Московский Авиационный Институт

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Институт №8 "Компьютерные науки и прикладная математика" Кафедра №806 "Вычислительная математика и программирование"

Лабораторная работа №5-7 по курсу «Операционные системы»

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Постановка задачи

Вариант 33.

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. Список основных поддерживаемых команд:

• Создание нового вычислительного узла

Формат команды: create id [parent]

id – целочисленный идентификатор нового вычислительного узла

рагепт — целочисленный идентификатор родительского узла. Если топологией не предусмотрено введение данного параметра, то его необходимо игнорировать (если его ввели)

Формат вывода:

«Ok: pid», где pid – идентификатор процесса для созданного вычислительного узла

«Error: Already exists» - вычислительный узел с таким идентификатором уже существует

«Error: Parent not found» - нет такого родительского узла с таким идентификатором

«Error: Parent is unavailable» - родительский узел существует, но по каким-то причинам с ним не удается связаться

«Error: [Custom error]» - любая другая обрабатываемая ошибка

Примечания: создание нового управляющего узла осуществляется пользователем программы при помощи запуска исполняемого файла. Id и pid — это разные идентификаторы.

• Исполнение команды на вычислительном узле

Формат команды: exec id [params]

id – целочисленный идентификатор вычислительного узла, на который отправляется команда Формат вывода:

«Ok:id: [result]», где result – результат выполненной команды

«Error:id: Not found» - вычислительный узел с таким идентификатором не найден

«Error:id: Node is unavailable» - по каким-то причинам не удается связаться с вычислительным узлом

«Error:id: [Custom error]» - любая другая обрабатываемая ошибка

• Топология

Все вычислительные узлы находятся в дереве общего вида. Есть только один управляющий узел.

Чтобы добавить новый вычислительный узел к управляющему, то необходимо выполнить команду: create id -1.

Набор команд

Формат команды сохранения значения: exec id count a b c ...

id – целочисленный идентификатор вычислительного узла, на который отправляется команда

count - кол-во последующих чисел

а b ... – сами числа

Формат команды: pingall

Вывод всех недоступных узлов вывести разделенные через точку запятую.

Общий метод и алгоритм решения

Использованные системные вызовы:

- pid_t fork() создание дочернего процесса
- execl(const char *path, const char *arg, ...) замена памяти процесса
- pid_t getpid(void); возвращает идентификатор текущего процесса

Используем ZeroMQ для очередей сообщений. Заданная топология – дерево узлов, у каждого узла будем хранить список дочерних узлов, который будут составлять объекты класса Node, у каждого из который будет создан и привязан сокет (всё это внутри родительского узла), к нему будет подключаться дочерний узел – дочерний процесс.

Поскольку требуется асинхронность, будем отправлять и принимать сообщения с флагом ZMQ DONTWAIT, чтобы предотвратить блокировку процессов при проблемах в отправке и получении и при попытке получения сообщения, когда сообщение ещё не было отправлено. Сообщения отправляются всем детям, дети отправляют дальше детям до момента, пока id сообщения не совпадёт с id принимателя.

У каждого сообщения будем фиксировать время его отправления, это необходимо для обработки ошибок с create и exec, а так же для определения недоступных процессов с помощью pingall. В первом случае будем при каждом отправлении сообщения класть его в список, если оно будет получено, то можно его удалить, если оно задерживается больше 5 секунд, то фиксируем ошибку. Во втором случае имеем другой список сообщений. При выполнении pingall всем узлам рассылается сообщение ping, и через 5 секунд мы проверяем есть в списке ping сообщений необработанные сообщения, если да, то соответствующие узлы выводи как недоступные. Списки постоянно проверяются.

Код программы

message.h

```
#pragma once
#include <cstring>
#include "common.h"
#define MESSAGE_VALUE_LENGTH 50
class Message
public:
  Message() = default;
  Message(CommandType cmd, int id, int add_data)
    : command(cmd)
    , id(id)
    , add_data(add_data)
    , sent_time(std::chrono::system_clock::now())
  {}
  Message(CommandType cmd, int id, int add_data, const int* arr)
    : command(cmd)
    , id(id)
    , add_data(add_data)
    , sent_time(std::chrono::system_clock::now())
  {
    for (int i\{0\}; i < add_data; i++)
       numbers[i] = arr[i];
  }
  CommandType command{CommandType::None};
  int id\{-1\};
  int add_data{-1};
  std::chrono::system_clock::time_point sent_time;
  int numbers[MESSAGE_VALUE_LENGTH]{};
```

```
};
```

common.h #pragma once

```
#include <chrono>
#include <unistd.h>
#include <iostream>
enum class CommandType : uint8_t {None, Create, Ping, Exec};
bool input_available();
std::chrono::system_clock::time_point now();
nodes.h
#pragma once
#include "zmq.h"
#include "message.h"
#include <iostream>
#include <chrono>
#include <list>
#include <map>
class Node
{
public:
  Node() = default;
  ~Node() {
    if (socket) zmq_close(socket);
    if (context) zmq_ctx_destroy(context);
  }
  Node(const Node&) = delete;
  Node& operator=(const Node&) = delete;
  Node(Node&& other) noexcept;
```

```
// bool operator==(const Node& other) const
//
      return id == other.id && pid == other.pid;
//
// }
  int id{-1};
  pid_t pid{-1};
  void* context{nullptr};
  void* socket{nullptr};
  std::string address;
};
Node create_node(int id, bool is_child);
Node create_process(int id);
class ComputingNode {
private:
  Node node_;
  std::list<Node> children_;
  void handle_create(const Message& message);
  void handle_ping(const Message& message);
  void handle_exec(Message& message);
  void broadcast_to_children(const Message& message);
public:
  explicit ComputingNode(int id)
    : node_(create_node(id, true)) {}
  void run();
};
void send_message(Node& node, const Message& msg);
Message receive_message(Node& node);
```

Node& operator=(Node&& other) noexcept;

```
control_node.cpp
#include <unordered_set>
#include "../include/nodes.h"
bool check_input()
{
  if (std::cin.fail())
    std::cin.clear();
     std::cin.ignore(std::numeric_limits<std::streamsize>::max(), '\n');
     std::cout << "Error: incorrect input" << std::endl;</pre>
    return false;
  }
  return true;
}
class Controller
private:
  std::unordered_set<int> node_ids_;
  std::list<Node> children ;
  std::list<Message> create_exec_messages_;
  std::list<Message> ping_messages_;
  bool availability_check_started_ {false};
  std::chrono::system_clock::time_point check_start_time_ {};
  void handle_child_message(const Message& message)
  {
    if (message.command == CommandType::Create)
       node_ids_.insert(message.id);
```

```
if (message.command != CommandType::Ping)
             std::cout << "Ok: " << message.add_data << std::endl;
           remove_message(message);
         }
         void check_pending_messages()
         {
           auto it = create_exec_messages_.begin();
           while (it != create_exec_messages_.end())
           {
             if (std::chrono::duration_cast<std::chrono::seconds>(now() - it->sent_time).count() > 5)
                handle_timeout(*it);
                it = create_exec_messages_.erase(it);
             else
                ++it;
         }
         void remove_message(const Message& message)
         {
           CommandType cmd = message.command;
           int id = message.id;
           if (cmd == CommandType::Create || cmd == CommandType::Exec)
             auto it = std::find_if(create_exec_messages_.begin(), create_exec_messages_.end(),
                         [cmd, id](const Message& m) {
                           return (m.command == cmd && m.id == id) ||
                               (m.command == cmd && m.command == CommandType::Create &&
m.add_data == id);
                         });
```

```
if (it != create_exec_messages_.end())
       create_exec_messages_.erase(it);
    }
  }
  else if (cmd == CommandType::Ping)
  {
    auto it = std::find_if(ping_messages_.begin(), ping_messages_.end(),
                  [id](const Message &m)
                  {
                    return (m.id == id);
                  });
    if (it != ping_messages_.end())
       ping_messages_.erase(it);
  }
void handle_timeout(const Message& message)
    if (message.command == CommandType::Create)
       std::cout << "Error: Parent " << message.id << " is unavailable" << std::endl;
    else
       std::cout << "Error: Node " << message.id << " is unavailable" << std::endl;
void broadcast_message(const Message& message)
  if (message.command == CommandType::Ping)
    ping_messages_.push_back(message);
  else
    create_exec_messages_.push_back(message);
  for (auto& child: children_)
```

}

{

}

{

```
{
     send_message(child, message);
}
void handle_create_command()
{
  int parent_id, child_id;
  std::cin >> child_id >> parent_id;
  if (!check_input())
     return;
  if (node_ids_.count(child_id))
     std::cout << "Error: Node with id " << child_id << " already exists" << std::endl;
     return;
  }
  if (!node_ids_.count(parent_id))
  {
     std::cout << "Error: Parent with id " << parent_id << " not found" << std::endl;
     return;
  }
  if (parent_id == -1)
     Node child = create_process(child_id);
     children_.push_back(std::move(child));
     node_ids_.insert(child_id);
     std::cout << "Ok: " << child.pid << std::endl;
  }
  else
  {
     broadcast_message(Message(CommandType::Create, parent_id, child_id));
}
```

```
void handle_exec_command()
  int id{}, count{};
  int numbers[MESSAGE_VALUE_LENGTH];
  std::cin >> id >> count;
  if (!check_input())
    return;
  if (!node_ids_.count(id))
     std::cout << "Error: Node with id " << id << " doesn't exist" << std::endl;
    return;
  }
  for (int i\{0\}; i < count; i++)
     std::cin >> numbers[i];
  if (!check_input())
    return;
  broadcast_message(Message(CommandType::Exec, id, count, numbers));
}
void handle_pingall_command()
  for (const int& id : node_ids_)
    if (id != -1)
       broadcast_message(Message(CommandType::Ping, id, 0));
  }
  availability_check_started_ = true;
  check_start_time_ = now();
```

```
}
void check_nodes_availability()
  if (!availability_check_started_)
     return;
  std::ostringstream os;
  os << "Ok: ";
  if (std::chrono::duration_cast<std::chrono::seconds>(now() - check_start_time_).count() > 6)
  {
     for (const int &id: node_ids_)
     {
       if (id != -1)
       {
          auto it = std::find_if(ping_messages_.begin(), ping_messages_.end(),
                         [id](const Message &m)
                           return (m.id == id);
                         });
          if (it != ping_messages_.end())
          {
                  if (os.str().size() != 4)
                    os << ';';
                  os << id;
                  ping_messages_.erase(it);
          }
     if (os.str().size() == 4)
       os << -1;
     std::cout << os.str() << std::endl;</pre>
     availability_check_started_ = false;
  }
}
```

```
public:
  Controller()
    node_ids_.insert(-1);
  }
  void run()
    std::string command;
    while (true)
    {
       for (auto& child: children_)
         Message message = receive_message(child);
         if (message.command != CommandType::None)
           handle_child_message(message);
         }
       }
       check_pending_messages();
       check_nodes_availability();
       if (!input_available())
         continue;
       }
       std::cin >> command;
       if (command == "create")
       {
         handle_create_command();
       else if (command == "exec")
       {
```

```
handle_exec_command();
       else if (command == "pingall")
          handle_pingall_command();
       }
       else
       {
          std::cout << "Error: Command doesn't exist!" << std::endl;</pre>
          std::cin.ignore(1000, '\n');
       }
     }
  }
};
int main()
  try
  {
     Controller controller;
     controller.run();
  }
  catch (const std::exception& e)
  {
     std::cerr << "Error: " << e.what() << std::endl;</pre>
     return 1;
  return 0;
computing_node.cpp
#include "../include/nodes.h"
int main(int argc, char* argv[])
{
  if (argc != 2)
  {
     std::cerr << "Usage: " << argv[0] << " <node_id>" << std::endl;
```

```
return 1;
  }
  try
  {
     ComputingNode node(std::atoi(argv[1]));
     node.run();
  } catch (const std::exception& e)
     std::cerr << "Error: " << e.what() << std::endl;
     return 1;
  }
  return 0;
}
nodes.cpp
#include "../include/nodes.h"
#include <cstdlib>
Node::Node(Node&& other) noexcept
  : id(other.id)
  , pid(other.pid)
  , context(other.context)
  , socket(other.socket)
  , address(std::move(other.address))
{
  other.context = nullptr;
  other.socket = nullptr;
}
Node& Node::operator=(Node&& other) noexcept
  if (this != &other)
     if (socket) zmq_close(socket);
     if (context) zmq_ctx_destroy(context);
```

```
id = other.id;
    pid = other.pid;
    context = other.context;
    socket = other.socket;
    address = std::move(other.address);
    other.context = nullptr;
    other.socket = nullptr;
  }
  return *this;
}
Node create_node(int id, bool is_child)
  Node node;
  node.id = id;
  node.pid = getpid();
  node.context = zmq_ctx_new();
  if (!node.context)
  {
    throw std::runtime_error("Failed to create ZMQ context");
  }
  node.socket = zmq_socket(node.context, ZMQ_DEALER);
  if (!node.socket)
    zmq_ctx_destroy(node.context);
    throw std::runtime_error("Failed to create ZMQ socket");
  }
  node.address = "tcp://127.0.0.1:" + std::to_string(5555 + id);
  int rc = is\_child
    ? zmq_connect(node.socket, node.address.c_str())
    : zmq_bind(node.socket, node.address.c_str());
```

```
if (rc != 0)
    throw std::runtime_error("Failed to " +
       std::string(is_child ? "connect" : "bind") +
       "ZMQ socket");
  }
  return node;
}
Node create_process(int id)
  pid_t pid = fork();
  if (pid == 0)
  {
    execl("./computing", "computing", std::to_string(id).c_str(), nullptr);
     std::cerr << "execl failed: " << strerror(errno) << std::endl;
    exit(1);
  }
  if (pid == -1)
  {
    throw std::runtime_error("Fork failed: " +
       std::string(strerror(errno)));
  }
  Node node = create_node(id, false);
  node.pid = pid;
  return node;
}
void ComputingNode::handle_create(const Message& message)
{
  if (message.id == node_.id)
  {
    Node child = create_process(message.add_data);
     children_.push_back(std::move(child));
```

```
send_message(node_, Message(CommandType::Create, child.id, child.pid));
  }
  else
    broadcast_to_children(message);
  }
}
void ComputingNode::handle_ping(const Message& message)
{
  if (message.id == node_.id)
  {
    send_message(node_, message);
  }
  else
    broadcast_to_children(message);
  }
}
void ComputingNode::handle_exec(Message &message)
{
  if (message.id == node_.id)
  {
    int result{};
    for (int i\{0\}; i < message.add\_data; i++)
       result += message.numbers[i];
    }
    send_message(node_, Message{CommandType::Exec, message.id, result});
  }
  else
    broadcast_to_children(message);
```

```
}
void ComputingNode::broadcast_to_children(const Message& message) {
  for (auto& child: children_) {
    send_message(child, message);
  }
}
void ComputingNode::run()
{
  while (true)
  {
    for (auto& child: children_)
       Message message = receive_message(child);
      if (message.command != CommandType::None)
       {
         send_message(node_, message);
    }
    Message message = receive_message(node_);
    switch (message.command)
    case CommandType::Create:
      handle_create(message);
      break;
    case CommandType::Ping:
       handle_ping(message);
      break;
    case CommandType::Exec:
       handle_exec(message);
       break;
```

```
default:
      break;
  }
}
void send_message(Node& node, const Message& msg)
{
  zmq_msg_t message;
  zmq_msg_init_size(&message, sizeof(msg));
  std::memcpy(zmq_msg_data(&message), &msg, sizeof(msg));
  zmq_msg_send(&message, node.socket, ZMQ_DONTWAIT);
  zmq_msg_close(&message);
}
Message receive_message(Node& node)
  zmq_msg_t message;
  zmq_msg_init(&message);
  if (zmq_msg_recv(&message, node.socket, ZMQ_DONTWAIT) == -1)
  {
    zmq_msg_close(&message);
    return {CommandType::None, -1, -1};
  }
  Message msg;
  std::memcpy(&msg, zmq_msg_data(&message), sizeof(Message));
  zmq_msg_close(&message);
  return msg;
}
common.cpp
#include "../include/common.h"
bool input_available()
  timeval tv{0,0};
```

```
fd_set fds;
FD_ZERO(&fds);
FD_SET(STDIN_FILENO, &fds);
select(STDIN_FILENO + 1, &fds, nullptr, nullptr, &tv);
return FD_ISSET(STDIN_FILENO, &fds);
}
std::chrono::system_clock::time_point now()
{
    return std::chrono::system_clock::now();
}
```

