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Лабораторная работа №6-8 по курсу «Операционные системы»

Управлении серверами сообщений. Применение отложенных  
вычислений. Интеграция программных систем друг с другом

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# 1 Постановка задачи

Реализовать распределенную систему по асинхронной обработке запросов. В данной распределенной системе должно существовать 2 вида узлов: «управляющий» и «вычислительный». Необходимо объединить данные узлы в соответствии с той топологией, которая определена вариантом. Связь между узлами необходимо осуществить при помощи технологии очередей сообщений. Также в данной системе необходимо предусмотреть проверку доступности узлов в соответствии с вариантом. При убийстве («kill -9») любого вычислительного узла система должна пытаться максимально сохранять свою работоспособность, а именно все дочерние узлы убитого узла могут стать недоступными, но родительские узлы должны сохранить свою работоспособность.

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

Топология – дерево общего вида, проверка – доступности ping id, вычислительная программа – поиск подстроки в строке.

## 2 Общие сведения о программе

Программа написанна на языке Си в Unix подобной операционной системе на базе ядра Linux. В программе используется очередь сообщений ZeroMQ.

Программа поддерживает следующие команды:

1. create [id] [parent] – создать узел с id [id], родителем которого является узел с id [parent].
2. remove [id] – удаляет узел с данным id.
3. exec [id] [string] [pattern] – запускает на узле [id] поиск подстроки [pattern] в строке [string].
4. ping [id] – проверка доступности узла [id].

Выход из программы происходит при окончании ввода, то есть при нажатии CTRL+D.

## 3 Общий метод и алгоритм решения

В программе используется тип соединения Request-Response. Узлы передают друг другу информацию при помощи очереди сообщений.

Все функции описаны либо для самого целевого узла либо его родителя. А для доставки сообщений создан метод `Send()`. Этот метод проверяет на доступность всех детей, если они доступны то отправляет им сообщение. В случае если детей нет, то он возвращает родителю ошибку об не нахождении узла. Когда родитель получает ответы от всех детей он отправляет на уровень выше либо единственный отличающийся от ошибки поиска, либо саму ошибку поиска. И так пока ответ не достигнет отправителя.

Если команда обращается к несуществующему узлу, то мы сразу возвращаем ошибку. Для этого у нас есть множество созданных узлов.

При создании мы просто форкаем родитель и передаем ребенку данные для связи с ним.

При удалении же мы передаем все детям также сигнал об удалении и рекурсивно формируем список всех своих потомков. В который по итогу добавляем себя и отправляем родителю. По итогу клиент удаляет все элементы этого списка из множества созданных узлов.

Для проверки доступности мы посылаем ребенку сообщение, и если за 3 секунды не получаем ответа, то считаем узел не доступным.

Поиск подстроки в строке происходит с помощью наивного алгоритма поиска из стандартной библиотеки.

## 4 Листинг программы

### net\_func.hpp

```
1 | #pragma once
2 |
3 | #include <iostream>
4 | #include <zmq.hpp>
5 | #include <sstream>
6 | #include <string>
7 |
8 | namespace my_net{
9 |     #define MY_PORT 4040
10 |    #define MY_IP "tcp://127.0.0.1:"
11 |
12 |    int bind(zmq::socket_t *socket, int id){
13 |        int port = MY_PORT + id;
14 |        while(true){
15 |            std::string address = MY_IP + std::to_string(port);
16 |            try{
17 |                socket->bind(address);
18 |                break;
19 |            } catch(...){
```

```

20         port++;
21     }
22 }
23 return port;
24 }
25
26 void connect(zmq::socket_t *socket, int port){
27     std::string address = MY_IP + std::to_string(port);
28     socket->connect(address);
29 }
30
31 void unbind(zmq::socket_t *socket, int port) {
32     std::string address = MY_IP + std::to_string(port);
33     socket->unbind(address);
34 }
35
36 void disconnect(zmq::socket_t *socket, int port) {
37     std::string address = MY_IP + std::to_string(port);
38     socket->disconnect(address);
39 }
40
41 void send_message(zmq::socket_t *socket, const std::string msg) {
42     zmq::message_t message(msg.size());
43     memcpy(message.data(), msg.c_str(), msg.size());
44     try{
45         socket->send(message);
46     }catch(...){}
47 }
48
49 std::string reseave(zmq::socket_t *socket){
50     zmq::message_t message;
51     bool success = true;
52     try{
53         socket->recv(&message,0);
54     }catch(...){
55         success = false;
56     }
57     if(!success || message.size() == 0){
58         throw -1;
59     }
60     std::string str(static_cast<char*>(message.data()), message.size());
61     return str;
62 }
63 }

```

## node.hpp

```

1 #include <iostream>
2 #include "net_func.hpp"
3 #include <sstream>

```

```

4  #include <unordered_map>
5  #include "unistd.h"
6
7
8  class Node{
9  private:
10     zmq::context_t context;
11 public:
12     std::unordered_map<int,zmq::socket_t*> children;
13     std::unordered_map<int,int> children_port;
14     zmq::socket_t parent;
15     int parent_port;
16
17     int id;
18     Node(int _id , int _parent_port = -1): id(_id),
19                                           parent(context,ZMQ_REP),
20                                           parent_port(_parent_port){
21         if(_id != -1){
22             my_net::connect(&parent,_parent_port);
23         }
24     }
25
26     std::string Ping_child(int _id){
27         std::string ans = "Ok: 0";
28         ans = "Ok: 0";
29         if(_id == id){
30             ans = "Ok: 1";
31             return ans;
32         } else if(children.find(_id) != children.end()){
33             std::string msg = "ping " + std::to_string(_id);
34             my_net::send_message(children[_id],msg);
35             try{
36                 msg = my_net::reseave(children[_id]);
37                 if(msg == "Ok: 1")
38                     ans = msg;
39             } catch(int){}
40             return ans;
41         }else{
42             return ans;
43         }
44     }
45
46     std::string Create_child(int child_id,std::string program_path){
47         std::string program_name = program_path.substr(program_path.find_last_of("/") +
48                                                         1);
49         children[child_id] = new zmq::socket_t(context,ZMQ_REQ);
50         int new_port = my_net::bind(children[child_id],child_id);
51         children_port[child_id] = new_port;

```

```

52     int pid = fork();
53
54     if(pid == 0){
55         execl(program_path.c_str(), program_name.c_str(), std::to_string(child_id).
56             c_str() , std::to_string(new_port).c_str() ,(char*)NULL);
57     }else{
58         std::string child_pid;
59         try{
60             children[child_id]->setsockopt(ZMQ_SNDTIMEO,3000);
61             my_net::send_message(children[child_id],"pid");
62             child_pid = my_net::reseave(children[child_id]);
63         } catch(int){
64             child_pid = "Error: can't connect to child";
65         }
66         return "Ok: " + child_pid;
67     }
68
69     std::string Pid(){
70         return std::to_string(getpid());
71     }
72
73     std::string Send(std::string str,int _id){
74         if(children.size() == 0){
75             return "Error: now find";
76         }else if(children.find(_id) != children.end()){
77             if(Ping_child(_id) == "Ok: 1"){
78                 my_net::send_message(children[_id],str);
79                 std::string ans;
80                 try{
81                     ans = my_net::reseave(children[_id]);
82                 } catch(int){
83                     ans = "Error: now find";
84                 }
85                 return ans;
86             }
87         }else{
88             std::string ans = "Error: not find";
89             for(auto& child: children ){
90                 if(Ping_child(child.first) == "Ok: 1"){
91                     std::string msg = "send " + std::to_string(_id) + " " + str;
92                     my_net::send_message(children[child.first],msg);
93                     try{
94                         msg = my_net::reseave(children[child.first]);
95                     } catch(int){
96                         msg = "Error: not find";
97                     }
98                     if(msg != "Error: not find"){
99                         ans = msg;

```

```

100         }
101     }
102 }
103     return ans;
104 }
105 }
106
107 std::string Remove(){
108     std::string ans;
109     if(children.size() > 0){
110         for(auto& child: children ){
111             if(Ping_child(child.first) == "Ok: 1"){
112                 std::string msg = "remove";
113                 my_net::send_message(children[child.first],msg);
114                 try{
115                     msg = my_net::reseave(children[child.first]);
116                     if(ans.size() > 0)
117                         ans = ans + " " + msg;
118                     else
119                         ans = msg;
120                 } catch(int){}
121             }
122             my_net::unbind(children[child.first], children_port[child.first]);
123             children[child.first]->close();
124         }
125         children.clear();
126         children_port.clear();
127     }
128     return ans;
129 }
130 };

```

## worker.cpp

```

1  #include "node.hpp"
2  #include "net_func.hpp"
3  #include <fstream>
4  #include <vector>
5  #include <signal.h>
6
7  int my_id = 0;
8
9  void Log(std::string str){
10     std::string f = std::to_string(my_id) + ".txt";
11     std::ofstream fout(f,std::ios_base::app);
12     fout << str;
13     fout.close();
14 }
15
16 int main(int argc, char **argv){

```

```

17     if(argc != 3){
18         return -1;
19     }
20
21     Node me(atoi(argv[1]),atoi(argv[2]));
22     std::string prog_path = "./worker";
23     while(1){
24         std::string message;
25         std::string command = " ";
26         message = my_net::reseave(&(me.parent));
27         std::istream request(message);
28         request >> command;
29
30
31         if(command == "create"){
32             int id_child, id_parent;
33             request >> id_child;
34             std::string ans = me.Create_child(id_child, prog_path);
35             my_net::send_message(&me.parent,ans);
36         } else if(command == "pid"){
37             std::string ans = me.Pid();
38             my_net::send_message(&me.parent,ans);
39         } else if(command == "ping"){
40             int id_child;
41             request >> id_child;
42             std::string ans = me.Ping_child(id_child);
43             my_net::send_message(&me.parent,ans);
44         } else if(command == "send"){
45             int id;
46             request >> id;
47             std::string str;
48             getline(request, str);
49             str.erase(0,1);
50             std::string ans;
51             ans = me.Send(str,id);
52             my_net::send_message(&me.parent,ans);
53         } else if(command == "exec"){
54             std::string str;
55             std::string pattern;
56             request >> str >> pattern;
57             std::vector<int> answers;
58             int start = 0;
59             while(str.find(pattern,start) != -1){
60                 start = str.find(pattern,start);
61                 answers.push_back(start);
62                 start++;
63             }
64             std::string to_send;
65             if(answers.size() == 0){

```



```

66         to_send = "-1";
67     }else{
68         to_send = std::to_string(answers[0]);
69         for(int i = 1; i < answers.size();++i){
70             to_send = to_send + ";" + std::to_string(answers[i]);
71         }
72     }
73     to_send = "Ok:" + std::to_string(me.id) + ":" + to_send;
74     my_net::send_message(&me.parent,to_send);
75 } else if(command == "remove"){
76     std::string ans = me.Remove();
77     ans = std::to_string(me.id) + " " + ans;
78     my_net::send_message(&me.parent, ans);
79     my_net::disconnect(&me.parent, me.parent_port);
80     me.parent.close();
81     break;
82 }
83 }
84 sleep(1);
85 return 0;
86 }

