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Кафедра №806 “Вычислительная математика и программирование”

**Курсовая работа по курсу**

**«Операционные системы»**

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Дата: 27.12.24

Москва, 2024

# Постановка задачи

## Вариант 3.

### Цель работы

1. Приобретение практических навыков в использовании знаний, полученных в течении курса
2. Проведение исследования в выбранной предметной области

### Задание

Необходимо спроектировать и реализовать программный прототип в соответствии с выбранным вариантом. Произвести анализ и сделать вывод на основании данных, полученных при работе программного прототипа.

Морской бой. Общение между сервером и клиентом необходимо организовать при помощи очередей сообщений (например, ZeroMQ). Каждый игрок должен при запуске ввести свой логин. Для каждого игрока должна вестись статистика игр (сколько побед/поражений). Игрок может посмотреть свою статистику.

## Общий метод и алгоритм решения

Использованные системные вызовы:

- `pid_t getpid(void);`– Возвращает идентификатор (PID) текущего процесса.
- `int kill(pid_t pid, int sig);`– Отправляет сигнал процессу с указанным PID.
- `unsigned int usleep(useconds_t usec);`– Приостанавливает выполнение текущего процесса на заданное количество микросекунд.

1. Сервер запускается и ожидает команды (`login`, `create`, `join`, `stats`) от клиентов через ZeroMQ (сокет `ZMQ_REP`).
2. Клиент вводит логин (через `stdin`), отправляет команду `login:<логин>`, сервер проверяет, нет ли такого логина, и отвечает.
3. Клиент может создавать игровую «комнату» (`create <имя_комнаты>`) или присоединяться к уже существующей (`join <имя_комнаты>`). Когда в комнате набирается 2 игрока, сервер стартует логику «Морского боя».
4. В процессе «Морского боя» сервер «шлёт первым» (используя `ZMQ_REQ`), а клиент отвечает (на `ZMQ_REP`). Сервер может проверять, жив ли клиентский процесс, через `kill(pid, 0)`. При неактивности или ошибке сервер завершает игру.
5. По итогам игры сервер обновляет статистику (`wins/loses`) для каждого логина. Клиент может потом продолжить, создав новую комнату или присоединившись к другой.

## Код программы

### Client.cpp

```
#include <iostream>
```

```
#include <string>
```

```
#include <sstream>
```

```
#include <unistd.h>
```

```
#include <csignal>
```

```
#include <thread>
```

```
#include <chrono>
```

```
#include "myMQ.h"
```

```
int PORT_ITER = 0; // Глобальная переменная из myMQ.hpp
```

```
// Указатель на «игровой» сокет
```

```
static zmq::socket_t* gPlayerSocket = nullptr;
```

```
/*
```

```
 * Игровой цикл: слушаем сервер (get_mes) и отвечаем (send_mes).
```

```
 * Возвращаемся, когда партия закончена (win/lose/ошибка).
```

```
*/
```

```
void gameLoop() {
```

```
    while (true) {
```

```
        std::string msg = get_mes(*gPlayerSocket);
```

```
        if (msg.empty()) {
```

```
            std::cout << "[Client] Пустое сообщение. Завершаем игровой режим.\n";
```

```
            return;
```

```
        }
```

```
        if (msg == "your_turn") {
```

```
            send_mes(*gPlayerSocket, "ok");
```

```
        }
```

```
        else if (msg == "not_your_turn") {
```

```
            send_mes(*gPlayerSocket, "ok");
```

```
        }
```

```
        else if (msg == "shoot") {
```

```

// Сервер просит координаты выстрела

int x, y;

std::cout << "[Client] Ваш ход! Введите x y: ";

std::cin >> x >> y;

std::stringstream ss;

ss << "coords:" << x << ":" << y;

send_mes(*gPlayerSocket, ss.str());

}

else if (msg == "shooted") {

    std::cout << "[Client] Попадание!\n";

    send_mes(*gPlayerSocket, "ok");

}

else if (msg == "miss") {

    std::cout << "[Client] Промех!\n";

    send_mes(*gPlayerSocket, "ok");

}

else if (msg.rfind("board", 0) == 0) {

    // Отобразим поле

    std::string boardStr = msg.substr(5);

    std::cout << "[Client] Текущее поле:\n" << boardStr << std::endl;

    send_mes(*gPlayerSocket, "ok");

}

else if (msg == "win") {

    std::cout << "[Client] Вы выиграли!\n";

    send_mes(*gPlayerSocket, "ok");

    return;

}

else if (msg == "lose") {

    std::cout << "[Client] Вы проиграли!\n";

    send_mes(*gPlayerSocket, "ok");

```

```

        return;
    }

    else if (msg.rfind("Введите ориентацию", 0) == 0) {

        // Сервер просит ориентацию

        std::cout << msg << std::endl;

        std::string orientation;

        std::cin >> orientation;

        send_mes(*gPlayerSocket, orientation);
    }

    else if (msg.rfind("Разместите", 0) == 0) {

        // Сервер просит координаты (x, y)

        std::cout << msg << std::endl;

        int x, y;

        std::cin >> x >> y;

        std::stringstream ss;

        ss << "coords:" << x << ":" << y;

        send_mes(*gPlayerSocket, ss.str());
    }

    else if (msg.rfind("Error", 0) == 0) {

        std::cout << "[Client] Ошибка: " << msg << std::endl;

        send_mes(*gPlayerSocket, "ok");
    }

    else {

        std::cout << "[Client] Неизвестное сообщение: " << msg << std::endl;
    }
}
}
}

```

```

int main() {

    zmq::context_t context(2);

```

```

// Сокет для команд (login, create, join, stats)

// Клиент = REQ, Сервер = REP

zmq::socket_t main_socket(context, ZMQ_REQ);

main_socket.connect(GetConPort(5555));


std::cout << "Добро пожаловать в Морской бой!\n";


// --- Авторизация ---

std::string login;

while (true) {

    std::cout << "Введите ваш логин: ";

    std::cin >> login;

    pid_t pid = getpid();

    std::stringstream ss;

    ss << "login:" << login << ":" << pid;

    send_mes(main_socket, ss.str());

    std::string resp = get_mes(main_socket);

    if (resp.rfind("Ok:", 0) == 0) {

        // Успешно

        auto colPos = resp.find(':');

        int socketIndex = std::stoi(resp.substr(colPos+1));

        // Игровой сокет (REP, т.к. сервер = REQ)

        gPlayerSocket = new zmq::socket_t(context, ZMQ_REP);

        gPlayerSocket->connect(GetConPort(5556 + socketIndex));

        std::cout << "[Client] Авторизация прошла успешно. Игровой порт: "

            << (5556 + socketIndex) << std::endl;
    }
}

```

```

        break;
    }

    else if (resp.find("Error:NameAlreadyExist") == 0) {

        std::cout << "Ошибка: логин уже существует, попробуйте другой.\n";

    }

    else if (resp.find("Error:NoFreeSockets") == 0) {

        std::cout << "Ошибка: на сервере нет свободных слотов.\n";

        return 0;

    }

    else {

        std::cout << "Ошибка: " << resp << std::endl;

    }

}

// --- Цикл команд create/join/stats/exit ---

while (true) {

    std::cout << "\n===== \n"

        << "Доступные команды:\n"

        << " create <имя_игры> - создать комнату\n"

        << " join <имя_игры> - присоединиться к комнате\n"

        << " stats          - показать свою статистику\n"

        << " exit           - выйти из программы\n"

        << "===== \n"

        << "Введите команду: ";

    std::string command;

    std::cin >> command;

    if (command == "create") {

        std::string roomName;

        std::cin >> roomName;

```

```

std::stringstream ss;

ss << "create:" << login << ":" << roomName;

send_mes(main_socket, ss.str());

std::string resp = get_mes(main_socket);

std::cout << "[Client] Сервер ответил: " << resp << std::endl;


if (resp.rfind("Ok:RoomCreated", 0) == 0) {

    std::cout << "[Client] Ожидаем второго игрока...\n";

    gameLoop();

    // Возврат в меню после окончания игры

}

}

else if (command == "join") {

    std::string roomName;

    std::cin >> roomName;

    std::stringstream ss;

    ss << "join:" << login << ":" << roomName;

    send_mes(main_socket, ss.str());

    std::string resp = get_mes(main_socket);

    std::cout << "[Client] Сервер ответил: " << resp << std::endl;


    if (resp.rfind("Ok:RoomJoined", 0) == 0) {

        gameLoop();

        // После окончания партии снова в меню

    }

}

else if (command == "stats") {

    std::stringstream ss;

    ss << "stats:" << login;

    send_mes(main_socket, ss.str());

```



```

        std::string resp = get_mes(main_socket);

        std::cout << "[Client] Статистика: " << resp << std::endl;
    }

    else if (command == "exit") {

        std::cout << "[Client] Завершение работы.\n";

        return 0;

    }

    else {

        std::cout << "[Client] Неизвестная команда.\n";

    }

}

return 0;

}

Game.h

#pragma once

#include <iostream>

#include <string>

#include <sstream>

#include <csignal>

#include "player.h"

/*

*Класс, управляющий логикой «Морского боя» между двумя игроками

*/

class Game {

public:

    Player player1;

    Player player2;

```

```

/*
*Запуск игры
*/

void play(zmq::socket_t& player1_socket,
          zmq::socket_t& player2_socket,
          pid_t first_player_pid,
          pid_t second_player_pid)
{
    std::cout << "[Server] Игра началась между (PID "
                << first_player_pid << ") и (PID "
                << second_player_pid << ")!\n";

    player1.num = 1;
    player2.num = 2;

    // Расстановка кораблей

    player1.placeShips(player1_socket, first_player_pid, second_player_pid);
    player2.placeShips(player2_socket, first_player_pid, second_player_pid);

    int turn = 0;
    while (!gameOver()) {
        bool alive = try_recv(first_player_pid, second_player_pid);
        if (!alive) {
            std::cout << "[Server] Игра прервана (один из процессов умер)\n";
            kill(first_player_pid, SIGTERM);
            kill(second_player_pid, SIGTERM);
            exit(0);
        }
    }
}

```

```
if (turn % 2 == 0) {  
    // Ход первого  
    send_mes(player1_socket, "your_turn");  
    get_mes(player1_socket);  
  
    send_mes(player2_socket, "not_your_turn");  
    get_mes(player2_socket);  
  
    if (playerTurn(player1, player2, player1_socket, player2_socket)) {  
        if (gameOver()) {  
            // Победил 1  
            send_mes(player1_socket, "win");  
            get_mes(player1_socket);  
  
            send_mes(player2_socket, "lose");  
            get_mes(player2_socket);  
            break;  
        }  
        // Повтор хода (попадание)  
        continue;  
    } else {  
        turn++;  
    }  
} else {  
    // Ход второго  
    send_mes(player2_socket, "your_turn");  
    get_mes(player2_socket);  
  
    send_mes(player1_socket, "not_your_turn");  
    get_mes(player1_socket);  
}
```

```

    if (playerTurn(player2, player1, player2_socket, player1_socket)) {
        if (gameOver()) {
            // Победил 2

            send_mes(player2_socket, "win");

            get_mes(player2_socket);

            send_mes(player1_socket, "lose");

            get_mes(player1_socket);

            break;
        }

        continue;
    } else {
        turn++;
    }
}

std::cout << "[Server] Игра завершена!\n";
}

```

private:

```

/*
 * Проверка, не уничтожены ли все корабли
 */

bool gameOver() const {
    return allShipsDead(player1) || allShipsDead(player2);
}

```

```

bool allShipsDead(const Player& pl) const {
    for (auto& row : pl.board) {

```

```

    for (auto c : row) {
        if (c == 'O') {
            return false;
        }
    }
}

return true;
}

/*
 * Ход: attacker стреляет по defender
 * true, если попадание (ход повторяется), иначе false
 */

bool playerTurn(Player& attacker, Player& defender,
                zmq::socket_t& attacker_socket,
                zmq::socket_t& defender_socket)
{
    // Говорим «shoot»
    send_mes(attacker_socket, "shoot");

    std::string recv = get_mes(attacker_socket);

    // Ожидаем: "coords:x:y"

    std::stringstream ss(recv);

    std::string cmd, sx, sy;

    std::getline(ss, cmd, ':'); // coords
    std::getline(ss, sx, ':');
    std::getline(ss, sy, ':');

    if (sx.empty() || sy.empty()) {
        // Неверный формат
    }
}

```

```

    send_mes(attacker_socket, "miss");

    get_mes(attacker_socket);


    send_mes(defender_socket, "miss");

    get_mes(defender_socket);

    return false;
}


int x = std::stoi(sx);

int y = std::stoi(sy);


// Проверка
if (x < 0 || x >= BOARD_SIZE || y < 0 || y >= BOARD_SIZE) {

    // Мимо

    send_mes(attacker_socket, "miss");

    get_mes(attacker_socket);


    send_mes(defender_socket, "miss");

    get_mes(defender_socket);

    return false;
}


// Попал?
if (defender.board[x][y] == 'O') {

    defender.board[x][y] = 'X';

    send_mes(attacker_socket, "shooted");

    get_mes(attacker_socket);


    send_mes(defender_socket, "shooted");

    get_mes(defender_socket);

```

```

        return true;
    } else {
        // Попомax
        if (defender.board[x][y] == ' ') {
            defender.board[x][y] = '*';
        }

        send_mes(attacker_socket, "miss");
        get_mes(attacker_socket);

        send_mes(defender_socket, "miss");
        get_mes(defender_socket);

        // Покажем поле
        send_mes(attacker_socket, "board" + defender.getClearBoard());
        get_mes(attacker_socket);

        send_mes(defender_socket, "board" + defender.getBoard());
        get_mes(defender_socket);

        return false;
    }
}

};

```

### **myMQ.h**

```
#pragma once
```

```
#include <zmq.hpp>
```

```
#include <iostream>
```

```
#include <signal.h>
```

```
#include <string>
```

```

/*
*Глобальная переменная, отвечающая за индекс «игрового» сокета на сервере.
*/

extern int PORT_ITER;

/*
*Получить строку для подключения по TCP на заданный порт
*/

inline std::string GetConPort(int port) {
    return "tcp://127.0.0.1:" + std::to_string(port);
}

/*
*Отправка строки через сокет ZeroMQ
*/

inline bool send_mes(zmq::socket_t& socket, const std::string& message_string) {
    zmq::message_t message(message_string.size());
    memcpy(message.data(), message_string.c_str(), message_string.size());
    return bool(socket.send(message, zmq::send_flags::none));
}

/*
*Получение строки из сокета ZeroMQ
*/

inline std::string get_mes(zmq::socket_t& socket) {
    zmq::message_t message;
    bool ok = false;
    try {
        ok = bool(socket.recv(message, zmq::recv_flags::none));
    }
}

```



```

    } catch(...) {

        ok = false;

    }

    if (!ok) {

        return "";

    }

    return std::string(static_cast<char*>(message.data()), message.size());

}

/*

*Проверка, живы ли процессы (kill(pid, 0)).

*/

inline bool try_recv(pid_t first_player_pid, pid_t second_player_pid) {

    if (kill(first_player_pid, 0) != 0 || kill(second_player_pid, 0) != 0) {

        return false;

    }

    return true;

}

```

## **player.h**

```
#pragma once
```

```
#include <iostream>
```

```
#include <vector>
```

```
#include <string>
```

```
#include <sstream>
```

```
#include <csignal>
```

```
#include "myMQ.h"
```

```
// Размер игрового поля
```

```

const int BOARD_SIZE = 10;

/*
 *Класс, описывающий игрока и его поле
 */

class Player {
public:
    // Поле 10x10
    std::vector<std::vector<char>> board;

    // Номер игрока (1 или 2)
    int num;

    Player() {
        board = std::vector<std::vector<char>>(BOARD_SIZE, std::vector<char>(BOARD_SIZE, '
));
        num = 0;
    }

    /*
     *Простейшее размещение кораблей (один однопалубник)
     */

    void placeShips(zmq::socket_t& player_socket, pid_t first_player_pid, pid_t second_player_pid)
    {
        // Спросим у клиента ориентацию
        send_mes(player_socket, "Введите ориентацию (V/H)");
        std::string orientation = get_mes(player_socket);
        {
            // Удалим лишние пробелы
            std::stringstream tmpSS(orientation);
            tmpSS >> orientation;
        }
    }
}

```

```

// Попросим координаты

send_mes(player_socket, "Разместите 1-палубный корабль (x y)");

std::string coords = get_mes(player_socket);

bool alive = try_recv(first_player_pid, second_player_pid);

if (!alive) {

    std::cout << "[Server] Игра прервана из-за смерти процесса\n";

    kill(first_player_pid, SIGTERM);

    kill(second_player_pid, SIGTERM);

    exit(0);

}

// Парсим полученные координаты (формат "coords:x:y")

int x = -1, y = -1;

{

    std::stringstream ss(coords);

    std::string tmp;

    std::getline(ss, tmp, ':'); // "coords"

    std::getline(ss, tmp, ':'); // x

    x = std::stoi(tmp);

    std::getline(ss, tmp, ':'); // y

    y = std::stoi(tmp);

}

if (x < 0 || x >= BOARD_SIZE || y < 0 || y >= BOARD_SIZE) {

    send_mes(player_socket, "Error: Неверные координаты");

    get_mes(player_socket); // читаем "ok"

    return;

}

```

```

// Размещаем корабль

board[x][y] = 'O';


// Покажем доску

send_mes(player_socket, "board" + getBoard());

get_mes(player_socket); // "ok"
}


/*

*Возвращает поле игрока в виде строки (открытое, с кораблями)

*/

std::string getBoard() const {

    std::stringstream ss;

    ss << "\n 0 1 2 3 4 5 6 7 8 9\n";

    for (int i = 0; i < BOARD_SIZE; ++i) {

        ss << i << " ";

        for (int j = 0; j < BOARD_SIZE; ++j) {

            ss << board[i][j] << " ";

        }

        ss << "\n";

    }

    ss << "\n";

    return ss.str();

}


/*

*Возвращает поле игрока без отображения кораблей (скрытые «О»)

*/

std::string getClearBoard() const {

```

```

std::stringstream ss;

ss << "\n 0 1 2 3 4 5 6 7 8 9\n";

for (int i = 0; i < BOARD_SIZE; ++i) {
    ss << i << " ";

    for (int j = 0; j < BOARD_SIZE; ++j) {
        if (board[i][j] == 'O') {
            ss << " ";
        } else {
            ss << board[i][j] << " ";
        }
    }

    ss << "\n";
}

ss << "\n";

return ss.str();
}
};

```

### **server.cpp**

```

#include <iostream>

#include <string>

#include <map>

#include <unordered_map>

#include <csignal>

#include <unistd.h>

#include <sstream>


#include <zmq.hpp>


#include "myMQ.h"