Протокол работы программы

```
/home/luckyabatur/projects/OS_labs/lab5-7/cmake-build-debug/control
create 1 -1
Ok: 19931
create 2 -1
Ok: 19936
create 3 2
Ok: 19941
create 4 2
Ok: 19947
create 5 2
Ok: 19952
pingall
exec 5 5 1 2 3 4 5
Ok: 15
Ok: -1
pingall
Ok: 5;4;3;2
Strace:
18662 \text{ execve}("./\text{control}", ["./\text{control}"], 0x7ffff4d077b8 /* 36 \text{ vars }*/) = 0
                                = 0x561953d13000
18662 brk(NULL)
18662 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0)
= 0x7fbfb006c000
18662 access("/etc/ld.so.preload", R_OK) = -1 ENOENT (No such file or directory)
18662 openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 3
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=24775, ...}) = 0
```

```
18662 mmap(NULL, 24775, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7fbfb0065000
18662 close(3)
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libzmq.so.5", O_RDONLY|O_CLOEXEC) = 3
18662 \text{ fstat}(3, \{\text{st mode=S IFREG} | 0644, \text{st size=} 663584, ...\}) = 0
18662 mmap(NULL, 661336, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fbfaffc3000
18662 mmap(0x7fbfaffdc000, 425984, PROT_READ|PROT_EXEC,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x19000) = 0x7fbfaffdc000
18662 mmap(0x7fbfb0044000, 98304, PROT_READ,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x81000) = 0x7fbfb0044000
18662 mmap(0x7fbfb005c000, 36864, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x99000) = 0x7fbfb005c000
18662 close(3)
                      =0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libstdc++.so.6", O_RDONLY|O_CLOEXEC) = 3
18662 fstat(3, {st mode=S IFREG|0644, st size=2592224, ...}) = 0
18662 mmap(NULL, 2609472, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0x7fbfafd45000
18662 mmap(0x7fbfafde2000, 1343488, PROT_READ|PROT_EXEC,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x9d000) = 0x7fbfafde2000
18662 mmap(0x7fbfaff2a000, 552960, PROT_READ,
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x1e5000) = 0x7fbfaff2a000
18662 mmap(0x7fbfaffb1000, 57344, PROT_READ|PROT_WRITE,
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x26b000) = 0x7fbfaffb1000
18662 mmap(0x7fbfaffbf000, 12608, PROT_READ|PROT_WRITE,
MAP\_PRIVATE|MAP\_FIXED|MAP\_ANONYMOUS, -1, 0) = 0x7fbfaffbf000
18662 close(3)
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgcc_s.so.1", O_RDONLY|O_CLOEXEC) = 3
18662 \text{ fstat}(3, \{\text{st mode=S IFREG} | 0644, \text{st size} = 183024, ...\}) = 0
18662 mmap(NULL, 185256, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0) =
0x7fbfafd17000
18662 mmap(0x7fbfafd1b000, 147456, PROT READ|PROT EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7fbfafd1b000
18662 mmap(0x7fbfafd3f000, 16384, PROT READ, MAP PRIVATE|MAP FIXED|MAP DENYWRITE,
3, 0x28000) = 0x7fbfafd3f000
18662 mmap(0x7fbfafd43000, 8192, PROT READ|PROT WRITE,
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2b000) = 0x7fbfafd43000
18662 close(3)
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC) = 3
18662 \text{ read}(3, "\177\text{ELF}\2\1\1\3\0\0\0\0\0\0\0\0\0\0\220\243\2\0\0\0\0\0\0..., 832) = 832
18662 fstat(3, {st mode=S IFREG|0755, st size=2125328, ...}) = 0
18662 mmap(NULL, 2170256, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0) =
0x7fbfafb05000
18662 mmap(0x7fbfafb2d000, 1605632, PROT_READ|PROT_EXEC,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x28000) = 0x7fbfafb2d000
18662 mmap(0x7fbfafcb5000, 323584, PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1b0000) = 0x7fbfafcb5000
18662 mmap(0x7fbfafd04000, 24576, PROT_READ|PROT_WRITE,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x1fe000) = 0x7fbfafd04000
18662 mmap(0x7fbfafd0a000, 52624, PROT READ|PROT WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7fbfafd0a000
```

```
18662 close(3)
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libbsd.so.0", O_RDONLY|O_CLOEXEC) = 3
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=80888, ...}) = 0
18662 mmap(NULL, 86208, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0) = 0x7fbfafaef000
18662 mmap(0x7fbfafaf3000, 49152, PROT_READ|PROT_EXEC,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x4000) = 0x7fbfafaf3000
18662 mmap(0x7fbfafaff000, 12288, PROT READ, MAP PRIVATE|MAP FIXED|MAP DENYWRITE,
3, 0x10000) = 0x7fbfafaff000
18662 mmap(0x7fbfafb02000, 8192, PROT_READ|PROT_WRITE,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x12000) = 0x7fbfafb02000
18662 mmap(0x7fbfafb04000, 192, PROT READ|PROT WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7fbfafb04000
18662 close(3)
                      = 0
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libsodium.so.23", O_RDONLY|O_CLOEXEC) = 3
18662 fstat(3, {st mode=S IFREG|0644, st size=355040, ...}) = 0
18662 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0)
= 0x7fbfafaed000
18662 mmap(NULL, 353336, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0) =
0x7fbfafa96000
18662 mmap(0x7fbfafaa2000, 233472, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000) = 0x7fbfafaa2000
18662 mmap(0x7fbfafadb000, 65536, PROT READ, MAP PRIVATE|MAP FIXED|MAP DENYWRITE,
3, 0x45000) = 0x7fbfafadb000
18662 mmap(0x7fbfafaeb000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x55000) = 0x7fbfafaeb000
18662 close(3)
18662 openat(AT FDCWD, "/lib/x86 64-linux-gnu/libpgm-5.3.so.0", O RDONLY|O CLOEXEC) = 3
18662 \text{ fstat}(3, \{\text{st mode=S IFREG} | 0644, \text{st size} = 285568, ...\}) = 0
18662 mmap(NULL, 301040, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0) =
0x7fbfafa4c000
18662 mmap(0x7fbfafa50000, 159744, PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000) = 0x7fbfafa50000
18662 mmap(0x7fbfafa77000, 102400, PROT READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2b000) = 0x7fbfafa77000
18662 mmap(0x7fbfafa90000, 8192, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x44000) = 0x7fbfafa90000
18662 mmap(0x7fbfafa92000, 14320, PROT_READ|PROT_WRITE,
MAP PRIVATE|MAP FIXED|MAP ANONYMOUS, -1, 0) = 0x7fbfafa92000
18662 close(3)
18662 openat(AT FDCWD, "/lib/x86 64-linux-gnu/libnorm.so.1", O RDONLY|O CLOEXEC) = 3
18662 fstat(3, {st mode=S IFREG|0644, st size=366760, ...}) = 0
18662 mmap(NULL, 1092032, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0) =
0x7fbfaf941000
18662 mmap(0x7fbfaf94a000, 274432, PROT_READ|PROT_EXEC,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x9000) = 0x7fbfaf94a000
18662 mmap(0x7fbfaf98d000, 45056, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3,0x4c000) = 0x7fbfaf98d000
18662 mmap(0x7fbfaf998000, 16384, PROT_READ|PROT_WRITE,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x56000) = 0x7fbfaf998000
18662 mmap(0x7fbfaf99c000, 719296, PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) = 0x7fbfaf99c000
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18662 close(3)
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgssapi_krb5.so.2", O_RDONLY|O_CLOEXEC) = 3
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=338696, ...}) = 0
18662 mmap(NULL, 341080, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0) =
0x7fbfaf8ed000
18662 mmap(0x7fbfaf8f9000, 237568, PROT_READ|PROT_EXEC,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0xc000) = 0x7fbfaf8f9000
18662 mmap(0x7fbfaf933000, 40960, PROT READ, MAP PRIVATE|MAP FIXED|MAP DENYWRITE,
3,0x46000) = 0x7fbfaf933000
18662 mmap(0x7fbfaf93d000, 16384, PROT READ|PROT WRITE,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x4f000) = 0x7fbfaf93d000
18662 close(3)
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libm.so.6", O_RDONLY|O_CLOEXEC) = 3
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=952616, ...}) = 0
18662 mmap(NULL, 950296, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0) =
0x7fbfaf804000
18662 mmap(0x7fbfaf814000, 520192, PROT_READ|PROT_EXEC.
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x10000) = 0x7fbfaf814000
18662 mmap(0x7fbfaf893000, 360448, PROT READ,
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x8f000) = 0x7fbfaf893000
18662 mmap(0x7fbfaf8eb000, 8192, PROT_READ|PROT_WRITE,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0xe7000) = 0x7fbfaf8eb000
18662 close(3)
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libmd.so.0", O_RDONLY|O_CLOEXEC) = 3
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=55536, ...}) = 0
18662 mmap(NULL, 8192, PROT READ|PROT WRITE, MAP PRIVATE|MAP ANONYMOUS, -1, 0)
= 0x7fbfaf802000
18662 mmap(NULL, 57448, PROT READ, MAP PRIVATE MAP DENYWRITE, 3, 0) = 0x7fbfaf7f3000
18662 mmap(0x7fbfaf7f5000, 36864, PROT_READ|PROT_EXEC,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x2000) = 0x7fbfaf7f5000
18662 mmap(0x7fbfaf7fe000, 8192, PROT READ, MAP PRIVATE|MAP FIXED|MAP DENYWRITE,
3, 0xb000) = 0x7fbfaf7fe000
18662 mmap(0x7fbfaf800000, 8192, PROT READ|PROT WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000) = 0x7fbfaf800000
18662 close(3)
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkrb5.so.3", O_RDONLY|O_CLOEXEC) = 3
18662 \text{ fstat}(3, \{\text{st mode=S_IFREG} | 0644, \text{st\_size} = 823488, ...\}) = 0
18662 mmap(NULL, 822032, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0) =
0x7fbfaf72a000
18662 mmap(0x7fbfaf74a000, 397312, PROT_READ|PROT_EXEC,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x20000) = 0x7fbfaf74a000
18662 mmap(0x7fbfaf7ab000, 233472, PROT READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x81000) = 0x7fbfaf7ab000
18662 mmap(0x7fbfaf7e4000, 61440, PROT READ|PROT WRITE,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0xba000) = 0x7fbfaf7e4000
18662 close(3)
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libk5crypto.so.3", O_RDONLY|O_CLOEXEC) = 3
18662 \text{ fstat}(3, \{\text{st mode=S IFREG}|0644, \text{st size}=178648, ...}\}) = 0
18662 mmap(NULL, 176392, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0) =
0x7fbfaf6fe000
```

