Московский Авиационный Институт

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Институт №8 “Компьютерные науки и прикладная математика”

Кафедра №806 “Вычислительная математика и программирование”

**Лабораторная работа №5-7 по курсу**

**«Операционные системы»**

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Дата: 01.03.2024

Москва, 2024

**Постановка задачи**

Реализовать распределенную систему по асинхронной обработке запросов. В данной

распределенной системе должно существовать 2 вида узлов: «управляющий» и

«вычислительный». Необходимо объединить данные узлы в соответствии с той топологией,

которая определена вариантом. Связь между узлами необходимо осуществить при помощи

технологии очередей сообщений. Также в данной системе необходимо предусмотреть проверку

доступности узлов в соответствии с вариантом. При убийстве («kill -9») любого вычислительного

узла система должна пытаться максимально сохранять свою работоспособность, а именно все

дочерние узлы убитого узла могут стать недоступными, но родительские узлы должны сохранить

свою работоспособность.

Управляющий узел отвечает за ввод команд от пользователя и отправку этих команд на

вычислительные узлы.

* Топология 2 - **Дерево общего вида**.
* Набор команд 3 - **Локальный таймер.**
* Тип проверки доступности узлов 3 - **heartbeat time**.
* Технология очереди сообщений: **zero message queue.**

**Общий метод и алгоритм решения**

Использованные системные вызовы:

* pid\_t **fork**(void); – создает дочерний процесс, возвращает PID дочернего процесса, а процессу потомку возвращается 0, а в случае ошибки -1.
* int **execl**(const char \*pathname, const char \*arg, .../\*, (char \*) NULL \*/) - исполняет указанные файлы.
* **zmq\_ctx\_new**() –– создает новый контекст ZMQ.
* **zmq\_socket**() — создает ZMQ сокет.
* **zmq\_close**() — закрывает ZMQ сокет.
* **zmq\_ctx\_destroy**() –– уничтожает контекст ZMQ.
* **zmq\_socket**() - инициализация ZMQ сокета.
* **zmq\_connect**() - установление сое динения между сокетом ZMQ и удаленным адресом.
* **zmq\_sotcockopt**() - установка опций конфигурации для сокета ZMQ.
* **zmq\_recv**() - прием сообщений на сокете ZMQ.
* **zmq\_send**() - отправка сообщений с помощью сокета ZMQ.
* **zmq\_bing()** - привязка сокета к адресу и порту.

Для работы с системой, запускается программа serv.c, которая является реализацией логики управляющего узла, при создании вычислительного узла программа создает новый процесс и запускает в нем программу user.c. Сообщения в вычислительные узлы передаются при помощи ZeroMQ, по созданному сокету. Взаимосвязь узлов между собой описывается логикой, описанной в файле tree.h.

**Код программы**

**serv.c**

#include "tree.h"

#include <unistd.h>

#include <string.h>

#include <fcntl.h>

#include <sys/wait.h>

#include <mqueue.h>

#include <zmq.h>

char message[256]; // буфер

void killwithchildren(TNode\* root, void \* publisher) {

if (root == NULL) {

return;

}

sprintf(message, "kill %d", root->data); // записываем в message(буффер)

zmq\_send(publisher, message, strlen(message), 0); // отправляем сигнал узлу, чтобы он напечатал, что он мертв

memset(message, 0, sizeof(message)); // очищаем message (буфер)

killwithchildren(root->firstChild, publisher);

killwithchildren(root->nextBrother, publisher);

}

int main() {

void \*context = zmq\_ctx\_new();

void \*publisher = zmq\_socket(context, ZMQ\_PUB);

zmq\_bind(publisher, "tcp://127.0.0.1:5555");

char input[256];

char command[100];

char subcommand[100];

int arg1 = 0, arg2 = 0;

TNode \*root = createNode(-1); // управляющий узел

while (1) {

memset(message, 0, sizeof(message));

memset(command, 0, sizeof(command));

if(fgets(input, sizeof(input), stdin) == NULL) {

break;

}

sscanf(input, "%s", command);

if (strcmp(command, "create") == 0){

sscanf(input, "%\*s %d %d", &arg1, &arg2);

TNode \*node = find\_node(root, arg2);

TNode \*node2 = find\_node(root, arg1);

if (node == NULL){

printf("Error: Parent not found \n");

}

else if(node2 != NULL){

printf("Error: Already exist \n");

}

else{

addChild(node, arg1);

if (arg2 == -1){ // если создаем в управляющем узле

pid\_t id = fork();

if (id == 0){

char str1[sizeof(int)];

sprintf(str1, "%d", arg1);

execl("./user", "./user", str1, NULL);

perror("execl");

}

printf("Ok: %d\n", id);

}

else{

sprintf(message, "create %d %d", arg1, arg2);

zmq\_send(publisher, message, strlen(message), 0);

}

}

}

else if (strcmp(command, "exec") == 0) {

sscanf(input, "%\*s %d %s", &arg1, subcommand);

TNode \*searching = find\_node(root, arg1);

if (arg1 == -1) {

printf("This is a command process\n");

}

else if (searching == NULL) {

printf("Error:id Not found\n");

}

else if (searching->exist) {

zmq\_send(publisher, input, strlen(input), 0);

}

else {

printf("You can't give an option to dead root\n");

continue;

}

}

else if (strcmp(command, "kill") == 0) {

sscanf(input, "%\*s %d", &arg1);

TNode \*search\_to\_kill = find\_node(root, arg1);

if (search\_to\_kill == NULL) {

printf("Error: id Not Found\n");

continue;

}

if (arg1 == -1) {

printf("You can't kill control procces\n");

continue;

}

else {

killwithchildren(search\_to\_kill->firstChild, publisher); // рекурсивная отправка сообщений о смерти от дочерних узлов

killwithchildren(search\_to\_kill->nextBrother, publisher); // рекурсивная отправка сообщений о смерти от дочерних узлов

zmq\_send(publisher, input, strlen(input), 0);

disableNode(search\_to\_kill->firstChild); // рекурсивно убийство дочерних узлов

disableNode(search\_to\_kill->nextBrother); // рекурсивно убийство дочерних узлов

disableOneNode(search\_to\_kill); // убийство родительского узла

}

}

else if (strcmp(command, "heartbit") == 0) {

sscanf (input, "%\*s %d", &arg1);

int time = arg1 / 1000;

Heartbit(root, time);

printf("\n");

}

else if (strcmp(command, "ping") == 0) {

sscanf(input, "%\*s %d", &arg1);

TNode\* search\_available\_root = find\_node(root, arg1);

if (arg1 == -1) {

printf("Control process is always available\n");

printf("\n");

}

if (search\_available\_root == NULL) {

printf("Error: id not found\n");

continue;

}

if (search\_available\_root->exist) {

printf("Ok: 1 // узел %d доступен\n", arg1);

continue;

}

else {

printf("Ok: 0 // узел %d недоступен\n", arg1);

continue;

}

}

}

zmq\_close(publisher);

zmq\_ctx\_destroy(context);

}

**user.c**

#include <stdio.h>

#include <stdlib.h>

#include <stdbool.h>

#include "tree.h"

#include <string.h>

#include <unistd.h>

#include <fcntl.h>

#include <sys/wait.h>

#include <zmq.h>

int id;

struct Timer {

clock\_t total\_time;

time\_t cur\_time;

int running;

};

struct Timer myTimer;

void startTimer(struct Timer\* timer) {

if (!timer->running) {

timer->cur\_time = time(NULL);

timer->running = 1;

printf("Ok:%d\n", id);

return;

}

}

void stopTimer(struct Timer\* timer) {

if (timer->running) {

timer->total\_time += time(NULL) - timer->cur\_time;

timer->running = 0;

printf("Ok:%d\n", id);

return;

}

}

void getTotalSumTimer(struct Timer\* timer) {

if (timer->running) {

printf("Ok:%d: %ld\n", id, (timer->total\_time + (time(NULL) - timer->cur\_time)) \* 1000);

}

else {

printf("Ok:%d: %ld\n", id, timer->total\_time \* 1000);

}

return;

}

int main(int argc, char \*\*argv) {

sscanf(argv[1], "%d", &id);

void \*context = zmq\_ctx\_new();

void \*subscriber = zmq\_socket(context, ZMQ\_SUB);

zmq\_connect(subscriber, "tcp://127.0.0.1:5555");

zmq\_setsockopt(subscriber, ZMQ\_SUBSCRIBE, "", 0);

char buffer[256];

char command[256];

char subcommand[256];

int arg1 = 0, arg2 = 0, k = 0, c = 0, val = 0;

pid\_t id1;

while (1) {

memset(buffer, 0, sizeof(buffer));

memset(command, 0, sizeof(command));

zmq\_recv(subscriber, buffer, sizeof(buffer), 0); // распаковываем сообщение в buffer

sscanf(buffer, "%s", command);

if (strcmp(command, "create") == 0){

sscanf(buffer, "%\*s %d %d", &arg1, &arg2);

if (id == arg2){

printf("Node %d: create child\n", id);

pid\_t id\_child = fork();

if (id\_child == 0){

char str1[sizeof(int)];

sprintf(str1, "%d", arg1);

execl("./user", "./user", str1, NULL);

perror("execl");

}

printf("Ok: %d\n", id\_child);

}

}

else if (strcmp(command, "exec") == 0) {

sscanf(buffer, "%\*s %d %s", &arg1, subcommand);

time\_t t = time(NULL);

if (id == arg1) {

if (strcmp(subcommand, "time") == 0) {

getTotalSumTimer(&myTimer);