```

## client.cpp

```

1  #include "node.hpp"
2  #include "net_func.hpp"
3  #include "set"
4  #include <signal.h>
5
6
7
8  int main(){
9      std::set<int> all_nodes;
10     //std::set<int> not_availuable;
11     std::string prog_path = "./worker";
12     Node me(-1);
13     all_nodes.insert(-1);
14     std::string command;
15     while(std::cin >> command){
16         if(command == "create"){
17             int id_child, id_parent;
18             std::cin >> id_child >> id_parent;
19             if(all_nodes.find(id_child) != all_nodes.end()){
20                 std::cout << "Error: Already exists" << std::endl;
21             } else if(all_nodes.find(id_parent) == all_nodes.end()){
22                 std::cout << "Error: Parent not found" << std::endl;
23             }else if(id_parent == me.id){
24                 std::string ans = me.Create_child(id_child, prog_path);
25                 std::cout << ans << std::endl;
26                 all_nodes.insert(id_child);

```

```

27         } else{
28             std::string str = "create " + std::to_string(id_child);
29             std::string ans = me.Send(str, id_parent);
30             std::cout << ans << std::endl;
31             all_nodes.insert(id_child);
32         }
33     } else if(command == "ping"){
34         int id_child;
35         std::cin >> id_child;
36         if(all_nodes.find(id_child) == all_nodes.end()){
37             std::cout << "Error: Not found" << std::endl;
38         }else if(me.children.find(id_child) != me.children.end()){
39             std::string ans = me.Ping_child(id_child);
40             std::cout << ans << std::endl;
41         }else{
42             std::string str = "ping " + std::to_string(id_child);
43             std::string ans = me.Send(str, id_child);
44             if(ans == "Error: not find"){
45                 ans = "Ok: 0";
46             }
47             std::cout << ans << std::endl;
48         }
49     }else if(command == "exec"){
50         int id;
51         std::string str;
52         std::string pattern;
53         std::cin >> id >> str >> pattern;
54         std::string msg = "exec " + str + " " + pattern;
55         if(all_nodes.find(id) == all_nodes.end()){
56             std::cout << "Error: Not found" << std::endl;
57         }else{
58             std::string ans = me.Send(msg,id);
59             std::cout << ans << std::endl;
60         }
61     }
62     }else if(command == "remove"){
63         int id;
64         std::cin >> id;
65         std::string msg = "remove";
66         if(all_nodes.find(id) == all_nodes.end()){
67             std::cout << "Error: Not found" << std::endl;
68         }else{
69             std::string ans = me.Send(msg,id);
70             if(ans != "Error: not find"){
71                 std::istringstream ids(ans);
72                 int tmp;
73                 while(ids >> tmp){
74                     all_nodes.erase(tmp);
75                 }

```

```

76         ans = "Ok";
77         if(me.children.find(id) != me.children.end()){
78             my_net::unbind(me.children[id],me.children_port[id]);
79             me.children[id]->close();
80             me.children.erase(id);
81             me.children_port.erase(id);
82         }
83     }
84     std::cout << ans << std::endl;
85 }
86 }
87 }
88 me.Remove();
89 return 0;
90 }

```

## 5 Демонстрация работы программы

```
pavel@DESKTOP-K5KMLPV:~/Project/mai/2_course/OS/LB6_8$ ./client
create 2 -1
Ok: 2770
create 3 2
Ok: 2773
create 4 3
Ok: 2776
create 5 3
Ok: 2779
ping 5
Ok: 1
ping 4
Ok: 1
exec 3
abracadabra
abra
Ok:3:0;7
remove 5
Ok
ping 5
Error: Not found
remove 3
Ok
ping 3
Error: Not found
remove 4
Error: Not found
```