```

```

#include "game.h"

#include "player.h"


int PORT_ITER = 0;


// Структура игровой комнаты
struct GameRoom {

    std::string name;

    pid_t playersPid[2];

    zmq::socket_t* playersSock[2];

    int filled = 0;

};


int main() {

    zmq::context_t context(3);


    // Главный сокет (для команд login/create/join/stats) - REP

    zmq::socket_t main_socket(context, ZMQ_REP);

    main_socket.bind("tcp://*:5555");


    // «Игровые» сокеты - сервер = ZMQ_REQ (send->recv)

    const int MAX_SOCKETS = 5;

    zmq::socket_t sockets[MAX_SOCKETS] = {

        zmq::socket_t(context, ZMQ_REQ),

        zmq::socket_t(context, ZMQ_REQ),

        zmq::socket_t(context, ZMQ_REQ),

        zmq::socket_t(context, ZMQ_REQ),

        zmq::socket_t(context, ZMQ_REQ),

    };

    for (int i = 0; i < MAX_SOCKETS; i++) {

```

```

std::string bindStr = "tcp://*:" + std::to_string(5556 + i);

sockets[i].bind(bindStr);
}

std::map<std::string, pid_t> loginMap;           // login -> pid
std::map<pid_t, int> pidToSocketIndex;          // pid -> socket index
std::unordered_map<std::string, std::pair<int,int>> stats; // login -> (wins, loses)
std::map<std::string, GameRoom> rooms;          // roomName -> GameRoom

std::cout << "Сервер запущен.\n";

while (true) {
    // Ждём команду от клиента (client=REQ, здесь=REP)

    std::string request = get_mes(main_socket);

    if (request.empty()) {
        send_mes(main_socket, "Error:EmptyRequest");

        continue;
    }

    std::cout << "[SERVER] Получено сообщение: " << request << std::endl;

    std::stringstream ss(request);

    std::string cmd;

    std::getline(ss, cmd, ':');

    if (cmd == "login") {
        // "login:<login>:<pid>"

        std::string login;

        std::getline(ss, login, ':');

        std::string pidStr;

        std::getline(ss, pidStr, ':');
    }
}

```

```

pid_t p = (pid_t)std::stoi(pidStr);

// Проверяем, нет ли уже такого логина
if (loginMap.find(login) != loginMap.end()) {
    send_mes(main_socket, "Error:NameAlreadyExist");
    continue;
}

// Проверяем, есть ли свободный socketIndex
if (PORT_ITER >= MAX_SOCKETS) {
    send_mes(main_socket, "Error:NoFreeSockets");
    continue;
}

loginMap[login] = p;
pidToSocketIndex[p] = PORT_ITER;
if (stats.find(login) == stats.end()) {
    stats[login] = {0, 0}; // wins=0, loses=0
}

// Ответ: "Ok:<index>"
std::string resp = "Ok:" + std::to_string(PORT_ITER);
send_mes(main_socket, resp);

PORT_ITER++;
}

else if (cmd == "create") {
    // "create:<login>:<roomName>"
    std::string login, roomName;
    std::getline(ss, login, ':');
    std::getline(ss, roomName, ':');

```



```

if (loginMap.find(login) == loginMap.end()) {
    send_mes(main_socket, "Error:NeedLoginFirst");
    continue;
}

if (rooms.find(roomName) != rooms.end()) {
    send_mes(main_socket, "Error:RoomAlreadyExist");
    continue;
}

GameRoom gr;

gr.name = roomName;

gr.filled = 1;

gr.playersPid[0] = loginMap[login];

gr.playersPid[1] = 0;

gr.playersSock[0] = &sockets[ pidToSocketIndex[ loginMap[login] ] ];
gr.playersSock[1] = nullptr;

rooms[roomName] = gr;

send_mes(main_socket, "Ok:RoomCreated");
}

else if (cmd == "join") {
    // "join:<login>:<roomName>"
    std::string login, roomName;

    std::getline(ss, login, ':');
    std::getline(ss, roomName, ':');

    if (loginMap.find(login) == loginMap.end()) {
        send_mes(main_socket, "Error:NeedLoginFirst");
        continue;
    }

```

```

auto it = rooms.find(roomName);

if (it == rooms.end()) {

    send_mes(main_socket, "Error:RoomNotExist");

    continue;

}

GameRoom &gr = it->second;

if (gr.filled >= 2) {

    send_mes(main_socket, "Error:RoomIsFull");

    continue;

}


gr.playersPid[1] = loginMap[login];

gr.playersSock[1] = &sockets[ pidToSocketIndex[ loginMap[login] ] ];

gr.filled++;


send_mes(main_socket, "Ok:RoomJoined");


// Если теперь 2 игрока — запускаем игру
if (gr.filled == 2) {

    pid_t pid1 = gr.playersPid[0];

    pid_t pid2 = gr.playersPid[1];

    zmq::socket_t &sock1 = *(gr.playersSock[0]);

    zmq::socket_t &sock2 = *(gr.playersSock[1]);


    std::cout << "[SERVER] Начинаем игру в комнате " << roomName << std::endl;

    Game game;

    game.play(sock1, sock2, pid1, pid2);


    // Определяем, кто проиграл (проверив поле у каждого)

    bool p1lost = false;

```

```
bool p2lost = false;

// Проверяем поле player1
{
    bool p1Dead = true;
    for (auto &row : game.player1.board) {
        for (auto c : row) {
            if (c == 'O') {
                p1Dead = false;
                break;
            }
        }
        if (!p1Dead) break;
    }
    p1lost = p1Dead;
}

// Проверяем поле player2
{
    bool p2Dead = true;
    for (auto &row : game.player2.board) {
        for (auto c : row) {
            if (c == 'O') {
                p2Dead = false;
                break;
            }
        }
        if (!p2Dead) break;
    }
    p2lost = p2Dead;
```

```

    }

    // Найдём логины этих pid
    std::string login1, login2;
    for (auto &kv : loginMap) {
        if (kv.second == pid1) login1 = kv.first;
        if (kv.second == pid2) login2 = kv.first;
    }

    // Обновим статистику
    if (!login1.empty() && !login2.empty()) {
        if (p1lost && !p2lost) {
            // Игрок1 проиграл, игрок2 выиграл
            stats[login1].second += 1;
            stats[login2].first += 1;
        }
        if (p2lost && !p1lost) {
            stats[login2].second += 1;
            stats[login1].first += 1;
        }
    }

    // Удалим комнату (по завершении)
    rooms.erase(roomName);
}

}

else if (cmd == "stats") {
    // "stats:<login>"
    std::string login;
    std::getline(ss, login, ':');
    auto it = stats.find(login);

```

```

    if (it == stats.end()) {
        send_mes(main_socket, "Error:NoStats");
    } else {
        auto [w, l] = it->second;

        std::stringstream out;

        out << "Stats: wins=" << w << ", loses=" << l;

        send_mes(main_socket, out.str());
    }
}

else {
    send_mes(main_socket, "Error:UnknownCommand");
}
}

return 0;
}

```

## Протокол работы программы

### Тестирование:

root@983c3166cd08:/workspaces/os\_base/cp/src# ./server

Сервер запущен.

[SERVER] Получено сообщение: login:1:9065

[SERVER] Получено сообщение: create:1:1

[SERVER] Получено сообщение: login:2:9266

[SERVER] Получено сообщение: join:2:1

[SERVER] Начинаем игру в комнате 1

[Server] Игра началась между (PID 9065) и (PID 9266)!

root@983c3166cd08:/workspaces/os\_base/cp/src# ./client

Добро пожаловать в Морской бой!

Введите ваш логин: 1

[Client] Авторизация прошла успешно. Игровой порт: 5556

=====

Доступные команды:

create <имя\_игры> - создать комнату

join <имя\_игры> - присоединиться к комнате

stats - показать свою статистику

exit - выйти из программы

=====

Введите команду: create 1

[Client] Сервер ответил: Ok:RoomCreated

[Client] Ожидаем второго игрока...

Введите ориентацию (V/H)

V

Разместите 1-палубный корабль (x y)

1 1

[Client] Текущее поле:

0 1 2 3 4 5 6 7 8 9

0

1 O

2

3

4

5

6

7

8

9

[Client] Ваш ход! Введите x y:

root@983c3166cd08:/workspaces/os\_base/cp/src# ./client

Добро пожаловать в Морской бой!

Введите ваш логин: 2

[Client] Авторизация прошла успешно. Игровой порт: 5557

=====

Доступные команды:

create <имя\_игры> - создать комнату

join <имя\_игры> - присоединиться к комнате

stats - показать свою статистику

exit - выйти из программы

=====

Введите команду: join 1

[Client] Сервер ответил: Ok:RoomJoined

Введите ориентацию (V/H)

H

Разместите 1-палубный корабль (x y)

2 2

[Client] Текущее поле:

0 1 2 3 4 5 6 7 8 9

0

1

2 O

3

4

5

6

7

8

9

## Strace:

## Server:

10507 execve("./server", [ "./server"], 0x7ffc14d0d458 /\* 26 vars \*/) = 0

10507 brk(NULL) = 0xe96a000

10507 mmap(NULL, 8192, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f2c6a77a000

10507 access("/etc/ld.so.preload", R\_OK) = -1 ENOENT (No such file or directory)

10507 openat(AT\_FDCWD, "/etc/ld.so.cache", O\_RDONLY|O\_CLOEXEC) = 3

10507 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=25786, ...}, AT\_EMPTY\_PATH) = 0

10507 mmap(NULL, 25786, PROT\_READ, MAP\_PRIVATE, 3, 0) = 0x7f2c6a773000

10507 close(3) = 0

10507 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libzmq.so.5", O\_RDONLY|O\_CLOEXEC) =  
3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=774184, ...}, AT\_EMPTY\_PATH) = 0

10507 mmap(NULL, 772088, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) =  
0x7f2c6a6b6000

10507 mmap(0x7f2c6a6b6000, 487424, PROT\_READ|PROT\_EXEC,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x19000) = 0x7f2c6a6cf000

10507 mmap(0x7f2c6a746000, 147456, PROT\_READ,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x90000) = 0x7f2c6a746000

10507 mmap(0x7f2c6a76a000, 36864, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xb4000) = 0x7f2c6a76a000

10507 close(3) = 0

10507 openat(AT\_FDCWD, "/usr/local/lib64/libstdc++.so.6", O\_RDONLY|O\_CLOEXEC) = 3

10507 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st\_mode=S\_IFREG|0755, st\_size=2530008, ...}, AT\_EMPTY\_PATH) =  
0

10507 mmap(NULL, 2543808, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) =  
0x7f2c6a448000

10507 mmap(0x7f2c6a448000, 1216512, PROT\_READ|PROT\_EXEC,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xa5000) = 0x7f2c6a4ed000

10507 mmap(0x7f2c6a616000, 581632, PROT\_READ,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1ce000) = 0x7f2c6a616000

10507 mmap(0x7f2c6a6a4000, 57344, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x25c000) = 0x7f2c6a6a4000



```

10507 mmap(0x7f2c6a6b2000, 12480, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f2c6a6b2000

10507 close(3)                = 0

10507 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libm.so.6", O_RDONLY|O_CLOEXEC) = 3

10507 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=907784, ...}, AT_EMPTY_PATH) = 0

10507 mmap(NULL, 909560, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f2c6a369000

10507 mmap(0x7f2c6a379000, 471040, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x10000) = 0x7f2c6a379000

10507 mmap(0x7f2c6a3ec000, 368640, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x83000) = 0x7f2c6a3ec000

10507 mmap(0x7f2c6a446000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xdc000) = 0x7f2c6a446000

10507 close(3)                = 0

10507 openat(AT_FDCWD, "/usr/local/lib64/libgcc_s.so.1", O_RDONLY|O_CLOEXEC) = 3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=906528, ...}, AT_EMPTY_PATH) = 0

10507 mmap(NULL, 181160, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f2c6a33c000

10507 mmap(0x7f2c6a340000, 143360, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f2c6a340000

10507 mmap(0x7f2c6a363000, 16384, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x27000) = 0x7f2c6a363000

10507 mmap(0x7f2c6a367000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2b000) = 0x7f2c6a367000

10507 close(3)                = 0

10507 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC) = 3

10507 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\20t\2\0\0\0\0"..., 832) = 832

10507 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"..., 784, 64) =
784

10507 newfstatat(3, "", {st_mode=S_IFREG|0755, st_size=1922136, ...}, AT_EMPTY_PATH) =
0

10507 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"..., 784, 64) =
784

10507 mmap(NULL, 1970000, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f2c6a15b000

```

```

10507 mmap(0x7f2c6a181000, 1396736, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x26000) = 0x7f2c6a181000

10507 mmap(0x7f2c6a2d6000, 339968, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x17b000) = 0x7f2c6a2d6000

10507 mmap(0x7f2c6a329000, 24576, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1ce000) = 0x7f2c6a329000

10507 mmap(0x7f2c6a32f000, 53072, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f2c6a32f000

10507 close(3)                = 0

10507 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libbsd.so.0", O_RDONLY|O_CLOEXEC) = 3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=84840, ...}, AT_EMPTY_PATH) = 0

10507 mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f2c6a159000

10507 mmap(NULL, 86224, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f2c6a143000

10507 mmap(0x7f2c6a147000, 49152, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f2c6a147000

10507 mmap(0x7f2c6a153000, 12288, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x10000) = 0x7f2c6a153000

10507 mmap(0x7f2c6a156000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x13000) = 0x7f2c6a156000

10507 mmap(0x7f2c6a158000, 208, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f2c6a158000

10507 close(3)                = 0

10507 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libsodium.so.23",
O_RDONLY|O_CLOEXEC) = 3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\314\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=363208, ...}, AT_EMPTY_PATH) = 0

10507 mmap(NULL, 365576, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f2c6a0e9000

10507 mprotect(0x7f2c6a0f5000, 311296, PROT_NONE) = 0

10507 mmap(0x7f2c6a0f5000, 233472, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000) = 0x7f2c6a0f5000

10507 mmap(0x7f2c6a12e000, 73728, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x45000) = 0x7f2c6a12e000

10507 mmap(0x7f2c6a141000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x57000) = 0x7f2c6a141000

10507 close(3)                = 0

```

```

10507 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libpgm-5.3.so.0",
O_RDONLY|O_CLOEXEC) = 3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\220\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=306400, ...}, AT_EMPTY_PATH) = 0

10507 mmap(NULL, 326096, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f2c6a099000

10507 mmap(0x7f2c6a09d000, 167936, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f2c6a09d000

10507 mmap(0x7f2c6a0c6000, 118784, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2d000) = 0x7f2c6a0c6000

10507 mmap(0x7f2c6a0e3000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x49000) = 0x7f2c6a0e3000

10507 mmap(0x7f2c6a0e5000, 14800, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f2c6a0e5000

10507 close(3) = 0

10507 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libnorm.so.1", O_RDONLY|O_CLOEXEC) =
3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\300\246\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=489480, ...}, AT_EMPTY_PATH) = 0

10507 mmap(NULL, 1214976, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f2c69f70000

10507 mprotect(0x7f2c69f7a000, 438272, PROT_NONE) = 0

10507 mmap(0x7f2c69f7a000, 278528, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xa000) = 0x7f2c69f7a000

10507 mmap(0x7f2c69fbe000, 155648, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4e000) = 0x7f2c69fbe000

10507 mmap(0x7f2c69fe5000, 16384, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x74000) = 0x7f2c69fe5000

10507 mmap(0x7f2c69fe9000, 719360, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f2c69fe9000

10507 close(3) = 0

10507 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgssapi_krb5.so.2",
O_RDONLY|O_CLOEXEC) = 3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=338680, ...}, AT_EMPTY_PATH) = 0

10507 mmap(NULL, 337152, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f2c69f1d000

10507 mmap(0x7f2c69f29000, 221184, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000) = 0x7f2c69f29000