}

else if (strcmp(subcommand, "start") == 0) {

startTimer(&myTimer);

}

else if (strcmp(subcommand, "stop") == 0) {

stopTimer(&myTimer);

}

}

}

else if (strcmp(command, "kill") == 0) {

sscanf(buffer, "%\*s %d", &arg1);

if (id == arg1){

printf("Node %d: has been killed\n", id);

break;

}

}

}

zmq\_close(subscriber);

zmq\_ctx\_destroy(context);

}

**tree.h**

#include <stdio.h>

#include <stdbool.h>

#include <stdlib.h>

#include <unistd.h>

#include <stdint.h>

#include <time.h>

typedef struct TNode {

int data;

struct TNode \*firstChild;

struct TNode \*nextBrother;

bool exist;

} TNode;

TNode \*createNode(int data) {

TNode \*newNode = (TNode \*)malloc(sizeof(TNode));

if (newNode != NULL) {

newNode->data = data;

newNode->firstChild = NULL;

newNode->nextBrother = NULL;

newNode->exist = true;

}

return newNode;

}

void addChild(TNode \*parent, int data) { // добавление дочернего узла

TNode \*newChild = createNode(data);

if (newChild == NULL) {

fprintf(stderr, "Failed to create a new child node.\n");

return;

}

if (parent->firstChild == NULL) {

parent->firstChild = newChild;

} else {

TNode \*brother = parent->firstChild;

while (brother->nextBrother != NULL) {

brother = brother->nextBrother;

}

brother->nextBrother = newChild;

}

}

TNode\* find\_node(TNode \*root, int data) { // обход дерева

if (root == NULL) {

return NULL;

}

if (root->data == data && root->exist == true) {

return root;

}

TNode \*found\_in\_child = find\_node(root->firstChild, data);

if (found\_in\_child != NULL) {

return found\_in\_child;

}

return find\_node(root->nextBrother, data);

}

void Heartbit(TNode\* root, int time) {

if (root != NULL) {

if (root->exist) {

sleep(time);

printf("Heartbit: node %d is fine\n", root->data);

}

else {

sleep(4\*time);

printf("Heartbit: node %d is unavailable now\n", root->data);

}

Heartbit(root->firstChild, time);

Heartbit(root->nextBrother, time);

}

}

void disableNode(TNode \*node) { // рекурсивное убийство дочерних узлов

if (node == NULL) {

return;

}

node->exist = false;

disableNode(node->firstChild);

disableNode(node->nextBrother);

}

void disableOneNode(TNode \*node) { // убийство родительского узла

node->exist = false;

}

**Протокол работы программы**

**Тестирование:**

mattrrixwsl@DESKTOP-HRTTO4C:/mnt/c/Users/Никита/Desktop/Projects/MAI8fac\_OS/lab5-7/progra

ms$ ./server

create 5 -1

Ok: 103413

create 10 -1

Ok: 103422

create 6 5

Node 5: create child

Ok: 103439

create 9 10

Node 10: create child

Ok: 103473

ping 9

Ok: 1 // узел 9 доступен

kill 9

Node 9: has been killed

ping 9

Error: id not found

heartbit 2000

Heartbit: node -1 is fine

Heartbit: node 5 is fine

Heartbit: node 6 is fine

Heartbit: node 10 is fine

Heartbit: node 9 is unavailable now

exec 6 start

Ok:6

exec time

exec 6 time

Ok:6: 12000

exec 6 stop

Ok:6

exec 6 time

Ok:6: 17000

exec 5 start

Ok:5

exec 6 start

Ok:6

exec 5 time

Ok:5: 9000

exec 6 time

Ok:6: 23000

exec 5 stop

Ok:5

exec 6 stop

Ok:6

Node 5: has been killed

Node 6: has been killed

exec 5 start

Error:id Not found

**Strace:**

execve("./server", ["./server", "-f"], 0x7ffd0abe7ab8 /\* 35 vars \*/) = 0

brk(NULL) = 0x558e7d35f000

arch\_prctl(0x3001 /\* ARCH\_??? \*/, 0x7ffc1e19cdd0) = -1 EINVAL (Invalid argument)

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) =

0x7f01bed10000

access("/etc/ld.so.preload", R\_OK) = -1 ENOENT (No such file or directory)

openat(AT\_FDCWD, "/etc/ld.so.cache", O\_RDONLY|O\_CLOEXEC) = 3

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=19739, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 19739, PROT\_READ, MAP\_PRIVATE, 3, 0) = 0x7f01bed0b000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libzmq.so.5", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\240\233\1\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=634936, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 636784, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01bec6f000

mmap(0x7f01bec87000, 397312, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x18000) = 0x7f01bec87000

mmap(0x7f01bece8000, 106496, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x79000) = 0x7f01bece8000

mmap(0x7f01bed02000, 36864, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x92000) = 0x7f01bed02000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libc.so.6", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0P\237\2\0\0\0\0\0"..., 832) = 832

pread64(3, "\6\0\0\0\4\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0"..., 784, 64) = 784

pread64(3, "\4\0\0\0 \0\0\0\5\0\0\0GNU\0\2\0\0\300\4\0\0\0\3\0\0\0\0\0\0\0"..., 48, 848) = 48

pread64(3, "\4\0\0\0\24\0\0\0\3\0\0\0GNU\0\302\211\332Pq\2439\235\350\223\322\257\201\326\243\f"...,

68, 896) = 68

newfstatat(3, "", {st\_mode=S\_IFREG|0755, st\_size=2220400, ...}, AT\_EMPTY\_PATH) = 0

pread64(3, "\6\0\0\0\4\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0@\0\0\0\0\0\0\0"..., 784, 64) = 784

mmap(NULL, 2264656, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01bea46000

mprotect(0x7f01bea6e000, 2023424, PROT\_NONE) = 0

mmap(0x7f01bea6e000, 1658880, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x28000) = 0x7f01bea6e000

mmap(0x7f01bec03000, 360448, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x1bd000) = 0x7f01bec03000

mmap(0x7f01bec5c000, 24576, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x215000) = 0x7f01bec5c000

mmap(0x7f01bec62000, 52816, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f01bec62000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libbsd.so.0", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=89096, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 94432, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01bea2e000

mprotect(0x7f01bea32000, 69632, PROT\_NONE) = 0

mmap(0x7f01bea32000, 53248, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f01bea32000

mmap(0x7f01bea3f000, 12288, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x11000) = 0x7f01bea3f000

mmap(0x7f01bea43000, 8192, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x14000) = 0x7f01bea43000

mmap(0x7f01bea45000, 224, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f01bea45000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libsodium.so.23", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=355040, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 357440, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be9d6000

mprotect(0x7f01be9e2000, 303104, PROT\_NONE) = 0

mmap(0x7f01be9e2000, 229376, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xc000) = 0x7f01be9e2000

mmap(0x7f01bea1a000, 69632, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x44000) = 0x7f01bea1a000

mmap(0x7f01bea2c000, 8192, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x55000) = 0x7f01bea2c000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libpgm-5.3.so.0", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\340L\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=310264, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 329808, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be985000

mmap(0x7f01be989000, 172032, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f01be989000

mmap(0x7f01be9b3000, 118784, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x2e000) = 0x7f01be9b3000

mmap(0x7f01be9d0000, 8192, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4a000) = 0x7f01be9d0000

mmap(0x7f01be9d2000, 14416, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f01be9d2000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libnorm.so.1", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0 \255\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=497824, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 1223168, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be85a000

mprotect(0x7f01be864000, 446464, PROT\_NONE) = 0

mmap(0x7f01be864000, 286720, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xa000) = 0x7f01be864000

mmap(0x7f01be8aa000, 155648, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x50000) = 0x7f01be8aa000

mmap(0x7f01be8d1000, 16384, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x76000) = 0x7f01be8d1000

mmap(0x7f01be8d5000, 719360, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f01be8d5000

close(3) = 0

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) =

0x7f01be858000

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libgssapi\_krb5.so.2", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=338648, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 340960, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be804000

mprotect(0x7f01be80f000, 282624, PROT\_NONE) = 0

mmap(0x7f01be80f000, 229376, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xb000) = 0x7f01be80f000

mmap(0x7f01be847000, 49152, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x43000) = 0x7f01be847000

mmap(0x7f01be854000, 16384, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4f000) = 0x7f01be854000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libstdc++.so.6", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=2260296, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 2275520, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be5d8000

mprotect(0x7f01be672000, 1576960, PROT\_NONE) = 0

mmap(0x7f01be672000, 1118208, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x9a000) = 0x7f01be672000

mmap(0x7f01be783000, 454656, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x1ab000) = 0x7f01be783000

mmap(0x7f01be7f3000, 57344, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x21a000) = 0x7f01be7f3000

mmap(0x7f01be801000, 10432, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f01be801000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libgcc\_s.so.1", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=125488, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 127720, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be5b8000

mmap(0x7f01be5bb000, 94208, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f01be5bb000

mmap(0x7f01be5d2000, 16384, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x1a000) = 0x7f01be5d2000

mmap(0x7f01be5d6000, 8192, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1d000) = 0x7f01be5d6000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libmd.so.0", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=47472, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 49384, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be5ab000

mmap(0x7f01be5ad000, 28672, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2000) = 0x7f01be5ad000

mmap(0x7f01be5b4000, 8192, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x9000) = 0x7f01be5b4000