## 6 Strace

```
pavel@DESKTOP-K5KMLPV:~/Project/mai/2_course/OS/LB6_8$ cat log.txt
execve("./client",["./client"],0x7ffe8b8368e0 /* 30 vars */) = 0
brk(NULL)                               = 0x5637fbc3000
arch_prctl(0x3001 /* ARCH_??? */ ,0x7fff0a455420) = -1 EINVAL (Invalid argument)
access("/etc/ld.so.preload",R_OK)       = -1 ENOENT (No such file or directory)
openat(AT_FDCWD,"./tls/x86_64/libzmq.so.5",O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD,"./tls/x86_64/libzmq.so.5",O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD,"./tls/x86_64/libzmq.so.5",O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD,"./x86_64/libzmq.so.5",O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD,"./x86_64/libzmq.so.5",O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD,"./x86_64/libzmq.so.5",O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD,"./libzmq.so.5",O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD,"./etc/ld.so.cache",O_RDONLY|O_CLOEXEC) = 3
fstat(3,{st_mode=S_IFREG|0644,st_size=45372,...}) = 0
mmap(NULL,45372,PROT_READ,MAP_PRIVATE,3,0) = 0x7f721d429000
close(3)                                = 0
```

```
(AT_FDCWD,"./lib/x86_64-linux-gnu/libz.so.5",0_RDONLY|O_CLOEXEC) = 3  
read(3,>\\I7FELF2\\1\\1\\3\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\3\\0>>\\0\\1\\0\\0\\0\\0\\0\\...832) = 832  
fstat(3,{st_mode=S_IFREG|0644,st_size=675776,...}) = 0  
mmap(NULL,8192,PROT_READ|PROT_WRITE,MAP_PRIVATE|MAY_ANONYMOUS,-1,0) = 0x7f721d427000  
mmap(NULl,678128,PROT_READ,MAP_PRIVATE|MAY_DENYWRITE,3,0) = 0x7f721d381000  
mmap(0x7f721d397000,034080,PROT_READ|PROT_EXEC,MAP_PRIVATE|MAY_FIXED|MAY_DENYWRITE,3,0x16000) = 0x7f721d397000  
mmap(0x7f721d400000,126976,PROT_READ,MAP_PRIVATE|MAY_FIXED|MAY_DENYWRITE,3,0xf000) = 0x7f721d400000  
mmap(0x7f721d41f000,32768,PROT_READ|PROT_WRITE,MAP_PRIVATE|MAY_FIXED|MAY_DENYWRITE,3,0x9d000) = 0x7f721d41f000  
close(3)  
= 0  
openat(AT_FDCWD,"./tls/x86_64/x86_64/libstdc++.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD,"./tls/x86_64/libstdc++.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD,"./tls/x86_64/libstdc++.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD,"./tls/x86_64/libstdc++.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD,"./x86_64/x86_64/libstdc++.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD,"./x86_64/libstdc++.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD,"./libstdc++.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD,"./lib/x86_64-linux-gnu/libstdc++.so.6",0_RDONLY|O_CLOEXEC) = 3  
read(3,>\\I7FELF2\\1\\1\\3\\0\\0\\0\\0\\0\\0\\0\\0\\3\\0>>\\0\\1\\0\\0\\0\\0\\0\\240\\341\\t\\0\\0\\0\\0\\0\\...832) = 832  
fstat(3,{st_mode=S_IFREG|0644,st_size=1952928,...}) = 0  
mmap(NULL,1968128,PROT_READ,MAP_PRIVATE|MAY_DENYWRITE,3,0) = 0x7f721d1a0000  
mprotect(0x7f721d236000,1286144,PROT_NONE) = 0  
mmap(0x7f721d236000,983040,PROT_READ|PROT_EXEC,MAP_PRIVATE|MAY_FIXED|MAY_DENYWRITE,3,0x9e000) = 0x7f721d236000  
mmap(0x7f721d326000,299008,PROT_READ,MAP_PRIVATE|MAY_FIXED|MAY_DENYWRITE,3,0x186000) = 0x7f721d326000  
mmap(0x7f721d370000,57344,PROT_READ|PROT_WRITE,MAP_PRIVATE|MAY_FIXED|MAY_DENYWRITE,3,0xcfc000) = 0x7f721d370000  
mmap(0x7f721d37ef000,10240,PROT_READ|PROT_WRITE,MAP_PRIVATE|MAY_FIXED|MAY_ANONMYSOUS,-1,0) = 0x7f721d37ef000  
close(3)  
= 0  
openat(AT_FDCWD,"./tIs/x86_64/x86_64/libgcc.s.so.1",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./tlS/x86_64/libgcc.s.so.1",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./tlS/x86_64/libgcc.s.so.1",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./tlS/libgcc.s.so.1",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./x86_64/x86_64/libgcc.s.so.1",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./x86_64/libgcc.s.so.1",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./x86_64/libgcc.s.so.1",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./libgcc.s.so.1",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./lib/x86_64-lInux-gnu/libgcc.s.so.1",0_RDONLY|O_CLOEXEC) = 3  
read(3,>\\I7FELF2\\1\\1\\1\\0\\0\\0\\0\\0\\0\\0\\0\\0\\3\\0>>\\0\\1\\0\\0\\0\\0\\0\\3405\\0\\0\\0\\0\\0\\0\\...832) = 832  
fstat(3,{st_mode=S_IFREG|0644,st_size=104984,...}) = 0  
mmap(NULL,107592,PROT_READ,MAP_PRIVATE|MAY_DENYWRITE,3,0) = 0x7f721d185000  
mmap(0x7f721d188000,73728,PROT_READ|PROT_EXEC,MAP_PRIVATE|MAY_FIXED|MAY_DENYWRITE,3,0x3000) = 0x7f721d188000  
mmap(0x7f721d19a000,16384,PROT_READ,MAP_PRIVATE|MAY_FIXED|MAY_DENYWRITE,3,0x15000) = 0x7f721d19a000  
mmap(0x7f721d19e000,8192,PROT_READ|PROT_WRITE,MAP_PRIVATE|MAY_FIXED|MAY_DENYWRITE,3,0x18000) = 0x7f721d19e000  
close(3)  
= 0  
openat(AT_FDCWD","./tIs/x86_64/x86_64/lib.c.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./tIs/x86_64/lib.c.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./tIs/x86_64/lib.c.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./tIs/lib.c.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./x86_64/x86_64/lib.c.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./x86_64/lib.c.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./x86_64/lib.c.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./lib.c.so.6",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./lib/x86_64-lInux-gnu/lib.c.so.6",0_RDONLY|O_CLOEXEC) = 3  
read(3,>\\I7FELF2\\1\\1\\1\\0\\0\\0\\0\\0\\0\\0\\0\\0\\3\\0>>\\0\\1\\0\\0\\0\\0\\0\\360q\\2\\0\\0\\0\\0\\0\\...832) = 832  
pread64(3,\"\\6\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\...784,64) = 784  
pread64(3,\"\\4\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\...32,848) = 32  
pread64(3,\"\\4\\0\\0\\0\\0\\24\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\...68,880) = 68  
fstat(3,{st_mode=S_IFREG|0755,st_size=2029224,...}) = 0  
pread64(3,\"\\6\\0\\0\\0\\0\\4\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\...784,64) = 784  
pread64(3,\"\\4\\0\\0\\0\\0\\20\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\...32,848) = 32  
pread64(3,\"\\4\\0\\0\\0\\0\\24\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\...68,880) = 68  
mmap(NULL,2036952,PROT_READ,MAP_PRIVATE|MAY_DENYWRITE,3,0) = 0x7f721cf93000  
mprotect(0x7f721cfb8000,1847296,PROT_NONE) = 0  
mmap(0x7f721cfb8000,1540096,PROT_READ|PROT_EXEC,MAP_PRIVATE|MAY_FIXED|MAY_DENYWRITE,3,0x25000) = 0x7f721cfb8000  
mmap(0x7f721fd130000,303104,PROT_READ,MAP_PRIVATE|MAY_FIXED|MAY_DENYWRITE,3,0x19d000) = 0x7f721fd130000  
mmap(0x7f721fd17b000,24576,PROT_READ|PROT_WRITE,MAP_PRIVATE|MAY_FIXED|MAY_DENYWRITE,3,0xe7000) = 0x7f721fd17b000  
mmap(0x7f721d181000,13528,PROT_READ|PROT_WRITE,MAP_PRIVATE|MAY_FIXED|MAY_ANONYMOUS,-1,0) = 0x7f721d181000  
close(3)  
= 0  
openat(AT_FDCWD","./tIs/x86_64/x86_64/libsodium.so.23",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./tIs/x86_64/libsodium.so.23",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./tIs/x86_64/libsodium.so.23",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./tIs/libsodium.so.23",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./x86_64/x86_64/libsodium.so.23",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./x86_64/libsodium.so.23",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./libsodium.so.23",0_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)  
openat(AT_FDCWD","./lib/x86_64-lInux-gnu/libsodium.so.23",0_RDONLY|O_CLOEXEC) = 3  
read(3,>\\I7FELF2\\1\\1\\1\\0\\0\\0\\0\\0\\0\\0\\0\\0\\3\\0>>\\0\\1\\0\\0\\0\\0\\0\\200\\302\\0\\0\\0\\0\\0\\0\\...832) = 832  
fstat(3,{st_mode=S_IFREG|0644,st_size=355016,...}) = 0  
mmap(NULL,357384,PROT_READ,MAP_PRIVATE|MAY_DENYWRITE,3,0) = 0x7f721cf3b000  
mmap(0x7f721cf47000,229376,PROT_READ|PROT_EXEC,MAP_PRIVATE|MAY_FIXED|MAY_DENYWRITE,3,0xc000) = 0x7f721cf47000  
mmap(0x7f721cf
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openat(AT_FDCWD, "/tls/x86_64/libpgm-5.2.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libpgm-5.2.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/libpgm-5.2.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/x86_64/libpgm-5.2.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libpgm-5.2.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libpgm-5.2.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/libpgm-5.2.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libpgm-5.2.so.0", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\3\0\0\1\0\0\0\0\240L\0\0\0\0\0\0"... ,832) = 832
fstat(3, {st_mode=S_IFREG|0644, st_size=302056, ...}) = 0
mmap(NULL, 321584, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f721ceec000
mmap(0x7f721cef0000, 163840, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f721cef0000
mmap(0x7f721cf18000, 118784, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2c000) = 0x7f721cf18000
mmap(0x7f721cf35000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x48000) = 0x7f721cf35000
mmap(0x7f721cf37000, 14384, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f721cf37000
close(3) = 0
openat(AT_FDCWD, "/tls/x86_64/x86_64/libnorm.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libnorm.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libnorm.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/libnorm.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/x86_64/libnorm.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libnorm.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libnorm.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/libnorm.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libnorm.so.1", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\3\0\0\1\0\0\0\0\257\0\0\0\0\0\0"... ,832) = 832
fstat(3, {st_mode=S_IFREG|0644, st_size=690344, ...}) = 0
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f721ceea000
mmap(NULL, 1420000, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f721cd8f000
mmap(0x7f721cd99000, 421888, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xa000) = 0x7f721cd99000
mmap(0x7f721ce00000, 217088, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x71000) = 0x7f721ce00000
mmap(0x7f721ce35000, 16384, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xa5000) = 0x7f721ce35000
mmap(0x7f721ce39000, 723680, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f721ce39000
close(3) = 0
openat(AT_FDCWD, "/tls/x86_64/x86_64/libgssapi_krb5.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libgssapi_krb5.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libgssapi_krb5.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/libgssapi_krb5.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/x86_64/libgssapi_krb5.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libgssapi_krb5.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libgssapi_krb5.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/libgssapi_krb5.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgssapi_krb5.so.2", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\3\0\0\1\0\0\0\0\321\0\0\0\0\0\0"... ,832) = 832
fstat(3, {st_mode=S_IFREG|0644, st_size=309712, ...}) = 0
mmap(NULL, 312128, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f721cd42000
mmap(0x7f721cd44000, 204800, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xb000) = 0x7f721cd44000
mmap(0x7f721cd7f000, 49152, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3d000) = 0x7f721cd7f000
mmap(0x7f721cd8b000, 16384, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x48000) = 0x7f721cd8b000
close(3) = 0