```

```

10507 mmap(0x7f2c69f5f000, 53248, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x42000) = 0x7f2c69f5f000

10507 mmap(0x7f2c69f6c000, 16384, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4f000) = 0x7f2c69f6c000

10507 close(3)                = 0

10507 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libmd.so.0", O_RDONLY|O_CLOEXEC) = 3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=47312, ...}, AT_EMPTY_PATH) = 0

10507 mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f2c69f1b000

10507 mmap(NULL, 49384, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f2c69f0e000

10507 mmap(0x7f2c69f10000, 28672, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f2c69f10000

10507 mmap(0x7f2c69f17000, 8192, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9000) = 0x7f2c69f17000

10507 mmap(0x7f2c69f19000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xa000) = 0x7f2c69f19000

10507 close(3)                = 0

10507 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libpthread.so.0", O_RDONLY|O_CLOEXEC)
= 3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=14480, ...}, AT_EMPTY_PATH) = 0

10507 mmap(NULL, 16400, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f2c69f09000

10507 mmap(0x7f2c69f0a000, 4096, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1000) = 0x7f2c69f0a000

10507 mmap(0x7f2c69f0b000, 4096, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f2c69f0b000

10507 mmap(0x7f2c69f0c000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f2c69f0c000

10507 close(3)                = 0

10507 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkrb5.so.3", O_RDONLY|O_CLOEXEC) =
3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=888080, ...}, AT_EMPTY_PATH) = 0

10507 mmap(NULL, 890784, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f2c69e2f000

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10507 mmap(0x7f2c69e52000, 389120, PROT\_READ|PROT\_EXEC,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x23000) = 0x7f2c69e52000

10507 mmap(0x7f2c69eb1000, 294912, PROT\_READ,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x82000) = 0x7f2c69eb1000

10507 mmap(0x7f2c69ef9000, 65536, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xc9000) = 0x7f2c69ef9000

10507 close(3) = 0

10507 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libk5crypto.so.3",  
O\_RDONLY|O\_CLOEXEC) = 3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=183048, ...}, AT\_EMPTY\_PATH) = 0

10507 mmap(NULL, 180952, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) =  
0x7f2c69e02000

10507 mmap(0x7f2c69e06000, 106496, PROT\_READ|PROT\_EXEC,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f2c69e06000

10507 mmap(0x7f2c69e20000, 53248, PROT\_READ,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1e000) = 0x7f2c69e20000

10507 mmap(0x7f2c69e2d000, 8192, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2b000) = 0x7f2c69e2d000

10507 close(3) = 0

10507 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libcom\_err.so.2",  
O\_RDONLY|O\_CLOEXEC) = 3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=18344, ...}, AT\_EMPTY\_PATH) = 0

10507 mmap(NULL, 20552, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) =  
0x7f2c69dfc000

10507 mmap(0x7f2c69dfe000, 4096, PROT\_READ|PROT\_EXEC,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2000) = 0x7f2c69dfe000

10507 mmap(0x7f2c69dff000, 4096, PROT\_READ,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f2c69dff000

10507 mmap(0x7f2c69e00000, 8192, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f2c69e00000

10507 close(3) = 0

10507 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libkrb5support.so.0",  
O\_RDONLY|O\_CLOEXEC) = 3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=52224, ...}, AT\_EMPTY\_PATH) = 0

10507 mmap(NULL, 8192, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f2c69dfa000

10507 mmap(NULL, 54632, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f2c69dec000

10507 mmap(0x7f2c69def000, 24576, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f2c69def000

10507 mmap(0x7f2c69df5000, 12288, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x9000) = 0x7f2c69df5000

10507 mmap(0x7f2c69df8000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xb000) = 0x7f2c69df8000

10507 close(3) = 0

10507 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libkeyutils.so.1", O\_RDONLY|O\_CLOEXEC) = 3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=22448, ...}, AT\_EMPTY\_PATH) = 0

10507 mmap(NULL, 24592, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f2c69de5000

10507 mmap(0x7f2c69de7000, 8192, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2000) = 0x7f2c69de7000

10507 mmap(0x7f2c69de9000, 4096, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f2c69de9000

10507 mmap(0x7f2c69dea000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f2c69dea000

10507 close(3) = 0

10507 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libresolv.so.2", O\_RDONLY|O\_CLOEXEC) = 3

10507 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10507 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=60328, ...}, AT\_EMPTY\_PATH) = 0

10507 mmap(NULL, 68136, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f2c69dd4000

10507 mmap(0x7f2c69dd7000, 32768, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f2c69dd7000

10507 mmap(0x7f2c69ddf000, 8192, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xb000) = 0x7f2c69ddf000

10507 mmap(0x7f2c69de1000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xd000) = 0x7f2c69de1000

10507 mmap(0x7f2c69de3000, 6696, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f2c69de3000

10507 close(3) = 0

10507 mmap(NULL, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f2c69dd2000

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10507 mmap(NULL, 12288, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f2c69dcf000

10507 arch_prctl(ARCH_SET_FS, 0x7f2c69dcf9c0) = 0

10507 set_tid_address(0x7f2c69dcfc90) = 10507

10507 set_robust_list(0x7f2c69dcfca0, 24) = 0

10507 rseq(0x7f2c69dd02e0, 0x20, 0, 0x53053053) = 0

10507 mprotect(0x7f2c6a329000, 16384, PROT_READ) = 0

10507 mprotect(0x7f2c69de1000, 4096, PROT_READ) = 0

10507 mprotect(0x7f2c69dea000, 4096, PROT_READ) = 0

10507 mprotect(0x7f2c69df8000, 4096, PROT_READ) = 0

10507 mprotect(0x7f2c69e00000, 4096, PROT_READ) = 0

10507 mprotect(0x7f2c69e2d000, 4096, PROT_READ) = 0

10507 mprotect(0x7f2c69ef9000, 53248, PROT_READ) = 0

10507 mprotect(0x7f2c69f0c000, 4096, PROT_READ) = 0

10507 mprotect(0x7f2c69f19000, 4096, PROT_READ) = 0

10507 mprotect(0x7f2c69f6c000, 8192, PROT_READ) = 0

10507 mprotect(0x7f2c6a446000, 4096, PROT_READ) = 0

10507 mprotect(0x7f2c6a367000, 4096, PROT_READ) = 0

10507 mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f2c69dcd000

10507 mprotect(0x7f2c6a6a4000, 45056, PROT_READ) = 0

10507 mprotect(0x7f2c69fe5000, 12288, PROT_READ) = 0

10507 mprotect(0x7f2c6a0e3000, 4096, PROT_READ) = 0

10507 mprotect(0x7f2c6a141000, 4096, PROT_READ) = 0

10507 mprotect(0x7f2c6a156000, 4096, PROT_READ) = 0

10507 mprotect(0x7f2c6a76a000, 32768, PROT_READ) = 0

10507 mprotect(0x41b000, 4096, PROT_READ) = 0

10507 mprotect(0x7f2c6a7ac000, 8192, PROT_READ) = 0

10507 prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024,
rlim_max=RLIM64_INFINITY}) = 0

10507 munmap(0x7f2c6a773000, 25786) = 0

10507 futex(0x7f2c6a6b273c, FUTEX_WAKE_PRIVATE, 2147483647) = 0

10507 getrandom("\x37\xbc\x72\xa3\x84\x5d\x1c\x83", 8, GRND_NONBLOCK) = 8

10507 brk(NULL) = 0xe96a000

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10507 brk(0xe98b000)          = 0xe98b000
10507 openat(AT_FDCWD, "/sys/devices/system/cpu/online", O_RDONLY|O_CLOEXEC) = 3
10507 read(3, "0-15\n", 1024)    = 5
10507 close(3)                 = 0
10507 openat(AT_FDCWD, "/sys/devices/system/cpu/possible", O_RDONLY|O_CLOEXEC) = 3
10507 read(3, "0-15\n", 1024)    = 5
10507 close(3)                 = 0
10507 getpid()                 = 10507
10507 sched_getaffinity(10507, 128, [0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15]) = 32
10507 newfstatat(AT_FDCWD, "/etc/nsswitch.conf", {st_mode=S_IFREG|0644, st_size=494, ...},
0) = 0
10507 newfstatat(AT_FDCWD, "/", {st_mode=S_IFDIR|0755, st_size=4096, ...}, 0) = 0
10507 openat(AT_FDCWD, "/etc/nsswitch.conf", O_RDONLY|O_CLOEXEC) = 3
10507 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=494, ...}, AT_EMPTY_PATH) = 0
10507 read(3, "# /etc/nsswitch.conf\n#\n# Example" ..., 4096) = 494
10507 read(3, "", 4096)         = 0
10507 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=494, ...}, AT_EMPTY_PATH) = 0
10507 close(3)                 = 0
10507 openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 3
10507 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=25786, ...}, AT_EMPTY_PATH) = 0
10507 mmap(NULL, 25786, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f2c6a773000
10507 close(3)                 = 0
10507 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v4/libnss_db.so.2",
O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
10507 newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v4", 0x7fff0acfbbb0,
0) = -1 ENOENT (No such file or directory)
10507 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)
10507 newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v3", 0x7fff0acfbbb0,
0) = -1 ENOENT (No such file or directory)
10507 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)
10507 newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v2", 0x7fff0acfbbb0,
0) = -1 ENOENT (No such file or directory)
10507 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/tls/x86_64/x86_64/libnss_db.so.2",
O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)

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10507 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/x86\_64/x86\_64", 0x7fff0acfbbbb0, 0) = -1 ENOENT (No such file or directory)

10507 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)

10507 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/x86\_64", 0x7fff0acfbbbb0, 0) = -1 ENOENT (No such file or directory)

10507 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)

10507 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/x86\_64", 0x7fff0acfbbbb0, 0) = -1 ENOENT (No such file or directory)

10507 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls", 0x7fff0acfbbbb0, 0) = -1 ENOENT (No such file or directory)

10507 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/x86\_64/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/x86\_64/x86\_64", 0x7fff0acfbbbb0, 0) = -1 ENOENT (No such file or directory)

10507 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)

10507 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/x86\_64", 0x7fff0acfbbbb0, 0) = -1 ENOENT (No such file or directory)

10507 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)

10507 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/x86\_64", 0x7fff0acfbbbb0, 0) = -1 ENOENT (No such file or directory)

10507 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu", {st\_mode=S\_IFDIR|0755, st\_size=4096, ...}, 0) = 0

10507 openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v4/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v4", 0x7fff0acfbbbb0, 0) = -1 ENOENT (No such file or directory)

10507 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)

10507 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v3", 0x7fff0acfbbbb0, 0) = -1 ENOENT (No such file or directory)

10507 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)

10507 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v2", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file or directory)

10507 openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/x86\_64/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/x86\_64/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file or directory)

10507 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)

10507 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file or directory)

10507 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)

10507 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file or directory)

10507 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)

10507 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file or directory)

10507 openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/x86\_64/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/x86\_64/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file or directory)

10507 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)

10507 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file or directory)

10507 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)

10507 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file or directory)

10507 openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu", {st\_mode=S\_IFDIR|0755, st\_size=4096, ...}, 0) = 0

10507 openat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v4/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v4", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file or directory)

10507 openat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v3/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v3", 0x7fff0acfbbb0, 0) = -1 ENOENT  
(No such file or directory)

10507 openat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v2/libnss\_db.so.2",  
O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v2", 0x7fff0acfbbb0, 0) = -1 ENOENT  
(No such file or directory)

10507 openat(AT\_FDCWD, "/lib/tls/x86\_64/x86\_64/libnss\_db.so.2",  
O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/lib/tls/x86\_64/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No  
such file or directory)

10507 openat(AT\_FDCWD, "/lib/tls/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1  
ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/lib/tls/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file  
or directory)

10507 openat(AT\_FDCWD, "/lib/tls/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1  
ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/lib/tls/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file  
or directory)

10507 openat(AT\_FDCWD, "/lib/tls/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT  
(No such file or directory)

10507 newfstatat(AT\_FDCWD, "/lib/tls", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file or  
directory)

10507 openat(AT\_FDCWD, "/lib/x86\_64/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) =  
-1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/lib/x86\_64/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No  
such file or directory)

10507 openat(AT\_FDCWD, "/lib/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1  
ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/lib/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file or  
directory)

10507 openat(AT\_FDCWD, "/lib/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1  
ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/lib/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file or  
directory)

10507 openat(AT\_FDCWD, "/lib/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT  
(No such file or directory)

10507 newfstatat(AT\_FDCWD, "/lib", {st\_mode=S\_IFDIR|0755, st\_size=4096, ...}, 0) = 0

10507 openat(AT\_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v4/libnss\_db.so.2",  
O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v4", 0x7fff0acfbbb0, 0) = -1  
ENOENT (No such file or directory)

10507 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)

10507 newfstatat(AT\_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v3", 0x7fff0acfbbb0, 0) = -1  
ENOENT (No such file or directory)

10507 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)

10507 newfstatat(AT\_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v2", 0x7fff0acfbbb0, 0) = -1  
ENOENT (No such file or directory)

10507 openat(AT\_FDCWD, "/usr/lib/tls/x86\_64/x86\_64/libnss\_db.so.2",  
O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/usr/lib/tls/x86\_64/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT  
(No such file or directory)

10507 openat(AT\_FDCWD, "/usr/lib/tls/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -  
1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/usr/lib/tls/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such  
file or directory)

10507 openat(AT\_FDCWD, "/usr/lib/tls/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -  
1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/usr/lib/tls/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such  
file or directory)

10507 openat(AT\_FDCWD, "/usr/lib/tls/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1  
ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/usr/lib/tls", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file or  
directory)

10507 openat(AT\_FDCWD, "/usr/lib/x86\_64/x86\_64/libnss\_db.so.2",  
O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No  
such file or directory)

10507 openat(AT\_FDCWD, "/usr/lib/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1  
ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file  
or directory)

10507 openat(AT\_FDCWD, "/usr/lib/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1  
ENOENT (No such file or directory)

10507 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64", 0x7fff0acfbbb0, 0) = -1 ENOENT (No such file  
or directory)

10507 openat(AT\_FDCWD, "/usr/lib/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT  
(No such file or directory)

10507 newfstatat(AT\_FDCWD, "/usr/lib", {st\_mode=S\_IFDIR|0755, st\_size=4096, ...}, 0) = 0

10507 munmap(0x7f2c6a773000, 25786) = 0

```

10507 openat(AT_FDCWD, "/etc/protocols", O_RDONLY|O_CLOEXEC) = 3
10507 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=3144, ...}, AT_EMPTY_PATH) = 0
10507 lseek(3, 0, SEEK_SET) = 0
10507 read(3, "# Internet (IP) protocols\n#\n# Up"..., 4096) = 3144
10507 read(3, "", 4096) = 0
10507 close(3) = 0
10507 eventfd2(0, EFD_CLOEXEC) = 3
10507 fcntl(3, F_GETFL) = 0x2 (flags O_RDWR)
10507 fcntl(3, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10507 fcntl(3, F_GETFL) = 0x802 (flags O_RDWR|O_NONBLOCK)
10507 fcntl(3, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10507 getpid() = 10507
10507 getpid() = 10507
10507 getRandom("\x09\xab\xdc\x60\xef\xf7\x96\x37\x97\x4a\xa1\x5f\x04\x9d\xbd\x29", 16, 0) =
16
10507 getRandom("\x1a\x09\xf7\xb1\xe7c\x05\xd0\x76\x47\x3a\xdf\xac\x14\x4a\xbc", 16, 0) =
16
10507 eventfd2(0, EFD_CLOEXEC) = 4
10507 fcntl(4, F_GETFL) = 0x2 (flags O_RDWR)
10507 fcntl(4, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10507 fcntl(4, F_GETFL) = 0x802 (flags O_RDWR|O_NONBLOCK)
10507 fcntl(4, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10507 getpid() = 10507
10507 epoll_create1(EPOCH_CLOEXEC) = 5
10507 epoll_ctl(5, EPOLL_CTL_ADD, 4, {events=0, data={u32=244827744, u64=244827744}})
= 0
10507 epoll_ctl(5, EPOLL_CTL_MOD, 4, {events=EPOLLIN, data={u32=244827744,
u64=244827744}}) = 0
10507 getpid() = 10507
10507 rt_sigaction(SIGRT_1, {sa_handler=0x7f2c6a1e1720, sa_mask=[],
sa_flags=SA_RESTORER|SA_ONSTACK|SA_RESTART|SA_SIGINFO,
sa_restorer=0x7f2c6a197050}, NULL, 8) = 0
10507 rt_sigprocmask(SIG_UNBLOCK, [RTMIN RT_1], NULL, 8) = 0
10507 mmap(NULL, 8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0) = 0x7f2c695cc000

```

10507 mprotect(0x7f2c695cd000, 8388608, PROT\_READ|PROT\_WRITE) = 0

10507 rt\_sigprocmask(SIG\_BLOCK, ~[], [], 8) = 0

10507

clone3({flags=CLONE\_VM|CLONE\_FS|CLONE\_FILES|CLONE\_SIGHAND|CLONE\_THREAD|CLONE\_SYSVSEM|CLONE\_SETTLS|CLONE\_PARENT\_SETTID|CLONE\_CHILD\_CLEARTID, child\_tid=0x7f2c69dcc990, parent\_tid=0x7f2c69dcc990, exit\_signal=0, stack=0x7f2c695cc000, stack\_size=0x7ffd00, tls=0x7f2c69dcc6c0} => {parent\_tid=[10509]}, 88) = 10509

10509 rseq(0x7f2c69dcccfe0, 0x20, 0, 0x53053053 <unfinished ...>

10507 rt\_sigprocmask(SIG\_SETMASK, [], <unfinished ...>

10509 <... rseq resumed>) = 0

10507 <... rt\_sigprocmask resumed>NULL, 8) = 0

10509 set\_robust\_list(0x7f2c69dcc9a0, 24 <unfinished ...>

10507 eventfd2(0, EFD\_CLOEXEC <unfinished ...>

10509 <... set\_robust\_list resumed>) = 0

10507 <... eventfd2 resumed>) = 6

10509 rt\_sigprocmask(SIG\_SETMASK, [], <unfinished ...>

10507 fcntl(6, F\_GETFL <unfinished ...>

10509 <... rt\_sigprocmask resumed>NULL, 8) = 0

10507 <... fcntl resumed>) = 0x2 (flags O\_RDWR)

10509 rt\_sigprocmask(SIG\_BLOCK, ~[RTMIN RT\_1], <unfinished ...>

10507 fcntl(6, F\_SETFL, O\_RDWR|O\_NONBLOCK <unfinished ...>

10509 <... rt\_sigprocmask resumed>NULL, 8) = 0

10507 <... fcntl resumed>) = 0

10509 sched\_getparam(10509, <unfinished ...>

10507 fcntl(6, F\_GETFL <unfinished ...>

10509 <... sched\_getparam resumed>[0]) = 0

10507 <... fcntl resumed>) = 0x802 (flags O\_RDWR|O\_NONBLOCK)

10509 sched\_getscheduler(10509 <unfinished ...>

10507 fcntl(6, F\_SETFL, O\_RDWR|O\_NONBLOCK <unfinished ...>

10509 <... sched\_getscheduler resumed>) = 0 (SCHED\_OTHER)

10507 <... fcntl resumed>) = 0

10509 sched\_setscheduler(10509, SCHED\_OTHER, [0] <unfinished ...>

10507 getpid( <unfinished ...>

10509 <... sched\_setscheduler resumed>) = 0

```

10507 <... getpid resumed>          = 10507
10509 prctl(PR_SET_NAME, "ZMQbg/Reaper" <unfinished ...>
10507 epoll_create1(EPOLL_CLOEXEC <unfinished ...>
10509 <... prctl resumed>            = 0
10507 <... epoll_create1 resumed>    = 7
10509 epoll_wait(5, <unfinished ...>
10507 epoll_ctl(7, EPOLL_CTL_ADD, 6, {events=0, data={u32=244831664, u64=244831664}})
= 0
10507 epoll_ctl(7, EPOLL_CTL_MOD, 6, {events=EPOLLIN, data={u32=244831664,
u64=244831664}}) = 0
10507 mmap(NULL, 8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0) = 0x7f2c68dcb000
10507 mprotect(0x7f2c68dcc000, 8388608, PROT_READ|PROT_WRITE) = 0
10507 rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0
10507
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD|CLO
NE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEARTID,
child_tid=0x7f2c695cb990, parent_tid=0x7f2c695cb990, exit_signal=0, stack=0x7f2c68dcb000,
stack_size=0x7ffd00, tls=0x7f2c695cb6c0} => {parent_tid=[10510]}, 88) = 10510
10510 rseq(0x7f2c695cbfe0, 0x20, 0, 0x53053053 <unfinished ...>
10507 rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
10510 <... rseq resumed>              = 0
10507 <... rt_sigprocmask resumed>NULL, 8) = 0
10510 set_robust_list(0x7f2c695cb9a0, 24 <unfinished ...>
10507 eventfd2(0, EFD_CLOEXEC <unfinished ...>
10510 <... set_robust_list resumed>)   = 0
10507 <... eventfd2 resumed>          = 8
10510 rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
10507 fcntl(8, F_GETFL <unfinished ...>
10510 <... rt_sigprocmask resumed>NULL, 8) = 0
10507 <... fcntl resumed>              = 0x2 (flags O_RDWR)
10510 rt_sigprocmask(SIG_BLOCK, ~[RTMIN RT_1], <unfinished ...>
10507 fcntl(8, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
10510 <... rt_sigprocmask resumed>NULL, 8) = 0
10507 <... fcntl resumed>              = 0

```

```

10510 sched_getparam(10510, <unfinished ...>
10507 fcntl(8, F_GETFL <unfinished ...>
10510 <... sched_getparam resumed>[0]) = 0
10507 <... fcntl resumed>          = 0x802 (flags O_RDWR|O_NONBLOCK)
10510 sched_getscheduler(10510 <unfinished ...>
10507 fcntl(8, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
10510 <... sched_getscheduler resumed>) = 0 (SCHED_OTHER)
10507 <... fcntl resumed>          = 0
10510 sched_setscheduler(10510, SCHED_OTHER, [0] <unfinished ...>
10507 getpid( <unfinished ...>
10510 <... sched_setscheduler resumed>) = 0
10507 <... getpid resumed>          = 10507
10510 prctl(PR_SET_NAME, "ZMQbg/IO/0" <unfinished ...>
10507 epoll_create1(EPOLL_CLOEXEC <unfinished ...>
10510 <... prctl resumed>          = 0
10507 <... epoll_create1 resumed>    = 9
10510 epoll_wait(7, <unfinished ...>
10507 epoll_ctl(9, EPOLL_CTL_ADD, 8, {events=0, data={u32=244851120, u64=244851120}})
= 0
10507 epoll_ctl(9, EPOLL_CTL_MOD, 8, {events=EPOLLIN, data={u32=244851120,
u64=244851120}}) = 0
10507 mmap(NULL, 8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0) = 0x7f2c685ca000
10507 mprotect(0x7f2c685cb000, 8388608, PROT_READ|PROT_WRITE) = 0
10507 rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0
10507
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD|CLO
NE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEARTID,
child_tid=0x7f2c68dca990, parent_tid=0x7f2c68dca990, exit_signal=0, stack=0x7f2c685ca000,
stack_size=0x7ffd00, tls=0x7f2c68dca6c0} => {parent_tid=[10511]}, 88) = 10511
10511 rseq(0x7f2c68dcafe0, 0x20, 0, 0x53053053 <unfinished ...>
10507 rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
10511 <... rseq resumed>          = 0
10507 <... rt_sigprocmask resumed>NULL, 8) = 0
10511 set_robust_list(0x7f2c68dca9a0, 24 <unfinished ...>

```