mmap(0x7f01be5b6000, 8192, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xa000) = 0x7f01be5b6000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libpthread.so.0", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=21448, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 16424, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be5a6000

mmap(0x7f01be5a7000, 4096, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1000) = 0x7f01be5a7000

mmap(0x7f01be5a8000, 4096, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x2000) = 0x7f01be5a8000

mmap(0x7f01be5a9000, 8192, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2000) = 0x7f01be5a9000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libm.so.6", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=940560, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 942344, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be4bf000

mmap(0x7f01be4cd000, 507904, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xe000) = 0x7f01be4cd000

mmap(0x7f01be549000, 372736, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x8a000) = 0x7f01be549000

mmap(0x7f01be5a4000, 8192, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xe4000) = 0x7f01be5a4000

close(3) = 0

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) =

0x7f01be4bd000

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libkrb5.so.3", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=827936, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 830576, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be3f2000

mprotect(0x7f01be413000, 634880, PROT\_NONE) = 0

mmap(0x7f01be413000, 380928, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x21000) = 0x7f01be413000

mmap(0x7f01be470000, 249856, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x7e000) = 0x7f01be470000

mmap(0x7f01be4ae000, 61440, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xbb000) = 0x7f01be4ae000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libk5crypto.so.3", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=182864, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 188472, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be3c3000

mprotect(0x7f01be3c7000, 163840, PROT\_NONE) = 0

mmap(0x7f01be3c7000, 110592, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f01be3c7000

mmap(0x7f01be3e2000, 49152, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x1f000) = 0x7f01be3e2000

mmap(0x7f01be3ef000, 8192, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2b000) = 0x7f01be3ef000

mmap(0x7f01be3f1000, 56, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f01be3f1000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libcom\_err.so.2", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=18504, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 20552, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be3bd000

mmap(0x7f01be3bf000, 4096, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2000) = 0x7f01be3bf000

mmap(0x7f01be3c0000, 4096, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x3000) = 0x7f01be3c0000

mmap(0x7f01be3c1000, 8192, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f01be3c1000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libkrb5support.so.0", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=52016, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 54224, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be3af000

mprotect(0x7f01be3b2000, 36864, PROT\_NONE) = 0

mmap(0x7f01be3b2000, 24576, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f01be3b2000

mmap(0x7f01be3b8000, 8192, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x9000) = 0x7f01be3b8000

mmap(0x7f01be3bb000, 8192, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xb000) = 0x7f01be3bb000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libkeyutils.so.1", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=22600, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 24592, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be3a8000

mmap(0x7f01be3aa000, 8192, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2000) = 0x7f01be3aa000

mmap(0x7f01be3ac000, 4096, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0x4000) = 0x7f01be3ac000

mmap(0x7f01be3ad000, 8192, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f01be3ad000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libresolv.so.2", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=68552, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) =

0x7f01be3a6000

mmap(NULL, 80456, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f01be392000

mmap(0x7f01be395000, 40960, PROT\_READ|PROT\_EXEC,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f01be395000

mmap(0x7f01be39f000, 12288, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3,

0xd000) = 0x7f01be39f000

mmap(0x7f01be3a2000, 8192, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xf000) = 0x7f01be3a2000

mmap(0x7f01be3a4000, 6728, PROT\_READ|PROT\_WRITE,

MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f01be3a4000

close(3) = 0

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) =

0x7f01be390000

mmap(NULL, 12288, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) =

0x7f01be38d000

arch\_prctl(ARCH\_SET\_FS, 0x7f01be38d9c0) = 0

set\_tid\_address(0x7f01be38dc90) = 131424

set\_robust\_list(0x7f01be38dca0, 24) = 0

rseq(0x7f01be38e360, 0x20, 0, 0x53053053) = 0

mprotect(0x7f01bec5c000, 16384, PROT\_READ) = 0

mprotect(0x7f01be3a2000, 4096, PROT\_READ) = 0

mprotect(0x7f01be3ad000, 4096, PROT\_READ) = 0

mprotect(0x7f01be3bb000, 4096, PROT\_READ) = 0

mprotect(0x7f01be3c1000, 4096, PROT\_READ) = 0

mprotect(0x7f01be3ef000, 4096, PROT\_READ) = 0

mprotect(0x7f01be4ae000, 53248, PROT\_READ) = 0

mprotect(0x7f01be5a4000, 4096, PROT\_READ) = 0

mprotect(0x7f01be5a9000, 4096, PROT\_READ) = 0

mprotect(0x7f01be5b6000, 4096, PROT\_READ) = 0

mprotect(0x7f01be5d6000, 4096, PROT\_READ) = 0

mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) =

0x7f01be38b000

mprotect(0x7f01be7f3000, 45056, PROT\_READ) = 0

mprotect(0x7f01be854000, 8192, PROT\_READ) = 0

mprotect(0x7f01be8d1000, 12288, PROT\_READ) = 0

mprotect(0x7f01be9d0000, 4096, PROT\_READ) = 0

mprotect(0x7f01bea2c000, 4096, PROT\_READ) = 0

mprotect(0x7f01bea43000, 4096, PROT\_READ) = 0

mprotect(0x7f01bed02000, 32768, PROT\_READ) = 0

mprotect(0x558e7bc21000, 4096, PROT\_READ) = 0

mprotect(0x7f01bed4a000, 8192, PROT\_READ) = 0

prlimit64(0, RLIMIT\_STACK, NULL, {rlim\_cur=8192\*1024, rlim\_max=RLIM64\_INFINITY}) = 0

munmap(0x7f01bed0b000, 19739) = 0

getrandom("\x5b\x71\x96\xf8\xfc\x9b\x6f\x1d", 8, GRND\_NONBLOCK) = 8

brk(NULL) = 0x558e7d35f000

brk(0x558e7d380000) = 0x558e7d380000

openat(AT\_FDCWD, "/sys/devices/system/cpu/online", O\_RDONLY|O\_CLOEXEC) = 3

read(3, "0-15\n", 1024) = 5

close(3) = 0

openat(AT\_FDCWD, "/sys/devices/system/cpu",

O\_RDONLY|O\_NONBLOCK|O\_CLOEXEC|O\_DIRECTORY) = 3

newfstatat(3, "", {st\_mode=S\_IFDIR|0755, st\_size=0, ...}, AT\_EMPTY\_PATH) = 0

getdents64(3, 0x558e7d370ee0 /\* 32 entries \*/, 32768) = 936

getdents64(3, 0x558e7d370ee0 /\* 0 entries \*/, 32768) = 0

close(3) = 0

getpid() = 131424

sched\_getaffinity(131424, 128, [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15]) = 32

newfstatat(AT\_FDCWD, "/etc/nsswitch.conf", {st\_mode=S\_IFREG|0644, st\_size=510, ...}, 0) = 0

newfstatat(AT\_FDCWD, "/", {st\_mode=S\_IFDIR|0755, st\_size=4096, ...}, 0) = 0

openat(AT\_FDCWD, "/etc/nsswitch.conf", O\_RDONLY|O\_CLOEXEC) = 3

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=510, ...}, AT\_EMPTY\_PATH) = 0

read(3, "# /etc/nsswitch.conf\n#\n# Example"..., 4096) = 510

read(3, "", 4096) = 0

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=510, ...}, AT\_EMPTY\_PATH) = 0

close(3) = 0

openat(AT\_FDCWD, "/etc/ld.so.cache", O\_RDONLY|O\_CLOEXEC) = 3

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=19739, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 19739, PROT\_READ, MAP\_PRIVATE, 3, 0) = 0x7f01bed0b000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v3/libnss\_db.so.2",

O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v3", 0x7ffc1e199d10, 0) = -1

ENOENT (No such file or directory)

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v2/libnss\_db.so.2",

O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v2", 0x7ffc1e199d10, 0) = -1

ENOENT (No such file or directory)

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/haswell/x86\_64/libnss\_db.so.2",

O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/haswell/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT

(No such file or directory)

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/haswell/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) =

-1 ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/haswell", 0x7ffc1e199d10, 0) = -1 ENOENT (No such

file or directory)

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) =

-1 ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No such

file or directory)

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1

ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or

directory)

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/haswell/x86\_64/libnss\_db.so.2",

O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/haswell/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No

such file or directory)

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/haswell/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1

ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/haswell", 0x7ffc1e199d10, 0) = -1 ENOENT (No such

file or directory)

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1

ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No such

file or directory)

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT

(No such file or directory)

newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu", {st\_mode=S\_IFDIR|0755, st\_size=24576, ...}, 0) = 0

openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v3/libnss\_db.so.2",

O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v3", 0x7ffc1e199d10, 0) = -1

ENOENT (No such file or directory)

openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v2/libnss\_db.so.2",

O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v2", 0x7ffc1e199d10, 0) = -1

ENOENT (No such file or directory)

openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/haswell/x86\_64/libnss\_db.so.2",

O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/haswell/x86\_64", 0x7ffc1e199d10, 0) = -1

ENOENT (No such file or directory)

openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/haswell/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC)

= -1 ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/haswell", 0x7ffc1e199d10, 0) = -1 ENOENT (No

such file or directory)

openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC)

= -1 ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No

such file or directory)

openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1

ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file

or directory)

openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/haswell/x86\_64/libnss\_db.so.2",

O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/haswell/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT

(No such file or directory)

openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/haswell/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) =