openat(AT_FDCWD, "/tls/x86_64/x86_64/libpthread.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libpthread.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libpthread.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/libpthread.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/x86_64/libpthread.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libpthread.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libpthread.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/libpthread.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libpthread.so.0", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\3\0\0\1\0\0\0\0\220\201\0\0\0\0\0\0"... ,832) = 832
pread64(3, "\4\0\0\0\24\0\0\0\0\3\0\0\0\0\0\0\3\0\0\1\0\0\0\0\220\201\0\0\0\0\0\0"... ,832) = 832
fstat(3, {st_mode=S_IFREG|0755, st_size=157224, ...}) = 0
pread64(3, "\4\0\0\0\24\0\0\0\0\3\0\0\0\0\0\0\3\0\0\1\0\0\0\0\367\265T\320\374\301V]Yf]\223\337"... ,68,824) = 68
mmap(NULL, 140408, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f721cdf000
mmap(0x7f721cd26000, 69632, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x7000) = 0x7f721cd26000
mmap(0x7f721cd37000, 20480, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x18000) = 0x7f721cd37000
mmap(0x7f721cd3c000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1c000) = 0x7f721cd3c000
mmap(0x7f721cd3e000, 13432, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f721cd3e000
close(3) = 0
openat(AT_FDCWD, "/tls/x86_64/x86_64/libm.so.6", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libm.so.6", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libm.so.6", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/libm.so.6", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/x86_64/libm.so.6", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libm.so.6", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libm.so.6", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/libm.so.6", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libm.so.6", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\3\0\0\0\0\0\0\0\0\0\3\0\0\1\0\0\0\0\300\363\0\0\0\0\0\0"... ,832) = 832
fstat(3, {st_mode=S_IFREG|0644, st_size=1369352, ...}) = 0
mmap(NULL, 1368336, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f721cbd0000
mmap(0x7f721cbd0000, 684032, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xf000) = 0x7f721cbd0000
mmap(0x7f721cc86000, 618496, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xb6000) = 0x7f721cc86000
mmap(0x7f721cd1d000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x14c000) = 0x7f721cd1d000

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close(3) = 0
openat(AT_FDCWD, "/tls/x86_64/x86_64/libkrb5.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libkrb5.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libkrb5.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/libkrb5.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/x86_64/libkrb5.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libkrb5.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libkrb5.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkrb5.so.3", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\3\0\0\0\1\0\0\0 ?\2\0\0\0\0\0"... ,832) = 832
fstat(3, {st_mode=S_IFREG|0644, st_size=902016, ...}) = 0
mmap(NULL, 904640, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f721caf3000
mprotect(0x7f721cb15000, 700416, PROT_NONE) = 0
mmap(0x7f721cb15000, 397312, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x22000) = 0x7f721cb15000
mmap(0x7f721cb76000, 299008, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x83000) = 0x7f721cb76000
mmap(0x7f721cbc0000, 65536, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xcc000) = 0x7f721cbc0000
close(3) = 0
openat(AT_FDCWD, "/tls/x86_64/x86_64/libk5crypto.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libk5crypto.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libk5crypto.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/libk5crypto.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/x86_64/libk5crypto.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libk5crypto.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libk5crypto.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/libk5crypto.so.3", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libk5crypto.so.3", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\3\0\0\0\1\0\0\0\240\0\0\0\0\0"... ,832) = 832
fstat(3, {st_mode=S_IFREG|0644, st_size=191040, ...}) = 0
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0x7f721caf1000
mmap(NULL, 196696, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f721cac0000
mprotect(0x7f721cac4000, 172032, PROT_NONE) = 0
mmap(0x7f721cac4000, 114688, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f721cac4000
mmap(0x7f721cae0000, 53248, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x20000) = 0x7f721cae0000
mmap(0x7f721cae0000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2d000) = 0x7f721cae0000
mmap(0x7f721caf0000, 88, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7f721caf0000
close(3) = 0
openat(AT_FDCWD, "/tls/x86_64/x86_64/libcom_err.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libcom_err.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libcom_err.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/libcom_err.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/x86_64/libcom_err.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libcom_err.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libcom_err.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/libcom_err.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libcom_err.so.2", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\3\0\0\0\1\0\0\0\200\0\0\0\0\0"... ,832) = 832
fstat(3, {st_mode=S_IFREG|0644, st_size=22600, ...}) = 0
mmap(NULL, 24744, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f721cab9000
mmap(0x7f721cabb000, 8192, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f721cabb000
mmap(0x7f721cabd000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f721cabd000
mmap(0x7f721cabe000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f721cabe000
close(3) = 0
openat(AT_FDCWD, "/tls/x86_64/x86_64/libkrb5support.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libkrb5support.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libkrb5support.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/libkrb5support.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/x86_64/libkrb5support.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libkrb5support.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libkrb5support.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/libkrb5support.so.0", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkrb5support.so.0", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\3\0\0\0\1\0\0\0\360\0\0\0\0\0"... ,832) = 832
fstat(3, {st_mode=S_IFREG|0644, st_size=56096, ...}) = 0
mmap(NULL, 58344, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f721caa0000
mmap(0x7f721caad000, 28672, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0x7f721caad000
mmap(0x7f721cab4000, 12288, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xa000) = 0x7f721cab4000
mmap(0x7f721cab7000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000) = 0x7f721cab7000
close(3) = 0
openat(AT_FDCWD, "/tls/x86_64/x86_64/libkeyutils.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libkeyutils.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libkeyutils.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/libkeyutils.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/x86_64/libkeyutils.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libkeyutils.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libkeyutils.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/libkeyutils.so.1", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkeyutils.so.1", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\3\0\0\0\1\0\0\0\0\0"... ,832) = 832
fstat(3, {st_mode=S_IFREG|0644, st_size=22600, ...}) = 0
mmap(NULL, 24592, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7f721caa3000
mmap(0x7f721caa5000, 8192, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7f721caa5000
mmap(0x7f721caa7000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f721caa7000
mmap(0x7f721caa8000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7f721caa8000

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close(3)
= 0
openat(AT_FDCWD, "/tls/x86_64/x86_64/libresolv.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libresolv.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libresolv.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libresolv.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/x86_64/libresolv.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libresolv.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libresolv.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/libresolv.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libresolv.so.2", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\3\0>\0\1\0\0\0\0\0\0\0\0\0\0\0...832) = 832
fstat(3, {st_mode=S_IFREG|0644, st_size=101320, ...}) = 0
mmap(NULL, 113280, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0xf7f21ca87000
mprotect(0xf7f21ca8b000, 81920, PROT_NONE) = 0
mmap(0xf7f21ca8b000, 65536, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0xf7f21ca8b000
mmap(0xf7f21ca9b000, 12288, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x14000) = 0xf7f21ca9b000
mmap(0xf7f21ca9f000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x17000) = 0xf7f21ca9f000
mmap(0xf7f21caa1000, 6784, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0xf7f21caa1000
close(3)
= 0
openat(AT_FDCWD, "/tls/x86_64/x86_64/libdl.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libdl.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/x86_64/libdl.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/tls/libdl.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/x86_64/libdl.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libdl.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/x86_64/libdl.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/libdl.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libdl.so.2", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\0\3\0><0\1\0\0\0\0\22\0\0\0\0\0\0\0...832) = 832
fstat(3, {st_mode=S_IFREG|0644, st_size=18816, ...}) = 0
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0xf7f21ca85000
mmap(NULL, 20752, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0xf7f21ca7f000
mmap(0xf7f21ca80000, 8192, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1000) = 0xf7f21ca80000
mmap(0xf7f21ca82000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0xf7f21ca82000
mmap(0xf7f21ca83000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000) = 0xf7f21ca83000
close(3)
= 0
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0xf7f21ca7d000
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) = 0xf7f21ca7b000
arch_prctl(ARCH_SET_FS, 0xf7f21ca7e600) = 0
mprotect(0xf7f21d17b000, 12288, PROT_READ) = 0
mprotect(0xf7f21ca83000, 4096, PROT_READ) = 0
mprotect(0xf7f21ca9f000, 4096, PROT_READ) = 0
mprotect(0xf7f21caa8000, 4096, PROT_READ) = 0
mprotect(0xf7f21cab7000, 4096, PROT_READ) = 0
mprotect(0xf7f21cd3c000, 4096, PROT_READ) = 0
mprotect(0xf7f21cabe000, 4096, PROT_READ) = 0
mprotect(0xf7f21cae000, 4096, PROT_READ) = 0
mprotect(0xf7f21cbc0000, 57344, PROT_READ) = 0
mprotect(0xf7f21cd1d000, 4096, PROT_READ) = 0
mprotect(0xf7f21cd8b000, 8192, PROT_READ) = 0
mprotect(0xf7f21d19e000, 4096, PROT_READ) = 0
mprotect(0xf7f21d370000, 40566, PROT_READ) = 0