```

10507 eventfd2(0, EFD_CLOEXEC <unfinished ...>
10511 <... set_robust_list resumed>) = 0
10507 <... eventfd2 resumed> = 10
10511 rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
10507 fcntl(10, F_GETFL <unfinished ...>
10511 <... rt_sigprocmask resumed>NULL, 8) = 0
10507 <... fcntl resumed> = 0x2 (flags O_RDWR)
10511 rt_sigprocmask(SIG_BLOCK, ~[RTMIN RT_1], <unfinished ...>
10507 fcntl(10, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
10511 <... rt_sigprocmask resumed>NULL, 8) = 0
10507 <... fcntl resumed> = 0
10511 sched_getparam(10511, <unfinished ...>
10507 fcntl(10, F_GETFL <unfinished ...>
10511 <... sched_getparam resumed>[0]) = 0
10507 <... fcntl resumed> = 0x802 (flags O_RDWR|O_NONBLOCK)
10511 sched_getscheduler(10511 <unfinished ...>
10507 fcntl(10, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
10511 <... sched_getscheduler resumed>) = 0 (SCHED_OTHER)
10507 <... fcntl resumed> = 0
10511 sched_setscheduler(10511, SCHED_OTHER, [0] <unfinished ...>
10507 getpid( <unfinished ...>
10511 <... sched_setscheduler resumed>) = 0
10507 <... getpid resumed> = 10507
10511 prctl(PR_SET_NAME, "ZMQbg/IO/1" <unfinished ...>
10507 epoll_create1(EPOLL_CLOEXEC <unfinished ...>
10511 <... prctl resumed> = 0
10507 <... epoll_create1 resumed> = 11
10511 epoll_wait(9, <unfinished ...>
10507 epoll_ctl(11, EPOLL_CTL_ADD, 10, {events=0, data={u32=244853232,
u64=244853232}}) = 0
10507 epoll_ctl(11, EPOLL_CTL_MOD, 10, {events=EPOLLIN, data={u32=244853232,
u64=244853232}}) = 0
10507 mmap(NULL, 8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0) = 0x7f2c67dc9000

```

10507 mprotect(0x7f2c67dca000, 8388608, PROT\_READ|PROT\_WRITE) = 0

10507 rt\_sigprocmask(SIG\_BLOCK, ~[], [], 8) = 0

10507

clone3({flags=CLONE\_VM|CLONE\_FS|CLONE\_FILES|CLONE\_SIGHAND|CLONE\_THREAD|CLONE\_SYSVSEM|CLONE\_SETTLS|CLONE\_PARENT\_SETTID|CLONE\_CHILD\_CLEARTID, child\_tid=0x7f2c685c9990, parent\_tid=0x7f2c685c9990, exit\_signal=0, stack=0x7f2c67dc9000, stack\_size=0x7ffd00, tls=0x7f2c685c96c0} => {parent\_tid=[10512]}, 88) = 10512

10512 rseq(0x7f2c685c9fe0, 0x20, 0, 0x53053053 <unfinished ...>

10507 rt\_sigprocmask(SIG\_SETMASK, [], <unfinished ...>

10512 <... rseq resumed>) = 0

10507 <... rt\_sigprocmask resumed>NULL, 8) = 0

10512 set\_robust\_list(0x7f2c685c99a0, 24 <unfinished ...>

10507 eventfd2(0, EFD\_CLOEXEC <unfinished ...>

10512 <... set\_robust\_list resumed>) = 0

10507 <... eventfd2 resumed>) = 12

10512 rt\_sigprocmask(SIG\_SETMASK, [], <unfinished ...>

10507 fcntl(12, F\_GETFL <unfinished ...>

10512 <... rt\_sigprocmask resumed>NULL, 8) = 0

10507 <... fcntl resumed>) = 0x2 (flags O\_RDWR)

10512 rt\_sigprocmask(SIG\_BLOCK, ~[RTMIN RT\_1], <unfinished ...>

10507 fcntl(12, F\_SETFL, O\_RDWR|O\_NONBLOCK <unfinished ...>

10512 <... rt\_sigprocmask resumed>NULL, 8) = 0

10507 <... fcntl resumed>) = 0

10512 sched\_getparam(10512, <unfinished ...>

10507 fcntl(12, F\_GETFL <unfinished ...>

10512 <... sched\_getparam resumed>[0]) = 0

10507 <... fcntl resumed>) = 0x802 (flags O\_RDWR|O\_NONBLOCK)

10512 sched\_getscheduler(10512 <unfinished ...>

10507 fcntl(12, F\_SETFL, O\_RDWR|O\_NONBLOCK <unfinished ...>

10512 <... sched\_getscheduler resumed>) = 0 (SCHED\_OTHER)

10507 <... fcntl resumed>) = 0

10512 sched\_setscheduler(10512, SCHED\_OTHER, [0] <unfinished ...>

10507 getpid( <unfinished ...>

10512 <... sched\_setscheduler resumed>) = 0

```

10507 <... getpid resumed>          = 10507
10512 prctl(PR_SET_NAME, "ZMQbg/IO/2" <unfinished ...>
10507 getpid( <unfinished ...>
10512 <... prctl resumed>           = 0
10507 <... getpid resumed>          = 10507
10512 epoll_wait(11, <unfinished ...>
10507 poll([ {fd=12, events=POLLIN}], 1, 0) = 0 (Timeout)
10507 socket(AF_INET, SOCK_STREAM|SOCK_CLOEXEC, IPPROTO_TCP) = 13
10507 setsockopt(13, SOL_SOCKET, SO_REUSEADDR, [1], 4) = 0
10507 bind(13, {sa_family=AF_INET, sin_port=htons(5555), sin_addr=inet_addr("0.0.0.0")}, 16)
= 0
10507 listen(13, 100)               = 0
10507 getsockname(13, {sa_family=AF_INET, sin_port=htons(5555),
sin_addr=inet_addr("0.0.0.0")}, [128 => 16]) = 0
10507 getsockname(13, {sa_family=AF_INET, sin_port=htons(5555),
sin_addr=inet_addr("0.0.0.0")}, [128 => 16]) = 0
10507 getpid()                     = 10507
10507 write(6, "\1\0\0\0\0\0\0", 8) = 8
10510 <... epoll_wait resumed> [{events=EPOLLIN, data={u32=244831664, u64=244831664}}],
256, -1) = 1
10507 getpid( <unfinished ...>
10510 getpid( <unfinished ...>
10507 <... getpid resumed>          = 10507
10510 <... getpid resumed>          = 10507
10507 write(12, "\1\0\0\0\0\0\0", 8 <unfinished ...>
10510 poll([ {fd=6, events=POLLIN}], 1, 0 <unfinished ...>
10507 <... write resumed>           = 8
10510 <... poll resumed>            = 1 ([ {fd=6, revents=POLLIN} ])
10507 eventfd2(0, EFD_CLOEXEC <unfinished ...>
10510 getpid( <unfinished ...>
10507 <... eventfd2 resumed>         = 14
10510 <... getpid resumed>          = 10507
10507 fcntl(14, F_GETFL <unfinished ...>
10510 read(6, <unfinished ...>

```

```

10507 <... fcntl resumed>)          = 0x2 (flags O_RDWR)
10510 <... read resumed>"\1\0\0\0\0\0\0", 8) = 8
10507 fcntl(14, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
10510 mmap(NULL, 134217728, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_NORESERVE, -1, 0 <unfinished ...>
10507 <... fcntl resumed>)          = 0
10510 <... mmap resumed>)           = 0x7f2c5fdc9000
10507 fcntl(14, F_GETFL <unfinished ...>
10510 munmap(0x7f2c5fdc9000, 2322432 <unfinished ...>
10507 <... fcntl resumed>)          = 0x802 (flags O_RDWR|O_NONBLOCK)
10510 <... munmap resumed>)         = 0
10507 fcntl(14, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
10510 munmap(0x7f2c64000000, 64786432 <unfinished ...>
10507 <... fcntl resumed>)          = 0
10510 <... munmap resumed>)         = 0
10507 getpid( <unfinished ...>
10510 mprotect(0x7f2c60000000, 135168, PROT_READ|PROT_WRITE <unfinished ...>
10507 <... getpid resumed>)         = 10507
10510 <... mprotect resumed>)       = 0
10507 eventfd2(0, EFD_CLOEXEC <unfinished ...>
10510 epoll_ctl(7, EPOLL_CTL_ADD, 13, {events=0, data={u32=1610615664,
u64=139828565904240}} <unfinished ...>
10507 <... eventfd2 resumed>)       = 15
10510 <... epoll_ctl resumed>)      = 0
10507 fcntl(15, F_GETFL <unfinished ...>
10510 epoll_ctl(7, EPOLL_CTL_MOD, 13, {events=EPOLLIN, data={u32=1610615664,
u64=139828565904240}} <unfinished ...>
10507 <... fcntl resumed>)          = 0x2 (flags O_RDWR)
10510 <... epoll_ctl resumed>)      = 0
10507 fcntl(15, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
10510 getpid( <unfinished ...>
10507 <... fcntl resumed>)          = 0
10510 <... getpid resumed>)         = 10507
10507 fcntl(15, F_GETFL <unfinished ...>

```

```

10510 poll([{fd=6, events=POLLIN}], 1, 0 <unfinished ...>
10507 <... fcntl resumed>          = 0x802 (flags O_RDWR|O_NONBLOCK)
10510 <... poll resumed>          = 0 (Timeout)
10507 fcntl(15, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
10510 epoll_wait(7, <unfinished ...>
10507 <... fcntl resumed>          = 0
10507 getpid()                    = 10507
10507 eventfd2(0, EFD_CLOEXEC)    = 16
10507 fcntl(16, F_GETFL)           = 0x2 (flags O_RDWR)
10507 fcntl(16, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10507 fcntl(16, F_GETFL)           = 0x802 (flags O_RDWR|O_NONBLOCK)
10507 fcntl(16, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10507 getpid()                    = 10507
10507 eventfd2(0, EFD_CLOEXEC)    = 17
10507 fcntl(17, F_GETFL)           = 0x2 (flags O_RDWR)
10507 fcntl(17, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10507 fcntl(17, F_GETFL)           = 0x802 (flags O_RDWR|O_NONBLOCK)
10507 fcntl(17, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10507 getpid()                    = 10507
10507 eventfd2(0, EFD_CLOEXEC)    = 18
10507 fcntl(18, F_GETFL)           = 0x2 (flags O_RDWR)
10507 fcntl(18, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10507 fcntl(18, F_GETFL)           = 0x802 (flags O_RDWR|O_NONBLOCK)
10507 fcntl(18, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10507 getpid()                    = 10507
10507 getpid()                    = 10507
10507 poll([{fd=14, events=POLLIN}], 1, 0) = 0 (Timeout)
10507 socket(AF_INET, SOCK_STREAM|SOCK_CLOEXEC, IPPROTO_TCP) = 21
10507 setsockopt(21, SOL_SOCKET, SO_REUSEADDR, [1], 4) = 0
10507 bind(21, {sa_family=AF_INET, sin_port=htons(5556), sin_addr=inet_addr("0.0.0.0")}, 16)
= 0
10507 listen(21, 100)              = 0

```

```

10507 getsockname(21, {sa_family=AF_INET, sin_port=htons(5556),
sin_addr=inet_addr("0.0.0.0")}, [128 => 16]) = 0

10507 getsockname(21, {sa_family=AF_INET, sin_port=htons(5556),
sin_addr=inet_addr("0.0.0.0")}, [128 => 16]) = 0

10507 getpid() = 10507

10507 write(8, "\1\0\0\0\0\0\0", 8) = 8

10511 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=244851120, u64=244851120}}],
256, -1) = 1

10507 getpid( <unfinished ...>

10511 getpid( <unfinished ...>

10507 <... getpid resumed>) = 10507

10511 <... getpid resumed>) = 10507

10507 write(14, "\1\0\0\0\0\0\0", 8 <unfinished ...>

10511 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>

10507 <... write resumed>) = 8

10511 <... poll resumed>) = 1 ([{fd=8, revents=POLLIN}])

10507 getpid( <unfinished ...>

10511 getpid( <unfinished ...>

10507 <... getpid resumed>) = 10507

10511 <... getpid resumed>) = 10507

10507 poll([{fd=15, events=POLLIN}], 1, 0 <unfinished ...>

10511 read(8, <unfinished ...>

10507 <... poll resumed>) = 0 (Timeout)

10511 <... read resumed>"\1\0\0\0\0\0\0", 8) = 8

10507 socket(AF_INET, SOCK_STREAM|SOCK_CLOEXEC, IPPROTO_TCP <unfinished ...>

10511 mmap(NULL, 134217728, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_NORESERVE, -1, 0 <unfinished ...>

10507 <... socket resumed>) = 22

10511 <... mmap resumed>) = 0x7f2c58000000

10507 setsockopt(22, SOL_SOCKET, SO_REUSEADDR, [1], 4 <unfinished ...>

10511 munmap(0x7f2c5c000000, 67108864 <unfinished ...>

10507 <... setsockopt resumed>) = 0

10511 <... munmap resumed>) = 0

```

```

10507 bind(22, {sa_family=AF_INET, sin_port=htons(5557), sin_addr=inet_addr("0.0.0.0")}, 16
<unfinished ...>

10511 mprotect(0x7f2c58000000, 135168, PROT_READ|PROT_WRITE <unfinished ...>

10507 <... bind resumed>)          = 0

10511 <... mprotect resumed>)      = 0

10507 listen(22, 100 <unfinished ...>

10511 epoll_ctl(9, EPOLL_CTL_ADD, 21, {events=0, data={u32=1476397936,
u64=139828431686512}} <unfinished ...>

10507 <... listen resumed>)        = 0

10511 <... epoll_ctl resumed>)     = 0

10507 getsockname(22, <unfinished ...>

10511 epoll_ctl(9, EPOLL_CTL_MOD, 21, {events=EPOLLIN, data={u32=1476397936,
u64=139828431686512}} <unfinished ...>

10507 <... getsockname resumed>{sa_family=AF_INET, sin_port=htons(5557),
sin_addr=inet_addr("0.0.0.0")}, [128 => 16]) = 0

10511 <... epoll_ctl resumed>)     = 0

10507 getsockname(22, <unfinished ...>

10511 getpid( <unfinished ...>

10507 <... getsockname resumed>{sa_family=AF_INET, sin_port=htons(5557),
sin_addr=inet_addr("0.0.0.0")}, [128 => 16]) = 0

10511 <... getpid resumed>)        = 10507

10507 getpid( <unfinished ...>

10511 poll([fd=8, events=POLLIN]), 1, 0 <unfinished ...>

10507 <... getpid resumed>)        = 10507

10511 <... poll resumed>)          = 0 (Timeout)

10507 write(8, "\1\0\0\0\0\0\0", 8 <unfinished ...>

10511 epoll_wait(9, <unfinished ...>

10507 <... write resumed>)          = 8

10511 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=244851120, u64=244851120}}],
256, -1) = 1

10507 getpid( <unfinished ...>

10511 getpid( <unfinished ...>

10507 <... getpid resumed>)        = 10507

10511 <... getpid resumed>)        = 10507

10507 write(15, "\1\0\0\0\0\0\0", 8 <unfinished ...>

```

```

10511 poll([fd=8, events=POLLIN]), 1, 0 <unfinished ...>
10507 <... write resumed>          = 8
10511 <... poll resumed>          = 1 ([fd=8, revents=POLLIN])
10507 getpid( <unfinished ...>
10511 getpid( <unfinished ...>
10507 <... getpid resumed>        = 10507
10511 <... getpid resumed>        = 10507
10507 poll([fd=16, events=POLLIN]), 1, 0 <unfinished ...>
10511 read(8, <unfinished ...>
10507 <... poll resumed>          = 0 (Timeout)
10511 <... read resumed>"1\0\0\0\0\0\0\0", 8) = 8
10507 socket(AF_INET, SOCK_STREAM|SOCK_CLOEXEC, IPPROTO_TCP <unfinished ...>
10511 epoll_ctl(9, EPOLL_CTL_ADD, 22, {events=0, data={u32=1476397968,
u64=139828431686544}} <unfinished ...>
10507 <... socket resumed>        = 23
10511 <... epoll_ctl resumed>     = 0
10507 setsockopt(23, SOL_SOCKET, SO_REUSEADDR, [1], 4 <unfinished ...>
10511 epoll_ctl(9, EPOLL_CTL_MOD, 22, {events=EPOLLIN, data={u32=1476397968,
u64=139828431686544}} <unfinished ...>
10507 <... setsockopt resumed>    = 0
10511 <... epoll_ctl resumed>    = 0
10507 bind(23, {sa_family=AF_INET, sin_port=htons(5558), sin_addr=inet_addr("0.0.0.0")}, 16
<unfinished ...>
10511 getpid( <unfinished ...>
10507 <... bind resumed>          = 0
10511 <... getpid resumed>        = 10507
10507 listen(23, 100 <unfinished ...>
10511 poll([fd=8, events=POLLIN]), 1, 0 <unfinished ...>
10507 <... listen resumed>        = 0
10511 <... poll resumed>          = 0 (Timeout)
10507 getsockname(23, <unfinished ...>
10511 epoll_wait(9, <unfinished ...>
10507 <... getsockname resumed>{sa_family=AF_INET, sin_port=htons(5558),
sin_addr=inet_addr("0.0.0.0")}, [128 => 16]) = 0

```



```

10507 getsockname(23, {sa_family=AF_INET, sin_port=htons(5558),
sin_addr=inet_addr("0.0.0.0")}, [128 => 16]) = 0

10507 getpid() = 10507

10507 write(10, "\1\0\0\0\0\0\0", 8) = 8

10512 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=244853232, u64=244853232}}],
256, -1) = 1

10507 getpid( <unfinished ...>

10512 getpid( <unfinished ...>

10507 <... getpid resumed>) = 10507

10512 <... getpid resumed>) = 10507

10507 write(16, "\1\0\0\0\0\0\0", 8 <unfinished ...>

10512 poll([{fd=10, events=POLLIN}], 1, 0 <unfinished ...>

10507 <... write resumed>) = 8

10512 <... poll resumed>) = 1 ([{fd=10, revents=POLLIN}])

10507 getpid( <unfinished ...>

10512 getpid( <unfinished ...>

10507 <... getpid resumed>) = 10507

10512 <... getpid resumed>) = 10507

10507 poll([{fd=17, events=POLLIN}], 1, 0 <unfinished ...>

10512 read(10, <unfinished ...>

10507 <... poll resumed>) = 0 (Timeout)