-1 ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/haswell", 0x7ffc1e199d10, 0) = -1 ENOENT (No

such file or directory)

openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) =

-1 ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No

such file or directory)

openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1

ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu", {st\_mode=S\_IFDIR|0755, st\_size=24576, ...}, 0) =

0

openat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v3/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1

ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v3", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file

or directory)

openat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v2/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1

ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v2", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file

or directory)

openat(AT\_FDCWD, "/lib/tls/haswell/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1

ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/lib/tls/haswell/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or

directory)

openat(AT\_FDCWD, "/lib/tls/haswell/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No

such file or directory)

newfstatat(AT\_FDCWD, "/lib/tls/haswell", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or directory)

openat(AT\_FDCWD, "/lib/tls/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No

such file or directory)

newfstatat(AT\_FDCWD, "/lib/tls/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or directory)

openat(AT\_FDCWD, "/lib/tls/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file

or directory)

newfstatat(AT\_FDCWD, "/lib/tls", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or directory)

openat(AT\_FDCWD, "/lib/haswell/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT

(No such file or directory)

newfstatat(AT\_FDCWD, "/lib/haswell/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or

directory)

openat(AT\_FDCWD, "/lib/haswell/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such

file or directory)

newfstatat(AT\_FDCWD, "/lib/haswell", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or directory)

openat(AT\_FDCWD, "/lib/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such

file or directory)

newfstatat(AT\_FDCWD, "/lib/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or directory)

openat(AT\_FDCWD, "/lib/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or

directory)

newfstatat(AT\_FDCWD, "/lib", {st\_mode=S\_IFDIR|0755, st\_size=4096, ...}, 0) = 0

openat(AT\_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v3/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1

ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v3", 0x7ffc1e199d10, 0) = -1 ENOENT (No such

file or directory)

openat(AT\_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v2/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1

ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v2", 0x7ffc1e199d10, 0) = -1 ENOENT (No such

file or directory)

openat(AT\_FDCWD, "/usr/lib/tls/haswell/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1

ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/tls/haswell/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or

directory)

openat(AT\_FDCWD, "/usr/lib/tls/haswell/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT

(No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/tls/haswell", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or

directory)

openat(AT\_FDCWD, "/usr/lib/tls/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT

(No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/tls/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or

directory)

openat(AT\_FDCWD, "/usr/lib/tls/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such

file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/tls", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or directory)

openat(AT\_FDCWD, "/usr/lib/haswell/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1

ENOENT (No such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/haswell/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or

directory)

openat(AT\_FDCWD, "/usr/lib/haswell/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No

such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/haswell", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or directory)

openat(AT\_FDCWD, "/usr/lib/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No

such file or directory)

newfstatat(AT\_FDCWD, "/usr/lib/x86\_64", 0x7ffc1e199d10, 0) = -1 ENOENT (No such file or directory)

openat(AT\_FDCWD, "/usr/lib/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file

or directory)

newfstatat(AT\_FDCWD, "/usr/lib", {st\_mode=S\_IFDIR|0755, st\_size=4096, ...}, 0) = 0

munmap(0x7f01bed0b000, 19739) = 0

openat(AT\_FDCWD, "/etc/ld.so.cache", O\_RDONLY|O\_CLOEXEC) = 3

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=19739, ...}, AT\_EMPTY\_PATH) = 0

mmap(NULL, 19739, PROT\_READ, MAP\_PRIVATE, 3, 0) = 0x7f01bed0b000

close(3) = 0

openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libnss\_db-2.35.so", O\_RDONLY|O\_CLOEXEC) = -1

ENOENT (No such file or directory)

openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/libnss\_db-2.35.so", O\_RDONLY|O\_CLOEXEC) = -1

ENOENT (No such file or directory)

openat(AT\_FDCWD, "/lib/libnss\_db-2.35.so", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file

or directory)

openat(AT\_FDCWD, "/usr/lib/libnss\_db-2.35.so", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such

file or directory)

munmap(0x7f01bed0b000, 19739) = 0

openat(AT\_FDCWD, "/etc/protocols", O\_RDONLY|O\_CLOEXEC) = 3

newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=2932, ...}, AT\_EMPTY\_PATH) = 0

lseek(3, 0, SEEK\_SET) = 0

read(3, "# Internet (IP) protocols\n#\n# Up"..., 4096) = 2932

read(3, "", 4096) = 0

close(3) = 0

eventfd2(0, EFD\_CLOEXEC) = 3

fcntl(3, F\_GETFL) = 0x2 (flags O\_RDWR)

fcntl(3, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

fcntl(3, F\_GETFL) = 0x802 (flags O\_RDWR|O\_NONBLOCK)

fcntl(3, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

getpid() = 131424

getpid() = 131424

getrandom("\xa6\xcb\x1c\x96\xbc\xfd\x7f\x92\x2a\x8d\xa0\x6e\x97\x0e\x06\x67", 16, 0) = 16

getrandom("\x1c\xb2\xeb\x1a\x34\x05\xe9\x64\x11\x12\x50\x0f\xce\xf9\xbe\xed", 16, 0) = 16

eventfd2(0, EFD\_CLOEXEC) = 4

fcntl(4, F\_GETFL) = 0x2 (flags O\_RDWR)

fcntl(4, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

fcntl(4, F\_GETFL) = 0x802 (flags O\_RDWR|O\_NONBLOCK)

fcntl(4, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

getpid() = 131424

**epoll\_create1(EPOLL\_CLOEXEC) = 5**

epoll\_ctl(5, EPOLL\_CTL\_ADD, 4, {events=0, data={u32=2100761184, u64=94070474478176}}) = 0

epoll\_ctl(5, EPOLL\_CTL\_MOD, 4, {events=EPOLLIN, data={u32=2100761184,

u64=94070474478176}}) = 0

getpid() = 131424

rt\_sigaction(SIGRT\_1, {sa\_handler=0x7f01bead7870, sa\_mask=[],

sa\_flags=SA\_RESTORER|SA\_ONSTACK|SA\_RESTART|SA\_SIGINFO, sa\_restorer=0x7f01bea88520},

NULL, 8) = 0

rt\_sigprocmask(SIG\_UNBLOCK, [RTMIN RT\_1], NULL, 8) = 0

mmap(NULL, 8392704, PROT\_NONE, MAP\_PRIVATE|MAP\_ANONYMOUS|MAP\_STACK, -1, 0) =

0x7f01bdb8a000

mprotect(0x7f01bdb8b000, 8388608, PROT\_READ|PROT\_WRITE) = 0

rt\_sigprocmask(SIG\_BLOCK, ~[], [], 8) = 0

clone3({flags=CLONE\_VM|CLONE\_FS|CLONE\_FILES|CLONE\_SIGHAND|CLONE\_THREAD|CLON

E\_SYSVSEM|CLONE\_SETTLS|CLONE\_PARENT\_SETTID|CLONE\_CHILD\_CLEARTID,

child\_tid=0x7f01be38a910, parent\_tid=0x7f01be38a910, exit\_signal=0, stack=0x7f01bdb8a000,

stack\_size=0x7ffc80, tls=0x7f01be38a640} => {parent\_tid=[131425]}, 88) = 131425

rt\_sigprocmask(SIG\_SETMASK, [], NULL, 8) = 0

eventfd2(0, EFD\_CLOEXEC) = 6

fcntl(6, F\_GETFL) = 0x2 (flags O\_RDWR)

fcntl(6, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

fcntl(6, F\_GETFL) = 0x802 (flags O\_RDWR|O\_NONBLOCK)

fcntl(6, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

getpid() = 131424

**epoll\_create1(EPOLL\_CLOEXEC) = 7**

epoll\_ctl(7, EPOLL\_CTL\_ADD, 6, {events=0, data={u32=2100781664, u64=94070474498656}}) = 0

epoll\_ctl(7, EPOLL\_CTL\_MOD, 6, {events=EPOLLIN, data={u32=2100781664,

u64=94070474498656}}) = 0

mmap(NULL, 8392704, PROT\_NONE, MAP\_PRIVATE|MAP\_ANONYMOUS|MAP\_STACK, -1, 0) =

0x7f01bd389000

mprotect(0x7f01bd38a000, 8388608, PROT\_READ|PROT\_WRITE) = 0

rt\_sigprocmask(SIG\_BLOCK, ~[], [], 8) = 0

clone3({flags=CLONE\_VM|CLONE\_FS|CLONE\_FILES|CLONE\_SIGHAND|CLONE\_THREAD|CLON

E\_SYSVSEM|CLONE\_SETTLS|CLONE\_PARENT\_SETTID|CLONE\_CHILD\_CLEARTID,

child\_tid=0x7f01bdb89910, parent\_tid=0x7f01bdb89910, exit\_signal=0, stack=0x7f01bd389000,

stack\_size=0x7ffc80, tls=0x7f01bdb89640} => {parent\_tid=[131426]}, 88) = 131426

rt\_sigprocmask(SIG\_SETMASK, [], NULL, 8) = 0

eventfd2(0, EFD\_CLOEXEC) = 8

fcntl(8, F\_GETFL) = 0x2 (flags O\_RDWR)

fcntl(8, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

fcntl(8, F\_GETFL) = 0x802 (flags O\_RDWR|O\_NONBLOCK)

fcntl(8, F\_SETFL, O\_RDWR|O\_NONBLOCK) = 0

getpid() = 131424

getpid() = 131424

poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

**socket(AF\_NETLINK, SOCK\_RAW|SOCK\_CLOEXEC, NETLINK\_ROUTE) = 9**

**bind(9, {sa\_family=AF\_NETLINK, nl\_pid=0, nl\_groups=00000000}, 12) = 0**

getsockname(9, {sa\_family=AF\_NETLINK, nl\_pid=131424, nl\_groups=00000000}, [12]) = 0