mprotect(0xf7f21ce35000, 12288, PROT_READ) = 0
mprotect(0xf7f21cf35000, 4096, PROT_READ) = 0
mprotect(0xf7f21cf91000, 4096, PROT_READ) = 0
mprotect(0xf7f21d41f000, 28672, PROT_READ) = 0
mprotect(0x5637fb5f8000, 4096, PROT_READ) = 0
mprotect(0xf7f21d462000, 4096, PROT_READ) = 0
munmap(0xf7f21d429000, 45372) = 0
set_tid_address(0xf7f21ca7e8d0) = 2942
set_robust_list(0xf7f21ca7e8e0, 24) = 0
rt_sigaction(SIGRTMIN, {sa_handler=0xf7f21cd26bf0, sa_mask=[], sa_flags=SA_RESTORER|SA_SIGINFO, sa_restorer=0xf7f21cd343c0}, NULL, 8) = 0
rt_sigaction(SIGRT_1, {sa_handler=0xf7f21cd26c90, sa_mask=[], sa_flags=SA_RESTORER|SA_RESTART|SA_SIGINFO, sa_restorer=0xf7f21cd343c0}, NULL, 8) = 0
rt_sigprocmask(SIG_UNBLOCK, [RTMIN RT_1], NULL, 8) = 0
prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0
brk(NULL) = 0x5637fbcdb3000
brk(0x5637fbcd4000) = 0x5637fbcd4000
futexp(0xf7f21d37e6bc, FUTEXP_WAKE_PRIVATE, 2147483647) = 0
futexp(0xf7f21d37e6c8, FUTEXP_WAKE_PRIVATE, 2147483647) = 0
openat(AT_FDCWD, "/sys/devices/system/cpu/online", O_RDONLY|O_CLOEXEC) = 3
read(3, "0-3\n", 8192) = 4
close(3)
= 0
openat(AT_FDCWD, "/sys/devices/system/cpu", O_RDONLY|O_NONBLOCK|O_CLOEXEC|O_DIRECTORY) = 3
fstat(3, {st_mode=S_IFDIR|0755, st_size=0, ...}) = 0
getdents64(3, /* 17 entries */, 32768) = 496
getdents64(3, /* 0 entries */, 32768) = 0
close(3)
= 0
getpid() = 2942
sched_getaffinity(2942, 128, [0, 1, 2, 3]) = 32
openat(AT_FDCWD, "/etc/nsswitch.conf", O_RDONLY|O_CLOEXEC) = 3
fstat(3, {st_mode=S_IFREG|0644, st_size=510, ...}) = 0
read(3, "# /etc/nsswitch.conf\n#\n# Example"...4096) = 510
read(3, "", 4096) = 0
close(3)
= 0
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[illegible]

17

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s=0,tx_carrier_errors=0,tx_fifo_errors=0,tx_heartbeat_errors=0,tx_window_errors=0,rx_compressed=0,tx_compressed=0,rx_nohandler=0},{nla_len=12,nla_type=IFLA_XDP},{nla_len=5,nla_type=IFLA_XDP_ATTACHED},XDP_ATTACHED_NONE},{nla_len=188,nla_type=IFLA_LINKINFO},{nla_len=9,nla_type=IFLA_INFO_KIND,"bond"},{nla_len=172,nla_type=IFLA_INFO_DATA,"x05\x00\x01\x00\x00\x00\x00\x08\x00\x03\x00\x00\x00\x00\x08\x00\x04\x00\x00\x00\x08\x00\x05\x00\x00\x00\x00\x00..."}},{nla_len=760,nla_type=IFLA_AF_SPEC},{nla_len=136,nla_type=AF_INET},{nla_len=132,nla_type=IFLA_INET_CONF},{[IPV4_DEVCONF_FORWARDING-1] = 0,[IPV4_DEVCONF_MC_FORWARDING-1] = 0,[IPV4_DEVCONF_PROXY_ARP-1] = 0,[IPV4_DEVCONF_ACCEPT_REDIRECTS-1] = 1,[IPV4_DEVCONF_SECURE_REDIRECTS-1] = 1,[IPV4_DEVCONF_SEND_REDIRECTS-1] = 1,[IPV4_DEVCONF_SHARED_MEDIA-1] = 1,[IPV4_DEVCONF_RP_FILTER-1] = 0,[IPV4_DEVCONF_ACCEPT_SOURCE_ROUTE-1] = 1,[IPV4_DEVCONF_BOOTP_RELAY-1] = 0,[IPV4_DEVCONF_LOG_MARTIANS-1] = 0,[IPV4_DEVCONF_TAG-1] = 0,[IPV4_DEVCONF_ARPFILTER-1] = 0,[IPV4_DEVCONF_MEDIUM_ID-1] = 0,[IPV4_DEVCONF_NOXFRM-1] = 0,[IPV4_DEVCONF_NOPOLICY-1] = 0,[IPV4_DEVCONF_FORCE_IGMP_VERSION-1] = 0,[IPV4_DEVCONF_ANNOUNCE-1] = 0,[IPV4_DEVCONF_IGNORE-1] = 0,[IPV4_DEVCONF_PROMOTE_SECONDARIES-1] = 0,[IPV4_DEVCONF_ARP_ACCEPT-1] = 0,[IPV4_DEVCONF_ARP_NOTIFY-1] = 0,[IPV4_DEVCONF_ACCEPT_LOCAL-1] = 0,[IPV4_DEVCONF_SRC_VMARK-1] = 0,[IPV4_DEVCONF_PROXY_ARP_VLAN-1] = 0,[IPV4_DEVCONF_ROUTE_LOCALNET-1] = 0,[IPV4_DEVCONF_IGMPV2_UNSOLICITED_REPORT_INTERVAL-1] = 10000,[IPV4_DEVCONF_IGMPV3_UNSOLICITED_REPORT_INTERVAL-1] = 1000,[IPV4_DEVCONF_IGNORE_ROUTES_WITH_LINKDOWN-1] = 0,[IPV4_DEVCONF_DROP_UNICAST_IN_L2_MULTICAST-1] = 0,[IPV4_DEVCONF_DROP_GRATUITOUS_ARP-1] = 0,[IPV4_DEVCONF_BC_FORWARDING-1] = 0},{nla_len=620,nla_type=AF_INET6},{nla_len=8,nla_type=IFLA_INET6_FLAGS},0},{nla_len=20,nla_type=IFLA_INET6_CACHEINFO},{max_reasm_len=65535,tstamp=25,reachable_time=24970,retrans_time=1000},{nla_len=208,nla_type=IFLA_INET6_CONF},{[DEVCONF_FORWARDING] = 0,[DEVCONF_HOPLIMIT] = 64,[DEVCONF_MTU6] = 1500,[DEVCONF_ACCEPT_RA] = 1,[DEVCONF_MIB_ACCEPT_REDIRECTS] = 1,[DEVCONF_AUTOCONF] = 1,[DEVCONF_DAD_TRANSMITS] = 1,[DEVCONF_RTR_SOLICITS] = -1,[DEVCONF_RTR_SOLICIT_INTERVAL] = 4000,[DEVCONF_RTR_SOLICIT_DELAY] = 1000,[DEVCONF_USE_TEMPADDR] = 0,[DEVCONF_TEMP_VALID_LFT] = 604800,[DEVCONF_TEMP_PREFERRED_LFT] = 86400,[DEVCONF_REGEN_MAX_RETRY] = 3,[DEVCONF_MAX_DESYNC_FACTOR] = 600,[DEVCONF_MAX_ADDRESSES] = 16,[DEVCONF_FORCE_MLD_VERSION] = 0,[DEVCONF_ACCEPT_RA_DEFRTR] = 1,[DEVCONF_ACCEPT_RA_PINFO] = 1,[DEVCONF_ACCEPT_RA_RTR_PREF] = 0,[DEVCONF_RTR_PROBE_INTERVAL] = 0,[DEVCONF_ACCEPT_RA_RT_INFO_MAX_PLEN] = 0,[DEVCONF_PROXY_NDP] = 0,[DEVCONF_OPTIMISTIC_DAD] = 0,[DEVCONF_ACCEPT_SOURCE_ROUTE] = 0,[DEVCONF_MC_FORWARDING] = 0,[DEVCONF_DISABLE_IPV6] = 0,[DEVCONF_ACCEPT_DAD] = 1,[DEVCONF_FORCE_TLLAO] = 0,[DEVCONF_NDISC_NOTIFY] = 0,[DEVCONF_MLDV1_UNSOLICITED_REPORT_INTERVAL] = 10000,[DEVCONF_MLDV2_UNSOLICITED_REPORT_INTERVAL] = 1000,...},{nla_len=300,nla_type=IFLA_INET6_STATS},{[IPSTATS_MIB_NUM] = 37,[IPSTATS_MIB_INPKTS] = 0,[IPSTATS_MIB_INOCTETS] = 0,[IPSTATS_MIB_INDELIVERS] = 0,[IPSTATS_MIB_OUTFORWDATAGRAMS] = 0,[IPSTATS_MIB_OUTPKTS] = 0,[IPSTATS_MIB_OUTOCTETS] = 0,[IPSTATS_MIB_INHDRERRORS] = 0,[IPSTATS_MIB_INTOOBIGERRORS] = 0,[IPSTATS_MIB_INNOROUTES] = 0,[IPSTATS_MIB_INADDRERRORS] = 0,[IPSTATS_MIB_INUNKNOWNPROTOS] = 0,[IPSTATS_MIB_INTRUNCATEDPKTS] = 0,[IPSTATS_MIB_INDISCARDS] = 0,[IPSTATS_MIB_OUTDISCARDS] = 0,[IPSTATS_MIB_OUTNOROUTES] = 0,[IPSTATS_MIB_REASMTIMEOUT] = 0,[IPSTATS_MIB_REASMREQDS] = 0,[IPSTATS_MIB_REASMOKS] = 0,[IPSTATS_MIB_REASMFFAILS] = 0,[IPSTATS_MIB_FRAGOKS] = 0,[IPSTATS_MIB_FRAGFAILS] = 0,[IPSTATS_MIB_FRAGCREATES] = 0,[IPSTATS_MIB_INMCSTPKTS] = 0,[IPSTATS_MIB_OUTMCSTPKTS] = 0,[IPSTATS_MIB_INBCSTPKTS] = 0,[IPSTATS_MIB_OUTBCSTPKTS] = 0,[IPSTATS_MIB_INMCSTOCTETS] = 0,[IPSTATS_MIB_OUTMCSTOCTETS] = 0,[IPSTATS_MIB_INBCSTOCTETS] = 0,[IPSTATS_MIB_OUTBCSTOCTETS] = 0,[IPSTATS_MIB_CSUMERRORS] = 0,...},{nla_len=52,nla_type=IFLA_INET6_ICMP6STATS},{[ICMP6_MIB_NUM] = 6,[ICMP6_MIB_INMSGS] = 0,[ICMP6_MIB_INERRORS] = 0,[ICMP6_MIB_OUTMSGS] = 0,[ICMP6_MIB_OUTERRORS] = 0,[ICMP6_MIB_CSUMERRORS] = 0},{nla_len=20,nla_type=IFLA_INET6_TOKEN},inet_pton(AF_INET6,":::"),{nla_len=5,nla_type=IFLA_INET6_ADDR_GEN_MODE},IN6_ADDR_GEN_MODE_EUI64},{nla_len=4096},msg_iovlen=1,msg_controllen=0,msg_flags=0},0) = 2824
recvmsg(10,[msg_name={sa_family=AF_NETLINK,nl_pid=0,nl_groups=00000000},msg_namelen=12,msg_iov={{iov_base={{len=1336,type=RTM_NEWLINK,flags=NLM_F_MULTI,seq=1619099638,pid=2942},{ifi_family=AF_UNSPEC,ifi_type=ARPHRD_ETHER,ifi_index=if_nametoindex("dummy0"),ifi_flags=IFF_BROADCAST|IFF_NOARP,ifi_change=0},{nla_len=11,nla_type=IFLA_IFNAME,"dummy0"},{nla_len=8,nla_type=IFLA_TXQLEN,1000},{nla_len=5,nla_type=IFLA_OPERSTATE,2},{nla_len=5,nla_type=IFLA_LINKMODE,0},{nla_len=8,nla_type=IFLA_MTU,1500},{nla_len=8,nla_type=IFLA_MIN_MTU,0},{nla_len=8,nla_type=IFLA_MAX_MTU,0},{nla_len=8,nla_type=IFLA_GROUP,0},{nla_len=8,nla_type=IFLA_PROMISCUITY,0},{nla_len=8,nla_type=IFLA_NUM_TX_QUEUES,1},{nla_len=8,nla_type=IFLA_GSO_MAX_SEGS,65535},{nla_len=8,nla_type=IFLA_GSO_MAX_SIZE,65536},{nla_len=8,nla_type=IFLA_NUM_RX_QUEUES,1},{nla_len=5,nla_type=IFLA_CARRIER,1},{nla_len=9,nla_type=IFLA_QDISC,"noop"},{nla_len=8,nla_type=IFLA_CARRIER_CHANGES,0},{nla_len=5,nla_type=IFLA_PROTO_DOWN,0},{nla_len=8,nla_type=IFLA_CARRIER_UP_COUNT,0},{nla_len=8,nla_type=IFLA_CARRIER_DOWN_COUNT,0},{nla_len=36,nla_type=IFLA_MAP},{mem_start=0,mem_end=0,base_addr=0,irq=0,dma=0,port=0},{nla_len=10,nla_type=IFLA_ADDRESS},"x26\x0b\x15\xcf\xdb\x28"},{nla_len=10,nla_type=IFLA_BROADCAST},"xff\xff\xff\xff\xff\xff"},{nla_len=196,nla_type=IFLA_STATS64},{rx_packets=0,tx_packets=0,rx_bytes=0,tx_bytes=0,rx_errors=0,tx_errors=0,rx_dropped=0,tx_dropped=0,multicast=0,collisions=0,rx_length_errors=0,rx_over_errors=0,rx_crc_errors=0,rx_frame_errors=0,rx_fifo_errors=0,rx_missed_errors=0,tx_aborted_errors=0,tx_carrier_errors=0,tx_fifo_errors=0,tx_heartbeat_errors=0,tx_window_errors=0,tx_compressed=0,tx_compressed=0,rx_nohandler=0},{nla_len=100,nla_type=IFLA_STATS},{rx_packets=0,tx_packets=0,rx_bytes=0,tx_bytes=0,rx_errors=0,tx_errors=0,rx_dropped=0,tx_dropped=0,multicast=0,collisions=0,rx_length_errors=0,rx_over_errors=0,rx_crc_errors=0,rx_frame_errors=0,rx_fifo_errors=0,rx_missed_errors=0,tx_aborted_errors=0,tx_carrier_errors=0,tx_fifo_errors=0,tx_heartbeat_errors=0,tx_window_errors=0,tx_compressed=0,tx_compressed=0,rx_nohandler=0},{nla_len=12,nla_type=IFLA_XDP},{nla_len=5,nla_type=IFLA_XDP_ATTACHED},XDP_ATTACHED_NONE},{nla_len=16,nla_type=IFLA_LINKINFO},{nla_len=10,nla_type=IFLA_INFO_KIND,"dummy"},{nla_len=760,nla_type=IFLA_AF_SPEC},{nla_len=136,nla_type=AF_INET},{nla_len=132,nla_type=IFLA_INET_CONF},{[IPV4_DEVCONF_FORWARDING-1] = 0,[IPV4_DEVCONF_MC_FORWARDING-1] = 0,[IPV4_DEVCONF_PROXY_ARP-1] = 0,[IPV4_DEVCONF_ACCEPT_REDIRECTS-1] = 1,[IPV4_DEVCONF_SECURE_REDIRECTS-1] = 1,[IPV4_DEVCONF_SEND_REDIRECTS-1] = 1,[IPV4_DEVCONF_SHARED_MEDIA-1] = 1,[IPV4_DEVCONF_RP_FILTER-1] = 0,[IPV4_DEVCONF_ACCEPT_SOURCE_ROUTE-1] = 1,[IPV4_DEVCONF_BOOTP_RELAY-1] = 0,[IPV4_DEVCONF_LOG_MARTIANS-1] = 0,[IPV4_DEVCONF_TAG-1] = 0,[IPV4_DEVCONF_ARPFILTER-1] = 0,[IPV4_DEVCONF_MEDIUM_ID-1] = 0,[IPV4_DEVCONF_NOXFRM-1] = 0,[IPV4_DEVCONF_NOPOLICY-1] = 0,[IPV4_DEVCONF_PROMOTE_SECONDARIES-1] = 0,[IPV4_DEVCONF_ARP_ACCEPT-1] = 0,[IPV4_DEVCONF_ARP_NOTIFY-1] = 0,[IPV4_DEVCONF_ACCEPT_LOCAL-1] = 0,[IPV4_DEVCONF_SRC_VMARK-1] = 0,[IPV4_DEVCONF_PROXY_ARP_VLAN-1] = 0,[IPV4_DEVCONF_ROUTE_LOCALNET-1] = 0,[IPV4_DEVCONF_IGMPV2_UNSOLICITED_REPORT_INTERVAL-1] = 10000,[IPV4_DEVCONF_IGMPV3_UNSOLICITED_REPORT_INTERVAL-1] = 1000,[IPV4_DEVCONF_IGNORE_ROUTES_WITH_LINKDOWN-1] = 0,[IPV4_DEVCONF_DROP_UNICAST_IN_L2_MULTICAST-1] = 0,[IPV4_DEVCONF_DROP_GRATUITOUS_ARP-1] = 0,[IPV4_DEVCONF_BC_FORWARDING-1] = 0},{nla_len=620,nla_type=AF_INET6},{nla_len=8,nla_type=IFLA_INET6_FLAGS},0},{nla_len=20,nla_type=IFLA_INET6_CACHEINFO},{max_reasm_len=65535,tstamp=25,reachable_time=28820,retrans_time=1000},{nla_len=208,nla_type=IFLA_INET6_CONF},{[DEVCONF_FORWARDING] = 0,[DEVCONF_HOPLIMIT] = 64,[DEVCONF_ACCEPT_RA] = 1,[DEVCONF_ACCEPT_REDIRECTS] = 1,[DEVCONF_AUTOCONF] = 1,[DEVCONF_DAD_TRANSMITS] = 1,[DEVCONF_RTR_SOLICITS] = -1,[DEVCONF_RTR_SOLICIT_INTERVAL] = 4000,[DEVCONF_RTR_SOLICIT_DELAY] = 1000,[DEVCONF_USE_TEMPADDR] = 0,[DEVCONF_TEMP_VALID_LFT] = 604800,[DEVCONF_REGEN_MAX_RETRY] = 3,[DEVCONF_MAX_DESYNC_FACTOR] = 600,[DEVCONF_FORCE_MLD_VERSION] = 0,[DEVCONF_ACCEPT_RA_DEFRTR] = 1,[DEVCONF_ACCEPT_RA_PINFO] = 1,[DEVCONF_ACCEPT_RA_RTR_PREF] = 0,[DEVCONF_RTR_PROBE_INTERVAL] = 0,[DEVCONF_ACCEPT_RA_RT_INFO_MAX_PLEN] = 0,[DEVCONF_PROXY_NDP] = 0,[DEVCONF_OPTIMISTIC_DAD] = 0,[DEVCONF_ACCEPT_SOURCE_ROUTE] = 0,[DEVCONF_MC_FORWARDING] = 0,[DEVCONF_DISABLE_IPV6] = 0,[DEVCONF_ACCEPT_DAD] = -1,[DEVCONF_FORCE_TLLAO] = 0,[DEVCONF_NDISC_NOTIFY] = 0,[DEVCONF_MLDV1_UNSOLICITED_REPORT_INTERVAL] = 10000,[DEVCONF_MLDV2_UNSOLICITED_REPORT_INTERVAL] = 1000,...},{nla_len=300,nla_type=IFLA_INET6_STATS},{[IPSTATS_MIB_NUM] = 37,[IPSTATS_MIB_INPKTS] = 0,[IPSTATS_MIB_INOCTETS] = 0,[IPSTATS_MIB_INDELIVERS] = 0,[IPSTATS_MIB_OUTFORWDATAGRAMS] = 0,[IPSTATS_MIB_OUTPKTS] = 0,[IPSTATS_MIB_INHDRERRORS] = 0,[IPSTATS_MIB_INTOOBIGERRORS] = 0,[IPSTATS_MIB_INNOROUTES] = 0,[IPSTATS_MIB_INADDRERRORS] = 0,[IPSTATS_MIB_INUNKNOWNPROTOS] = 0,[IPSTATS_MIB_INTRUNCATEDPKTS] = 0,[IPSTATS_MIB_INDISCARDS] = 0,[IPSTATS_MIB_OUTDISCARDS] = 0,[IPSTATS_MIB_OUTNOROUTES] = 0,[IPSTATS_MIB_REASMTIMEOUT] = 0,[IPSTATS_MIB_REASMREQDS] = 0,[IPSTATS_MIB_REASMOKS] = 0,[IPSTATS_MIB_REASMFFAILS] = 0,[IPSTATS_MIB_FRAGOKS] = 0,[IPSTATS_MIB_FRAGFAILS] = 0,[IPSTATS_MIB_FRAGCREATES] = 0,[IPSTATS_MIB_INMCSTPKTS] = 0,[IPSTATS_MIB_OUTMCSTPKTS] = 0,[IPSTATS_MIB_INBCSTPKTS] = 0,[IPSTATS_MIB_OUTBCSTPKTS] = 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```