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18662 mmap(0x7fbfaf702000, 110592, PROT_READ|PROT_EXEC,
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x4000) = 0x7fbfaf702000
18662 mmap(0x7fbfaf71d000, 45056, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3, 0x1f000) = 0x7fbfaf71d000
18662 mmap(0x7fbfaf728000, 8192, PROT READ|PROT WRITE,
MAP\_PRIVATE|MAP\_FIXED|MAP\_DENYWRITE, 3, 0x2a000) = 0x7fbfaf728000
18662 close(3)
                      =0
18662 openat(AT FDCWD, "/lib/x86 64-linux-gnu/libcom err.so.2", O RDONLY|O CLOEXEC) = 3
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=18504, ...}) = 0
18662 mmap(NULL, 20552, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0) = 0x7fbfaf6f8000
18662 mmap(0x7fbfaf6fa000, 4096, PROT READ|PROT EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7 fbfaf6fa000
18662 mmap(0x7fbfaf6fb000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3.0x3000 = 0x7fbfaf6fb000
18662 mmap(0x7fbfaf6fc000, 8192, PROT READ|PROT WRITE,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x3000) = 0x7fbfaf6fc000
18662 close(3)
18662 openat(AT FDCWD, "/lib/x86 64-linux-gnu/libkrb5support.so.0", O RDONLY|O CLOEXEC) = 3
18662 fstat(3, {st mode=S IFREG|0644, st size=47904, ...}) = 0
18662 mmap(NULL, 50128, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7fbfaf6eb000
18662 mmap(0x7fbfaf6ee000, 24576, PROT_READ|PROT_EXEC,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x3000) = 0x7fbfaf6ee000
18662 mmap(0x7fbfaf6f4000, 8192, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3,0x9000) = 0x7fbfaf6f4000
18662 mmap(0x7fbfaf6f6000, 8192, PROT READ|PROT WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xa000) = 0x7fbfaf6f6000
18662 close(3)
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkeyutils.so.1", O_RDONLY|O_CLOEXEC) = 3
18662 fstat(3, {st mode=S IFREG|0644, st size=22600, ...}) = 0
18662 mmap(NULL, 8192, PROT READ|PROT WRITE, MAP PRIVATE|MAP ANONYMOUS, -1, 0)
= 0x7fbfaf6e9000
18662 mmap(NULL, 24592, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) = 0x7fbfaf6e2000
18662 mmap(0x7fbfaf6e4000, 8192, PROT READ|PROT EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000) = 0x7fbfaf6e4000
18662 mmap(0x7fbfaf6e6000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3,0x4000) = 0x7fbfaf6e6000
18662 mmap(0x7fbfaf6e7000, 8192, PROT_READ|PROT_WRITE,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x4000) = 0x7fbfaf6e7000
18662 close(3)
18662 openat(AT FDCWD, "/lib/x86 64-linux-gnu/libresolv.so.2", O RDONLY|O CLOEXEC) = 3
18662 \text{ fstat}(3, \{\text{st mode=S IFREG}|0644, \text{st size}=68104, ...}) = 0
18662 mmap(NULL, 75912, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0) = 0x7fbfaf6cf000
18662 mmap(0x7fbfaf6d2000, 40960, PROT_READ|PROT_EXEC,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x3000) = 0x7fbfaf6d2000
18662 mmap(0x7fbfaf6dc000, 8192, PROT READ, MAP PRIVATE|MAP FIXED|MAP DENYWRITE,
3, 0xd000) = 0x7fbfaf6dc000
18662 mmap(0x7fbfaf6de000, 8192, PROT READ|PROT WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xf000) = 0x7fbfaf6de000
18662 mmap(0x7fbfaf6e0000, 6280, PROT_READ|PROT_WRITE,
MAP PRIVATE|MAP FIXED|MAP ANONYMOUS, -1, 0) = 0x7fbfaf6e0000
18662 close(3)
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18662 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0)
= 0x7fbfaf6cd000
18662 mmap(NULL, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0)
= 0x7fbfaf6ca000
18662 arch pretl(ARCH SET FS, 0x7fbfaf6ca9c0) = 0
18662 \text{ set\_tid\_address}(0x7fbfaf6cac90) = 18662
18662 set robust list(0x7fbfaf6caca0, 24) = 0
18662 \operatorname{rseg}(0x7fbfaf6cb2e0, 0x20, 0, 0x53053053) = 0
18662 \text{ mprotect}(0x7 \text{fbfafd}04000, 16384, PROT \text{ READ}) = 0
18662 mprotect(0x7fbfaf6de000, 4096, PROT_READ) = 0
18662 \text{ mprotect}(0x7 \text{fbfaf6e} 7000, 4096, PROT \text{ READ}) = 0
18662 \text{ mprotect}(0x7fbfaf6f6000, 4096, PROT READ) = 0
18662 mprotect(0x7fbfaf6fc000, 4096, PROT_READ) = 0
18662 mprotect(0x7fbfaf728000, 4096, PROT_READ) = 0
18662 \text{ mprotect}(0x7fbfaf7e4000, 53248, PROT READ) = 0
18662 mprotect(0x7fbfaf800000, 4096, PROT_READ) = 0
18662 \text{ mprotect}(0x7 \text{fbfaf8eb000}, 4096, PROT \text{ READ}) = 0
18662 mprotect(0x7fbfaf93d000, 8192, PROT_READ) = 0
18662 \text{ mprotect}(0x7 \text{fbfafd} 43000, 4096, PROT \text{ READ}) = 0
18662 mmap(NULL, 8192, PROT READ|PROT WRITE, MAP PRIVATE|MAP ANONYMOUS, -1, 0)
= 0x7fbfaf6c8000
18662 mprotect(0x7fbfaffb1000, 45056, PROT_READ) = 0
18662 \text{ mprotect}(0x7 \text{fbfaf} 998000, 12288, PROT \text{ READ}) = 0
18662 \text{ mprotect}(0x7fbfafa90000, 4096, PROT READ) = 0
18662 mprotect(0x7fbfafaeb000, 4096, PROT_READ) = 0
18662 mprotect(0x7fbfafb02000, 4096, PROT_READ) = 0
18662 \text{ mprotect}(0x7fbfb005c000, 32768, PROT\_READ) = 0
18662 \text{ mprotect}(0x5619531a5000, 4096, PROT\_READ) = 0
18662 mprotect(0x7fbfb00a4000, 8192, PROT_READ) = 0
18662 prlimit64(0, RLIMIT STACK, NULL, {rlim cur=8192*1024, rlim max=RLIM64 INFINITY}) = 0
18662 munmap(0x7fbfb0065000, 24775)
                                          =0
18662 futex(0x7fbfaffbf7bc, FUTEX WAKE PRIVATE, 2147483647) = 0
18662 \text{ getrandom}(\text{``} \text{x}40\text{\x}16\text{\x}3c\text{\x}41\text{\x}a0\text{\x}10\text{\x}46\text{\x}ab\text{''}, 8, GRND NONBLOCK}) = 8
18662 brk(NULL)
                                = 0x561953d13000
18662 brk(0x561953d34000)
                                    = 0x561953d34000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
```

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18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Time out)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 \text{ fstat}(0, \{\text{st_mode=S_IFCHR} | 0620, \text{st_rdev=makedev}(0x88, 0x2), ...\}) = 0
18662 \text{ read}(0, "create 1 - 1 \ n", 1024) = 12
                                                                            clone(child stack=NULL.
flags=CLONE_CHILD_CLEARTID|CLONE_CHILD_SETTID|SIGCHLD, child_tidptr=0x7fbfaf6cac90) =
18664
18662 getpid()
                            = 18662
18662 openat(AT_FDCWD, "/sys/devices/system/cpu/online", O_RDONLY|O_CLOEXEC) = 3
18662 read(3, "0-11\n", 1024)
                                  = 5
18662 close(3)
18662 openat(AT_FDCWD, "/sys/devices/system/cpu/possible", O_RDONLY|O_CLOEXEC) = 3
18662 read(3, "0-11\n", 1024)
                                  =5
18662 close(3)
                            =0
18662 getpid()
                            = 18662
18662 sched getaffinity(18662, 128, [0 1 2 3 4 5 6 7 8 9 10 11]) = 32
18662 newfstatat(AT_FDCWD, "/etc/nsswitch.conf", {st_mode=S_IFREG|0644, st_size=526, ...}, 0) = 0
```

```
18662 newfstatat(AT_FDCWD, "/", {st_mode=S_IFDIR|0755, st_size=4096, ...}, 0) = 0
18662 openat(AT_FDCWD, "/etc/nsswitch.conf", O_RDONLY|O_CLOEXEC) = 3
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=526, ...}) = 0
18662 \text{ read}(3, \text{"#/etc/nsswitch.conf} \text{n#} \text{Example"...}, 4096) = 526
18662 read(3, "", 4096)
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=526, ...}) = 0
18662 close(3 < unfinished ...>
18664 set robust list(0x7fbfaf6caca0, 24 < unfinished ...>
18662 <... close resumed>)
18662 openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC <unfinished ...>
18664 < \dots  set robust list resumed>) = 0
18662 <... openat resumed>)
18662 fstat(3, {st_mode=S_IFREG|0644, st_size=24775, ...}) = 0
18664 execve("./computing", ["computing", "1"], 0x7ffd69a2fd68 /* 36 vars */ <unfinished ...>
18662 mmap(NULL, 24775, PROT_READ, MAP_PRIVATE, 3, 0) = 0x7fbfb0065000
18662 close(3)
             openat(AT FDCWD,
18662
                                        "/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)
18662 newfstatat(AT FDCWD, "/lib/x86 64-linux-gnu/glibc-hwcaps/x86-64-v3/", 0x7ffd69a2c700, 0) = -1
ENOENT (No such file or directory)
             openat(AT FDCWD,
                                        "/lib/x86 64-linux-gnu/glibc-hwcaps/x86-64-v2/libnss db.so.2",
18662
O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file or directory)
18662 newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v2/", 0x7ffd69a2c700, 0) = -1
ENOENT (No such file or directory)
18662 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1
ENOENT (No such file or directory)
18662 newfstatat(AT_FDCWD, "/lib/x86_64-linux-gnu/", {st_mode=S_IFDIR|0755, st_size=36864, ...}, 0)
18664 <... execve resumed>)
                                 =0
           openat(AT FDCWD,
                                    "/usr/lib/x86 64-linux-gnu/glibc-hwcaps/x86-64-v3/libnss_db.so.2",
O RDONLY|O CLOEXEC| = -1 ENOENT (No such file or directory)
18662 newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v3/", <unfinished ...>
18664 brk(NULL < unfinished ...>
18662 <... newfstatat resumed>0x7ffd69a2c700, 0) = -1 ENOENT (No such file or directory)
           openat(AT FDCWD,
                                    "/usr/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v2/libnss_db.so.2",
O RDONLY|O CLOEXEC < unfinished ...>
18664 <... brk resumed>)
                                = 0x55b5206a7000
                                 = -1 ENOENT (No such file or directory)
18662 <... openat resumed>)
18662 newfstatat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/glibc-hwcaps/x86-64-v2/", 0x7ffd69a2c700, 0) =
-1 ENOENT (No such file or directory)
18664 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0
<unfinished ...>
18662 openat(AT_FDCWD, "/usr/lib/x86_64-linux-gnu/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1
ENOENT (No such file or directory)
18664 <... mmap resumed>)
                                  = 0x7f52a3e40000
18662 newfstatat(AT FDCWD, "/usr/lib/x86 64-linux-gnu/", {st mode=S IFDIR|0755, st size=36864, ...},
0) = 0
18664 access("/etc/ld.so.preload", R_OK <unfinished ...>
18662 openat(AT FDCWD, "/lib/glibc-hwcaps/x86-64-v3/libnss db.so.2", O RDONLY|O CLOEXEC) = -
1 ENOENT (No such file or directory)
18664 <... access resumed>)
                                 = -1 ENOENT (No such file or directory)
18662 newfstatat(AT_FDCWD, "/lib/glibc-hwcaps/x86-64-v3/", 0x7ffd69a2c700, 0) = -1 ENOENT (No such
```