**sendto(9, [{nlmsg\_len=20, nlmsg\_type=RTM\_GETLINK, nlmsg\_flags=NLM\_F\_REQUEST|NLM\_F\_DUMP, nlmsg\_seq=1709268905, nlmsg\_pid=0}, {ifi\_family=AF\_UNSPEC, ...}], 20, 0, {sa\_family=AF\_NETLINK, nl\_pid=0, nl\_groups=00000000}, 12) = 20**

recvmsg(9, {msg\_name={sa\_family=AF\_NETLINK, nl\_pid=0, nl\_groups=00000000}, msg\_namelen=12, msg\_iov=[{iov\_base=[[{nlmsg\_len=1336, nlmsg\_type=RTM\_NEWLINK, nlmsg\_flags=NLM\_F\_MULTI, nlmsg\_seq=1709268905, nlmsg\_pid=131424}, {ifi\_family=AF\_UNSPEC, ifi\_type=ARPHRD\_LOOPBACK, ifi\_index=if\_nametoindex("lo"), ifi\_flags=IFF\_UP|IFF\_LOOPBACK|IFF\_RUNNING|IFF\_LOWER\_UP, ifi\_change=0}, [[{nla\_len=7, nla\_type=IFLA\_IFNAME}, "lo"], [{nla\_len=8, nla\_type=IFLA\_TXQLEN}, 1000], [{nla\_len=5, nla\_type=IFLA\_OPERSTATE}, 0], [{nla\_len=5, nla\_type=IFLA\_LINKMODE}, 0], [{nla\_len=8, nla\_type=IFLA\_MTU}, 65536], [{nla\_len=8, nla\_type=IFLA\_MIN\_MTU}, 0], [{nla\_len=8, nla\_type=IFLA\_MAX\_MTU}, 0], [{nla\_len=8, nla\_type=IFLA\_GROUP}, 0], [{nla\_len=8, nla\_type=IFLA\_PROMISCUITY}, 0], [{nla\_len=8, nla\_type=IFLA\_NUM\_TX\_QUEUES}, 1], [{nla\_len=8, nla\_type=IFLA\_GSO\_MAX\_SEGS}, 65535], [{nla\_len=8, nla\_type=IFLA\_GSO\_MAX\_SIZE}, 65536], [{nla\_len=8, nla\_type=IFLA\_NUM\_RX\_QUEUES}, 1], [{nla\_len=5, nla\_type=IFLA\_CARRIER}, 1], [{nla\_len=12, nla\_type=IFLA\_QDISC}, "noqueue"], [{nla\_len=8, nla\_type=IFLA\_CARRIER\_CHANGES}, 0], [{nla\_len=8, nla\_type=IFLA\_CARRIER\_UP\_COUNT}, 0], [{nla\_len=8, nla\_type=IFLA\_CARRIER\_DOWN\_COUNT}, 0], [{nla\_len=5, nla\_type=IFLA\_PROTO\_DOWN}, 0], [{nla\_len=36, nla\_type=IFLA\_MAP}, {mem\_start=0, mem\_end=0, base\_addr=0, irq=0, dma=0, port=0}], [{nla\_len=10, nla\_type=IFLA\_ADDRESS}, 00:00:00:00:00:00], [{nla\_len=10, nla\_type=IFLA\_BROADCAST}, 00:00:00:00:00:00], [{nla\_len=196, nla\_type=IFLA\_STATS64}, {rx\_packets=213128, tx\_packets=213128, rx\_bytes=491245870, tx\_bytes=491245870, rx\_errors=0, tx\_errors=0, rx\_dropped=0, tx\_dropped=0, multicast=0, collisions=0, rx\_length\_errors=0, rx\_over\_errors=0, rx\_crc\_errors=0, rx\_frame\_errors=0, rx\_fifo\_errors=0, rx\_missed\_errors=0, tx\_aborted\_errors=0, tx\_carrier\_errors=0, tx\_fifo\_errors=0, tx\_heartbeat\_errors=0, tx\_window\_errors=0, rx\_compressed=0, tx\_compressed=0, rx\_nohandler=0}], [{nla\_len=100, nla\_type=IFLA\_STATS}, {rx\_packets=213128, tx\_packets=213128, rx\_bytes=491245870, tx\_bytes=491245870, rx\_errors=0, tx\_errors=0, rx\_dropped=0, tx\_dropped=0, multicast=0, collisions=0, rx\_length\_errors=0, rx\_over\_errors=0, rx\_crc\_errors=0, rx\_frame\_errors=0, rx\_fifo\_errors=0, rx\_missed\_errors=0, tx\_aborted\_errors=0, tx\_carrier\_errors=0, tx\_fifo\_errors=0, tx\_heartbeat\_errors=0, tx\_window\_errors=0, rx\_compressed=0, tx\_compressed=0, rx\_nohandler=0}], [{nla\_len=12, nla\_type=IFLA\_XDP}, [{nla\_len=5, nla\_type=IFLA\_XDP\_ATTACHED}, XDP\_ATTACHED\_NONE]], [{nla\_len=780, nla\_type=IFLA\_AF\_SPEC}, [[{nla\_len=136, nla\_type=AF\_INET}, [{nla\_len=132, nla\_type=IFLA\_INET\_CONF}, [[IPV4\_DEVCONF\_FORWARDING-1] = 0, [IPV4\_DEVCONF\_MC\_FORWARDING-1] = 0, [IPV4\_DEVCONF\_PROXY\_ARP-1] = 0, [IPV4\_DEVCONF\_ACCEPT\_REDIRECTS-1] = 1, [IPV4\_DEVCONF\_SECURE\_REDIRECTS-1] = 1, [IPV4\_DEVCONF\_SEND\_REDIRECTS-1] = 1, [IPV4\_DEVCONF\_SHARED\_MEDIA-1] = 1, [IPV4\_DEVCONF\_RP\_FILTER-1] = 2, [IPV4\_DEVCONF\_ACCEPT\_SOURCE\_ROUTE-1] = 0, [IPV4\_DEVCONF\_BOOTP\_RELAY-1] = 0, [IPV4\_DEVCONF\_LOG\_MARTIANS-1] = 0, [IPV4\_DEVCONF\_TAG-1] = 0, [IPV4\_DEVCONF\_ARPFILTER-1] = 0, [IPV4\_DEVCONF\_MEDIUM\_ID-1] = 0, [IPV4\_DEVCONF\_NOXFRM-1] = 1, [IPV4\_DEVCONF\_NOPOLICY-1] = 1, [IPV4\_DEVCONF\_FORCE\_IGMP\_VERSION-1] = 0, [IPV4\_DEVCONF\_ARP\_ANNOUNCE-1] = 0, [IPV4\_DEVCONF\_ARP\_IGNORE-1] = 0, [IPV4\_DEVCONF\_PROMOTE\_SECONDARIES-1] = 1, [IPV4\_DEVCONF\_ARP\_ACCEPT-1] = 0, [IPV4\_DEVCONF\_ARP\_NOTIFY-1] = 0, [IPV4\_DEVCONF\_ACCEPT\_LOCAL-1] = 0, [IPV4\_DEVCONF\_SRC\_VMARK-1] = 0, [IPV4\_DEVCONF\_PROXY\_ARP\_PVLAN-1] = 0, [IPV4\_DEVCONF\_ROUTE\_LOCALNET-1] = 0, [IPV4\_DEVCONF\_IGMPV2\_UNSOLICITED\_REPORT\_INTERVAL-1] = 10000, [IPV4\_DEVCONF\_IGMPV3\_UNSOLICITED\_REPORT\_INTERVAL-1] = 1000, [IPV4\_DEVCONF\_IGNORE\_ROUTES\_WITH\_LINKDOWN-1] = 0, [IPV4\_DEVCONF\_DROP\_UNICAST\_IN\_L2\_MULTICAST-1] = 0, [IPV4\_DEVCONF\_DROP\_GRATUITOUS\_ARP-1] = 0, [IPV4\_DEVCONF\_BC\_FORWARDING-1] = 0]]], [{nla\_len=640, nla\_type=AF\_INET6}, [[{nla\_len=8, nla\_type=IFLA\_INET6\_FLAGS}, IF\_READY], [{nla\_len=20, nla\_type=IFLA\_INET6\_CACHEINFO}, {max\_reasm\_len=65535, tstamp=44, reachable\_time=20270, retrans\_time=1000}], [{nla\_len=228, nla\_type=IFLA\_INET6\_CONF}, [[DEVCONF\_FORWARDING] = 0, [DEVCONF\_HOPLIMIT] = 64, [DEVCONF\_MTU6] = 65536, [DEVCONF\_ACCEPT\_RA] = 1, [DEVCONF\_ACCEPT\_REDIRECTS] = 1, [DEVCONF\_AUTOCONF] = 1, [DEVCONF\_DAD\_TRANSMITS] = 