10512 <... read resumed>"\1\0\0\0\0\0\0", 8) = 8

10507 socket(AF_INET, SOCK_STREAM|SOCK_CLOEXEC, IPPROTO_TCP <unfinished ...>

10512 mmap(0x7f2c5c000000, 67108864, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_NORESERVE, -1, 0 <unfinished ...>

10507 <... socket resumed>) = 24

10512 <... mmap resumed>) = 0x7f2c5c000000

10507 setsockopt(24, SOL_SOCKET, SO_REUSEADDR, [1], 4 <unfinished ...>

10512 mprotect(0x7f2c5c000000, 135168, PROT_READ|PROT_WRITE <unfinished ...>

10507 <... setsockopt resumed>) = 0

10512 <... mprotect resumed>) = 0

10507 bind(24, {sa_family=AF_INET, sin_port=htons(5559), sin_addr=inet_addr("0.0.0.0")}, 16
<unfinished ...>

```

```

10512 epoll_ctl(11, EPOLL_CTL_ADD, 23, {events=0, data={u32=1543506800,
u64=139828498795376}} <unfinished ...>

10507 <... bind resumed>)          = 0

10512 <... epoll_ctl resumed>)      = 0

10507 listen(24, 100 <unfinished ...>

10512 epoll_ctl(11, EPOLL_CTL_MOD, 23, {events=EPOLLIN, data={u32=1543506800,
u64=139828498795376}} <unfinished ...>

10507 <... listen resumed>)         = 0

10512 <... epoll_ctl resumed>)      = 0

10507 getsockname(24, <unfinished ...>

10512 getpid( <unfinished ...>

10507 <... getsockname resumed>{sa_family=AF_INET, sin_port=htons(5559),
sin_addr=inet_addr("0.0.0.0")}, [128 => 16]) = 0

10512 <... getpid resumed>)         = 10507

10507 getsockname(24, <unfinished ...>

10512 poll([fd=10, events=POLLIN]), 1, 0 <unfinished ...>

10507 <... getsockname resumed>{sa_family=AF_INET, sin_port=htons(5559),
sin_addr=inet_addr("0.0.0.0")}, [128 => 16]) = 0

10512 <... poll resumed>)           = 0 (Timeout)

10507 getpid( <unfinished ...>

10512 epoll_wait(11, <unfinished ...>

10507 <... getpid resumed>)         = 10507

10507 write(10, "\1\0\0\0\0\0\0", 8) = 8

10512 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=244853232, u64=244853232}}],
256, -1) = 1

10507 getpid( <unfinished ...>

10512 getpid( <unfinished ...>

10507 <... getpid resumed>)         = 10507

10512 <... getpid resumed>)         = 10507

10507 write(17, "\1\0\0\0\0\0\0", 8 <unfinished ...>

10512 poll([fd=10, events=POLLIN]), 1, 0 <unfinished ...>

10507 <... write resumed>)          = 8

10512 <... poll resumed>)           = 1 ([fd=10, revents=POLLIN])

10507 getpid( <unfinished ...>

```

```

10512 getpid( <unfinished ...>
10507 <... getpid resumed>          = 10507
10512 <... getpid resumed>          = 10507
10507 poll([{fd=18, events=POLLIN}], 1, 0 <unfinished ...>
10512 read(10, <unfinished ...>
10507 <... poll resumed>            = 0 (Timeout)
10512 <... read resumed>"\1\0\0\0\0\0\0", 8) = 8
10507 socket(AF_INET, SOCK_STREAM|SOCK_CLOEXEC, IPPROTO_TCP <unfinished ...>
10512 epoll_ctl(11, EPOLL_CTL_ADD, 24, {events=0, data={u32=1543506832,
u64=139828498795408}} <unfinished ...>
10507 <... socket resumed>          = 25
10512 <... epoll_ctl resumed>       = 0
10507 setsockopt(25, SOL_SOCKET, SO_REUSEADDR, [1], 4 <unfinished ...>
10512 epoll_ctl(11, EPOLL_CTL_MOD, 24, {events=EPOLLIN, data={u32=1543506832,
u64=139828498795408}} <unfinished ...>
10507 <... setsockopt resumed>      = 0
10512 <... epoll_ctl resumed>       = 0
10507 bind(25, {sa_family=AF_INET, sin_port=htons(5560), sin_addr=inet_addr("0.0.0.0")}, 16
<unfinished ...>
10512 getpid( <unfinished ...>
10507 <... bind resumed>            = 0
10512 <... getpid resumed>          = 10507
10507 listen(25, 100 <unfinished ...>
10512 poll([{fd=10, events=POLLIN}], 1, 0 <unfinished ...>
10507 <... listen resumed>          = 0
10512 <... poll resumed>            = 0 (Timeout)
10507 getsockname(25, <unfinished ...>
10512 epoll_wait(11, <unfinished ...>
10507 <... getsockname resumed>{sa_family=AF_INET, sin_port=htons(5560),
sin_addr=inet_addr("0.0.0.0")}, [128 => 16]) = 0
10507 getsockname(25, {sa_family=AF_INET, sin_port=htons(5560),
sin_addr=inet_addr("0.0.0.0")}, [128 => 16]) = 0
10507 getpid()                      = 10507
10507 write(6, "\1\0\0\0\0\0\0", 8) = 8

```

```

10510 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=244831664, u64=244831664}}],
256, -1) = 1
10507 getpid( <unfinished ...>
10510 getpid( <unfinished ...>
10507 <... getpid resumed>)          = 10507
10510 <... getpid resumed>)          = 10507
10507 write(18, "\1\0\0\0\0\0\0", 8 <unfinished ...>
10510 poll([{fd=6, events=POLLIN}], 1, 0 <unfinished ...>
10507 <... write resumed>)           = 8
10510 <... poll resumed>)             = 1 ([{fd=6, revents=POLLIN}])
10507 newfstatat(1, "", <unfinished ...>
10510 getpid( <unfinished ...>
10507 <... newfstatat resumed>{st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0), ...,
AT_EMPTY_PATH) = 0
10510 <... getpid resumed>)          = 10507
10507 write(1, "\320\241\320\265\321\200\320\262\320\265\321\200
\320\267\320\260\320\277\321\203\321\211\320\265\320\275.\n", 29 <unfinished ...>
10510 read(6, <unfinished ...>
10507 <... write resumed>)           = 29
10510 <... read resumed>"\1\0\0\0\0\0\0", 8) = 8
10507 getpid( <unfinished ...>
10510 epoll_ctl(7, EPOLL_CTL_ADD, 25, {events=0, data={u32=1610615696,
u64=139828565904272}} <unfinished ...>
10507 <... getpid resumed>)          = 10507
10510 <... epoll_ctl resumed>)        = 0
10507 poll([{fd=12, events=POLLIN}], 1, -1 <unfinished ...>
10510 epoll_ctl(7, EPOLL_CTL_MOD, 25, {events=EPOLLIN, data={u32=1610615696,
u64=139828565904272}} <unfinished ...>
10507 <... poll resumed>)            = 1 ([{fd=12, revents=POLLIN}])
10510 <... epoll_ctl resumed>)        = 0
10507 getpid( <unfinished ...>
10510 getpid( <unfinished ...>
10507 <... getpid resumed>)          = 10507
10510 <... getpid resumed>)          = 10507

```

```

10507 read(12, <unfinished ...>

10510 poll([{fd=6, events=POLLIN}], 1, 0 <unfinished ...>

10507 <... read resumed>"\1\0\0\0\0\0\0", 8) = 8

10510 <... poll resumed>          = 0 (Timeout)

10507 getpid( <unfinished ...>

10510 epoll_wait(7, <unfinished ...>

10507 <... getpid resumed>        = 10507

10507 poll([{fd=12, events=POLLIN}], 1, 0) = 0 (Timeout)

10507 getpid()                   = 10507

10507 poll([{fd=12, events=POLLIN}], 1, -1 <unfinished ...>

10510 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=1610615664,
u64=139828565904240}}], 256, -1) = 1

10510 accept4(13, {sa_family=AF_INET, sin_port=htons(46920),
sin_addr=inet_addr("127.0.0.1")}, [128 => 16], SOCK_CLOEXEC) = 26

10510 setsockopt(26, SOL_TCP, TCP_NODELAY, [1], 4) = 0

10510 getpeername(26, {sa_family=AF_INET, sin_port=htons(46920),
sin_addr=inet_addr("127.0.0.1")}, [128 => 16]) = 0

10510 getsockname(26, {sa_family=AF_INET, sin_port=htons(5555),
sin_addr=inet_addr("127.0.0.1")}, [128 => 16]) = 0

10510 getpeername(26, {sa_family=AF_INET, sin_port=htons(46920),
sin_addr=inet_addr("127.0.0.1")}, [128 => 16]) = 0

10510 fcntl(26, F_GETFL)          = 0x2 (flags O_RDWR)

10510 fcntl(26, F_SETFL, O_RDWR|O_NONBLOCK) = 0

10510 getpid()                   = 10507

10510 write(6, "\1\0\0\0\0\0\0", 8) = 8

10510 epoll_wait(7, [{events=EPOLLIN, data={u32=244831664, u64=244831664}}], 256, -1) = 1

10510 getpid()                   = 10507

10510 poll([{fd=6, events=POLLIN}], 1, 0) = 1 ([{fd=6, revents=POLLIN}])

10510 getpid()                   = 10507

10510 read(6, "\1\0\0\0\0\0\0", 8) = 8

10510 epoll_ctl(7, EPOLL_CTL_ADD, 26, {events=0, data={u32=1610615792,
u64=139828565904368}}) = 0

10510 epoll_ctl(7, EPOLL_CTL_MOD, 26, {events=EPOLLIN, data={u32=1610615792,
u64=139828565904368}}) = 0

10510 epoll_ctl(7, EPOLL_CTL_MOD, 26, {events=EPOLLIN|EPOLLOUT,
data={u32=1610615792, u64=139828565904368}}) = 0

```



```

10507 <... getpid resumed>)          = 10507
10510 sendto(26, "\\4\\31\\5READY\\vSocket-Type\\0\\0\\0\\3REP", 27, 0, NULL, 0 <unfinished ...>
10507 read(12, <unfinished ...>
10510 <... sendto resumed>)          = 27
10507 <... read resumed>"\\1\\0\\0\\0\\0\\0\\0", 8) = 8
10510 epoll_wait(7, <unfinished ...>
10507 getpid( <unfinished ...>
10510 <... epoll_wait resumed>[{events=EPOLLOUT, data={u32=1610615792,
u64=139828565904368}}], 256, -1) = 1
10507 <... getpid resumed>)          = 10507
10510 epoll_ctl(7, EPOLL_CTL_MOD, 26, {events=EPOLLIN, data={u32=1610615792,
u64=139828565904368}} <unfinished ...>
10507 write(6, "\\1\\0\\0\\0\\0\\0\\0", 8 <unfinished ...>
10510 <... epoll_ctl resumed>)        = 0
10507 <... write resumed>)           = 8
10510 epoll_wait(7, <unfinished ...>
10507 getpid( <unfinished ...>
10510 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=244831664, u64=244831664}}],
256, -1) = 1
10507 <... getpid resumed>)          = 10507
10510 getpid( <unfinished ...>
10507 poll([{fd=12, events=POLLIN}], 1, 0 <unfinished ...>
10510 <... getpid resumed>)          = 10507
10507 <... poll resumed>)            = 0 (Timeout)
10510 poll([{fd=6, events=POLLIN}], 1, 0 <unfinished ...>
10507 getpid( <unfinished ...>
10510 <... poll resumed>)            = 1 ([{fd=6, revents=POLLIN}])
10507 <... getpid resumed>)          = 10507
10510 getpid( <unfinished ...>
10507 poll([{fd=12, events=POLLIN}], 1, -1 <unfinished ...>
10510 <... getpid resumed>)          = 10507
10510 read(6, "\\1\\0\\0\\0\\0\\0\\0", 8) = 8
10510 getpid()                      = 10507
10510 poll([{fd=6, events=POLLIN}], 1, 0) = 0 (Timeout)

```

```

10510 epoll_wait(7, [{events=EPOLLIN, data={u32=1610615792, u64=139828565904368}}],
256, -1) = 1

10510 recvfrom(26, "\1\0\0\21login:andre:10606", 8192, 0, NULL, NULL) = 21

10510 getpid() = 10507

10510 write(12, "\1\0\0\0\0\0\0", 8) = 8

10507 <... poll resumed> = 1 ([{fd=12, revents=POLLIN}])

10510 epoll_wait(7, <unfinished ...>

10507 getpid() = 10507

10507 read(12, "\1\0\0\0\0\0\0", 8) = 8

10507 getpid() = 10507

10507 poll([fd=12, events=POLLIN], 1, 0) = 0 (Timeout)

10507 getpid() = 10507

10507 write(6, "\1\0\0\0\0\0\0", 8) = 8

10510 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=244831664, u64=244831664}}],
256, -1) = 1

10507 write(1, "[SERVER] \320\237\320\276\320\273\321\203\321\207\320\265\320\275\320\276
\321\201\320\276\320\276"..., 64 <unfinished ...>

10510 getpid( <unfinished ...>

10507 <... write resumed> = 64

10510 <... getpid resumed> = 10507

10507 getpid( <unfinished ...>

10510 poll([fd=6, events=POLLIN], 1, 0 <unfinished ...>

10507 <... getpid resumed> = 10507

10510 <... poll resumed> = 1 ([fd=6, revents=POLLIN])

10507 poll([fd=12, events=POLLIN], 1, 0 <unfinished ...>

10510 getpid( <unfinished ...>

10507 <... poll resumed> = 0 (Timeout)

10510 <... getpid resumed> = 10507

10507 getpid( <unfinished ...>

10510 read(6, <unfinished ...>

10507 <... getpid resumed> = 10507

10510 <... read resumed> "\1\0\0\0\0\0\0", 8) = 8

10507 poll([fd=12, events=POLLIN], 1, -1 <unfinished ...>

```



```

10510 epoll_ctl(7, EPOLL_CTL_MOD, 26, {events=EPOLLIN|EPOLLOUT,
data={u32=1610615792, u64=139828565904368}}) = 0

10510 getpid() = 10507

10510 write(12, "\1\0\0\0\0\0\0", 8 <unfinished ...>

10507 <... poll resumed>) = 1 ([{fd=12, revents=POLLIN}])

10510 <... write resumed>) = 8

10507 getpid( <unfinished ...>

10510 sendto(26, "\1\0\0\4Ok:0", 8, 0, NULL, 0 <unfinished ...>

10507 <... getpid resumed>) = 10507

10510 <... sendto resumed>) = 8

10507 read(12, <unfinished ...>

10510 getpid( <unfinished ...>

10507 <... read resumed> "\1\0\0\0\0\0\0", 8) = 8

10510 <... getpid resumed>) = 10507

10507 getpid( <unfinished ...>

10510 poll([fd=6, events=POLLIN]), 1, 0 <unfinished ...>

10507 <... getpid resumed>) = 10507

10510 <... poll resumed>) = 0 (Timeout)

10507 poll([fd=12, events=POLLIN]), 1, 0 <unfinished ...>

10510 epoll_wait(7, <unfinished ...>

10507 <... poll resumed>) = 0 (Timeout)

10510 <... epoll_wait resumed> [{events=EPOLLOUT, data={u32=1610615792,
u64=139828565904368}}], 256, -1) = 1

10507 getpid( <unfinished ...>

10510 epoll_ctl(7, EPOLL_CTL_MOD, 26, {events=EPOLLIN, data={u32=1610615792,
u64=139828565904368}} <unfinished ...>

10507 <... getpid resumed>) = 10507

10510 <... epoll_ctl resumed>) = 0

10507 poll([fd=12, events=POLLIN]), 1, -1 <unfinished ...>

10510 epoll_wait(7, <unfinished ...>

10511 <... epoll_wait resumed> [{events=EPOLLIN, data={u32=1476397936,
u64=139828431686512}}], 256, -1) = 1

10511 accept4(21, {sa_family=AF_INET, sin_port=htons(42414),
sin_addr=inet_addr("127.0.0.1")}, [128 => 16], SOCK_CLOEXEC) = 27

```

```

10511 setsockopt(27, SOL_TCP, TCP_NODELAY, [1], 4) = 0

10511 getpeername(27, {sa_family=AF_INET, sin_port=htons(42414),
sin_addr=inet_addr("127.0.0.1")}, [128 => 16]) = 0

10511 getsockname(27, {sa_family=AF_INET, sin_port=htons(5556),
sin_addr=inet_addr("127.0.0.1")}, [128 => 16]) = 0

10511 getpeername(27, {sa_family=AF_INET, sin_port=htons(42414),
sin_addr=inet_addr("127.0.0.1")}, [128 => 16]) = 0

10511 fcntl(27, F_GETFL)          = 0x2 (flags O_RDWR)

10511 fcntl(27, F_SETFL, O_RDWR|O_NONBLOCK) = 0

10511 getpid()                    = 10507

10511 write(8, "\1\0\0\0\0\0\0", 8) = 8

10511 epoll_wait(9, [{events=EPOLLIN, data={u32=244851120, u64=244851120}}], 256, -1) = 1

10511 getpid()                    = 10507

10511 poll([{fd=8, events=POLLIN}], 1, 0) = 1 ([{fd=8, revents=POLLIN}])

10511 getpid()                    = 10507

10511 read(8, "\1\0\0\0\0\0\0", 8) = 8

10511 epoll_ctl(9, EPOLL_CTL_ADD, 27, {events=0, data={u32=1476398064,
u64=139828431686640}}) = 0

10511 epoll_ctl(9, EPOLL_CTL_MOD, 27, {events=EPOLLIN, data={u32=1476398064,
u64=139828431686640}}) = 0

10511 epoll_ctl(9, EPOLL_CTL_MOD, 27, {events=EPOLLIN|EPOLLOUT,
data={u32=1476398064, u64=139828431686640}}) = 0

10511 recvfrom(27, 0x7f2c58001318, 12, 0, NULL, NULL) = -1 EAGAIN (Resource temporarily
unavailable)

10511 getpid()                    = 10507

10511 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)

10511 epoll_wait(9, [{events=EPOLLOUT, data={u32=1476398064, u64=139828431686640}}],
256, 29997) = 1

10511 sendto(27, "\377\0\0\0\0\0\0\1\177", 10, 0, NULL, 0) = 10

10511 epoll_ctl(9, EPOLL_CTL_MOD, 27, {events=EPOLLIN, data={u32=1476398064,
u64=139828431686640}}) = 0

10511 epoll_wait(9, [{events=EPOLLIN, data={u32=1476398064, u64=139828431686640}}],
256, 29996) = 1

10511 recvfrom(27, "\377\0\0\0\0\0\0\1\177\3", 12, 0, NULL, NULL) = 11

10511 epoll_ctl(9, EPOLL_CTL_MOD, 27, {events=EPOLLIN|EPOLLOUT,
data={u32=1476398064, u64=139828431686640}}) = 0

```