18664 openat(AT FDCWD, "/etc/ld.so.cache", O RDONLY|O CLOEXEC <unfinished ...>

18662 openat(AT_FDCWD, "/lib/glibc-hwcaps/x86-64-v2/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -

file or directory)

```
1 ENOENT (No such file or directory)
18664 <... openat resumed>)
18662 newfstatat(AT_FDCWD, "/lib/glibc-hwcaps/x86-64-v2/", 0x7ffd69a2c700, 0) = -1 ENOENT (No such
file or directory)
18664 fstat(3, <unfinished ...>
18662 openat(AT_FDCWD, "/lib/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such file
or directory)
18664 <... fstat resumed>{st mode=S IFREG|0644, st size=24775, ...}) = 0
18662 newfstatat(AT FDCWD, "/lib/", {st mode=S IFDIR|0755, st size=4096, ...}, 0) = 0
18664 mmap(NULL, 24775, PROT_READ, MAP_PRIVATE, 3, 0 <unfinished ...>
18662 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)
                                                        = 0x7f52a3e39000
18664 <... mmap resumed>)
18662 newfstatat(AT_FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v3/", 0x7ffd69a2c700, 0) = -1 ENOENT (No
such file or directory)
18664 close(3 < unfinished ...>
18662 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)
18664 <... close resumed>)
18662 newfstatat(AT FDCWD, "/usr/lib/glibc-hwcaps/x86-64-v2/", 0x7ffd69a2c700, 0) = -1 ENOENT (No
such file or directory)
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libzmq.so.5", O_RDONLY|O_CLOEXEC <unfinished
18662 openat(AT_FDCWD, "/usr/lib/libnss_db.so.2", O_RDONLY|O_CLOEXEC) = -1 ENOENT (No such
file or directory)
18664 <... openat resumed>)
18662 newfstatat(AT_FDCWD, "/usr/lib/", {st_mode=S_IFDIR|0755, st_size=4096, ...}, 0) = 0
18664 read(3, <unfinished ...>
18662 \text{ munmap}(0x7fbfb0065000, 24775) = 0
18662 openat(AT_FDCWD, "/etc/protocols", O_RDONLY|O_CLOEXEC) = 3
18662 fstat(3, {st mode=S IFREG|0644, st size=3144, ...}) = 0
18662 lseek(3, 0, SEEK_SET)
                                                         =0
18662 read(3, "# Internet (IP) protocols\n#\n# Up"..., 4096) = 3144
18662 read(3, <unfinished ...>
18662 <... read resumed>"", 4096)
18664 fstat(3, <unfinished ...>
18662 close(3)
                                              =0
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=663584, ...}) = 0
18662 eventfd2(0, EFD_CLOEXEC < unfinished ...>
18664 mmap(NULL, 661336, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 <... eventfd2 resumed>)
                                                       =3
18662 fcntl(3, F GETFL)
                                                      = 0x2 (flags O RDWR)
18662 fcntl(3, F SETFL, O RDWR|O NONBLOCK) = 0
18662 fcntl(3, F_GETFL)
                                                      = 0x802 (flags O_RDWR|O_NONBLOCK)
18662 fcntl(3, F SETFL, O RDWR|O NONBLOCK) = 0
18662 getpid()
                                             = 18662
18662 getpid()
                                             = 18662
18662 getrandom( <unfinished ...>
                                                       = 0x7f52a3d97000
18664 <... mmap resumed>)
18662 < ... \ getrandom \ resumed > "\xa7\x5b\xda\x64\x81\xaf\x04\xcc\x04\x02\xd8\xfa\xee\xa1\x31\x5a", \ 16, \ 16, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 18, \ 
0) = 16
18662 getrandom( <unfinished ...>
                             mmap(0x7f52a3db0000,
                                                                                                                     PROT READ|PROT EXEC,
                                                                                     425984.
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x19000 < unfinished ...>
```

```
18662 <... getrandom resumed>"\xdd\x4e\xe6\x95\x23\xb9\xcb\xbe\xfa\x1d\x9e\x52\x47\x50\x9e\xca", 16,
0) = 16
18662 eventfd2(0, EFD_CLOEXEC < unfinished ...>
18664 <... mmap resumed>)
                               = 0x7f52a3db0000
18662 < ... eventfd2 resumed>)
                               =4
18662 fcntl(4, F_GETFL < unfinished ...>
18664 mmap(0x7f52a3e18000, 98304, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3, 0x81000 < unfinished ...>
18662 <... fcntl resumed>)
                             = 0x2 (flags O RDWR)
18662 fcntl(4, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
18664 <... mmap resumed>)
                               = 0x7f52a3e18000
18662 <... fcntl resumed>)
18662 fcntl(4, F_GETFL < unfinished ...>
                mmap(0x7f52a3e30000,
                                                                PROT_READ|PROT_WRITE,
18664
                                               36864,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x99000 <unfinished ...>
18662 <... fcntl resumed>)
                             = 0x802 (flags O_RDWR|O_NONBLOCK)
18662 fcntl(4, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
18664 <... mmap resumed>)
                               = 0x7f52a3e30000
18662 <... fcntl resumed>)
                             =0
18662 getpid()
                         = 18662
18664 close(3 < unfinished ...>
18662 epoll_create1(EPOLL_CLOEXEC)
18664 <... close resumed>)
18662 epoll_ctl(5, EPOLL_CTL_ADD, 4, {events=0, data={u32=1406294672, u64=94666780465808}})
= 0
18664
        openat(AT_FDCWD,
                              "/lib/x86_64-linux-gnu/libstdc++.so.6",
                                                                  O_RDONLY|O_CLOEXEC
<unfinished ...>
18662
        epoll ctl(5,
                     EPOLL CTL MOD,
                                           4,
                                                {events=EPOLLIN,
                                                                    data=\{u32=1406294672,
u64=94666780465808\}\})=0
18664 <... openat resumed>)
                              =3
18662 getpid()
                         = 18662
18664 read(3, <unfinished ...>
               rt sigaction(SIGRT 1,
                                            {sa handler=0x7fbfafb9e530,
sa flags=SA RESTORER|SA ONSTACK|SA RESTART|SA SIGINFO,
                                                                sa restorer=0x7fbfafb4a330},
NULL, 8) = 0
18662 rt_sigprocmask(SIG_UNBLOCK, [RTMIN RT_1], NULL, 8) = 0
18664 fstat(3, <unfinished ...>
18662 mmap(NULL, 8392704, PROT_NONE, MAP_PRIVATE|MAP_ANONYMOUS|MAP_STACK, -1,
0) = 0x7fbfaeec7000
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=2592224, ...}) = 0
18662 mprotect(0x7fbfaeec8000, 8388608, PROT_READ|PROT_WRITE) = 0
18664 mmap(NULL, 2609472, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0 <unfinished ...>
18662 rt_sigprocmask(SIG_BLOCK, \sim[], [QUIT], 8) = 0
18664 <... mmap resumed>)
                               = 0x7f52a3b19000
18662
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD|CLONE
_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEARTID,
child tid=0x7fbfaf6c7990,
                          parent tid=0x7fbfaf6c7990,
                                                      exit signal=0,
                                                                      stack=0x7fbfaeec7000,
stack_size=0x7ffd00, tls=0x7fbfaf6c76c0} <unfinished ...>
                                               1343488.
               mmap(0x7f52a3bb6000,
                                                                 PROT READ|PROT EXEC,
18664
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9d000 <unfinished ...>
18662 <... clone3 resumed> => {parent_tid=[18665]}, 88) = 18665
18662 rt sigprocmask(SIG SETMASK, [QUIT], <unfinished ...>
18664 <... mmap resumed>)
                              = 0x7f52a3bb6000
```

```
18662 <... rt_sigprocmask resumed>NULL, 8) = 0
18665 rseq(0x7fbfaf6c7fe0, 0x20, 0, 0x53053053 <unfinished ...>
18662 eventfd2(0, EFD_CLOEXEC < unfinished ...>
18664
                     mmap(0x7f52a3cfe000,
                                                         552960.
                                                                                PROT_READ,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x1e5000 < unfinished ...>
18662 <... eventfd2 resumed>)
                                =6
18665 < ... rseq resumed>)
                              = 0
18662 fcntl(6, F GETFL < unfinished ...>
18664 <... mmap resumed>)
                                = 0x7f52a3cfe000
18662 <... fcntl resumed>)
                              = 0x2 (flags O_RDWR)
18665 set robust list(0x7fbfaf6c79a0, 24 <unfinished ...>
18662 fcntl(6, F SETFL, O RDWR|O NONBLOCK <unfinished ...>
                mmap(0x7f52a3d85000,
18664
                                                 57344,
                                                                  PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x26b000 < unfinished ...>
18662 <... fcntl resumed>)
                              = 0
18665 <... set_robust_list resumed>) = 0
18662 fcntl(6, F_GETFL < unfinished ...>
18664 <... mmap resumed>)
                                = 0x7f52a3d85000
18662 <... fcntl resumed>)
                              = 0x802 (flags O RDWR|O NONBLOCK)
18665 rt sigprocmask(SIG SETMASK, [QUIT], <unfinished ...>
18662 fcntl(6, F SETFL, O RDWR|O NONBLOCK <unfinished ...>
                mmap(0x7f52a3d93000,
                                                                  PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0 < unfinished ...>
18662 <... fcntl resumed>)
                              =0
18665 <... rt_sigprocmask resumed>NULL, 8) = 0
18662 getpid( <unfinished ...>
18664 <... mmap resumed>)
                                = 0x7f52a3d93000
18662 <... getpid resumed>)
                               = 18662
18662 epoll_create1(EPOLL_CLOEXEC < unfinished ...>
18665 rt_sigprocmask(SIG_BLOCK, ~[RTMIN RT_1], <unfinished ...>
18662 <... epoll create1 resumed>)
18664 close(3 < unfinished ...>
18662 epoll_ctl(7, EPOLL_CTL_ADD, 6, {events=0, data={u32=1406296784, u64=94666780467920}}
<unfinished ...>
18665 <... rt_sigprocmask resumed>NULL, 8) = 0
18662 <... epoll_ctl resumed>)
18664 <... close resumed>)
                              = 0
18662
        epoll ctl(7,
                     EPOLL CTL MOD,
                                            6,
                                                  {events=EPOLLIN,
                                                                       data = \{u32 = 1406296784,
u64=94666780467920}} < unfinished ...>
18665 sched_getparam(18665, <unfinished ...>
18662 <... epoll_ctl resumed>)
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libgcc_s.so.1", O_RDONLY|O_CLOEXEC < unfinished
...>
18662 mmap(NULL, 8392704, PROT NONE, MAP PRIVATE|MAP ANONYMOUS|MAP STACK, -1,
0) = 0x7fbfae6c6000
18665 < \dots  sched getparam resumed>[0]) = 0
18664 <... openat resumed>)
                               =3
18662 mprotect(0x7fbfae6c7000, 8388608, PROT_READ|PROT_WRITE < unfinished ...>
18665 sched getscheduler(18665 < unfinished ...>
18662 <... mprotect resumed>)
18664 read(3, <unfinished ...>
18662 rt_sigprocmask(SIG_BLOCK, ~[], <unfinished ...>
18665 <... sched_getscheduler resumed>) = 0 (SCHED_OTHER)
18662 < \dots rt sigprocmask resumed>[QUIT], 8) = 0
```

```
18662
clone3({flags=CLONE_VM|CLONE_FS|CLONE_FILES|CLONE_SIGHAND|CLONE_THREAD|CLONE
_SYSVSEM|CLONE_SETTLS|CLONE_PARENT_SETTID|CLONE_CHILD_CLEARTID,
                            parent_tid=0x7fbfaeec6990,
child tid=0x7fbfaeec6990,
                                                         exit signal=0,
                                                                           stack=0x7fbfae6c6000,
stack size=0x7ffd00, tls=0x7fbfaeec66c0} <unfinished ...>
18665 sched_setscheduler(18665, SCHED_OTHER, [0] < unfinished ...>
18664 fstat(3, <unfinished ...>
18662 < ... clone3 resumed > = \{parent tid = [18666]\}, 88\} = 18666
18665 < \dots  sched setscheduler resumed> ) = 0
18662 rt_sigprocmask(SIG_SETMASK, [QUIT], <unfinished ...>
18664 <... fstat resumed>{st mode=S IFREG|0644, st size=183024, ...}) = 0
18662 < ... \text{ rt sigprocmask resumed} > \text{NULL}, 8 = 0
18665 prctl(PR_SET_NAME, "ZMQbg/Reaper" < unfinished ...>
18662 eventfd2(0, EFD_CLOEXEC < unfinished ...>
18664 mmap(NULL, 185256, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 <... eventfd2 resumed>)
18662 fcntl(8, F GETFL < unfinished ...>
18665 <... prctl resumed>)
18662 <... fcntl resumed>)
                              = 0x2 (flags O RDWR)
                                = 0x7f52a3aeb000
18664 <... mmap resumed>)
18662 fcntl(8, F SETFL, O RDWR|O NONBLOCK <unfinished ...>
18665 epoll_wait(5, <unfinished ...>
18662 <... fcntl resumed>)
18666 rseq(0x7fbfaeec6fe0, 0x20, 0, 0x53053053 <unfinished ...>
18664
                 mmap(0x7f52a3aef000,
                                                                     PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000 <unfinished ...>
18662 fcntl(8, F_GETFL < unfinished ...>
18666 <... rseq resumed>)
                              = 0x802 (flags O_RDWR|O_NONBLOCK)
18662 <... fcntl resumed>)
18664 <... mmap resumed>)
                                 = 0x7f52a3aef000
18662 fcntl(8, F_SETFL, O_RDWR|O_NONBLOCK <unfinished ...>
18666 set_robust_list(0x7fbfaeec69a0, 24 <unfinished ...>
18662 <... fcntl resumed>)
                               =0
18664
                      mmap(0x7f52a3b13000,
                                                            16384.
                                                                                  PROT READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000 < unfinished ...>
                           = 18662
18662 getpid()
18662 getpid()
                           = 18662
18666 <... set_robust_list resumed>) = 0
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 <... mmap resumed>)
                                = 0x7f52a3b13000
18662 <... poll resumed>)
                              = 0 (Timeout)
18662 socket(AF_NETLINK, SOCK_RAW|SOCK_CLOEXEC, NETLINK_ROUTE < unfinished ...>
18666 rt sigprocmask(SIG SETMASK, [QUIT], <unfinished ...>
                                                                    PROT READ|PROT WRITE,
18664
                 mmap(0x7f52a3b17000,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2b000 < unfinished ...>
18662 <... socket resumed>)
                                =9
18666 < ... rt_sigprocmask resumed>NULL, 8) = 0
18662 bind(9, {sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000}, 12) = 0
18662 getsockname(9, {sa_family=AF_NETLINK, nl_pid=18662, nl_groups=00000000}, [12]) = 0
18662
                  sendto(9,
                                       [\{nlmsg len=20,
                                                                  nlmsg type=RTM GETLINK,
nlmsg_flags=NLM_F_REQUEST|NLM_F_DUMP,
                                                     nlmsg_seq=1741797306,
                                                                                  nlmsg pid=0},
{ifi_family=AF_UNSPEC, ...}], 20, 0, {sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000}, 12
<unfinished ...>
                                = 0x7f52a3b17000
18664 <... mmap resumed>)
```