1, [DEVCONF\_RTR\_SOLICITS] = -1, [DEVCONF\_RTR\_SOLICIT\_INTERVAL] = 4000, [DEVCONF\_RTR\_SOLICIT\_DELAY] = 1000, [DEVCONF\_USE\_TEMPADDR] = -1, [DEVCONF\_TEMP\_VALID\_LFT] = 604800, [DEVCONF\_TEMP\_PREFERED\_LFT] = 86400, [DEVCONF\_REGEN\_MAX\_RETRY] = 3, [DEVCONF\_MAX\_DESYNC\_FACTOR] = 600, [DEVCONF\_MAX\_ADDRESSES] = 16, [DEVCONF\_FORCE\_MLD\_VERSION] = 0, [DEVCONF\_ACCEPT\_RA\_DEFRTR] = 1, [DEVCONF\_ACCEPT\_RA\_PINFO] = 1, [DEVCONF\_ACCEPT\_RA\_RTR\_PREF] = 0, [DEVCONF\_RTR\_PROBE\_INTERVAL] = 0, [DEVCONF\_ACCEPT\_RA\_RT\_INFO\_MAX\_PLEN] = 0, [DEVCONF\_PROXY\_NDP] = 0, [DEVCONF\_OPTIMISTIC\_DAD] = 0, [DEVCONF\_ACCEPT\_SOURCE\_ROUTE] = 0, [DEVCONF\_MC\_FORWARDING] = 0, [DEVCONF\_DISABLE\_IPV6] = 0, [DEVCONF\_ACCEPT\_DAD] = -1, [DEVCONF\_FORCE\_TLLAO] = 0, [DEVCONF\_NDISC\_NOTIFY] = 0, [DEVCONF\_MLDV1\_UNSOLICITED\_REPORT\_INTERVAL] = 10000, [DEVCONF\_MLDV2\_UNSOLICITED\_REPORT\_INTERVAL] = 1000, ...]], [{nla\_len=300, nla\_type=IFLA\_INET6\_STATS}, [[IPSTATS\_MIB\_NUM] = 37, [IPSTATS\_MIB\_INPKTS] = 0, [IPSTATS\_MIB\_INOCTETS] = 0, [IPSTATS\_MIB\_INDELIVERS] = 0, [IPSTATS\_MIB\_OUTFORWDATAGRAMS] = 0, [IPSTATS\_MIB\_OUTPKTS] = 0, [IPSTATS\_MIB\_OUTOCTETS] = 0, [IPSTATS\_MIB\_INHDRERRORS] = 0, [IPSTATS\_MIB\_INTOOBIGERRORS] = 0, [IPSTATS\_MIB\_INNOROUTES] = 0, [IPSTATS\_MIB\_INADDRERRORS] = 0, [IPSTATS\_MIB\_INUNKNOWNPROTOS] = 0, [IPSTATS\_MIB\_INTRUNCATEDPKTS] = 0, [IPSTATS\_MIB\_INDISCARDS] = 0, [IPSTATS\_MIB\_OUTDISCARDS] = 0, [IPSTATS\_MIB\_OUTNOROUTES] = 0, [IPSTATS\_MIB\_REASMTIMEOUT] = 0, [IPSTATS\_MIB\_REASMREQDS] = 0, [IPSTATS\_MIB\_REASMOKS] = 0, [IPSTATS\_MIB\_REASMFAILS] = 0, [IPSTATS\_MIB\_FRAGOKS] = 0, [IPSTATS\_MIB\_FRAGFAILS] = 0, [IPSTATS\_MIB\_FRAGCREATES] = 0, [IPSTATS\_MIB\_INMCASTPKTS] = 0, [IPSTATS\_MIB\_OUTMCASTPKTS] = 0, [IPSTATS\_MIB\_INBCASTPKTS] = 0, [IPSTATS\_MIB\_OUTBCASTPKTS] = 0, [IPSTATS\_MIB\_INMCASTOCTETS] = 0, [IPSTATS\_MIB\_OUTMCASTOCTETS] = 0, [IPSTATS\_MIB\_INBCASTOCTETS] = 0, [IPSTATS\_MIB\_OUTBCASTOCTETS] = 0, [IPSTATS\_MIB\_CSUMERRORS] = 0, ...]], [{nla\_len=52, nla\_type=IFLA\_INET6\_ICMP6STATS}, [[ICMP6\_MIB\_NUM] = 6, [ICMP6\_MIB\_INMSGS] = 0, [ICMP6\_MIB\_INERRORS] = 0, [ICMP6\_MIB\_OUTMSGS] = 0, [ICMP6\_MIB\_OUTERRORS] = 0, [ICMP6\_MIB\_CSUMERRORS] = 0]], [{nla\_len=20, nla\_type=IFLA\_INET6\_TOKEN}, inet\_pton(AF\_INET6, "::")], [{nla\_len=5, nla\_type=IFLA\_INET6\_ADDR\_GEN\_MODE}, IN6\_ADDR\_GEN\_MODE\_EUI64]]]]]]], [{nlmsg\_len=1404, nlmsg\_type=RTM\_NEWLINK, nlmsg\_flags=NLM\_F\_MULTI, nlmsg\_seq=1709268905, nlmsg\_pid=131424}, {ifi\_family=AF\_UNSPEC, ifi\_type=ARPHRD\_ETHER, ifi\_index=if\_nametoindex("eth0"), ifi\_flags=IFF\_UP|IFF\_BROADCAST|IFF\_RUNNING|IFF\_MULTICAST|IFF\_LOWER\_UP, ifi\_change=0}, [[{nla\_len=9, nla\_type=IFLA\_IFNAME}, "eth0"], [{nla\_len=8, nla\_type=IFLA\_TXQLEN}, 1000], [{nla\_len=5, nla\_type=IFLA\_OPERSTATE}, 6], [{nla\_len=5, nla\_type=IFLA\_LINKMODE}, 0], [{nla\_len=8, nla\_type=IFLA\_MTU}, 1500], [{nla\_len=8, nla\_type=IFLA\_MIN\_MTU}, 68], [{nla\_len=8, nla\_type=IFLA\_MAX\_MTU}, 65521], [{nla\_len=8, nla\_type=IFLA\_GROUP}, 0], [{nla\_len=8, nla\_type=IFLA\_PROMISCUITY}, 0], [{nla\_len=8, nla\_type=IFLA\_NUM\_TX\_QUEUES}, 64], [{nla\_len=8, nla\_type=IFLA\_GSO\_MAX\_SEGS}, 65535], [{nla\_len=8, nla\_type=IFLA\_GSO\_MAX\_SIZE}, 62780], [{nla\_len=8, nla\_type=IFLA\_NUM\_RX\_QUEUES}, 64], [{nla\_len=5, nla\_type=IFLA\_CARRIER}, 1], [{nla\_len=7, nla\_type=IFLA\_QDISC}, "mq"], [{nla\_len=8, nla\_type=IFLA\_CARRIER\_CHANGES}, 1], [{nla\_len=8, nla\_type=IFLA\_CARRIER\_UP\_COUNT}, 1], [{nla\_len=8, nla\_type=IFLA\_CARRIER\_DOWN\_COUNT}, 0], [{nla\_len=5, nla\_type=IFLA\_PROTO\_DOWN}, 0], [{nla\_len=36, nla\_type=IFLA\_MAP}, {mem\_start=0, mem\_end=0, base\_addr=0, irq=0, dma=0, port=0}], [{nla\_len=10, nla\_type=IFLA\_ADDRESS}, 00:15:5d:6e:81:5d], [{nla\_len=10, nla\_type=IFLA\_BROADCAST}, ff:ff:ff:ff:ff:ff], [{nla\_len=196, nla\_type=IFLA\_STATS64}, {rx\_packets=15816, tx\_packets=10540, rx\_bytes=22736340, tx\_bytes=3646286, rx\_errors=0, tx\_errors=0, rx\_dropped=0, tx\_dropped=0, multicast=3666, collisions=0, rx\_length\_errors=0, rx\_over\_errors=0, rx\_crc\_errors=0, rx\_frame\_errors=0, rx\_fifo\_errors=0, rx\_missed\_errors=0, tx\_aborted\_errors=0, tx\_carrier\_errors=0, tx\_fifo\_errors=0, tx\_heartbeat\_errors=0, tx\_window\_errors=0, rx\_compressed=0, tx\_compressed=0, rx\_nohandler=0}], [{nla\_len=100, nla\_type=IFLA\_STATS}, {rx\_packets=15816, tx\_packets=10540, rx\_bytes=22736340, tx\_bytes=3646286, rx\_errors=0, tx\_errors=0, rx\_dropped=0, tx\_dropped=0, multicast=3666, collisions=0, rx\_length\_errors=0, rx\_over\_errors=0, rx\_crc\_errors=0, rx\_frame\_errors=0, rx\_fifo\_errors=0, rx\_missed\_errors=0, tx\_aborted\_errors=0, tx\_carrier\_errors=0, tx\_fifo\_errors=0, tx\_heartbeat\_errors=0, tx\_window\_errors=0, rx\_compressed=0, tx\_compressed=0, rx\_nohandler=0}], [{nla\_len=12, nla\_type=IFLA\_XDP}, [{nla\_len=5, nla\_type=IFLA\_XDP\_ATTACHED}, XDP\_ATTACHED\_NONE]], [{nla\_len=10, nla\_type=IFLA\_PERM\_ADDRESS}, 