```
[IPSTATS_MIB_OUTBCASTPKTS] = 0, [IPSTATS_MIB_INMCASTOCTETS] = 0, [IPSTATS_MIB_OUTMCASTOCTETS] = 0, [IPSTATS_MIB_INNBCASTOCTETS] = 0, [IPSTATS_MIB_OUTBCASTOCTETS] = 0, [IPSTATS_MIB_CSUMERRORS] = 0, ...], {{"nla_len=52,nla_type=IFLA_INET6_ICMP6STATS"}, [{"ICMP6_MIB_NUM] = 6, [ICMP6_MIB_INMSG] = 0, [ICMP6_MIB_INERRORS] = 0, [ICMP6_MIB_OUTMSG] = 0, [ICMP6_MIB_OUTERRORS] = 0, [ICMP6_MIB_CSUMERRORS] = 0}], {{"nla_len=20,nla_type=IFLA_INET6_TOKEN"}, inet_pton(AF_INET6, ":::0"), {{"nla_len=5,nla_type=IFLA_INET6_ADDR_GEN_MODE"}, IN6_ADDR_GEN_MODE_EUI64}}]]], {{"len=1316,type=RTM_NEWLINK,flags=NLM_F_MULTI,seq=1619099638,pid=2942},{if_familay=AF_UNSPEC,ifi_type=ARPHRD_ETHER,ifi_index=if_nametoindex("eth0"),ifi_flags=IFF_UP|IFF_BROADCAST|IFF_RUNNING|IFF_MULTICAST|IFF_LOWER_UP,ifi_change=0},{{"nla_len=9,nla_type=IFLA_IFNAME"}, "eth0"}, {{"nla_len=8,nla_type=IFLA_TXQLEN"}, 1000}, {{"nla_len=5,nla_type=IFLA_OPERSTATE"}, 6}, {{"nla_len=5,nla_type=IFLA_LINKMODE"}, 0}, {{"nla_len=8,nla_type=IFLA_MTU"}, 1500}, {{"nla_len=8,nla_type=IFLA_MIN_MTU"}, 68}, {{"nla_len=8,nla_type=IFLA_MAX_MTU"}, 65521}, {{"nla_len=8,nla_type=IFLA_GROUP"}, 0}, {{"nla_len=8,nla_type=IFLA_PROMISCUITY"}, 0}, {{"nla_len=8,nla_type=IFLA_NUM_TX_QUEUES"}, 64}, {{"nla_len=8,nla_type=IFLA_GSO_MAX_SEGS"}, 65535}, {{"nla_len=8,nla_type=IFLA_GSO_MAX_SIZE"}, 62780}, {{"nla_len=8,nla_type=IFLA_NUM_RX_QUEUES"}, 64}, {{"nla_len=5,nla_type=IFLA_CARRIER"}, 1}, {{"nla_len=7,nla_type=IFLA_QDISC"}, "mq"}, {{"nla_len=8,nla_type=IFLA_CARRIER_CHANGES"}, 1}, {{"nla_len=5,nla_type=IFLA_PROTO_DOWN"}, 0}, {{"nla_len=8,nla_type=IFLA_CARRIER_UP_COUNT"}, 1}, {{"nla_len=8,nla_type=IFLA_CARRIER_DOWN_COUNT"}, 0}, {{"nla_len=36,nla_type=IFLA_MAP"}, {mem_start=0,mem_end=0,base_addr=0,irq=0,dma=0,port=0}}, {{"nla_len=10,nla_type=IFLA_ADDRESS"}, {"x00\x15\x5d\x8f\x68\x8f"}}, {{"nla_len=10,nla_type=IFLA_BROADCAST"}, {"xff\xff\xff\xff\xff\xff"}}, {{"nla_len=196,nla_type=IFLA_STATS64"}, 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{{"nla_len=620,nla_type=AF_INET6"}, {{"nla_len=8,nla_type=IFLA_INET6_FLOWINFO"}, {max_reasm_len=65535,timestamp=121,reachable_time=40800,retx_timeout=1000}}, {{"nla_len=208,nla_type=IFLA_INET6_CONF"}, {[DEVCONF_FORWARDING] = 0, [DEVCONF_HOPLIMIT] = 64, [DEVCONF_NF_MTU] = 1500, [DEVCONF_ACCEPT_RA] = 1, [DEVCONF_ACCEPT_REDIRECTS] = 1, [DEVCONF_AUTOCONF] = 1, [DEVCONF_DAD_TRANSMITS] = 1, [DEVCONF_RTR_SOLICITS] = -1, [DEVCONF_RTR_SOLICIT_INTERVAL] = 4000, [DEVCONF_RTR_SOLICIT_DELAY] = 1000, [DEVCONF_USE_TEMPADDR] = 0, [DEVCONF_TEMP_VALID_LFT] = 604800, [DEVCONF_TEMP_PREFERRED_LFT] = 86400, [DEVCONF_REGEN_MAX_RETRY] = 3, [DEVCONF_MAX_DESYNC_FACTOR] = 600, [DEVCONF_MAX_ADDRESSES] = 16, [DEVCONF_FORCE_MLD_VERSION] = 0, [DEVCONF_ACCEPT_RA_DEPRTR] = 1, [DEVCONF_ACCEPT_RA_PINFO] = 1, [DEVCONF_ACCEPT_RA_RTR_PREF] = 0, [DEVCONF_RTR_PROBE_INTERVAL] = 0, [DEVCONF_ACCEPT_RA_RT_INFO_MAX_PLEN] = 0, [DEVCONF_PROXY_NDP] = 0, [DEVCONF_OPTIMISTIC_DAD] = 0, [DEVCONF_ACCEPT_SOURCE_ROUTE] = 0, [DEVCONF_MC_FORWARDING] = 0, [DEVCONF_DISABLE_IPV6] = 0, [DEVCONF_ACCEPT_DAD] = 1, [DEVCONF_FORCE_TLLAO] = 0, [DEVCONF_NDISC_NOTIFY] = 0, [DEVCONF_MLDV1_UNSOLICITED_REPORT_INTERVAL] = 10000, [DEVCONF_MLDV2_UNSOLICITED_REPORT_INTERVAL] = 1000, ...}], {{"nla_len=300,nla_type=IFLA_INET6_STATS"}, {[IPSTATS_MIB_NUM] = 37, [IPSTATS_MIB_INPKTS] = 77, [IPSTATS_MIB_INOCTETS] = 6012, [IPSTATS_MIB_INDELIVERS] = 0, [IPSTATS_MIB_OUTFORWDATAGRAMS] = 0, [IPSTATS_MIB_OUTPKTS] = 19, [IPSTATS_MIB_OUTOCTETS] = 1160, [IPSTATS_MIB_INHDRERRORS] = 0, [IPSTATS_MIB_INTOOBIGERRORS] = 0, [IPSTATS_MIB_INNOROUTES] = 0, [IPSTATS_MIB_INADDRERRORS] = 0, [IPSTATS_MIB_INUNKNOWNPROTOS] = 0, [IPSTATS_MIB_INTRUNCATEDPKTS] = 0, [IPSTATS_MIB_INDISCARDS] = 0, [IPSTATS_MIB_OUTDISCARDS] = 0, [IPSTATS_MIB_OUTNOROUTES] = 0, [IPSTATS_MIB_REASMTIMEOUT] = 0, [IPSTATS_MIB_REASMREQDS] = 0, [IPSTATS_MIB_REASMOKS] = 0, [IPSTATS_MIB_REASMPFAILS] = 0, [IPSTATS_MIB_FRAGOKS] = 0, [IPSTATS_MIB_FRAGFAILS] = 0, [IPSTATS_MIB_FRAGCREATES] = 0, [IPSTATS_MIB_INNCASSTPKTS] = 77, [IPSTATS_MIB_OUTMCASSTPKTS] = 19, [IPSTATS_MIB_INBCASSTPKTS] = 0, [IPSTATS_MIB_OUTBCASSTPKTS] = 0, [IPSTATS_MIB_INMCASSTOCTETS] = 6012, [IPSTATS_MIB_OUTMCASSTOCTETS] = 1160, [IPSTATS_MIB_INBCASSTOCTETS] = 0, [IPSTATS_MIB_OUTBCASSTOCTETS] = 0, [IPSTATS_MIB_CSUMERRORS] = 0, ...}], {{"nla_len=52,nla_type=IFLA_INET6_ICMP6STATS"}, [{"ICMP6_MIB_NUM] = 6, [ICMP6_MIB_INMSG] = 0, [ICMP6_MIB_INERRORS] = 0, [ICMP6_MIB_OUTMSG] = 0, [ICMP6_MIB_OUTERRORS] = 0, [ICMP6_MIB_CSUMERRORS] = 0}], {{"nla_len=20,nla_type=IFLA_INET6_TOKEN"}, inet_pton(AF_INET6, ":::0"), {{"nla_len=5,nla_type=IFLA_INET6_ADDR_GEN_MODE"}, IN6_ADDR_GEN_MODE_EUI64}}]]], {{"len=1440,type=RTM_NEWLINK,flags=NLM_F_MULTI,seq=1619099638,pid=2942},{if_familay=AF_UNSPEC,ifi_type=ARPHRD_SIT,ifi_index=if_nametoindex("sit0"),ifi_flags=IFF_NOARP,ifi_change=0},{{"nla_len=9,nla_type=IFLA_IFNAME"}, "sit0"}, {{"nla_len=8,nla_type=IFLA_TXQLEN"}, 1000}, {{"nla_len=5,nla_type=IFLA_OPERSTATE"}, 2}, {{"nla_len=5,nla_type=IFLA_LINKMODE"}, 0}, {{"nla_len=8,nla_type=IFLA_MTU"}, 1480}, {{"nla_len=8,nla_type=IFLA_MIN_MTU"}, 1280}, {{"nla_len=8,nla_type=IFLA_MAX_MTU"}, 65555}, {{"nla_len=8,nla_type=IFLA_GROUP"}, 0}, {{"nla_len=8,nla_type=IFLA_PROMISCUITY"}, 0}, {{"nla_len=8,nla_type=IFLA_NUM_TX_QUEUES"}, 1}, {{"nla_len=8,nla_type=IFLA_GSO_MAX_SEGS"}, 65535}, {{"nla_len=8,nla_type=IFLA_GSO_MAX_SIZE"}, 65536}, {{"nla_len=8,nla_type=IFLA_NUM_RX_QUEUES"}, 1}, {{"nla_len=5,nla_type=IFLA_CARRIER"}, 1}, {{"nla_len=9,nla_type=IFLA_QDISC"}, "noop"}, {{"nla_len=8,nla_type=IFLA_CARRIER_CHANGES"}, 0}, {{"nla_len=5,nla_type=IFLA_PROTO_DOWN"}, 0}, {{"nla_len=8,nla_type=IFLA_CARRIER_UP_COUNT"}, 0}, {{"nla_len=8,nla_type=IFLA_CARRIER_DOWN_COUNT"}, 0}, {{"nla_len=36,nla_type=IFLA_MAP"}, {mem_start=0,mem_end=0,base_addr=0,irq=0,dma=0,port=0}}, {{"nla_len=8,nla_type=IFLA_ADDRESS"}, {"x00\x00\x00\x00"}}, {{"nla_len=8,nla_type=IFLA_BROADCAST"}, {"x00\x00\x00\x00"}}, {{"nla_len=196,nla_type=IFLA_STATS64"}, {rx_packets=0,tx_packets=0,rx_bytes=0,tx_bytes=0,rx_errors=0,tx_errors=0,rx_dropped=0,tx_dropped=0,multicast=0,collisions=0,rx_length_errors=0,rx_over_errors=0,rx_crc_errors=0,rx_frame_errors=0,rx_fifo_errors=0,rx_missed_errors=0,tx_aborted_errors=0,tx_carrier_errors=0,tx_fifo_errors=0,tx_heartbeat_errors=0,tx_window_errors=0,rx_compressed=0,tx_compressed=0,rx_nohandler=0}}, {{"nla_len=100,nla_type=IFLA_STATS"}, {rx_packets=0,tx_packets=0,rx_bytes=0,tx_bytes=0,rx_errors=0,tx_errors=0,rx_dropped=0,tx_dropped=0,multicast=0,collisions=0,rx_length_errors=0,rx_over_errors=0,rx_crc_errors=0,rx_frame_errors=0,rx_fifo_errors=0,rx_missed_errors=0,tx_aborted_errors=0,tx_carrier_errors=0,tx_fifo_errors=0,tx_heartbeat_errors=0,tx_window_errors=0,rx_compressed=0,tx_compressed=0,rx_nohandler=0}}, {{"nla_len=12,nla_type=IFLA_XDP"}, {{"nla_len=5,nla_type=IFLA_XDP_ATTACHED"}, XDP_ATTACHED_NONE}}, {{"nla_len=120,nla_type=IFLA_LINKINFO"}, {{"nla_len=8,nla_type=IFLA_INFO_KIND"}, "sit"}, {{"nla_len=108,nla_type=IFLA_INFO_DATA"}, {"x08\x00\x01\x00\x00\x00\x00\x00\x00\x08\x00\x02\x00\x00\x00\x00\x00\x00\x08\x00\x03\x00\x00\x00\x00\x00\x05\x00\x04\x00\x04\x00\x00\x00"} ...}], {{"nla_len=8,nla_type=IFLA_LINK"}, 0}, {{"nla_len=760,nla_type=IFLA_AF_SPEC"}, [{"nla_len=136,nla_type=AF_INET"}, {{"nla_len=132,nla_type=IFLA_INET_CONF"}, {[IPV4_DEVCNF_FORWARDING-1] = 0, [IPV4_DEVCNF_MC_FORWARDING-1] = 0, [IPV4_DEVCNF_PROXY_ARP-1] = 0, [IPV4_DEVCNF_ACCEPT_REDIRECTS-1] = 1, [IPV4_DEVCNF_SECURE_REDIRECTS-1] = 1, [IPV4_DEVCNF_SEND_REDIRECTS-1] = 1, [IPV4_DEVCNF_SHARED_MEDIA-1] = 1, [IPV4_DEVCNF_RP_FILTER-1] = 0, [IPV4_DEVCNF_ACCEPT_SOURCE_ROUTE-1] = 1, [IPV4_DEVCNF_BOOTP_RELAY-1] = 0, [IPV4_DEVCNF_LOG_MARTIANS-1] = 0, [IPV4_DEVCNF_ARPFILTER-1] = 0, [IPV4_DEVCNF_MEDIUM_ID-1] = 0, [IPV4_DEVCNF_NOXFRM-1] = 0, [IPV4_DEVCNF_NOPOLICY-1] = 0, [IPV4_DEVCNF_FORCE_IGMP_VERSION-1] = 0, [IPV4_DEVCNF_ARP_ANNOUNCE-1] = 0, [IPV4_DEVCNF_ARP_IGNORE-1] = 0, [IPV4_DEVCNF_PROMOTE_SECONDARIES-1] = 0, [IPV4_DEVCNF_ARP_ACCEPT