```

10510 <... write resumed>          = 8
10511 epoll_ctl(9, EPOLL_CTL_DEL, 27, 0x7f2c58000bf4 <unfinished ...>
10510 epoll_ctl(7, EPOLL_CTL_DEL, 26, 0x7f2c60000bf4 <unfinished ...>
10511 <... epoll_ctl resumed>       = 0
10510 <... epoll_ctl resumed>       = 0
10511 close(27 <unfinished ...>
10510 close(26 <unfinished ...>
10511 <... close resumed>           = 0
10510 <... close resumed>           = 0
10511 epoll_wait(9, <unfinished ...>
10510 epoll_wait(7, <unfinished ...>
10511 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=244851120, u64=244851120}}],
256, -1) = 1
10510 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=244831664, u64=244831664}}],
256, -1) = 1
10511 getpid( <unfinished ...>
10510 getpid( <unfinished ...>
10511 <... getpid resumed>           = 10507
10510 <... getpid resumed>           = 10507
10511 poll([{fd=8, events=POLLIN}], 1, 0) = 1 ([{fd=8, revents=POLLIN}])
10510 poll([{fd=6, events=POLLIN}], 1, 0 <unfinished ...>
10511 getpid( <unfinished ...>
10510 <... poll resumed>             = 1 ([{fd=6, revents=POLLIN}])
10511 <... getpid resumed>           = 10507
10510 getpid( <unfinished ...>
10511 read(8, "\1\0\0\0\0\0\0\0", 8) = 8
10510 <... getpid resumed>           = 10507
10511 getpid()                      = 10507
10511 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
10510 read(6, <unfinished ...>
10511 epoll_wait(9, <unfinished ...>
10510 <... read resumed>"\1\0\0\0\0\0\0\0", 8) = 8
10510 getpid()                      = 10507

```

```

10510 write(12, "\1\0\0\0\0\0\0", 8 <unfinished ...>
10507 <... poll resumed>          = 1 ([{fd=12, revents=POLLIN}])
10510 <... write resumed>         = 8
10507 getpid( <unfinished ...>
10510 getpid( <unfinished ...>
10507 <... getpid resumed>        = 10507
10510 <... getpid resumed>        = 10507
10507 read(12, <unfinished ...>
10510 poll([fd=6, events=POLLIN], 1, 0 <unfinished ...>
10507 <... read resumed> "\1\0\0\0\0\0\0", 8) = 8
10510 <... poll resumed>          = 0 (Timeout)
10507 getpid( <unfinished ...>
10510 epoll_wait(7, <unfinished ...>
10507 <... getpid resumed>        = 10507
10507 poll([fd=12, events=POLLIN], 1, 0) = 0 (Timeout)
10507 getpid()                    = 10507
10507 write(6, "\1\0\0\0\0\0\0", 8) = 8
10510 <... epoll_wait resumed> [{events=EPOLLIN, data={u32=244831664, u64=244831664}}],
256, -1) = 1
10507 getpid( <unfinished ...>
10510 getpid( <unfinished ...>
10507 <... getpid resumed>        = 10507
10510 <... getpid resumed>        = 10507
10507 poll([fd=12, events=POLLIN], 1, -1 <unfinished ...>
10510 poll([fd=6, events=POLLIN], 1, 0) = 1 ([fd=6, revents=POLLIN])
10510 getpid()                    = 10507
10510 read(6, "\1\0\0\0\0\0\0", 8) = 8
10510 getpid()                    = 10507
10510 write(12, "\1\0\0\0\0\0\0", 8 <unfinished ...>
10507 <... poll resumed>          = 1 ([fd=12, revents=POLLIN])
10510 <... write resumed>         = 8
10507 getpid( <unfinished ...>
10510 getpid( <unfinished ...>

```

```

10507 <... getpid resumed>          = 10507
10510 <... getpid resumed>          = 10507
10507 read(12, <unfinished ...>
10510 poll([{fd=6, events=POLLIN}], 1, 0 <unfinished ...>
10507 <... read resumed>"\1\0\0\0\0\0\0", 8) = 8
10510 <... poll resumed>            = 0 (Timeout)
10507 getpid( <unfinished ...>
10510 epoll_wait(7, <unfinished ...>
10507 <... getpid resumed>          = 10507
10507 poll([{fd=12, events=POLLIN}], 1, 0) = 0 (Timeout)
10507 getpid()                     = 10507
10507 poll([{fd=12, events=POLLIN}], 1, -1) = ? ERESTART_RESTARTBLOCK (Interrupted
by signal)
10507 --- SIGINT {si_signo=SIGINT, si_code=SI_KERNEL} ---
10511 <... epoll_wait resumed> <unfinished ...>) = ?
10512 <... epoll_wait resumed> <unfinished ...>) = ?
10510 <... epoll_wait resumed> <unfinished ...>) = ?
10509 <... epoll_wait resumed> <unfinished ...>) = ?
10512 +++ killed by SIGINT +++
10511 +++ killed by SIGINT +++
10510 +++ killed by SIGINT +++
10509 +++ killed by SIGINT +++
10507 +++ killed by SIGINT +++

```

**Client:**

10606 execve("./client", ["/client"], 0x7ffca441d9f8 /\* 26 vars \*/) = 0

10606 brk(NULL) = 0x32e95000

10606 mmap(NULL, 8192, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f3100860000

10606 access("/etc/ld.so.preload", R\_OK) = -1 ENOENT (No such file or directory)

10606 openat(AT\_FDCWD, "/etc/ld.so.cache", O\_RDONLY|O\_CLOEXEC) = 3

10606 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=25786, ...}, AT\_EMPTY\_PATH) = 0

10606 mmap(NULL, 25786, PROT\_READ, MAP\_PRIVATE, 3, 0) = 0x7f3100859000

10606 close(3) = 0

10606 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libzmq.so.5", O\_RDONLY|O\_CLOEXEC) =  
3

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=774184, ...}, AT\_EMPTY\_PATH) = 0

10606 mmap(NULL, 772088, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) =  
0x7f310079c000

10606 mmap(0x7f31007b5000, 487424, PROT\_READ|PROT\_EXEC,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x19000) = 0x7f31007b5000

10606 mmap(0x7f310082c000, 147456, PROT\_READ,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x90000) = 0x7f310082c000

10606 mmap(0x7f3100850000, 36864, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xb4000) = 0x7f3100850000

10606 close(3) = 0

10606 openat(AT\_FDCWD, "/usr/local/lib64/libstdc++.so.6", O\_RDONLY|O\_CLOEXEC) = 3

10606 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st\_mode=S\_IFREG|0755, st\_size=2530008, ...}, AT\_EMPTY\_PATH) =  
0

10606 mmap(NULL, 2543808, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) =  
0x7f310052e000

10606 mmap(0x7f31005d3000, 1216512, PROT\_READ|PROT\_EXEC,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xa5000) = 0x7f31005d3000

10606 mmap(0x7f31006fc000, 581632, PROT\_READ,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1ce000) = 0x7f31006fc000

10606 mmap(0x7f310078a000, 57344, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x25c000) = 0x7f310078a000

10606 mmap(0x7f3100798000, 12480, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f3100798000

```

10606 close(3)                = 0

10606 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libm.so.6", O_RDONLY|O_CLOEXEC) = 3

10606 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=907784, ...}, AT_EMPTY_PATH) = 0

10606 mmap(NULL, 909560, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f310044f000

10606 mmap(0x7f310045f000, 471040, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x10000) = 0x7f310045f000

10606 mmap(0x7f31004d2000, 368640, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x83000) = 0x7f31004d2000

10606 mmap(0x7f310052c000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xdc000) = 0x7f310052c000

10606 close(3)                = 0

10606 openat(AT_FDCWD, "/usr/local/lib64/libgcc_s.so.1", O_RDONLY|O_CLOEXEC) = 3

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=906528, ...}, AT_EMPTY_PATH) = 0

10606 mmap(NULL, 181160, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f3100422000

10606 mmap(0x7f3100426000, 143360, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f3100426000

10606 mmap(0x7f3100449000, 16384, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x27000) = 0x7f3100449000

10606 mmap(0x7f310044d000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2b000) = 0x7f310044d000

10606 close(3)                = 0

10606 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC) = 3

10606 read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 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"..., 784, 64) =
784

10606 newfstatat(3, "", {st_mode=S_IFREG|0755, st_size=1922136, ...}, AT_EMPTY_PATH) =
0

10606 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"..., 784, 64) =
784

10606 mmap(NULL, 1970000, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f3100241000

10606 mmap(0x7f3100267000, 1396736, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x26000) = 0x7f3100267000

```



```

10606 mmap(0x7f31003bc000, 339968, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x17b000) = 0x7f31003bc000

10606 mmap(0x7f310040f000, 24576, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1ce000) = 0x7f310040f000

10606 mmap(0x7f3100415000, 53072, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f3100415000

10606 close(3) = 0

10606 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libbsd.so.0", O_RDONLY|O_CLOEXEC) = 3

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=84840, ...}, AT_EMPTY_PATH) = 0

10606 mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f310023f000

10606 mmap(NULL, 86224, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f3100229000

10606 mmap(0x7f310022d000, 49152, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f310022d000

10606 mmap(0x7f3100239000, 12288, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x10000) = 0x7f3100239000

10606 mmap(0x7f310023c000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x13000) = 0x7f310023c000

10606 mmap(0x7f310023e000, 208, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f310023e000

10606 close(3) = 0

10606 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libsodium.so.23",
O_RDONLY|O_CLOEXEC) = 3

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\314\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=363208, ...}, AT_EMPTY_PATH) = 0

10606 mmap(NULL, 365576, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f31001cf000

10606 mprotect(0x7f31001db000, 311296, PROT_NONE) = 0

10606 mmap(0x7f31001db000, 233472, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000) = 0x7f31001db000

10606 mmap(0x7f3100214000, 73728, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x45000) = 0x7f3100214000

10606 mmap(0x7f3100227000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x57000) = 0x7f3100227000

10606 close(3) = 0

10606 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libpgm-5.3.so.0",
O_RDONLY|O_CLOEXEC) = 3

```

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\220I\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=306400, ...}, AT\_EMPTY\_PATH) = 0

10606 mmap(NULL, 326096, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f310017f000

10606 mmap(0x7f3100183000, 167936, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f3100183000

10606 mmap(0x7f31001ac000, 118784, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2d000) = 0x7f31001ac000

10606 mmap(0x7f31001c9000, 8192, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x49000) = 0x7f31001c9000

10606 mmap(0x7f31001cb000, 14800, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f31001cb000

10606 close(3) = 0

10606 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libnorm.so.1", O\_RDONLY|O\_CLOEXEC) = 3

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\300\246\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=489480, ...}, AT\_EMPTY\_PATH) = 0

10606 mmap(NULL, 1214976, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f3100056000

10606 mprotect(0x7f3100060000, 438272, PROT\_NONE) = 0

10606 mmap(0x7f3100060000, 278528, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xa000) = 0x7f3100060000

10606 mmap(0x7f31000a4000, 155648, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4e000) = 0x7f31000a4000

10606 mmap(0x7f31000cb000, 16384, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x74000) = 0x7f31000cb000

10606 mmap(0x7f31000cf000, 719360, PROT\_READ|PROT\_WRITE, MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f31000cf000

10606 close(3) = 0

10606 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libgssapi\_krb5.so.2", O\_RDONLY|O\_CLOEXEC) = 3

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=338680, ...}, AT\_EMPTY\_PATH) = 0

10606 mmap(NULL, 337152, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) = 0x7f3100003000

10606 mmap(0x7f310000f000, 221184, PROT\_READ|PROT\_EXEC, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xc000) = 0x7f310000f000

10606 mmap(0x7f3100045000, 53248, PROT\_READ, MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x42000) = 0x7f3100045000

```

10606 mmap(0x7f3100052000, 16384, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4f000) = 0x7f3100052000

10606 close(3)                = 0

10606 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libmd.so.0", O_RDONLY|O_CLOEXEC) = 3

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=47312, ...}, AT_EMPTY_PATH) = 0

10606 mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f3100001000

10606 mmap(NULL, 49384, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f30ffff4000

10606 mmap(0x7f30ffff6000, 28672, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f30ffff6000

10606 mmap(0x7f30ffffd000, 8192, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9000) = 0x7f30ffffd000

10606 mmap(0x7f30fffff000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xa000) = 0x7f30fffff000

10606 close(3)                = 0

10606 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libpthread.so.0", O_RDONLY|O_CLOEXEC)
= 3

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=14480, ...}, AT_EMPTY_PATH) = 0

10606 mmap(NULL, 16400, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f30fffe000

10606 mmap(0x7f30ffff0000, 4096, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1000) = 0x7f30ffff0000

10606 mmap(0x7f30ffff1000, 4096, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f30ffff1000

10606 mmap(0x7f30ffff2000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f30ffff2000

10606 close(3)                = 0

10606 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkrb5.so.3", O_RDONLY|O_CLOEXEC) =
3

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=888080, ...}, AT_EMPTY_PATH) = 0

10606 mmap(NULL, 890784, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7f30fff15000

10606 mmap(0x7f30fff38000, 389120, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x23000) = 0x7f30fff38000

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10606 mmap(0x7f30fff97000, 294912, PROT\_READ,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x82000) = 0x7f30fff97000

10606 mmap(0x7f30fffd000, 65536, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xc9000) = 0x7f30fffd000

10606 close(3) = 0

10606 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libk5crypto.so.3",  
O\_RDONLY|O\_CLOEXEC) = 3

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=183048, ...}, AT\_EMPTY\_PATH) = 0

10606 mmap(NULL, 180952, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) =  
0x7f30ffee8000

10606 mmap(0x7f30ffec000, 106496, PROT\_READ|PROT\_EXEC,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f30ffec000

10606 mmap(0x7f30fff06000, 53248, PROT\_READ,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1e000) = 0x7f30fff06000

10606 mmap(0x7f30fff13000, 8192, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2b000) = 0x7f30fff13000

10606 close(3) = 0

10606 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libcom\_err.so.2",  
O\_RDONLY|O\_CLOEXEC) = 3

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=18344, ...}, AT\_EMPTY\_PATH) = 0

10606 mmap(NULL, 20552, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) =  
0x7f30ffee2000

10606 mmap(0x7f30ffee4000, 4096, PROT\_READ|PROT\_EXEC,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2000) = 0x7f30ffee4000

10606 mmap(0x7f30ffee5000, 4096, PROT\_READ,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f30ffee5000

10606 mmap(0x7f30ffee6000, 8192, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f30ffee6000

10606 close(3) = 0

10606 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libkrb5support.so.0",  
O\_RDONLY|O\_CLOEXEC) = 3

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=52224, ...}, AT\_EMPTY\_PATH) = 0

10606 mmap(NULL, 8192, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f30ffee0000

10606 mmap(NULL, 54632, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) =  
0x7f30ffed2000

10606 mmap(0x7f30ffed5000, 24576, PROT\_READ|PROT\_EXEC,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f30ffed5000

10606 mmap(0x7f30ffedb000, 12288, PROT\_READ,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x9000) = 0x7f30ffedb000

10606 mmap(0x7f30ffede000, 8192, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xb000) = 0x7f30ffede000

10606 close(3) = 0

10606 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libkeyutils.so.1",  
O\_RDONLY|O\_CLOEXEC) = 3

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=22448, ...}, AT\_EMPTY\_PATH) = 0

10606 mmap(NULL, 24592, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) =  
0x7f30ffecb000

10606 mmap(0x7f30ffecd000, 8192, PROT\_READ|PROT\_EXEC,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2000) = 0x7f30ffecd000

10606 mmap(0x7f30ffecf000, 4096, PROT\_READ,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f30ffecf000

10606 mmap(0x7f30ffed0000, 8192, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7f30ffed0000

10606 close(3) = 0

10606 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libresolv.so.2", O\_RDONLY|O\_CLOEXEC)  
= 3

10606 read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0"..., 832) = 832

10606 newfstatat(3, "", {st\_mode=S\_IFREG|0644, st\_size=60328, ...}, AT\_EMPTY\_PATH) = 0

10606 mmap(NULL, 68136, PROT\_READ, MAP\_PRIVATE|MAP\_DENYWRITE, 3, 0) =  
0x7f30ffeba000

10606 mmap(0x7f30ffebd000, 32768, PROT\_READ|PROT\_EXEC,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x3000) = 0x7f30ffebd000

10606 mmap(0x7f30ffec5000, 8192, PROT\_READ,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xb000) = 0x7f30ffec5000

10606 mmap(0x7f30ffec7000, 8192, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0xd000) = 0x7f30ffec7000

10606 mmap(0x7f30ffec9000, 6696, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7f30ffec9000

10606 close(3) = 0

10606 mmap(NULL, 8192, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f30ffeb8000

10606 mmap(NULL, 12288, PROT\_READ|PROT\_WRITE,  
MAP\_PRIVATE|MAP\_ANONYMOUS, -1, 0) = 0x7f30ffeb5000

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10606 arch_prctl(ARCH_SET_FS, 0x7f30ffeb59c0) = 0
10606 set_tid_address(0x7f30ffeb5c90) = 10606
10606 set_robust_list(0x7f30ffeb5ca0, 24) = 0
10606 rseq(0x7f30ffeb62e0, 0x20, 0, 0x53053053) = 0
10606 mprotect(0x7f310040f000, 16384, PROT_READ) = 0
10606 mprotect(0x7f30ffec7000, 4096, PROT_READ) = 0
10606 mprotect(0x7f30ffed0000, 4096, PROT_READ) = 0
10606 mprotect(0x7f30ffede000, 4096, PROT_READ) = 0
10606 mprotect(0x7f30ffee6000, 4096, PROT_READ) = 0
10606 mprotect(0x7f30fff13000, 4096, PROT_READ) = 0
10606 mprotect(0x7f30fffd000, 53248, PROT_READ) = 0
10606 mprotect(0x7f30ffff2000, 4096, PROT_READ) = 0
10606 mprotect(0x7f30ffff000, 4096, PROT_READ) = 0
10606 mprotect(0x7f3100052000, 8192, PROT_READ) = 0
10606 mprotect(0x7f310052c000, 4096, PROT_READ) = 0
10606 mprotect(0x7f310044d000, 4096, PROT_READ) = 0
10606 mmap(NULL, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f30ffeb3000
10606 mprotect(0x7f310078a000, 45056, PROT_READ) = 0
10606 mprotect(0x7f31000cb000, 12288, PROT_READ) = 0
10606 mprotect(0x7f31001c9000, 4096, PROT_READ) = 0
10606 mprotect(0x7f3100227000, 4096, PROT_READ) = 0
10606 mprotect(0x7f310023c000, 4096, PROT_READ) = 0
10606 mprotect(0x7f3100850000, 32768, PROT_READ) = 0
10606 mprotect(0x40c000, 4096, PROT_READ) = 0
10606 mprotect(0x7f3100892000, 8192, PROT_READ) = 0
10606 prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024,
rlim_max=RLIM64_INFINITY}) = 0
10606 munmap(0x7f3100859000, 25786) = 0
10606 futex(0x7f310079873c, FUTEX_WAKE_PRIVATE, 2147483647) = 0
10606 getrandom("\x0d\x90\xfa\x19\xf5\x3b\x65\x00", 8, GRND_NONBLOCK) = 8
10606 brk(NULL) = 0x32e95000
10606 brk(0x32eb6000) = 0x32eb6000