00:15:5d:6e:81:5d], [{nla\_len=780, nla\_type=IFLA\_AF\_SPEC}, [[{nla\_len=136, nla\_type=AF\_INET}, [{nla\_len=132, nla\_type=IFLA\_INET\_CONF}, [[IPV4\_DEVCONF\_FORWARDING-1] = 0, [IPV4\_DEVCONF\_MC\_FORWARDING-1] = 0, [IPV4\_DEVCONF\_PROXY\_ARP-1] = 0, [IPV4\_DEVCONF\_ACCEPT\_REDIRECTS-1] = 1, [IPV4\_DEVCONF\_SECURE\_REDIRECTS-1] = 1, [IPV4\_DEVCONF\_SEND\_REDIRECTS-1] = 1, [IPV4\_DEVCONF\_SHARED\_MEDIA-1] = 1, [IPV4\_DEVCONF\_RP\_FILTER-1] = 2, [IPV4\_DEVCONF\_ACCEPT\_SOURCE\_ROUTE-1] = 0, [IPV4\_DEVCONF\_BOOTP\_RELAY-1] = 0, [IPV4\_DEVCONF\_LOG\_MARTIANS-1] = 0, [IPV4\_DEVCONF\_TAG-1] = 0, [IPV4\_DEVCONF\_ARPFILTER-1] = 0, [IPV4\_DEVCONF\_MEDIUM\_ID-1] = 0, [IPV4\_DEVCONF\_NOXFRM-1] = 0, [IPV4\_DEVCONF\_NOPOLICY-1] = 0, [IPV4\_DEVCONF\_FORCE\_IGMP\_VERSION-1] = 0, [IPV4\_DEVCONF\_ARP\_ANNOUNCE-1] = 0, [IPV4\_DEVCONF\_ARP\_IGNORE-1] = 0, [IPV4\_DEVCONF\_PROMOTE\_SECONDARIES-1] = 1, [IPV4\_DEVCONF\_ARP\_ACCEPT-1] = 0, [IPV4\_DEVCONF\_ARP\_NOTIFY-1] = 0, [IPV4\_DEVCONF\_ACCEPT\_LOCAL-1] = 0, [IPV4\_DEVCONF\_SRC\_VMARK-1] = 0, [IPV4\_DEVCONF\_PROXY\_ARP\_PVLAN-1] = 0, [IPV4\_DEVCONF\_ROUTE\_LOCALNET-1] = 0, [IPV4\_DEVCONF\_IGMPV2\_UNSOLICITED\_REPORT\_INTERVAL-1] = 10000, [IPV4\_DEVCONF\_IGMPV3\_UNSOLICITED\_REPORT\_INTERVAL-1] = 1000, [IPV4\_DEVCONF\_IGNORE\_ROUTES\_WITH\_LINKDOWN-1] = 0, [IPV4\_DEVCONF\_DROP\_UNICAST\_IN\_L2\_MULTICAST-1] = 0, [IPV4\_DEVCONF\_DROP\_GRATUITOUS\_ARP-1] = 0, [IPV4\_DEVCONF\_BC\_FORWARDING-1] = 0]]], [{nla\_len=640, nla\_type=AF\_INET6}, [[{nla\_len=8, nla\_type=IFLA\_INET6\_FLAGS}, IF\_RS\_SENT|IF\_READY], [{nla\_len=20, nla\_type=IFLA\_INET6\_CACHEINFO}, {max\_reasm\_len=65535, tstamp=61, reachable\_time=40530, retrans\_time=1000}], [{nla\_len=228, nla\_type=IFLA\_INET6\_CONF}, [[DEVCONF\_FORWARDING] = 0, [DEVCONF\_HOPLIMIT] = 64, [DEVCONF\_MTU6] = 1500, [DEVCONF\_ACCEPT\_RA] = 1, [DEVCONF\_ACCEPT\_REDIRECTS] = 1, [DEVCONF\_AUTOCONF] = 1, [DEVCONF\_DAD\_TRANSMITS] = 1, [DEVCONF\_RTR\_SOLICITS] = -1, [DEVCONF\_RTR\_SOLICIT\_INTERVAL] = 4000, [DEVCONF\_RTR\_SOLICIT\_DELAY] = 1000, [DEVCONF\_USE\_TEMPADDR] = 0, [DEVCONF\_TEMP\_VALID\_LFT] = 604800, [DEVCONF\_TEMP\_PREFERED\_LFT] = 86400, [DEVCONF\_REGEN\_MAX\_RETRY] = 3, [DEVCONF\_MAX\_DESYNC\_FACTOR] = 600, [DEVCONF\_MAX\_ADDRESSES] = 16, [DEVCONF\_FORCE\_MLD\_VERSION] = 0, [DEVCONF\_ACCEPT\_RA\_DEFRTR] = 1, [DEVCONF\_ACCEPT\_RA\_PINFO] = 1, [DEVCONF\_ACCEPT\_RA\_RTR\_PREF] = 0, [DEVCONF\_RTR\_PROBE\_INTERVAL] = 0, [DEVCONF\_ACCEPT\_RA\_RT\_INFO\_MAX\_PLEN] = 0, [DEVCONF\_PROXY\_NDP] = 0, [DEVCONF\_OPTIMISTIC\_DAD] = 0, [DEVCONF\_ACCEPT\_SOURCE\_ROUTE] = 0, [DEVCONF\_MC\_FORWARDING] = 0, [DEVCONF\_DISABLE\_IPV6] = 0, [DEVCONF\_ACCEPT\_DAD] = 1, [DEVCONF\_FORCE\_TLLAO] = 0, [DEVCONF\_NDISC\_NOTIFY] = 0, [DEVCONF\_MLDV1\_UNSOLICITED\_REPORT\_INTERVAL] = 10000, [DEVCONF\_MLDV2\_UNSOLICITED\_REPORT\_INTERVAL] = 1000, ...]], [{nla\_len=300, nla\_type=IFLA\_INET6\_STATS}, [[IPSTATS\_MIB\_NUM] = 37, [IPSTATS\_MIB\_INPKTS] = 703, [IPSTATS\_MIB\_INOCTETS] = 114914, [IPSTATS\_MIB\_INDELIVERS] = 0, [IPSTATS\_MIB\_OUTFORWDATAGRAMS] = 0, [IPSTATS\_MIB\_OUTPKTS] = 25, [IPSTATS\_MIB\_OUTOCTETS] = 1496, [IPSTATS\_MIB\_INHDRERRORS] = 0, [IPSTATS\_MIB\_INTOOBIGERRORS] = 0, [IPSTATS\_MIB\_INNOROUTES] = 0, [IPSTATS\_MIB\_INADDRERRORS] = 0, [IPSTATS\_MIB\_INUNKNOWNPROTOS] = 0, [IPSTATS\_MIB\_INTRUNCATEDPKTS] = 0, [IPSTATS\_MIB\_INDISCARDS] = 0, [IPSTATS\_MIB\_OUTDISCARDS] = 0, [IPSTATS\_MIB\_OUTNOROUTES] = 0, [IPSTATS\_MIB\_REASMTIMEOUT] = 0, [IPSTATS\_MIB\_REASMREQDS] = 0, [IPSTATS\_MIB\_REASMOKS] = 0, [IPSTATS\_MIB\_REASMFAILS] = 0, [IPSTATS\_MIB\_FRAGOKS] = 0, [IPSTATS\_MIB\_FRAGFAILS] = 0, [IPSTATS\_MIB\_FRAGCREATES] = 0, [IPSTATS\_MIB\_INMCASTPKTS] = 703, [IPSTATS\_MIB\_OUTMCASTPKTS] = 25, [IPSTATS\_MIB\_INBCASTPKTS] = 0, [IPSTATS\_MIB\_OUTBCASTPKTS] = 0, [IPSTATS\_MIB\_INMCASTOCTETS] = 114914, [IPSTATS\_MIB\_OUTMCASTOCTETS] = 1496, [IPSTATS\_MIB\_INBCASTOCTETS] = 0, [IPSTATS\_MIB\_OUTBCASTOCTETS] = 0, [IPSTATS\_MIB\_CSUMERRORS] = 0, ...]], [{nla\_len=52, nla\_type=IFLA\_INET6\_ICMP6STATS}, [[ICMP6\_MIB\_NUM] = 6, [ICMP6\_MIB\_INMSGS] = 0, [ICMP6\_MIB\_INERRORS] = 0, [ICMP6\_MIB\_OUTMSGS] = 25, [ICMP6\_MIB\_OUTERRORS] = 0, [ICMP6\_MIB\_CSUMERRORS] = 0]], [{nla\_len=20, nla\_type=IFLA\_INET6\_TOKEN}, inet\_pton(AF\_INET6, "::")], [{nla\_len=5, nla\_type=IFLA\_INET6\_ADDR\_GEN\_MODE}, IN6\_ADDR\_GEN\_MODE\_EUI64]]]]], [{nla\_len=41, nla\_type=IFLA\_PARENT\_DEV\_NAME}, "f523660e-b63b-4767-8f10-9894abca"...], [{nla\_len=10, nla\_type=IFLA\_PARENT\_DEV\_BUS\_NAME}, "vmbus"]]]], iov\_len=4096}], msg\_iovlen=1, msg\_controllen=0, msg\_flags=0}, 0) = 2740