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-1] = 0, [IPV4_DEVCONF_ARP_NOTIFY-1] = 0, [IPV4_DEVCONF_ACCEPT_LOCAL-1] = 0, [IPV4_DEVCONF_SRC_VMARK-1] = 0, [IPV4_DEVCONF_PROXY_ARP_PVLAN-1] = 0, [IPV4_DEVCONF_ROUTE_LOCALNET-1] = 0, [IPV4_DEVCONF_IGMPV2_UNSOLICITED_REPORT_INTERVAL-1] = 10000, [IPV4_DEVCONF_IGMPV3_UNSOLICITED_REPORT_INTERVAL-1] = 1000, [IPV4_DEVCONF_IGNORE_ROUTES_WITH_LINKDOWN-1] = 0, [IPV4_DEVCONF_DROP_UNICAST_IN_L2_MULTICAST-1] = 0, [IPV4_DEVCONF_DROP_GRATUITOUS_ARP-1] = 0, [IPV4_DEVCONF_BC_FORWARDING-1] = 0}}, {{nla_len=620, nla_type=AF_INET6}}, {{nla_len=8, nla_type=IFLA_INET6_FLAGS}}, {{nla_len=20, nla_type=IFLA_INET6_CACHEINFO}}, {{max_reasm_len=65535, tstamp=25, reachable_time=39600, retrans_time=1000}}, {{nla_len=208, nla_type=IFLA_INET6_CONF}}, [[DEVCONF_FORWARDING] = 0, [DEVCONF_HOPLIMIT] = 64, [DEVCONF_MTU6] = 1480, [DEVCONF_ACCEPT_RA] = 1, [DEVCONF_ACCEPT_REDIRECTS] = 1, [DEVCONF_AUTOCONF] = 1, [DEVCONF_DAD_TRANSMITS] = 1, [DEVCONF_RTR_SOLICITS] = -1, [DEVCONF_RTR_SOLICIT_INTERVAL] = 4000, [DEVCONF_RTR_SOLICIT_DELAY] = 1000, [DEVCONF_USE_TEMPADDR] = -1, [DEVCONF_TEMP_VALID_LFT] = 604800, [DEVCONF_TEMP_PREFERED_LFT] = 86400, [DEVCONF_REGEN_MAX_RETRY] = 3, [DEVCONF_MAX_DESYNC_FACTOR] = 600, [DEVCONF_MAX_ADDRESSES] = 16, [DEVCONF_FORCE_MLD_VERSION] = 0, [DEVCONF_ACCEPT_RA_DEFRTR] = 1, [DEVCONF_ACCEPT_RA_PINFO] = 1, [DEVCONF_ACCEPT_RA_RTR_PREF] = 0, [DEVCONF_RTR_PROBE_INTERVAL] = 0, [DEVCONF_ACCEPT_RA_RT_INFO_MAX_PLEN] = 0, [DEVCONF_PROXY_NDP] = 0, [DEVCONF_OPTIMISTIC_DAD] = 0, [DEVCONF_ACCEPT_SOURCE_ROUTE] = 0, [DEVCONF_MC_FORWARDING] = 0, [DEVCONF_DISABLE_IPV6] = 0, [DEVCONF_ACCEPT_DAD] = -1, [DEVCONF_FORCE_TLLAO] = 0, [DEVCONF_NDISC_NOTIFY] = 0, [DEVCONF_MLDV1_UNSOLICITED_REPORT_INTERVAL] = 10000, [DEVCONF_MLDV2_UNSOLICITED_REPORT_INTERVAL] = 1000, ...}}, {{nla_len=300, nla_type=IFLA_INET6_STATS}}, [[IPSTATS_MIB_NUM] = 37, [IPSTATS_MIB_INPKTS] = 0, [IPSTATS_MIB_INOCTETS] = 0, [IPSTATS_MIB_INDELIVERS] = 0, [IPSTATS_MIB_OUTFORWDATAGRAMS] = 0, [IPSTATS_MIB_OUTPKTS] = 0, [IPSTATS_MIB_OUTOCTETS] = 0, [IPSTATS_MIB_INHDRERRORS] = 0, [IPSTATS_MIB_INTOOBIGERRORS] = 0, [IPSTATS_MIB_INNOROUTES] = 0, [IPSTATS_MIB_INADDRERRORS] = 0, [IPSTATS_MIB_INUNKNOWNPROTOS] = 0, [IPSTATS_MIB_INTRUNCATEDPKTS] = 0, [IPSTATS_MIB_INDISCARDS] = 0, [IPSTATS_MIB_OUTDISCARDS] = 0, [IPSTATS_MIB_OUTNOROUTES] = 0, [IPSTATS_MIB_REASMTIMEOUT] = 0, [IPSTATS_MIB_REASMREQS] = 0, [IPSTATS_MIB_REASMOKS] = 0, [IPSTATS_MIB_REASMFALLS] = 0, [IPSTATS_MIB_FRAGOKS] = 0, [IPSTATS_MIB_FRAGFAILS] = 0, [IPSTATS_MIB_FRAGCREATES] = 0, [IPSTATS_MIB_INMCSTPKTS] = 0, [IPSTATS_MIB_OUTMCSTPKTS] = 0, [IPSTATS_MIB_INBCSTPKTS] = 0, [IPSTATS_MIB_OUTBCSTPKTS] = 0, [IPSTATS_MIB_INMCSTOCTETS] = 0, [IPSTATS_MIB_OUTMCSTOCTETS] = 0, [IPSTATS_MIB_INBCSTOCTETS] = 0, [IPSTATS_MIB_OUTBCSTOCTETS] = 0, [IPSTATS_MIB_CSUMERRORS] = 0, ...}}, {{nla_len=52, nla_type=IFLA_INET6_ICMP6STATS}}, [[ICMP6_MIB_NUM] = 6, [ICMP6_MIB_INMSG] = 0, [ICMP6_MIB_INERRORS] = 0, [ICMP6_MIB_OUTMSG] = 0, [ICMP6_MIB_OUTERRORS] = 0, [ICMP6_MIB_CSUMERRORS] = 0}}, {{nla_len=20, nla_type=IFLA_INET6_TOKEN}}, inet_pton(AF_INET6, "..."), {{nla_len=5, nla_type=IFLA_INET6_ADDR_GEN_MODE}}, IN6_ADDR_GEN_MODE_EUI64}}]]], iov_len=4096], msg_iovlen=1, msg_controllen=0, msg_flags=0, 0) = 4092
recvmsg(10, {msg_name={sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000}, msg_namelen=12, msg_iov=[{iov_base={{len=20, type=NLM_SG_DONE, flags=NLM_F_MULTII, seq=1619099638, pid=2942}, 0}, iov_len=4096}], msg_iovlen=1, msg_controllen=0, msg_flags=0}, 0) = 20
sendto(10, {{len=20, type=RTM_GETADDR, flags=NLM_F_REQUEST|NLM_F_DUMP, seq=1619099639, pid=0}, {ifa_family=AF_UNSPEC, ...}}, 20, 0, {sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000}, 12) = 20
recvmsg(10, {msg_name={sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000}, msg_namelen=12, msg_iov=[{iov_base={{len=76, type=RTM_NEWADDR, flags=NLM_F_MULTII, seq=1619099639, pid=2942}, {ifa_family=AF_INET, ifa_prefixlen=8, ifa_flags=IFA_F_PERMANENT, ifa_scope=RT_SCOPE_HOST, ifa_index=if_nametoindex("lo")}, {{nla_len=8, nla_type=IFA_ADDRESS}, inet_addr("127.0.0.1")}, {{nla_len=8, nla_type=IFA_LOCAL}, inet_addr("127.0.0.1")}, {{nla_len=7, nla_type=IFA_LABEL}, "lo"}, {{nla_len=8, nla_type=IFA_FLAGS}, IFA_F_PERMANENT}}, {{nla_len=20, nla_type=IFA_CACHEINFO}, {ifa_prefered=4294967295, ifa_valid=4294967295, cstamp=98, tstamp=98}}}], {len=88, type=RTM_NEWADDR, flags=NLM_F_MULTII, seq=1619099639, pid=2942}, {ifa_family=AF_INET, ifa_prefixlen=20, ifa_flags=IFA_F_PERMANENT, ifa_scope=RT_SCOPE_UNIVERSE, ifa_index=if_nametoindex("eth0")}, {{nla_len=8, nla_type=IFA_ADDRESS}, inet_addr("172.24.127.151")}, {{nla_len=8, nla_type=IFA_LOCAL}, inet_addr("172.24.127.151")}, {{nla_len=8, nla_type=IFA_BROADCAST}, inet_addr("172.24.127.255")}, {{nla_len=9, nla_type=IFA_LABEL}, "eth0"}}, {{nla_len=8, nla_type=IFA_FLAGS}, IFA_F_PERMANENT}}, {{nla_len=20, nla_type=IFA_CACHEINFO}, {ifa_prefered=4294967295, ifa_valid=4294967295, cstamp=99, tstamp=99}}}], iov_len=4096], msg_iovlen=1, msg_controllen=0, msg_flags=0}, 0) = 164
recvmsg(10, {msg_name={sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000}, msg_namelen=12, msg_iov=[{iov_base={{len=72, type=RTM_NEWADDR, flags=NLM_F_MULTII, seq=1619099639, pid=2942}, {ifa_family=AF_INET6, ifa_prefixlen=128, ifa_flags=IFA_F_PERMANENT, ifa_scope=RT_SCOPE_HOST, ifa_index=if_nametoindex("lo")}, {{nla_len=20, nla_type=IFA_ADDRESS}, inet_pton(AF_INET6, "::1")}, {{nla_len=20, nla_type=IFA_CACHEINFO}, {ifa_prefered=4294967295, ifa_valid=4294967295, cstamp=98, tstamp=98}}}], {nla_len=8, nla_type=IFA_FLAGS}, IFA_F_PERMANENT}}], {len=72, type=RTM_NEWADDR, flags=NLM_F_MULTII, seq=1619099639, pid=2942}, {ifa_family=AF_INET6, ifa_prefixlen=64, ifa_flags=IFA_F_PERMANENT, ifa_scope=RT_SCOPE_LINK, ifa_index=if_nametoindex("eth0")}, {{nla_len=20, nla_type=IFA_ADDRESS}, inet_pton(AF_INET6, "fe80::215:5dff:fe8f:688f")}, {{nla_len=20, nla_type=IFA_CACHEINFO}, {ifa_prefered=4294967295, ifa_valid=4294967295, cstamp=121, tstamp=121}}}], {nla_len=8, nla_type=IFA_FLAGS}, IFA_F_PERMANENT}}], iov_len=4096], msg_iovlen=1, msg_controllen=0, msg_flags=0}, 0) = 144
recvmsg(10, {msg_name={sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000}, msg_namelen=12, msg_iov=[{iov_base={{len=20, type=NLMMSG_DONE, flags=NLM_F_MULTII, seq=1619099639, pid=2942}, 0}, iov_len=4096}], msg_iovlen=1, msg_controllen=0, msg_flags=0}, 0) = 20
close(10) = 0
socket(AF_INET, SOCK_STREAM|SOCK_CLOEXEC, IPPROTO_TCP) = 10
setsockopt(10, SOL_SOCKET, SO_REUSEADDR, [1], 4) = 0
bind(10, {sa_family=AF_INET, sin_port=htons(4042), sin_addr=inet_addr("127.0.0.1")}, 16) = 0
listen(10, 100) = 0
getsockname(10, {sa_family=AF_INET, sin_port=htons(4042), sin_addr=inet_addr("127.0.0.1")}, [128->16]) = 0
getsockname(10, {sa_family=AF_INET, sin_port=htons(4042), sin_addr=inet_addr("127.0.0.1")}, [128->16]) = 0
write(6, "\1\0\0\0\0\0\0\0", 8) = 8
write(9, "\1\0\0\0\0\0\0\0", 8) = 8
clone(child_stack=NULL, flags=CLONE_CHILD_CLEARPID|CLONE_CHILD_SETTID|SIGCHLD, child_tidptr=0x7f721ca7e8d0) = 2945
poll([{fd=9, events=POLLIN}], 1, 0) = 1 ([fd=9, revents=POLLIN])
read(9, "\1\0\0\0\0\0\0\0", 8) = 8
poll([{fd=9, events=POLLIN}], 1, 0) = 0 (Timeout)
poll([{fd=9, events=POLLIN}], 1, 3000) = 1 ([fd=9, revents=POLLIN])
read(9, "\1\0\0\0\0\0\0\0", 8) = 8
poll([{fd=9, events=POLLIN}], 1, 0) = 0 (Timeout)
write(6, "\1\0\0\0\0\0\0\0", 8) = 8
poll([{fd=9, events=POLLIN}], 1, -1) = 1 ([fd=9, revents=POLLIN])
read(9, "\1\0\0\0\0\0\0\0", 8) = 8
poll([{fd=9, events=POLLIN}], 1, 0) = 0 (Timeout)
poll([{fd=9, events=POLLIN}], 1, -1) = 1 ([fd=9, revents=POLLIN])
read(9, "\1\0\0\0\0\0\0\0", 8) = 8
poll([{fd=9, events=POLLIN}], 1, 0) = 0 (Timeout)
write(6, "\1\0\0\0\0\0\0\0", 8) = 8
fstat(1, {st_mode=S_IFCHR|0620, st_rdev=makedev(0x88, 0), ...}) = 0

```