18662 <... sendto resumed>)

=20

```
18666 rt_sigprocmask(SIG_BLOCK, ~[RTMIN RT_1], <unfinished ...>
       recvmsg(9,
                   {msg_name={sa_family=AF_NETLINK,
                                                       nl_pid=0,
                                                                 nl_groups=00000000},
                   msg_iov=[{iov_base=[[{nlmsg_len=1348,
                                                         nlmsg type=RTM NEWLINK,
msg namelen=12,
nlmsg flags=NLM F MULTI, nlmsg seq=1741797306, nlmsg pid=18662}, {ifi family=AF UNSPEC,
ifi type=ARPHRD_LOOPBACK,
                                                         ifi_index=if_nametoindex("lo"),
ifi_flags=IFF_UP|IFF_LOOPBACK|IFF_RUNNING|IFF_LOWER_UP, ifi_change=0}, [[{nla_len=7,
nla_type=IFLA_IFNAME}, "lo"], [{nla_len=8, nla_type=IFLA_TXQLEN}, 1000], [{nla_len=5,
nla_type=IFLA_OPERSTATE}, 0], [{nla_len=5, nla_type=IFLA_LINKMODE}, 0], [{nla_len=8,
                                          nla_type=IFLA_MIN_MTU},
nla type=IFLA MTU},
                     65536], [{nla_len=8,
                                                                         [\{nla\ len=8,
nla_type=IFLA_MAX_MTU},
                               [{nla_len=8,
                                            nla_type=IFLA_GROUP},
                                                                     0],
                                                                         [{nla_len=8,
                           0],
nla type=IFLA PROMISCUITY},
                                  [\{nla len=8,
                                              nla type=IFLA NUM TX QUEUES},
                              0],
                   nla_type=IFLA_GSO_MAX_SEGS},
                                                          655351,
                                                                         [\{nla len=8,
nla_type=IFLA_GSO_MAX_SIZE}, 65536], [{nla_len=8, nla_type=IFLA_NUM_RX_QUEUES}, 1],
[{nla_len=5, nla_type=IFLA_CARRIER}, 1], [{nla_len=12, nla_type=IFLA_QDISC}, "noqueue"],
                   nla type=IFLA CARRIER CHANGES},
                                                                         [\{nla len=8,
nla_type=IFLA_CARRIER_UP_COUNT},
                                                     01,
                                                                         [\{nla\ len=8,
nla_type=IFLA_CARRIER_DOWN_COUNT}, 0], [{nla_len=5, nla_type=IFLA_PROTO_DOWN}, 0],
[{nla_len=36, nla_type=IFLA_MAP}, {mem_start=0, mem_end=0, base_addr=0, irq=0, dma=0,
                         nla type=IFLA ADDRESS},
                                                     00:00:00:00:00:00],
          [\{nla len=10,
nla_type=IFLA_BROADCAST}, 00:00:00:00:00:00], [{nla_len=196, nla_type=IFLA_STATS64},
{rx_packets=574915, tx_packets=574915, rx_bytes=98193605, tx_bytes=98193605, 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_carrier_errors=0,
                                             tx fifo errors=0,
tx aborted errors=0,
                                                                tx heartbeat errors=0,
tx window errors=0,
                   rx compressed=0, tx compressed=0,
                                                      rx nohandler=0}],
                                                                       [{nla len=100,
                         {rx_packets=574915,
                                               tx_packets=574915,
                                                                   rx_bytes=98193605,
nla_type=IFLA_STATS},
tx bytes=98193605, 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_type=IFLA_XDP},
                                                    nla_type=IFLA_XDP_ATTACHED},
[\{nla len=12,
                                      [{nla_len=5,
                                            nla_type=IFLA_AF_SPEC},
XDP_ATTACHED_NONE]],
                           [{nla_len=792,
                                                                       [[{nla_len=136,
                               [{nla_len=132,
nla type=AF INET},
                                                         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]=1,
                                                    [IPV4_DEVCONF_NOPOLICY-1]=1,
IIPV4 DEVCONF FORCE IGMP VERSION-11=0.
                                              IIPV4 DEVCONF ARP ANNOUNCE-11=0.
[IPV4 DEVCONF_ARP_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 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=652, nla_type=AF_INET6}, [[{nla_len=8, nla_type=IFLA_INET6_FLAGS},
             [{nla_len=20.
IF READY],
                           nla type=IFLA INET6 CACHEINFO},
                                                               {max reasm len=65535,
                                             retrans time=1000}],
                                                                        [\{nla len=240.
tstamp=44,
                 reachable time=24250,
nla_type=IFLA_INET6_CONF}, [[DEVCONF_FORWARDING]=0, [DEVCONF_HOPLIMIT]=64,
```

```
[DEVCONF MTU6]=65536,
                                                      [DEVCONF ACCEPT RA]=1,
[DEVCONF_ACCEPT_REDIRECTS]=1,
                                                       [DEVCONF_AUTOCONF]=1,
[DEVCONF_DAD_TRANSMITS]=1,
                                                   [DEVCONF_RTR_SOLICITS]=-1,
[DEVCONF RTR SOLICIT INTERVAL]=4000,
                                           [DEVCONF RTR SOLICIT DELAY]=1000,
[DEVCONF_USE_TEMPADDR]=-1,
                                            [DEVCONF_TEMP_VALID_LFT]=604800,
[DEVCONF_TEMP_PREFERED_LFT]=86400,
                                              [DEVCONF_REGEN_MAX_RETRY]=3,
[DEVCONF_MAX_DESYNC_FACTOR]=600,
                                                [DEVCONF MAX ADDRESSES]=16,
[DEVCONF_FORCE_MLD_VERSION]=0,
                                              [DEVCONF_ACCEPT_RA_DEFRTR]=1,
[DEVCONF ACCEPT RA PINFO]=1,
                                            [DEVCONF_ACCEPT_RA_RTR_PREF]=0,
[DEVCONF_RTR_PROBE_INTERVAL]=0,
[DEVCONF ACCEPT RA RT INFO MAX PLEN]=0,
                                                      [DEVCONF PROXY NDP]=0,
[DEVCONF_OPTIMISTIC_DAD]=0,
                                          [DEVCONF_ACCEPT_SOURCE_ROUTE]=0,
[DEVCONF_MC_FORWARDING]=0,
                                                    [DEVCONF DISABLE IPV6]=0,
[DEVCONF_ACCEPT_DAD]=-1,
                                                   [DEVCONF_FORCE_TLLAO]=0,
[DEVCONF NDISC NOTIFY]=0,
[DEVCONF_MLDV1_UNSOLICITED_REPORT_INTERVAL]=10000,
[DEVCONF_MLDV2_UNSOLICITED_REPORT_INTERVAL]=1000,
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                                                            ...]],
nla type=IFLA_INET6_STATS},
                                                       [IPSTATS_MIB_INPKTS]=0,
                             [[IPSTATS_MIB_NUM]=37,
                                                   [IPSTATS MIB INDELIVERS]=0,
[IPSTATS MIB INOCTETS]=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,
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[IPSTATS MIB REASMOKS]=0,
                                                  [IPSTATS MIB REASMFAILS]=0,
[IPSTATS MIB FRAGOKS]=0,
                                                   [IPSTATS_MIB_FRAGFAILS]=0,
[IPSTATS_MIB_FRAGCREATES]=0,
                                                 [IPSTATS_MIB_INMCASTPKTS]=0,
[IPSTATS_MIB_OUTMCASTPKTS]=0.
                                                 [IPSTATS MIB_INBCASTPKTS]=0,
[IPSTATS MIB OUTBCASTPKTS]=0,
                                              [IPSTATS MIB INMCASTOCTETS]=0,
[IPSTATS_MIB_OUTMCASTOCTETS]=0,
                                              [IPSTATS_MIB_INBCASTOCTETS]=0,
[IPSTATS_MIB_OUTBCASTOCTETS]=0, [IPSTATS_MIB_CSUMERRORS]=0, ...]], [{nla_len=52,
nla type=IFLA INET6 ICMP6STATS},
                                  [[ICMP6 MIB NUM]=6,
                                                        [ICMP6 MIB INMSGS]=0,
                          [ICMP6 MIB OUTMSGS]=0,
                                                    [ICMP6 MIB OUTERRORS]=0,
[ICMP6 MIB INERRORS]=0,
                                                    nla_type=IFLA_INET6_TOKEN},
[ICMP6_MIB_CSUMERRORS]=0]],
                                   [{nla_len=20,
inet pton(AF INET6,
                    "::")],
                            [{nla_len=5,
                                          nla_type=IFLA_INET6_ADDR_GEN_MODE},
IN6 ADDR GEN MODE EUI64]]]]]],
                                   [{nlmsg len=1416,
                                                      nlmsg type=RTM NEWLINK,
nlmsg_flags=NLM_F_MULTI, nlmsg_seq=1741797306, nlmsg_pid=18662}, {ifi_family=AF_UNSPEC,
ifi_type=ARPHRD_ETHER,
                                                    ifi_index=if_nametoindex("eth0"),
ifi_flags=IFF_UP|IFF_BROADCAST|IFF_RUNNING|IFF_MULTICAST|IFF_LOWER_UP,
                               nla type=IFLA IFNAME},
ifi change=0},
                [[\{nla len=9,
                                                          "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}, 1280], [{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_type=IFLA_GSO_MAX_SIZE},
[\{nla len=8,
                                                       62780],
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},
                 nla_type=IFLA_CARRIER_UP_COUNT},
                                                           2],
nla_type=IFLA_CARRIER_DOWN_COUNT}, 1], [{nla_len=5, nla_type=IFLA_PROTO_DOWN}, 0],
[{nla_len=36, nla_type=IFLA_MAP}, {mem_start=0, mem_end=0, base_addr=0, irq=0, dma=0,
                                                                    [{nla len=10.
          [{nla_len=10,
                       nla_type=IFLA_ADDRESS},
                                                 00:15:5d:1b:d9:32],
                                          [{nla_len=196,
                            ff:ff:ff:ff:ff],
nla_type=IFLA_BROADCAST},
                                                         nla type=IFLA STATS64},
```

```
{rx packets=13875, tx packets=7315, rx bytes=9401503, tx bytes=1379933, rx errors=0, tx errors=0,
rx_dropped=0, tx_dropped=0, multicast=3704, 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=13875, tx_packets=7315, rx_bytes=9401503, tx_bytes=1379933, rx_errors=0, tx_errors=0,
rx_dropped=0, tx_dropped=0, multicast=3704, 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,
                                                [{nla_len=12,
rx_compressed=0,
               tx_compressed=0, rx_nohandler=0}],
                                                            nla_type=IFLA_XDP},
           nla type=IFLA XDP ATTACHED},
                                           XDP ATTACHED NONE]],
[\{nla len=5.
                                                                    [\{nla\ len=10,
nla_type=IFLA_PERM_ADDRESS}, 00:15:5d:1b:d9:32], [{nla_len=792, nla_type=IFLA_AF_SPEC},
[[{nla len=136,
                nla type=AF INET},
                                      [{nla len=132,
                                                      nla type=IFLA INET CONF},
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                                          [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_ARP_ANNOUNCE-1]=0,
[IPV4 DEVCONF ARP 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_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=652, nla_type=AF_INET6}, [[{nla_len=8, nla_type=IFLA_INET6_FLAGS},
IF_RS_SENT|IF_READY],
                             [{nla_len=20,
                                               nla_type=IFLA_INET6_CACHEINFO},
{max reasm len=65535, tstamp=55, reachable time=29770, retrans time=1000}], [{nla len=240,
nla type=IFLA INET6 CONF}, [[DEVCONF FORWARDING]=0, [DEVCONF HOPLIMIT]=64,
[DEVCONF_MTU6]=1280, [DEVCONF_ACCEPT_RA]=1, [DEVCONF_ACCEPT_REDIRECTS]=1,
[DEVCONF AUTOCONF]=1,
                                                  [DEVCONF DAD TRANSMITS]=1,
[DEVCONF RTR SOLICITS]=-1,
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[DEVCONF RTR SOLICIT DELAY]=1000,
                                                  [DEVCONF USE TEMPADDR]=0,
[DEVCONF_TEMP_VALID_LFT]=604800,
                                         [DEVCONF_TEMP_PREFERED_LFT]=86400,
[DEVCONF_REGEN_MAX_RETRY]=3,
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[DEVCONF MAX ADDRESSES]=16.
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[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,
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[DEVCONF OPTIMISTIC DAD]=0,
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[DEVCONF_MC_FORWARDING]=0,
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[DEVCONF_ACCEPT_DAD]=1,
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[DEVCONF_MLDV2_UNSOLICITED_REPORT_INTERVAL]=1000,
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                                                     [IPSTATS_MIB_INPKTS]=1852,
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[IPSTATS MIB OUTFORWDATAGRAMS]=0.
                                                     [IPSTATS_MIB_OUTPKTS]=27,
[IPSTATS MIB OUTOCTETS]=1684,
                                                 [IPSTATS MIB INHDRERRORS]=0,
```

```
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[IPSTATS_MIB_INADDRERRORS]=0,
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[IPSTATS MIB INTRUNCATEDPKTS]=0,
                                                         [IPSTATS MIB INDISCARDS]=0,
[IPSTATS MIB OUTDISCARDS]=0,
                                                      [IPSTATS MIB OUTNOROUTES]=0,
                                                       [IPSTATS_MIB_REASMREQDS]=0,
[IPSTATS_MIB_REASMTIMEOUT]=0,
[IPSTATS MIB REASMOKS]=0,
                                                        [IPSTATS MIB REASMFAILS]=0,
[IPSTATS MIB FRAGOKS]=0,
                                                         [IPSTATS MIB FRAGFAILS]=0,
[IPSTATS_MIB_FRAGCREATES]=0,
                                                   [IPSTATS_MIB_INMCASTPKTS]=1852,
[IPSTATS MIB OUTMCASTPKTS]=27,
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[IPSTATS_MIB_OUTBCASTPKTS]=0,
                                              [IPSTATS_MIB_INMCASTOCTETS]=348631,
[IPSTATS MIB OUTMCASTOCTETS]=1684,
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[IPSTATS_MIB_OUTBCASTOCTETS]=0, [IPSTATS_MIB_CSUMERRORS]=0, ...]], [{nla_len=52,
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nla type=IFLA INET6 ICMP6STATS},
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[ICMP6_MIB_INERRORS]=0, [ICMP6_MIB_OUTMSGS]=27, [ICMP6_MIB_OUTERRORS]=0,
[ICMP6 MIB CSUMERRORS]=0]],
                                       [\{nla\ len=20,\
                                                          nla type=IFLA INET6 TOKEN},
inet pton(AF INET6,
                       "::")],
                                [\{nla len=5,
                                              nla_type=IFLA_INET6_ADDR_GEN_MODE},
IN6 ADDR_GEN_MODE_EUI64]]]],
                                    [{nla_len=41,
                                                   nla_type=IFLA_PARENT_DEV_NAME},
"902d75e4-7cf6-4b9d-af9e-1be7f565"...],
                                                                            [{nla_len=10,
nla type=IFLA PARENT DEV BUS NAME},
                                            "vmbus"]]]],
                                                          iov len=8192}],
                                                                           msg iovlen=1.
msg\_controllen=0, msg\_flags=0\}, 0) = 2764
18666 < ... \text{ rt sigprocmask resumed} > \text{NULL}, 8 = 0
18662 recvmsg(9, <unfinished ...>
18664 close(3 < unfinished ...>
18662 <... recvmsg resumed>{msg_name={sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000},
                       msg_iov=[{iov_base=[{nlmsg_len=20,