**recvmsg(9, {msg\_name={sa\_family=AF\_NETLINK, nl\_pid=0, nl\_groups=00000000}, msg\_namelen=12, msg\_iov=[{iov\_base=[{nlmsg\_len=20, nlmsg\_type=NLMSG\_DONE, nlmsg\_flags=NLM\_F\_MULTI, nlmsg\_seq=1709268905, nlmsg\_pid=131424}, 0], iov\_len=4096}], msg\_iovlen=1, msg\_controllen=0, msg\_flags=0}, 0) = 20**

**sendto(9, [{nlmsg\_len=20, nlmsg\_type=RTM\_GETADDR, nlmsg\_flags=NLM\_F\_REQUEST|NLM\_F\_DUMP, nlmsg\_seq=1709268906, nlmsg\_pid=0}, {ifa\_family=AF\_UNSPEC, ...}], 20, 0, {sa\_family=AF\_NETLINK, nl\_pid=0, nl\_groups=00000000}, 12) = 20**

**recvmsg(9, {msg\_name={sa\_family=AF\_NETLINK, nl\_pid=0, nl\_groups=00000000}, msg\_namelen=12, msg\_iov=[{iov\_base=[[{nlmsg\_len=76, nlmsg\_type=RTM\_NEWADDR, nlmsg\_flags=NLM\_F\_MULTI, nlmsg\_seq=1709268906, nlmsg\_pid=131424}, {ifa\_family=AF\_INET, ifa\_prefixlen=8, ifa\_flags=IFA\_F\_PERMANENT, ifa\_scope=RT\_SCOPE\_HOST, ifa\_index=if\_nametoindex("lo")}, [[{nla\_len=8, nla\_type=IFA\_ADDRESS}, inet\_addr("127.0.0.1")], [{nla\_len=8, nla\_type=IFA\_LOCAL}, inet\_addr("127.0.0.1")], [{nla\_len=7, nla\_type=IFA\_LABEL}, "lo"], [{nla\_len=8, nla\_type=IFA\_FLAGS}, IFA\_F\_PERMANENT], [{nla\_len=20, nla\_type=IFA\_CACHEINFO}, {ifa\_prefered=4294967295, ifa\_valid=4294967295, cstamp=44, tstamp=44}]]], [{nlmsg\_len=88, nlmsg\_type=RTM\_NEWADDR, nlmsg\_flags=NLM\_F\_MULTI, nlmsg\_seq=1709268906, nlmsg\_pid=131424}, {ifa\_family=AF\_INET, ifa\_prefixlen=20, ifa\_flags=IFA\_F\_PERMANENT, ifa\_scope=RT\_SCOPE\_UNIVERSE, ifa\_index=if\_nametoindex("eth0")}, [[{nla\_len=8, nla\_type=IFA\_ADDRESS}, inet\_addr("172.28.132.59")], [{nla\_len=8, nla\_type=IFA\_LOCAL}, inet\_addr("172.28.132.59")], [{nla\_len=8, nla\_type=IFA\_BROADCAST}, inet\_addr("172.28.143.255")], [{nla\_len=9, nla\_type=IFA\_LABEL}, "eth0"], [{nla\_len=8, nla\_type=IFA\_FLAGS}, IFA\_F\_PERMANENT], [{nla\_len=20, nla\_type=IFA\_CACHEINFO}, {ifa\_prefered=4294967295, ifa\_valid=4294967295, cstamp=61, tstamp=61}]]]], iov\_len=4096}], msg\_iovlen=1, msg\_controllen=0, msg\_flags=0}, 0) = 164**

**recvmsg(9, {msg\_name={sa\_family=AF\_NETLINK, nl\_pid=0, nl\_groups=00000000}, msg\_namelen=12, msg\_iov=[{iov\_base=[[{nlmsg\_len=72, nlmsg\_type=RTM\_NEWADDR, nlmsg\_flags=NLM\_F\_MULTI, nlmsg\_seq=1709268906, nlmsg\_pid=131424}, {ifa\_family=AF\_INET6, ifa\_prefixlen=128, ifa\_flags=IFA\_F\_PERMANENT, ifa\_scope=RT\_SCOPE\_HOST, ifa\_index=if\_nametoindex("lo")}, [[{nla\_len=20, nla\_type=IFA\_ADDRESS}, inet\_pton(AF\_INET6, "::1")], [{nla\_len=20, nla\_type=IFA\_CACHEINFO}, {ifa\_prefered=4294967295, ifa\_valid=4294967295, cstamp=44, tstamp=44}], [{nla\_len=8, nla\_type=IFA\_FLAGS}, IFA\_F\_PERMANENT]]], [{nlmsg\_len=72, nlmsg\_type=RTM\_NEWADDR, nlmsg\_flags=NLM\_F\_MULTI, nlmsg\_seq=1709268906, nlmsg\_pid=131424}, {ifa\_family=AF\_INET6, ifa\_prefixlen=64, ifa\_flags=IFA\_F\_PERMANENT, ifa\_scope=RT\_SCOPE\_LINK, ifa\_index=if\_nametoindex("eth0")}, [[{nla\_len=20, nla\_type=IFA\_ADDRESS}, inet\_pton(AF\_INET6, "fe80::215:5dff:fe6e:815d")], [{nla\_len=20, nla\_type=IFA\_CACHEINFO}, {ifa\_prefered=4294967295, ifa\_valid=4294967295, cstamp=61, tstamp=61}], [{nla\_len=8, nla\_type=IFA\_FLAGS}, IFA\_F\_PERMANENT]]]], iov\_len=4096}], msg\_iovlen=1, msg\_controllen=0, msg\_flags=0}, 0) = 144**

**recvmsg(9, {msg\_name={sa\_family=AF\_NETLINK, nl\_pid=0, nl\_groups=00000000}, msg\_namelen=12, msg\_iov=[{iov\_base=[{nlmsg\_len=20, nlmsg\_type=NLMSG\_DONE, nlmsg\_flags=NLM\_F\_MULTI, nlmsg\_seq=1709268906, nlmsg\_pid=131424}, 0], iov\_len=4096}], msg\_iovlen=1, msg\_controllen=0, msg\_flags=0}, 0) = 20**

close(9) = 0

**socket(AF\_INET, SOCK\_STREAM|SOCK\_CLOEXEC, IPPROTO\_TCP) = 9**

**setsockopt(9, SOL\_SOCKET, SO\_REUSEADDR, [1], 4) = 0**

**bind(9, {sa\_family=AF\_INET, sin\_port=htons(5555), sin\_addr=inet\_addr("127.0.0.1")}, 16) = 0**

listen(9, 100) = 0

getsockname(9, {sa\_family=AF\_INET, sin\_port=htons(5555), sin\_addr=inet\_addr("127.0.0.1")}, [128 =>

16]) = 0

getsockname(9, {sa\_family=AF\_INET, sin\_port=htons(5555), sin\_addr=inet\_addr("127.0.0.1")}, [128 =>

16]) = 0

getpid() = 131424

write(6, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 131424

write(8, "\1\0\0\0\0\0\0\0", 8) = 8

newfstatat(0, "", {st\_mode=S\_IFCHR|0620, st\_rdev=makedev(0x88, 0x7), ...}, AT\_EMPTY\_PATH) = 0

read(0, create 5 -11

"create 5 -11\n", 1024) = 13

newfstatat(1, "", {st\_mode=S\_IFCHR|0620, st\_rdev=makedev(0x88, 0x7), ...}, AT\_EMPTY\_PATH) = 0

write(1, "Error: Parent not found \n", 25Error: Parent not found

) = 25

read(0, create 9 5

"create 9 5\n", 1024) = 11

write(1, "Error: Parent not found \n", 25Error: Parent not found

) = 25

read(0, create 10 5

"create 10 5\n", 1024) = 12

write(1, "Error: Parent not found \n", 25Error: Parent not found

) = 25

read(0, heartbit 2000

"heartbit 2000\n", 1024) = 14

clock\_nanosleep(CLOCK\_REALTIME, 0, {tv\_sec=2, tv\_nsec=0}, 0x7ffc1e19cbd0) = 0

write(1, "Heartbit: node -1 is fine\n", 26Heartbit: node -1 is fine

) = 26

write(1, "\n", 1

) = 1

read(0, exec 10 start

"exec 10 start\n", 1024) = 14

write(1, "Error:id Not found\n", 19Error:id Not found

) = 19

read(0, exec 10 stop

"exec 10 stop\n", 1024) = 13

write(1, "Error:id Not found\n", 19Error:id Not found

) = 19

read(0, exec 10 time

"exec 10 time\n", 1024) = 13

write(1, "Error:id Not found\n", 19Error:id Not found

) = 19

read(0, kill 10

"kill 10\n", 1024) = 8

write(1, "Error: id Not Found\n", 20Error: id Not Found

) = 20

read(0, ping 10

"ping 10\n", 1024) = 8

write(1, "Error: id not found\n", 20Error: id not found

) = 20

read(0, kill 5

"kill 5\n", 1024) = 7

write(1, "Error: id Not Found\n", 20Error: id Not Found

) = 20

read(0, "", 1024) = 0

getpid() = 131424

write(4, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 131424

getpid() = 131424

write(8, "\1\0\0\0\0\0\0\0", 8) = 8

futex(0x558e7d371388, FUTEX\_WAKE\_PRIVATE, 1) = 1

getpid() = 131424

poll([{fd=3, events=POLLIN}], 1, -1) = 1 ([{fd=3, revents=POLLIN}])

getpid() = 131424

read(3, "\1\0\0\0\0\0\0\0", 8) = 8

getpid() = 131424

write(6, "\1\0\0\0\0\0\0\0", 8) = 8

close(7) = 0

close(6) = 0

close(5) = 0

close(4) = 0

close(3) = 0

exit\_group(0) = ?

+++ exited with 0 +++

**Вывод**

В результате проделанной работы, я попробовал себя в создании приложения по асинхронной обработке. Кроме того, я познакомился с технологией очереди сообщений ZeroMQ. Полученный опыт, я считаю полезным и интересным.