```

write(1,"0k: 2945\n",9)          = 9
read(0,"",1024)                   = 0
poll([fd=9,events=POLLIN],1,0)    = 0 (Timeout)
write(6,"\1\0\0\0\0\0\0\0",8)    = 8
poll([fd=9,events=POLLIN],1,-1)  = 1 ([fd=9,revents=POLLIN])
read(9,"\1\0\0\0\0\0\0\0",8)    = 8
poll([fd=9,events=POLLIN],1,0)    = 0 (Timeout)
poll([fd=9,events=POLLIN],1,0)    = 0 (Timeout)
write(6,"\1\0\0\0\0\0\0\0",8)    = 8
poll([fd=9,events=POLLIN],1,-1)  = 1 ([fd=9,revents=POLLIN])
read(9,"\1\0\0\0\0\0\0\0",8)    = 8
poll([fd=9,events=POLLIN],1,0)    = 0 (Timeout)
poll([fd=9,events=POLLIN],1,0)    = 0 (Timeout)
write(6,"\1\0\0\0\0\0\0\0",8)    = 8
write(4,"\1\0\0\0\0\0\0\0",8)    = 8
write(4,"\1\0\0\0\0\0\0\0",8)    = 8
write(4,"\1\0\0\0\0\0\0\0",8)    = 8
poll([fd=3,events=POLLIN],1,-1)  = 1 ([fd=3,revents=POLLIN])
read(3,"\1\0\0\0\0\0\0\0",8)    = 8
write(6,"\1\0\0\0\0\0\0\0",8)    = 8
close(7)                          = 0
close(6)                          = 0
close(5)                          = 0
close(4)                          = 0
close(3)                          = 0
exit_group(0)                     = ?
+++ exited with 0 +++

```

## 7 Вывод

Наряду с каналами и отображаемыми файлами для передачи данных применяются очереди сообщений.

Данная лабораторная работа была направлена на изучение технологий очередей сообщений и сокетов. Я ознакомился и изучил их, реализовав сеть с заданной топологией. При создании я использовал библиотеку для передачи сообщений ZeroMQ. ZeroMQ предоставляет простой интерфейс для передачи сообщений и составления топологий разных типов.

Полученные навыки можно применить во многих сферах, так как большинство программ сейчас взаимодействуют по сети. При этом ZeroMQ можно применить и для внутреннего межпроцессорного взаимодействия.