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10606 openat(AT_FDCWD, "/sys/devices/system/cpu/online", O_RDONLY|O_CLOEXEC) = 3
10606 read(3, "0-15\n", 1024)      = 5
10606 close(3)          = 0
10606 openat(AT_FDCWD, "/sys/devices/system/cpu/possible", O_RDONLY|O_CLOEXEC) = 3
10606 read(3, "0-15\n", 1024)      = 5
10606 close(3)          = 0
10606 getpid()          = 10606
10606 sched_getaffinity(10606, 128, [0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15]) = 32
10606 newfstatat(AT_FDCWD, "/etc/nsswitch.conf", {st_mode=S_IFREG|0644, st_size=494, ...},
0) = 0
10606 newfstatat(AT_FDCWD, "/", {st_mode=S_IFDIR|0755, st_size=4096, ...}, 0) = 0
10606 openat(AT_FDCWD, "/etc/nsswitch.conf", O_RDONLY|O_CLOEXEC) = 3
10606 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=494, ...}, AT_EMPTY_PATH) = 0
10606 read(3, "# /etc/nsswitch.conf\n#\nExample" ..., 4096) = 494
10606 read(3, "", 4096)      = 0
10606 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=494, ...}, AT_EMPTY_PATH) = 0
10606 close(3)          = 0
10606 openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 3
10606 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=25786, ...}, AT_EMPTY_PATH) = 0
10606 mmap(NULL, 25786, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7f3100859000
10606 close(3)          = 0
10606 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v4/libnss_db.so.2",
O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
10606 newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v4",
0x7ffdb35f160, 0) = -1 ENOENT (No such file or directory)
10606 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)
10606 newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v3",
0x7ffdb35f160, 0) = -1 ENOENT (No such file or directory)
10606 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)
10606 newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v2",
0x7ffdb35f160, 0) = -1 ENOENT (No such file or directory)
10606 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/tls/x86_64/x86_64/libnss_db.so.2",
O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)

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10606 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/x86\_64/x86\_64", 0x7ffdb35f160, 0) = -1 ENOENT (No such file or directory)

10606 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)

10606 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/x86\_64", 0x7ffdb35f160, 0) = -1 ENOENT (No such file or directory)

10606 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)

10606 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/x86\_64", 0x7ffdb35f160, 0) = -1 ENOENT (No such file or directory)

10606 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/tls", 0x7ffdb35f160, 0) = -1 ENOENT (No such file or directory)

10606 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/x86\_64/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/x86\_64/x86\_64", 0x7ffdb35f160, 0) = -1 ENOENT (No such file or directory)

10606 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)

10606 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/x86\_64", 0x7ffdb35f160, 0) = -1 ENOENT (No such file or directory)

10606 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)

10606 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/x86\_64", 0x7ffdb35f160, 0) = -1 ENOENT (No such file or directory)

10606 openat(AT\_FDCWD, "/lib/x86\_64-linux-gnu/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/lib/x86\_64-linux-gnu", {st\_mode=S\_IFDIR|0755, st\_size=4096, ...}, 0) = 0

10606 openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v4/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v4", 0x7ffdb35f160, 0) = -1 ENOENT (No such file or directory)

10606 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)

10606 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v3", 0x7ffdb35f160, 0) = -1 ENOENT (No such file or directory)

10606 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)



10606 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/glibc-hwcaps/x86-64-v2", 0x7ffdbe35f160, 0) = -1 ENOENT (No such file or directory)

10606 openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/x86\_64/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/x86\_64/x86\_64", 0x7ffdbe35f160, 0) = -1 ENOENT (No such file or directory)

10606 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)

10606 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/x86\_64", 0x7ffdbe35f160, 0) = -1 ENOENT (No such file or directory)

10606 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)

10606 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls/x86\_64", 0x7ffdbe35f160, 0) = -1 ENOENT (No such file or directory)

10606 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)

10606 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/tls", 0x7ffdbe35f160, 0) = -1 ENOENT (No such file or directory)

10606 openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/x86\_64/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/x86\_64/x86\_64", 0x7ffdbe35f160, 0) = -1 ENOENT (No such file or directory)

10606 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)

10606 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/x86\_64", 0x7ffdbe35f160, 0) = -1 ENOENT (No such file or directory)

10606 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)

10606 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/x86\_64", 0x7ffdbe35f160, 0) = -1 ENOENT (No such file or directory)

10606 openat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64-linux-gnu", {st\_mode=S\_IFDIR|0755, st\_size=4096, ...}, 0) = 0

10606 openat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v4/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v4", 0x7ffdbe35f160, 0) = -1 ENOENT (No such file or directory)

10606 openat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v3/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v3", 0x7ffdbe35f160, 0) = -1 ENOENT  
(No such file or directory)

10606 openat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v2/libnss\_db.so.2",  
O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/lib/glibc-hwcaps/x86-64-v2", 0x7ffdbe35f160, 0) = -1 ENOENT  
(No such file or directory)

10606 openat(AT\_FDCWD, "/lib/tls/x86\_64/x86\_64/libnss\_db.so.2",  
O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/lib/tls/x86\_64/x86\_64", 0x7ffdbe35f160, 0) = -1 ENOENT (No  
such file or directory)

10606 openat(AT\_FDCWD, "/lib/tls/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1  
ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/lib/tls/x86\_64", 0x7ffdbe35f160, 0) = -1 ENOENT (No such file  
or directory)

10606 openat(AT\_FDCWD, "/lib/tls/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1  
ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/lib/tls/x86\_64", 0x7ffdbe35f160, 0) = -1 ENOENT (No such file  
or directory)

10606 openat(AT\_FDCWD, "/lib/tls/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT  
(No such file or directory)

10606 newfstatat(AT\_FDCWD, "/lib/tls", 0x7ffdbe35f160, 0) = -1 ENOENT (No such file or  
directory)

10606 openat(AT\_FDCWD, "/lib/x86\_64/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) =  
-1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/lib/x86\_64/x86\_64", 0x7ffdbe35f160, 0) = -1 ENOENT (No  
such file or directory)

10606 openat(AT\_FDCWD, "/lib/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1  
ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/lib/x86\_64", 0x7ffdbe35f160, 0) = -1 ENOENT (No such file or  
directory)

10606 openat(AT\_FDCWD, "/lib/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1  
ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/lib/x86\_64", 0x7ffdbe35f160, 0) = -1 ENOENT (No such file or  
directory)

10606 openat(AT\_FDCWD, "/lib/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT  
(No such file or directory)

10606 newfstatat(AT\_FDCWD, "/lib", {st\_mode=S\_IFDIR|0755, st\_size=4096, ...}, 0) = 0

10606 openat(AT\_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v4/libnss\_db.so.2",  
O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v4", 0x7ffdbe35f160, 0) = -1  
ENOENT (No such file or directory)

10606 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)

10606 newfstatat(AT\_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v3", 0x7ffdb35f160, 0) = -1  
ENOENT (No such file or directory)

10606 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)

10606 newfstatat(AT\_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v2", 0x7ffdb35f160, 0) = -1  
ENOENT (No such file or directory)

10606 openat(AT\_FDCWD, "/usr/lib/tls/x86\_64/x86\_64/libnss\_db.so.2",  
O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/usr/lib/tls/x86\_64/x86\_64", 0x7ffdb35f160, 0) = -1 ENOENT  
(No such file or directory)

10606 openat(AT\_FDCWD, "/usr/lib/tls/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -  
1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/usr/lib/tls/x86\_64", 0x7ffdb35f160, 0) = -1 ENOENT (No such  
file or directory)

10606 openat(AT\_FDCWD, "/usr/lib/tls/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -  
1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/usr/lib/tls/x86\_64", 0x7ffdb35f160, 0) = -1 ENOENT (No such  
file or directory)

10606 openat(AT\_FDCWD, "/usr/lib/tls/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1  
ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/usr/lib/tls", 0x7ffdb35f160, 0) = -1 ENOENT (No such file or  
directory)

10606 openat(AT\_FDCWD, "/usr/lib/x86\_64/x86\_64/libnss\_db.so.2",  
O\_RDONLY|O\_CLOEXEC) = -1 ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64/x86\_64", 0x7ffdb35f160, 0) = -1 ENOENT (No  
such file or directory)

10606 openat(AT\_FDCWD, "/usr/lib/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1  
ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64", 0x7ffdb35f160, 0) = -1 ENOENT (No such  
file or directory)

10606 openat(AT\_FDCWD, "/usr/lib/x86\_64/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1  
ENOENT (No such file or directory)

10606 newfstatat(AT\_FDCWD, "/usr/lib/x86\_64", 0x7ffdb35f160, 0) = -1 ENOENT (No such  
file or directory)

10606 openat(AT\_FDCWD, "/usr/lib/libnss\_db.so.2", O\_RDONLY|O\_CLOEXEC) = -1 ENOENT  
(No such file or directory)

10606 newfstatat(AT\_FDCWD, "/usr/lib", {st\_mode=S\_IFDIR|0755, st\_size=4096, ...}, 0) = 0

10606 munmap(0x7f3100859000, 25786) = 0

```

10606 openat(AT_FDCWD, "/etc/protocols", O_RDONLY|O_CLOEXEC) = 3
10606 newfstatat(3, "", {st_mode=S_IFREG|0644, st_size=3144, ...}, AT_EMPTY_PATH) = 0
10606 lseek(3, 0, SEEK_SET) = 0
10606 read(3, "# Internet (IP) protocols\n#\n# Up"..., 4096) = 3144
10606 read(3, "", 4096) = 0
10606 close(3) = 0
10606 eventfd2(0, EFD_CLOEXEC) = 3
10606 fcntl(3, F_GETFL) = 0x2 (flags O_RDWR)
10606 fcntl(3, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10606 fcntl(3, F_GETFL) = 0x802 (flags O_RDWR|O_NONBLOCK)
10606 fcntl(3, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10606 getpid() = 10606
10606 getpid() = 10606
10606 getrandom("\x97\x12\xf7\x46\xe6\x1e\x91\xe6\x3a\x1f\xf0\xc4\xce\x1f\xc3\xb6", 16, 0) =
16
10606 getrandom("\xb7\x9c\x76\x5b\x70\xc3\x55\xfc\xc6\x33\xd1\xf7\xc6\xa4\xb4\x83", 16, 0) =
16
10606 eventfd2(0, EFD_CLOEXEC) = 4
10606 fcntl(4, F_GETFL) = 0x2 (flags O_RDWR)
10606 fcntl(4, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10606 fcntl(4, F_GETFL) = 0x802 (flags O_RDWR|O_NONBLOCK)
10606 fcntl(4, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10606 getpid() = 10606
10606 epoll_create1(EPOCH_CLOEXEC) = 5
10606 epoll_ctl(5, EPOLL_CTL_ADD, 4, {events=0, data={u32=854226528, u64=854226528}})
= 0
10606 epoll_ctl(5, EPOLL_CTL_MOD, 4, {events=EPOLLIN, data={u32=854226528,
u64=854226528}}) = 0
10606 getpid() = 10606
10606 rt_sigaction(SIGRT_1, {sa_handler=0x7f31002c7720, sa_mask=[],
sa_flags=SA_RESTORER|SA_ONSTACK|SA_RESTART|SA_SIGINFO,
sa_restorer=0x7f310027d050}, NULL, 8) = 0
10606 rt_sigprocmask(SIG_UNBLOCK, [RTMIN RT_1], NULL, 8) = 0
10606 mmap(NULL, 8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0) = 0x7f30ff6b2000

```

10606 mprotect(0x7f30ff6b3000, 8388608, PROT\_READ|PROT\_WRITE) = 0

10606 rt\_sigprocmask(SIG\_BLOCK, ~[], [], 8) = 0

10606

clone3({flags=CLONE\_VM|CLONE\_FS|CLONE\_FILES|CLONE\_SIGHAND|CLONE\_THREAD|CLONE\_SYSVSEM|CLONE\_SETTLS|CLONE\_PARENT\_SETTID|CLONE\_CHILD\_CLEARTID, child\_tid=0x7f30ffeb2990, parent\_tid=0x7f30ffeb2990, exit\_signal=0, stack=0x7f30ff6b2000, stack\_size=0x7ffd00, tls=0x7f30ffeb26c0} => {parent\_tid=[10607]}, 88) = 10607

10607 rseq(0x7f30ffeb2fe0, 0x20, 0, 0x53053053 <unfinished ...>

10606 rt\_sigprocmask(SIG\_SETMASK, [], <unfinished ...>

10607 <... rseq resumed>) = 0

10606 <... rt\_sigprocmask resumed>NULL, 8) = 0

10607 set\_robust\_list(0x7f30ffeb29a0, 24 <unfinished ...>

10606 eventfd2(0, EFD\_CLOEXEC <unfinished ...>

10607 <... set\_robust\_list resumed>) = 0

10606 <... eventfd2 resumed>) = 6

10607 rt\_sigprocmask(SIG\_SETMASK, [], <unfinished ...>

10606 fcntl(6, F\_GETFL <unfinished ...>

10607 <... rt\_sigprocmask resumed>NULL, 8) = 0

10606 <... fcntl resumed>) = 0x2 (flags O\_RDWR)

10607 rt\_sigprocmask(SIG\_BLOCK, ~[RTMIN RT\_1], <unfinished ...>

10606 fcntl(6, F\_SETFL, O\_RDWR|O\_NONBLOCK <unfinished ...>

10607 <... rt\_sigprocmask resumed>NULL, 8) = 0

10606 <... fcntl resumed>) = 0

10607 sched\_getparam(10607, <unfinished ...>

10606 fcntl(6, F\_GETFL <unfinished ...>

10607 <... sched\_getparam resumed>[0]) = 0

10606 <... fcntl resumed>) = 0x802 (flags O\_RDWR|O\_NONBLOCK)

10607 sched\_getscheduler(10607 <unfinished ...>

10606 fcntl(6, F\_SETFL, O\_RDWR|O\_NONBLOCK <unfinished ...>

10607 <... sched\_getscheduler resumed>) = 0 (SCHED\_OTHER)

10606 <... fcntl resumed>) = 0

10607 sched\_setscheduler(10607, SCHED\_OTHER, [0] <unfinished ...>

10606 getpid( <unfinished ...>

10607 <... sched\_setscheduler resumed>) = 0

```

10606 <... getpid resumed>)          = 10606
10607 prctl(PR_SET_NAME, "ZMQbg/Reaper" <unfinished ...>
10606 epoll_create1(EPOLL_CLOEXEC <unfinished ...>
10607 <... prctl resumed>)            = 0
10606 <... epoll_create1 resumed>)    = 7
10607 epoll_wait(5, <unfinished ...>
10606 epoll_ctl(7, EPOLL_CTL_ADD, 6, {events=0, data={u32=854230448, u64=854230448}})
= 0
10606 epoll_ctl(7, EPOLL_CTL_MOD, 6, {events=EPOLLIN, data={u32=854230448,
u64=854230448}}) = 0
10606 mmap(NULL, 8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0) = 0x7f30feeb1000
10606 mprotect(0x7f30feeb2000, 8388608, PROT_READ|PROT_WRITE) = 0
10606 rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0
10606
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD|CLO
NE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEARTID,
child_tid=0x7f30ff6b1990, parent_tid=0x7f30ff6b1990, exit_signal=0, stack=0x7f30feeb1000,
stack_size=0x7ffd00, tls=0x7f30ff6b16c0} => {parent_tid=[10608]}, 88) = 10608
10608 rseq(0x7f30ff6b1fe0, 0x20, 0, 0x53053053 <unfinished ...>
10606 rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
10608 <... rseq resumed>)              = 0
10606 <... rt_sigprocmask resumed>NULL, 8) = 0
10608 set_robust_list(0x7f30ff6b19a0, 24 <unfinished ...>
10606 eventfd2(0, EFD_CLOEXEC <unfinished ...>
10608 <... set_robust_list resumed>)    = 0
10606 <... eventfd2 resumed>)          = 8
10608 rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
10606 fcntl(8, F_GETFL <unfinished ...>
10608 <... rt_sigprocmask resumed>NULL, 8) = 0
10606 <... fcntl resumed>)              = 0x2 (flags O_RDWR)
10608 rt_sigprocmask(SIG_BLOCK, ~[RTMIN RT_1], <unfinished ...>
10606 fcntl(8, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
10608 <... rt_sigprocmask resumed>NULL, 8) = 0
10606 <... fcntl resumed>)              = 0

```

```

10608 sched_getparam(10608, <unfinished ...>
10606 fcntl(8, F_GETFL <unfinished ...>
10608 <... sched_getparam resumed>[0]) = 0
10606 <... fcntl resumed>          = 0x802 (flags O_RDWR|O_NONBLOCK)
10608 sched_getscheduler(10608 <unfinished ...>
10606 fcntl(8, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
10608 <... sched_getscheduler resumed>) = 0 (SCHED_OTHER)
10606 <... fcntl resumed>          = 0
10608 sched_setscheduler(10608, SCHED_OTHER, [0] <unfinished ...>
10606 getpid( <unfinished ...>
10608 <... sched_setscheduler resumed>) = 0
10606 <... getpid resumed>          = 10606
10608 prctl(PR_SET_NAME, "ZMQbg/IO/0" <unfinished ...>
10606 epoll_create1(EPOLL_CLOEXEC <unfinished ...>
10608 <... prctl resumed>          = 0
10606 <... epoll_create1 resumed>    = 9
10608 epoll_wait(7, <unfinished ...>
10606 epoll_ctl(9, EPOLL_CTL_ADD, 8, {events=0, data={u32=854249888, u64=854249888}})
= 0
10606 epoll_ctl(9, EPOLL_CTL_MOD, 8, {events=EPOLLIN, data={u32=854249888,
u64=854249888}}) = 0
10606 mmap(NULL, 8392704, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1, 0) = 0x7f30fe6b0000
10606 mprotect(0x7f30fe6b1000, 8388608, PROT_READ|PROT_WRITE) = 0
10606 rt_sigprocmask(SIG_BLOCK, ~[], [], 8) = 0
10606
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD|CLO
NE_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEARTID,
child_tid=0x7f30feeb0990, parent_tid=0x7f30feeb0990, exit_signal=0, stack=0x7f30fe6b0000,
stack_size=0x7ffd00, tls=0x7f30feeb06c0} => {parent_tid=[10609]}, 88) = 10609
10609 rseq(0x7f30feeb0fe0, 0x20, 0, 0x53053053 <unfinished ...>
10606 rt_sigprocmask(SIG_SETMASK, [], <unfinished ...>
10609 <... rseq resumed>          = 0
10606 <... rt_sigprocmask resumed>NULL, 8) = 0
10609 set_robust_list(0x7f30feeb09a0, 24 <unfinished ...>