msg namelen=12,
                                                               nlmsg_type=NLMSG_DONE,
nlmsg_flags=NLM_F_MULTI,
                           nlmsg_seq=1741797306,
                                                  nlmsg_pid=18662},
                                                                     0],
                                                                          iov_len=8192}],
msg_iovlen=1, msg_controllen=0, msg_flags=0}, 0) = 20
18666 sched_getparam(18666, <unfinished ...>
18662
                sendto(9,
                                   [{nlmsg_len=20,
                                                            nlmsg_type=RTM_GETADDR,
nlmsg flags=NLM F REOUEST|NLM F DUMP.
                                                 nlmsg seq=1741797307,
                                                                           nlmsg pid=0}.
{ifa_family=AF_UNSPEC, ...}], 20, 0, {sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000}, 12
<unfinished ...>
18664 <... close resumed>)
                            =0
18662 <... sendto resumed>)
                              = 20
18666 < \dots  sched_getparam resumed>[0]) = 0
18662 recvmsg(9, <unfinished ...>
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libc.so.6", O_RDONLY|O_CLOEXEC <unfinished ...>
18662 <... recvmsg resumed>{msg_name={sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000}},
                     msg_iov=[{iov_base=[[{nlmsg_len=76,
                                                             nlmsg_type=RTM_NEWADDR,
msg namelen=12,
nlmsg_flags=NLM_F_MULTI,
                           nlmsg_seq=1741797307, nlmsg_pid=18662}, {ifa_family=AF_INET,
ifa prefixlen=8,
                        ifa_flags=IFA_F_PERMANENT,
                                                              ifa scope=RT SCOPE HOST,
                                           nla_type=IFA_ADDRESS}, inet_addr("127.0.0.1")],
ifa_index=if_nametoindex("lo")}, [[{nla_len=8,
[{nla_len=8, nla_type=IFA_LOCAL}, inet_addr("127.0.0.1")], [{nla_len=7, nla_type=IFA_LABEL}, "lo"],
                  nla type=IFA FLAGS},
                                               IFA F PERMANENT],
                                                                            [\{nla len=20,
nla type=IFA CACHEINFO},
                             {ifa prefered=4294967295,
                                                       ifa valid=4294967295,
                                                                              cstamp=44,
tstamp=44}]]],
               [{nlmsg_len=84,
                                nlmsg type=RTM NEWADDR,
                                                              nlmsg flags=NLM F MULTI,
nlmsg_seq=1741797307,
                          nlmsg_pid=18662},
                                                {ifa_family=AF_INET,
                                                                          ifa_prefixlen=32,
ifa_flags=IFA_F_PERMANENT, ifa_scope=RT_SCOPE_UNIVERSE, ifa_index=if_nametoindex("lo")},
                 nla type=IFA ADDRESS},
                                             inet addr("10.255.255.254")],
                                                                             [{nla_len=8,
                      inet_addr("10.255.255.254")], [{nla_len=8,
                                                             nla_type=IFA_BROADCAST},
nla_type=IFA_LOCAL},
inet addr("10.255.255.254")],
                            [\{nla len=7\},
                                           nla_type=IFA_LABEL},
                                                                     "lo"],
                                                                             [{nla len=8,
                                                              nla_type=IFA_CACHEINFO},
                       IFA_F_PERMANENT],
nla_type=IFA_FLAGS},
                                               [\{nla\_len=20,
{ifa prefered=4294967295,
                         ifa valid=4294967295,
                                               cstamp=44,
                                                           tstamp=44}]]],
                                                                          [{nlmsg len=88,
                                                                   nlmsg_seq=1741797307,
nlmsg type=RTM NEWADDR,
                                  nlmsg flags=NLM F MULTI,
nlmsg_pid=18662},
                                          ifa_prefixlen=20,
                  {ifa_family=AF_INET,
                                                            ifa_flags=IFA_F_PERMANENT,
```

```
ifa_index=if_nametoindex("eth0")},
ifa_scope=RT_SCOPE_UNIVERSE,
                                                                                 [[\{nla\_len=8,
nla_type=IFA_ADDRESS},
                           inet_addr("172.17.162.92")],
                                                        [{nla_len=8,
                                                                       nla_type=IFA_LOCAL},
inet_addr("172.17.162.92")], [{nla_len=8, nla_type=IFA_BROADCAST}, inet_addr("172.17.175.255")],
                                           "eth0"],
                nla_type=IFA_LABEL},
                                                       [\{nla len=8,
                                                                       nla_type=IFA_FLAGS},
IFA F PERMANENT],
                        [{nla_len=20,
                                       nla_type=IFA_CACHEINFO},
                                                                     {ifa prefered=4294967295,
ifa_valid=4294967295, cstamp=55, tstamp=55}]]]], iov_len=8192}], msg_iovlen=1, msg_controllen=0,
msg flags=0, 0) = 248
18666 sched getscheduler(18666 < unfinished ...>
18662 recymsg(9, <unfinished ...>
18664 <... openat resumed>)
                               =3
18662 <... recvmsg resumed>{msg_name={sa_family=AF_NETLINK, nl_pid=0, nl_groups=00000000},
                       msg_iov=[{iov_base=[[{nlmsg_len=72,
msg namelen=12.
                                                                nlmsg type=RTM NEWADDR,
nlmsg_flags=NLM_F_MULTI, nlmsg_seq=1741797307, nlmsg_pid=18662}, {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")],
                                            {ifa_prefered=4294967295,
[\{nla len=20,
               nla_type=IFA_CACHEINFO},
                                                                        ifa_valid=4294967295,
cstamp=44, tstamp=44}], [{nla_len=8, nla_type=IFA_FLAGS}, IFA_F_PERMANENT]]], [{nlmsg_len=72,
nlmsg_type=RTM_NEWADDR,
                                    nlmsg_flags=NLM_F_MULTI,
                                                                       nlmsg_seq=1741797307,
                                             ifa_prefixlen=64.
                                                               ifa flags=IFA F PERMANENT,
nlmsg pid=18662}.
                    {ifa family=AF INET6,
ifa scope=RT SCOPE LINK,
                                     ifa index=if nametoindex("eth0")},
                                                                                [[\{nla len=20,
nla type=IFA ADDRESS},
                            inet_pton(AF_INET6,
                                                   "fe80::215:5dff:fe1b:d932")],
                                                                                 [\{nla len=20,
nla_type=IFA_CACHEINFO},
                              {ifa_prefered=4294967295,
                                                          ifa_valid=4294967295,
                                                                                   cstamp=55,
tstamp=55}],
            [{nla_len=8,
                            nla_type=IFA_FLAGS},
                                                    IFA_F_PERMANENT]]]],
                                                                             iov_len=8192}],
msg_iovlen=1, msg_controllen=0, msg_flags=0}, 0) = 144
18666 < ... sched_getscheduler resumed>) = 0 (SCHED_OTHER)
                     {msg_name={sa_family=AF_NETLINK,
                                                                        nl_groups=00000000},
18662
        recvmsg(9,
                                                             nl_pid=0,
msg namelen=12.
                        msg iov=[{iov base=[{nlmsg len=20,
                                                                  nlmsg type=NLMSG DONE,
nlmsg_flags=NLM_F_MULTI, nlmsg_seq=1741797307, nlmsg_pid=18662}, 0], iov_len=8192}],
msg_iovlen=1, msg_controllen=0, msg_flags=0\}, 0) = 20
18666 sched_setscheduler(18666, SCHED_OTHER, [0] <unfinished ...>
18662 close(9 < unfinished ...>
18664 read(3, <unfinished ...>
18662 <... close resumed>)
                              =0
18662 socket(AF INET, SOCK STREAM|SOCK CLOEXEC, IPPROTO TCP) = 9
18666 < \dots  sched_setscheduler resumed>) = 0
18662 setsockopt(9, SOL_SOCKET, SO_REUSEADDR, [1], 4) = 0
18666 prctl(PR_SET_NAME, "ZMQbg/IO/0" <unfinished ...>
18662 bind(9, {sa_family=AF_INET, sin_port=htons(5556), sin_addr=inet_addr("127.0.0.1")}, 16) = 0
18662 listen(9, 100 < unfinished ...>
18666 <... prctl resumed>)
                              =0
18662 <... listen resumed>)
18662 getsockname(9, <unfinished ...>
18666 epoll_wait(7, <unfinished ...>
                     getsockname
18662
           <...
                                      resumed>{sa_family=AF_INET,
                                                                          sin port=htons(5556),
\sin_addr = inet_addr("127.0.0.1"), [128 = > 16]) = 0
18662 getsockname(9, {sa family=AF INET, sin port=htons(5556), sin addr=inet addr("127.0.0.1")}, [128
=> 16]) = 0
18662 getpid()
                          = 18662
18662 \text{ write}(6, "\1\0\0\0\0\0\0, 8) = 8
18662 getpid()
                          = 18662
18662 \text{ write}(8, "\1\0\0\0\0\0\0,0,0, 8) = 8
18662 fstat(1, <unfinished ...>
18666 <... epoll_wait resumed>[{events=EPOLLIN, data={u32=1406296784, u64=94666780467920}}],
256, -1) = 1
```

```
18662 < ... fstat resumed > \{st_mode = S_IFCHR | 0620, st_rdev = makedev(0x88, 0x2), ... \}) = 0
18662 write(1, "Ok: 18664\n", 10)
18662 getpid()
                          = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 1 ([{fd=8, revents=POLLIN}])
                          = 18662
18662 getpid()
18662 \text{ read}(8, "\1\0\0\0\0\0\0, 8) = 8
18664 pread64(3, <unfinished ...>
18662 getpid( <unfinished ...>
18666 getpid( <unfinished ...>
784
18662 <... getpid resumed>)
                               = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 fstat(3, <unfinished ...>
18662 <... poll resumed>)
                              = 0 (Timeout)
18666 <... getpid resumed>)
                               = 18662
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
18664 <... fstat resumed>{ st_mode=S_IFREG|0755, st_size=2125328, ...}) = 0
18662 <... pselect6 resumed>)
                                = 0 (Timeout)
18662 getpid()
                          = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18666 poll([{fd=6, events=POLLIN}], 1, 0 < unfinished ...>
18662 <... poll resumed>)
                              = 0 (Timeout)
18664 pread64(3, <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 getpid( <unfinished ...>
18666 <... poll resumed>)
                              = 1 ([{fd=6, revents=POLLIN}])
18662 <... getpid resumed>)
                               = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18666 getpid( <unfinished ...>
18662 <... poll resumed>)
                              = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL < unfinished ...>
                               = 18662
18666 <... getpid resumed>)
18662 <... pselect6 resumed>)
                                = 0 (Timeout)
18664 mmap(NULL, 2170256, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 < unfinished ...>
18662 getpid( <unfinished ...>
18666 read(6, <unfinished ...>
18662 <... getpid resumed>)
                               = 18662
18666 < ... \text{ read resumed} > "\1\0\0\0\0\0\0\0, 8) = 8
18664 <... mmap resumed>)
                                = 0x7f52a38d9000
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18666 mmap(NULL, 134217728, PROT_NONE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0 < unfinished
...>
                mmap(0x7f52a3901000,
                                                                    PROT READ|PROT EXEC,
18664
                                                 1605632.
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x28000 < unfinished ...>
18662 <... poll resumed>)
                              = 0 (Timeout)
18666 <... mmap resumed>)
                                = 0x7fbfa66c6000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18666 munmap(0x7fbfa66c6000, 26451968 < unfinished ...>
18662 getpid( <unfinished ...>
18666 <... munmap resumed>)
18664 <... mmap resumed>)
                                = 0x7f52a3901000
18662 <... getpid resumed>)
                               = 18662
```

```
18666 munmap(0x7fbfac000000, 40656896 < unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
                       mmap(0x7f52a3a89000,
18664
                                                               323584,
                                                                                         PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1b0000 <unfinished ...>
18662 <... poll resumed>)
                                 = 0 (Timeout)
18666 <... munmap resumed>)
                                    =0
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18666 mprotect(0x7fbfa8000000, 135168, PROT_READ|PROT_WRITE < unfinished ...>
18662 getpid()
                             = 18662
18666 <... mprotect resumed>)
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL < unfinished ...>
18666 epoll_ctl(7, EPOLL_CTL_ADD, 9, {events=0, data={u32=2818575216, u64=140461134056304}}
<unfinished ...>
18662 <... pselect6 resumed>)
                                  = 0 (Timeout)
18662 getpid( <unfinished ...>
18666 <... epoll_ctl resumed>)
                                   = 0
18662 <... getpid resumed>)
                                  = 18662
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
         epoll ctl(7,
                        EPOLL_CTL_MOD,
                                                       {events=EPOLLIN,
18666
                                               9,
                                                                              data = \{u32 = 2818575216,
u64=140461134056304}} < unfinished ...>
18662 getpid()
                             = 18662
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
18666 <... epoll_ctl resumed>)
                                   = 0
18662 <... pselect6 resumed>)
                                  = 0 (Timeout)
18662 getpid( <unfinished ...>
18666 getpid( <unfinished ...>
18662 <... getpid resumed>)
                                  = 18662
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18666 <... getpid resumed>)
                                  = 18662
18662 getpid()
                             = 18662
18666 poll([{fd=6, events=POLLIN}], 1, 0 < unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 getpid()
                             = 18662
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18666 <... poll resumed>)
                           = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18666 epoll wait(7, <unfinished ...>
18664 <... mmap resumed>)
                                   = 0x7f52a3a89000
18662 getpid()
                             = 18662
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
                  mmap(0x7f52a3ad8000,
18664
                                                      24576,
                                                                         PROT_READ|PROT_WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x1fe000 <unfinished ...>
18662 getpid()
                             = 18662
18664 <... mmap resumed>)
                                   = 0x7f52a3ad8000
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664
                  mmap(0x7f52a3ade000,
                                                                         PROT_READ|PROT_WRITE,
                                                      52624,
MAP PRIVATE|MAP FIXED|MAP ANONYMOUS, -1, 0 < unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>)
                                   = 0x7f52a3ade000
```

```
= 18662
18662 getpid()
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 close(3 < unfinished ...>
18662 <... poll resumed>)
                               = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18662 getpid()
                           = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 <... close resumed>)
                                = 0
18662 <... poll resumed>)
                               = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libbsd.so.0", O_RDONLY|O_CLOEXEC < unfinished
...>
18662 <... pselect6 resumed>)
                                 = 0 (Timeout)
18662 getpid()
                           = 18662
18664 <... openat resumed>)
                                =3
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 read(3, <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 getpid()
                           = 18662
18664 fstat(3, <unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=80888, ...}) = 0
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 mmap(NULL, 86208, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 < unfinished ...>
18662 getpid()
                           = 18662
18664 <... mmap resumed>)
                                 = 0x7f52a38c3000
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664
                  mmap(0x7f52a38c7000,
                                                    49152,
                                                                       PROT READ|PROT EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000 < unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>)
                                 = 0x7f52a38c7000
18662 getpid()
                           = 18662
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
                      mmap(0x7f52a38d3000,
                                                             12288,
                                                                                    PROT_READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x10000 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>)
                                 = 0x7f52a38d3000
18662 getpid()
                           = 18662
18664
                  mmap(0x7f52a38d6000,
                                                                      PROT_READ|PROT_WRITE,
                                                    8192,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x12000 <unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... mmap resumed>)
                                 = 0x7f52a38d6000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
                  mmap(0x7f52a38d8000,
18664
                                                     192.
                                                                      PROT_READ|PROT_WRITE,
MAP PRIVATE|MAP FIXED|MAP ANONYMOUS, -1, 0 < unfinished ...>
18662 getpid()
                           = 18662
18664 <... mmap resumed>)
                                 = 0x7f52a38d8000
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 close(3 < unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... close resumed>)
                                = 0
18662 getpid()
                           = 18662
18664
        openat(AT FDCWD,
                               "/lib/x86 64-linux-gnu/libsodium.so.23",
                                                                        O RDONLY|O CLOEXEC
<unfinished ...>
```

```
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... openat resumed>)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 read(3, <unfinished ...>
18662 getpid()
                           = 18662
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 fstat(3, <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=355040, ...}) = 0
                           = 18662
18662 getpid()
18664 mmap(NULL, 8192, PROT READ|PROT WRITE, MAP PRIVATE|MAP ANONYMOUS, -1, 0
<unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
                                 = 0x7f52a38c1000
18664 <... mmap resumed>)
18662 <... poll resumed>)
                               = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 mmap(NULL, 353336, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 < unfinished ...>
18662 <... pselect6 resumed>)
                                = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... mmap resumed>)
                                 = 0x7f52a386a000
18662 <... getpid resumed>)
                                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664
                 mmap(0x7f52a3876000,
                                                   233472,
                                                                      PROT READ|PROT EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000 <unfinished ...>
                               = 0 (Timeout)
18662 <... poll resumed>)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
18664 <... mmap resumed>)
                                 = 0x7f52a3876000
18662 <... pselect6 resumed>)
                                 = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 mmap(0x7f52a38af000, 65536, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3, 0x45000 < unfinished ...>
18662 <... getpid resumed>)
                                = 18662
18664 <... mmap resumed>)
                                 = 0x7f52a38af000
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664
                 mmap(0x7f52a38bf000,
                                                                     PROT READ|PROT WRITE,
                                                    8192,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x55000 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>)
                                 = 0x7f52a38bf000
18662 getpid()
                           = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 close(3 < unfinished ...>
18662 <... poll resumed>)
                               = 0 (Timeout)
18664 <... close resumed>)
                               =0
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL < unfinished ...>
        openat(AT FDCWD,
                               "/lib/x86 64-linux-gnu/libpgm-5.3.so.0",
                                                                       O RDONLY|O CLOEXEC
18664
<unfinished ...>
18662 <... pselect6 resumed>)
                                = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... openat resumed>)
                                =3
18662 <... getpid resumed>)
                                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 read(3, <unfinished ...>
18662 <... poll resumed>)
                               = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
```

```
18662 <... pselect6 resumed>)
                               = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 fstat(3, <unfinished ...>
18662 <... getpid resumed>)
                               = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 < ... \text{ fstat resumed} < \text{st mode=S IFREG} = 0644, \text{ st size} = 285568, ... } = 0
18662 <... poll resumed>)
                              = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18664 mmap(NULL, 301040, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 getpid()
                          = 18662
18664 <... mmap resumed>)
                                = 0x7f52a3820000
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
                mmap(0x7f52a3824000,
                                                  159744,
                                                                    PROT_READ|PROT_EXEC,
18664
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>)
                                = 0x7f52a3824000
18662 getpid()
                          = 18662
                     mmap(0x7f52a384b000.
18664
                                                          102400.
                                                                                 PROT READ.
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x2b000 < unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... mmap resumed>)
                                = 0x7f52a384b000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664
                 mmap(0x7f52a3864000,
                                                  8192.
                                                                   PROT READ|PROT WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x44000 <unfinished ...>
18662 getpid()
                          = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 <... mmap resumed>)
                                = 0x7f52a3864000
18662 <... poll resumed>)
                              = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664
                mmap(0x7f52a3866000).
                                                 14320.
                                                                   PROT READ|PROT WRITE.
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0 <unfinished ...>
18662 <... pselect6 resumed>)
                               = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... mmap resumed>)
                                = 0x7f52a3866000
18662 <... getpid resumed>)
                               = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 close(3 < unfinished ...>
18662 <... poll resumed>)
                              = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
18664 <... close resumed>)
                               = 0 (Timeout)
18662 <... pselect6 resumed>)
18662 getpid( <unfinished ...>
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libnorm.so.1", O_RDONLY|O_CLOEXEC < unfinished
...>
18662 <... getpid resumed>)
                               = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 <... openat resumed>)
                               =3
18662 <... poll resumed>)
                              = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
18664 read(3, <unfinished ...>
18662 <... pselect6 resumed>)
                               = 0 (Timeout)
18662 getpid( <unfinished ...>
18662 <... getpid resumed>)
                               = 18662
```

```
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 fstat(3, <unfinished ...>
18662 <... poll resumed>)
                               = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 < ... \text{ fstat resumed} < \text{st mode=S IFREG} | 0644, \text{ st size} = 366760, ... } ) = 0
18662 <... pselect6 resumed>)
                                 = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 mmap(NULL, 1092032, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0 <unfinished ...>
18662 <... getpid resumed>)
                                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 <... mmap resumed>)
                                 = 0x7f52a3715000
18662 <... poll resumed>)
                               = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
18664
                 mmap(0x7f52a371e000,
                                                   274432,
                                                                       PROT_READ|PROT_EXEC,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x9000 < unfinished ...>
18662 <... pselect6 resumed>)
                                 = 0 (Timeout)
18664 <... mmap resumed>)
                                 = 0x7f52a371e000
18662 getpid()
                           = 18662
                      mmap(0x7f52a3761000.
18664
                                                             45056.
                                                                                    PROT READ.
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x4c000 < unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... mmap resumed>)
                                 = 0x7f52a3761000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664
                 mmap(0x7f52a376c000,
                                                    16384.
                                                                      PROT READ|PROT WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x56000 <unfinished ...>
18662 getpid()
                           = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 <... mmap resumed>)
                                 = 0x7f52a376c000
18662 <... poll resumed>)
                               = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664
                 mmap(0x7f52a3770000,
                                                  719296.
                                                                      PROT READ|PROT WRITE.
MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0 <unfinished ...>
18662 <... pselect6 resumed>)
                                 = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... mmap resumed>)
                                 = 0x7f52a3770000
18662 <... getpid resumed>)
                                = 18662
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 close(3 < unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
18664 <... close resumed>)
                                = 0
18662 <... pselect6 resumed>)
                                 = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 openat(AT FDCWD,
                             "/lib/x86 64-linux-gnu/libgssapi krb5.so.2", O RDONLY|O CLOEXEC
<unfinished ...>
18662 <... getpid resumed>)
                                = 18662
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... openat resumed>)
                                 =3
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
18664 read(3, <unfinished ...>
18662 <... pselect6 resumed>)
                                 = 0 (Timeout)
18662 getpid( <unfinished ...>
18662 <... getpid resumed>)
                                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 fstat(3, <unfinished ...>
```

```
18662 <... poll resumed>)
                               = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=338696, ...}) = 0
18662 <... pselect6 resumed>)
                                = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 mmap(NULL, 341080, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 < unfinished ...>
18662 <... getpid resumed>)
                               = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 <... mmap resumed>)
                                 = 0x7f52a36c1000
18662 <... poll resumed>)
                               = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
                 mmap(0x7f52a36cd000,
                                                                      PROT READ|PROT EXEC,
18664
                                                   237568.
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xc000 <unfinished ...>
18662 <... pselect6 resumed>)
                                = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... mmap resumed>)
                                 = 0x7f52a36cd000
18662 <... getpid resumed>)
                                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
                      mmap(0x7f52a3707000.
18664