```

10606 eventfd2(0, EFD\_CLOEXEC <unfinished ...>  
10609 <... set\_robust\_list resumed>) = 0  
10606 <... eventfd2 resumed> = 10  
10609 rt\_sigprocmask(SIG\_SETMASK, [], <unfinished ...>  
10606 fcntl(10, F\_GETFL <unfinished ...>  
10609 <... rt\_sigprocmask resumed>NULL, 8) = 0  
10606 <... fcntl resumed> = 0x2 (flags O\_RDWR)  
10609 rt\_sigprocmask(SIG\_BLOCK, ~[RTMIN RT\_1], <unfinished ...>  
10606 fcntl(10, F\_SETFL, O\_RDWR|O\_NONBLOCK <unfinished ...>  
10609 <... rt\_sigprocmask resumed>NULL, 8) = 0  
10606 <... fcntl resumed> = 0  
10609 sched\_getparam(10609, <unfinished ...>  
10606 fcntl(10, F\_GETFL <unfinished ...>  
10609 <... sched\_getparam resumed>[0]) = 0  
10606 <... fcntl resumed> = 0x802 (flags O\_RDWR|O\_NONBLOCK)  
10609 sched\_getscheduler(10609 <unfinished ...>  
10606 fcntl(10, F\_SETFL, O\_RDWR|O\_NONBLOCK <unfinished ...>  
10609 <... sched\_getscheduler resumed>) = 0 (SCHED\_OTHER)  
10606 <... fcntl resumed> = 0  
10609 sched\_setscheduler(10609, SCHED\_OTHER, [0] <unfinished ...>  
10606 getpid( <unfinished ...>  
10609 <... sched\_setscheduler resumed>) = 0  
10606 <... getpid resumed> = 10606  
10609 prctl(PR\_SET\_NAME, "ZMQbg/IO/1" <unfinished ...>  
10606 getpid( <unfinished ...>  
10609 <... prctl resumed> = 0  
10606 <... getpid resumed> = 10606  
10609 epoll\_wait(9, <unfinished ...>  
10606 poll([fd=10, events=POLLIN], 1, 0) = 0 (Timeout)  
10606 brk(0x32ed7000) = 0x32ed7000  
10606 futex(0x7f3100798748, FUTEX\_WAKE\_PRIVATE, 2147483647) = 0  
10606 getpid() = 10606



```

10606 write(6, "\1\0\0\0\0\0\0", 8) = 8

10608 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=854230448, u64=854230448}}],
256, -1) = 1

10606 getpid( <unfinished ...>

10608 getpid( <unfinished ...>

10606 <... getpid resumed>) = 10606

10608 <... getpid resumed>) = 10606

10606 write(10, "\1\0\0\0\0\0\0", 8 <unfinished ...>

10608 poll([{fd=6, events=POLLIN}], 1, 0 <unfinished ...>

10606 <... write resumed>) = 8

10608 <... poll resumed>) = 1 ([{fd=6, revents=POLLIN}])

10606 newfstatat(1, "", <unfinished ...>

10608 getpid( <unfinished ...>

10606 <... newfstatat resumed>{st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x1), ...,
AT_EMPTY_PATH) = 0

10608 <... getpid resumed>) = 10606

10606 write(1, "\320\224\320\276\320\261\321\200\320\276
\320\277\320\276\320\266\320\260\320\273\320\276\320\262\320\260\321\202\321\214 " ..., 58
<unfinished ...>

10608 read(6, <unfinished ...>

10606 <... write resumed>) = 58

10608 <... read resumed>"\1\0\0\0\0\0\0", 8) = 8

10606 write(1, "\320\222\320\262\320\265\320\264\320\270\321\202\320\265
\320\262\320\260\321\210 \320\273\320\276\320\263\320\270\320\275" ..., 34 <unfinished ...>

10608 mmap(NULL, 134217728, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_NORESERVE, -1, 0 <unfinished ...>

10606 <... write resumed>) = 34

10608 <... mmap resumed>) = 0x7f30f66b0000

10606 newfstatat(0, "", <unfinished ...>

10608 munmap(0x7f30f66b0000, 26542080 <unfinished ...>

10606 <... newfstatat resumed>{st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0x1), ...,
AT_EMPTY_PATH) = 0

10608 <... munmap resumed>) = 0

10606 read(0, <unfinished ...>

10608 munmap(0x7f30fc000000, 40566784) = 0

```

```

10608 mprotect(0x7f30f8000000, 135168, PROT_READ|PROT_WRITE) = 0
10608 socket(AF_INET, SOCK_STREAM|SOCK_CLOEXEC, IPPROTO_TCP) = 11
10608 fcntl(11, F_GETFL)          = 0x2 (flags O_RDWR)
10608 fcntl(11, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10608 connect(11, {sa_family=AF_INET, sin_port=htons(5555),
sin_addr=inet_addr("127.0.0.1")}, 16) = -1 EINPROGRESS (Operation now in progress)
10608 epoll_ctl(7, EPOLL_CTL_ADD, 11, {events=0, data={u32=4160754736,
u64=139848295912496}}) = 0
10608 epoll_ctl(7, EPOLL_CTL_MOD, 11, {events=EPOLLOUT, data={u32=4160754736,
u64=139848295912496}}) = 0
10608 getpid()                  = 10606
10608 poll([{fd=6, events=POLLIN}], 1, 0) = 0 (Timeout)
10608 epoll_wait(7, [{events=EPOLLOUT, data={u32=4160754736, u64=139848295912496}}],
256, -1) = 1
10608 epoll_ctl(7, EPOLL_CTL_DEL, 11, 0x7f30f8001434) = 0
10608 getsockopt(11, SOL_SOCKET, SO_ERROR, [0], [4]) = 0
10608 setsockopt(11, SOL_TCP, TCP_NODELAY, [1], 4) = 0
10608 getsockname(11, {sa_family=AF_INET, sin_port=htons(46920),
sin_addr=inet_addr("127.0.0.1")}, [128 => 16]) = 0
10608 getpeername(11, {sa_family=AF_INET, sin_port=htons(5555),
sin_addr=inet_addr("127.0.0.1")}, [128 => 16]) = 0
10608 fcntl(11, F_GETFL)          = 0x802 (flags O_RDWR|O_NONBLOCK)
10608 fcntl(11, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10608 getpid()                  = 10606
10608 write(6, "\1\0\0\0\0\0\0\0", 8) = 8
10608 epoll_wait(7, [{events=EPOLLIN, data={u32=854230448, u64=854230448}}], 256, -1) = 1
10608 getpid()                  = 10606
10608 poll([{fd=6, events=POLLIN}], 1, 0) = 1 ([{fd=6, revents=POLLIN}])
10608 getpid()                  = 10606
10608 read(6, "\1\0\0\0\0\0\0\0", 8) = 8
10608 epoll_ctl(7, EPOLL_CTL_ADD, 11, {events=0, data={u32=4160754736,
u64=139848295912496}}) = 0
10608 epoll_ctl(7, EPOLL_CTL_MOD, 11, {events=EPOLLIN, data={u32=4160754736,
u64=139848295912496}}) = 0
10608 epoll_ctl(7, EPOLL_CTL_MOD, 11, {events=EPOLLIN|EPOLLOUT,
data={u32=4160754736, u64=139848295912496}}) = 0

```



```

10606 getpid()                = 10606
10606 getpid()                = 10606
10606 poll([fd=10, events=POLLIN], 1, 0) = 1 ([fd=10, revents=POLLIN])
10606 getpid()                = 10606
10606 read(10, "\1\0\0\0\0\0\0", 8) = 8
10606 getpid()                = 10606
10606 poll([fd=10, events=POLLIN], 1, 0) = 0 (Timeout)
10606 getpid()                = 10606
10606 write(6, "\1\0\0\0\0\0\0", 8) = 8
10608 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=854230448, u64=854230448}}],
256, -1) = 1
10606 getpid( <unfinished ...>
10608 getpid( <unfinished ...>
10606 <... getpid resumed>)      = 10606
10608 <... getpid resumed>)      = 10606
10606 poll([fd=10, events=POLLIN], 1, -1 <unfinished ...>
10608 poll([fd=6, events=POLLIN], 1, 0) = 1 ([fd=6, revents=POLLIN])
10608 getpid()                = 10606
10608 read(6, "\1\0\0\0\0\0\0", 8) = 8
10608 epoll_ctl(7, EPOLL_CTL_MOD, 11, {events=EPOLLIN|EPOLLOUT,
data={u32=4160754736, u64=139848295912496}}) = 0
10608 getpid()                = 10606
10608 write(10, "\1\0\0\0\0\0\0", 8 <unfinished ...>
10606 <... poll resumed>)        = 1 ([fd=10, revents=POLLIN])
10608 <... write resumed>)       = 8
10606 getpid( <unfinished ...>
10608 sendto(11, "\1\0\0\21login:andre:10606", 21, 0, NULL, 0 <unfinished ...>
10606 <... getpid resumed>)      = 10606
10608 <... sendto resumed>)      = 21
10606 read(10, <unfinished ...>
10608 getpid( <unfinished ...>
10606 <... read resumed>"\1\0\0\0\0\0\0", 8) = 8
10608 <... getpid resumed>)      = 10606

```

```

10606 getpid( <unfinished ...>
10608 poll([ {fd=6, events=POLLIN}], 1, 0 <unfinished ...>
10606 <... getpid resumed>)          = 10606
10608 <... poll resumed>)           = 0 (Timeout)
10606 poll([ {fd=10, events=POLLIN}], 1, 0 <unfinished ...>
10608 epoll_wait(7, <unfinished ...>
10606 <... poll resumed>)           = 0 (Timeout)
10608 <... epoll_wait resumed>[{events=EPOLLOUT, data={u32=4160754736,
u64=139848295912496}}], 256, -1) = 1
10606 getpid( <unfinished ...>
10608 epoll_ctl(7, EPOLL_CTL_MOD, 11, {events=EPOLLIN, data={u32=4160754736,
u64=139848295912496}}) <unfinished ...>
10606 <... getpid resumed>)          = 10606
10608 <... epoll_ctl resumed>)        = 0
10606 poll([ {fd=10, events=POLLIN}], 1, -1 <unfinished ...>
10608 epoll_wait(7, [{events=EPOLLIN, data={u32=4160754736, u64=139848295912496}}],
256, -1) = 1
10608 recvfrom(11, "\1\0\0\4Ok:0", 8192, 0, NULL, NULL) = 8
10608 getpid()                      = 10606
10608 write(10, "\1\0\0\0\0\0\0", 8) = 8
10606 <... poll resumed>)           = 1 ([ {fd=10, revents=POLLIN}])
10608 epoll_wait(7, <unfinished ...>
10606 getpid()                      = 10606
10606 read(10, "\1\0\0\0\0\0\0", 8) = 8
10606 getpid()                      = 10606
10606 poll([ {fd=10, events=POLLIN}], 1, 0) = 0 (Timeout)
10606 getpid()                      = 10606
10606 write(6, "\1\0\0\0\0\0\0", 8) = 8
10608 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=854230448, u64=854230448}}],
256, -1) = 1
10606 eventfd2(0, EFD_CLOEXEC <unfinished ...>
10608 getpid( <unfinished ...>
10606 <... eventfd2 resumed>)         = 12
10608 <... getpid resumed>)          = 10606

```

```

10606 fcntl(12, F_GETFL <unfinished ...>
10608 poll([fd=6, events=POLLIN]), 1, 0 <unfinished ...>
10606 <... fcntl resumed>          = 0x2 (flags O_RDWR)
10608 <... poll resumed>          = 1 ([fd=6, events=POLLIN])
10606 fcntl(12, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
10608 getpid( <unfinished ...>
10606 <... fcntl resumed>          = 0
10608 <... getpid resumed>         = 10606
10606 fcntl(12, F_GETFL <unfinished ...>
10608 read(6, <unfinished ...>
10606 <... fcntl resumed>          = 0x802 (flags O_RDWR|O_NONBLOCK)
10608 <... read resumed>"\1\0\0\0\0\0\0\0", 8) = 8
10606 fcntl(12, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
10608 getpid( <unfinished ...>
10606 <... fcntl resumed>          = 0
10608 <... getpid resumed>         = 10606
10606 getpid( <unfinished ...>
10608 poll([fd=6, events=POLLIN]), 1, 0 <unfinished ...>
10606 <... getpid resumed>         = 10606
10608 <... poll resumed>          = 0 (Timeout)
10606 getpid( <unfinished ...>
10608 epoll_wait(7, <unfinished ...>
10606 <... getpid resumed>         = 10606
10606 poll([fd=12, events=POLLIN]), 1, 0) = 0 (Timeout)
10606 getpid()                    = 10606
10606 write(8, "\1\0\0\0\0\0\0\0", 8) = 8
10609 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=854249888, u64=854249888}}],
256, -1) = 1
10606 getpid( <unfinished ...>
10609 getpid( <unfinished ...>
10606 <... getpid resumed>         = 10606
10609 <... getpid resumed>         = 10606
10606 write(12, "\1\0\0\0\0\0\0\0", 8 <unfinished ...>

```

```

10609 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
10606 <... write resumed>          = 8
10609 <... poll resumed>          = 1 ([{fd=8, revents=POLLIN}])
10606 write(1, "[Client]
\320\220\320\262\321\202\320\276\321\200\320\270\320\267\320\260\321\206\320\270\321\217 "..., 91
<unfinished ...>
10609 getpid( <unfinished ...>
10606 <... write resumed>          = 91
10609 <... getpid resumed>         = 10606
10606 write(1, "\n===== "..., 43 <unfinished ...>
10609 read(8, <unfinished ...>
10606 <... write resumed>          = 43
10609 <... read resumed> "\1\0\0\0\0\0\0", 8) = 8
10606 write(1, "\320\224\320\276\321\201\321\202\321\203\320\277\320\275\321\213\320\265
\320\272\320\276\320\274\320\260\320\275\320\264\321"..., 35 <unfinished ...>
10609 mmap(NULL, 134217728, PROT_NONE,
MAP_PRIVATE|MAP_ANONYMOUS|MAP_NORESERVE, -1, 0 <unfinished ...>
10606 <... write resumed>          = 35
10609 <... mmap resumed>           = 0x7f30f0000000
10606 write(1, " create <\320\270\320\274\321\217_\320\270\320\263\321\200\321\213> -
\321\201"..., 60 <unfinished ...>
10609 munmap(0x7f30f4000000, 67108864 <unfinished ...>
10606 <... write resumed>          = 60
10609 <... munmap resumed>         = 0
10606 write(1, " join <\320\270\320\274\321\217_\320\270\320\263\321\200\321\213> -
\320\277"..., 77 <unfinished ...>
10609 mprotect(0x7f30f0000000, 135168, PROT_READ|PROT_WRITE <unfinished ...>
10606 <... write resumed>          = 77
10609 <... mprotect resumed>       = 0
10606 write(1, " stats             - \320\277\320\276\320\272\320\260\320\267"..., 69 <unfinished ...>
10609 socket(AF_INET, SOCK_STREAM|SOCK_CLOEXEC, IPPROTO_TCP <unfinished ...>
10606 <... write resumed>          = 69
10609 <... socket resumed>         = 13
10606 write(1, " exit              - \320\262\321\213\320\271\321\202\320\270"..., 57 <unfinished ...>
10609 fcntl(13, F_GETFL <unfinished ...>

```

```

10606 <... write resumed>          = 57
10609 <... fcntl resumed>          = 0x2 (flags O_RDWR)
10606 write(1, "=====...", 42 <unfinished ...>
10609 fcntl(13, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
10606 <... write resumed>          = 42
10609 <... fcntl resumed>          = 0
10606 write(1, "\320\222\320\262\320\265\320\264\320\270\321\202\320\265
\320\272\320\276\320\274\320\260\320\275\320\264\321\203: ", 31 <unfinished ...>
10609 connect(13, {sa_family=AF_INET, sin_port=htons(5556),
sin_addr=inet_addr("127.0.0.1")}, 16 <unfinished ...>
10606 <... write resumed>          = 31
10606 read(0, <unfinished ...>
10609 <... connect resumed>        = -1 EINPROGRESS (Operation now in progress)
10609 epoll_ctl(9, EPOLL_CTL_ADD, 13, {events=0, data={u32=4026537008,
u64=139848161694768}}) = 0
10609 epoll_ctl(9, EPOLL_CTL_MOD, 13, {events=EPOLLOUT, data={u32=4026537008,
u64=139848161694768}}) = 0
10609 getpid()                    = 10606
10609 poll([fd=8, events=POLLIN], 1, 0) = 0 (Timeout)
10609 epoll_wait(9, [{events=EPOLLOUT, data={u32=4026537008, u64=139848161694768}}],
256, -1) = 1
10609 epoll_ctl(9, EPOLL_CTL_DEL, 13, 0x7f30f0001434) = 0
10609 getsockopt(13, SOL_SOCKET, SO_ERROR, [0], [4]) = 0
10609 setsockopt(13, SOL_TCP, TCP_NODELAY, [1], 4) = 0
10609 getsockname(13, {sa_family=AF_INET, sin_port=htons(42414),
sin_addr=inet_addr("127.0.0.1")}, [128 => 16]) = 0
10609 getpeername(13, {sa_family=AF_INET, sin_port=htons(5556),
sin_addr=inet_addr("127.0.0.1")}, [128 => 16]) = 0
10609 fcntl(13, F_GETFL)          = 0x802 (flags O_RDWR|O_NONBLOCK)
10609 fcntl(13, F_SETFL, O_RDWR|O_NONBLOCK) = 0
10609 getpid()                    = 10606
10609 write(8, "\1\0\0\0\0\0\0", 8) = 8
10609 epoll_wait(9, [{events=EPOLLIN, data={u32=854249888, u64=854249888}}], 256, -1) = 1
10609 getpid()                    = 10606
10609 poll([fd=8, events=POLLIN], 1, 0) = 1 ([fd=8, revents=POLLIN])

```



```
10609 epoll_ctl(9, EPOLL_CTL_MOD, 13, {events=EPOLLIN, data={u32=4026537008,
139848161694768}}) = 0
```

10609 epoll\_wait(9, [{events=EPOLLIN, data={u32=4026537008, u64=139848161694768}}], 256, 29988) = 1

10609 recvfrom(13, "\4&\5READY\vSocket-Type\0\0\03REQ\10Iden"..., 8192, 0, NULL, NULL) = 40

10609 epoll\_ctl(9, EPOLL\_CTL\_MOD, 13, {events=EPOLLIN|EPOLLOUT, data={u32=4026537008, u64=139848161694768}}) = 0

10609 epoll\_ctl(9, EPOLL\_CTL\_MOD, 13, {events=EPOLLIN, data={u32=4026537008, u64=139848161694768}}) = 0

10609 epoll\_wait(9, <unfinished ...>

10606 <... read resumed>0x32eb71f0, 1024) = ? ERESTARTSYS (To be restarted if SA\_RESTART is set)

10606 --- SIGINT {si\_signo=SIGINT, si\_code=SI\_KERNEL} ---

10609 <... epoll\_wait resumed> <unfinished ...>) = ?

10608 <... epoll\_wait resumed> <unfinished ...>) = ?

10607 <... epoll\_wait resumed> <unfinished ...>) = ?

10609 +++ killed by SIGINT +++

10608 +++ killed by SIGINT +++

10607 +++ killed by SIGINT +++

10606 +++ killed by SIGINT +++

## **Вывод**

В ходе разработки многопользовательской игры «Морской бой» с использованием библиотеки ZeroMQ мне удалось успешно реализовать все основные функциональные требования, включая авторизацию пользователей, создание и присоединение к игровым комнатам, а также ведение статистики побед и поражений. Программа демонстрирует стабильную работу обмена сообщениями между сервером и клиентами, обеспечивая плавный игровой процесс.