                                                            40960.
                                                                                   PROT READ,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x46000 <unfinished ...>
18662 <... poll resumed>)
                               = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
18664 <... mmap resumed>)
                                = 0x7f52a3707000
18662 <... pselect6 resumed>)
                                = 0 (Timeout)
18662 getpid( <unfinished ...>
18664
                 mmap(0x7f52a3711000,
                                                                     PROT_READ|PROT_WRITE,
                                                   16384,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4f000 < unfinished ...>
18662 <... getpid resumed>)
                                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 <... mmap resumed>)
                                 = 0x7f52a3711000
18662 <... poll resumed>)
                               = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 close(3 < unfinished ...>
18662 getpid()
                           = 18662
18664 <... close resumed>)
                               =0
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libm.so.6", O_RDONLY|O_CLOEXEC <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... openat resumed>)
                                =3
18662 getpid()
                           = 18662
18664 read(3, <unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 fstat(3, <unfinished ...>
18662 getpid()
                           = 18662
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=952616, ...}) = 0
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 mmap(NULL, 950296, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>)
                                 = 0x7f52a35d8000
18662 getpid()
                           = 18662
                 mmap(0x7f52a35e8000,
18664
                                                   520192,
                                                                      PROT READ|PROT EXEC.
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x10000 <unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
```

```
18664 <... mmap resumed>)
                            = 0x7f52a35e8000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
                     mmap(0x7f52a3667000,
                                                           360448,
                                                                                  PROT_READ,
18664
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x8f000 <unfinished ...>
18662 getpid()
                           = 18662
18664 <... mmap resumed>)
                                 = 0x7f52a3667000
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664
                 mmap(0x7f52a36bf000,
                                                                    PROT READ|PROT WRITE,
                                                   8192.
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0xe7000 <unfinished ...>
18662 <... poll resumed>)
                           = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
                                = 0x7f52a36bf000
18664 <... mmap resumed>)
18662 <... pselect6 resumed>)
                                = 0 (Timeout)
18662 getpid()
                           = 18662
18664 close(3 < unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... close resumed>)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 openat(AT FDCWD, "/lib/x86 64-linux-gnu/libmd.so.0", O RDONLY/O CLOEXEC <unfinished
...>
18662 getpid()
                           = 18662
18664 <... openat resumed>)
                                =3
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 read(3, <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 getpid()
                           = 18662
18664 fstat(3, <unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... fstat resumed>{st mode=S IFREG|0644, st size=55536, ...}) = 0
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18664 mmap(NULL, 8192, PROT READ|PROT WRITE, MAP PRIVATE|MAP ANONYMOUS, -1, 0
<unfinished ...>
18662 getpid()
                           = 18662
18664 <... mmap resumed>)
                                 = 0x7f52a35d6000
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 mmap(NULL, 57448, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>)
                                 = 0x7f52a35c7000
18662 getpid()
                           = 18662
                 mmap(0x7f52a35c9000.
18664
                                                   36864.
                                                                     PROT READ|PROT EXEC,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x2000 <unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... mmap resumed>)
                                = 0x7f52a35c9000
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18664 mmap(0x7f52a35d2000, 8192, PROT READ, MAP PRIVATE|MAP FIXED|MAP DENYWRITE,
3, 0xb000 < unfinished ...>
18662 getpid()
                           = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 <... mmap resumed>)
                                 = 0x7f52a35d2000
18662 <... poll resumed>)
                              = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
                 mmap(0x7f52a35d4000,
                                                   8192,
                                                                    PROT READ|PROT WRITE,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0xc000 <unfinished ...>
18662 < \dots  pselect6 resumed>) = 0 (Timeout)
```

```
18662 getpid( <unfinished ...>
18664 <... mmap resumed>)
                                  = 0x7f52a35d4000
18662 <... getpid resumed>)
                                 = 18662
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 close(3 < unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... close resumed>)
18662 getpid()
                            = 18662
18664 openat(AT FDCWD, "/lib/x86 64-linux-gnu/libkrb5.so.3", O RDONLY|O CLOEXEC < unfinished
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... openat resumed>)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 read(3, <unfinished ...>
18662 getpid()
                            = 18662
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 fstat(3, <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18664 < ... \text{ fstat resumed} < \text{st mode=S IFREG} | 0644, \text{ st size} = 823488, ... } ) = 0
18662 getpid()
                            = 18662
18664 mmap(NULL, 822032, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... mmap resumed>)
                                  = 0x7f52a34fe000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
                 mmap(0x7f52a351e000,
                                                    397312,
                                                                        PROT_READ|PROT_EXEC,
18664
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x20000 <unfinished ...>
18662 getpid()
                            = 18662
18664 <... mmap resumed>)
                                  = 0x7f52a351e000
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664
                      mmap(0x7f52a357f000,
                                                              233472.
                                                                                      PROT READ,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x81000 < unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>)
                                  = 0x7f52a357f000
18662 getpid()
                            = 18662
                 mmap(0x7f52a35b8000,
18664
                                                                       PROT READ|PROT WRITE,
                                                    61440.
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xba000 <unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... mmap resumed>)
                                  = 0x7f52a35b8000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 close(3 < unfinished ...>
18662 <... getpid resumed>)
                                 = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 <... close resumed>)
                                =0
18662 <... poll resumed>)
                                = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
         openat(AT_FDCWD,
                                "/lib/x86_64-linux-gnu/libk5crypto.so.3", O_RDONLY|O_CLOEXEC
18664
<unfinished ...>
18662 <... pselect6 resumed>)
                                 = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... openat resumed>)
                                 =3
18662 <... getpid resumed>)
                                 = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 read(3, <unfinished ...>
```

```
18662 <... poll resumed>)
                              = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
= 0 (Timeout)
18662 <... pselect6 resumed>)
18662 getpid( <unfinished ...>
18664 fstat(3, <unfinished ...>
18662 <... getpid resumed>)
                               = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 < .... fstat resumed>{st mode=S IFREG|0644, st size=178648, ...}) = 0
18662 <... poll resumed>)
                              = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
18664 mmap(NULL, 176392, PROT READ, MAP PRIVATE|MAP DENYWRITE, 3, 0 <unfinished ...>
18662 <... pselect6 resumed>)
                                = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... mmap resumed>)
                                = 0x7f52a34d2000
18662 <... getpid resumed>)
                               = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664
                 mmap(0x7f52a34d6000,
                                                  110592,
                                                                     PROT_READ|PROT_EXEC,
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x4000 <unfinished ...>
18662 <... poll resumed>)
                              = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL < unfinished ...>
18664 <... mmap resumed>)
                                = 0x7f52a34d6000
18662 <... pselect6 resumed>)
                                = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 mmap(0x7f52a34f1000, 45056, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3,0x1f000 < unfinished ... >
18662 <... getpid resumed>)
                               = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 <... mmap resumed>)
                                = 0x7f52a34f1000
18662 <... poll resumed>)
                              = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL < unfinished ...>
                 mmap(0x7f52a34fc000,
                                                   8192.
                                                                    PROT READ|PROT WRITE,
18664
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x2a000 < unfinished ...>
18662 <... pselect6 resumed>)
                              = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... mmap resumed>)
                                = 0x7f52a34fc000
18662 <... getpid resumed>)
                               = 18662
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 close(3 < unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... close resumed>)
18662 getpid()
                           = 18662
        openat(AT FDCWD,
                              "/lib/x86 64-linux-gnu/libcom err.so.2",
                                                                      O RDONLY|O CLOEXEC
18664
<unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... openat resumed>)
                               =3
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 read(3, <unfinished ...>
18662 getpid()
                           = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 fstat(3, <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18664 < ... \text{ fstat resumed} > \{ \text{st mode=S IFREG} | 0644, \text{ st size} = 18504, ... \} ) = 0
18662 getpid( <unfinished ...>
```

```
18664 mmap(NULL, 20552, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 < unfinished ...>
18662 <... getpid resumed>)
                                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 <unfinished ...>
18664 <... mmap resumed>)
                                 = 0x7f52a34cc000
18662 <... poll resumed>)
                               = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
                           = 18662
18662 getpid()
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL < unfinished ...>
                  mmap(0x7f52a34ce000,
                                                                      PROT READ|PROT EXEC,
18664
                                                    4096,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x2000 < unfinished ...>
18662 <... pselect6 resumed>)
                                = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... mmap resumed>)
                                 = 0x7f52a34ce000
18662 <... getpid resumed>)
                                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 mmap(0x7f52a34cf000, 4096, PROT READ, MAP PRIVATE|MAP FIXED|MAP DENYWRITE,
3, 0x3000 < unfinished ...>
18662 <... poll resumed>)
                               = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL <unfinished ...>
18664 <... mmap resumed>)
                                = 0x7f52a34cf000
18662 <... pselect6 resumed>)
                                = 0 (Timeout)
18662 getpid( <unfinished ...>
18664
                 mmap(0x7f52a34d0000,
                                                    8192.
                                                                     PROT READ|PROT WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000 < unfinished ...>
18662 <... getpid resumed>)
                                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 <... mmap resumed>)
                                 = 0x7f52a34d0000
18662 <... poll resumed>)
                               = 0 (Timeout)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
18664 close(3 < unfinished ...>
18662 <... pselect6 resumed>)
                                = 0 (Timeout)
18662 getpid( <unfinished ...>
18664 <... close resumed>)
                               =0
18662 <... getpid resumed>)
                                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libkrb5support.so.0", O_RDONLY|O_CLOEXEC
<unfinished ...>
                               = 0 (Timeout)
18662 <... poll resumed>)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL < unfinished ...>
18664 <... openat resumed>)
                                = 0 (Timeout)
18662 <... pselect6 resumed>)
18662 getpid( <unfinished ...>
18664 read(3, <unfinished ...>
18662 <... getpid resumed>)
                                = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18662 <... poll resumed>)
                               = 0 (Timeout)
18664 fstat(3, <unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... fstat resumed>{st_mode=S_IFREG|0644, st_size=47904, ...}) = 0
18662 getpid()
                           = 18662
18664 mmap(NULL, 50128, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 < unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... mmap resumed>)
                                 = 0x7f52a34bf000
```

```
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
                                                                     PROT_READ|PROT_EXEC,
18664
                 mmap(0x7f52a34c2000,
                                                   24576,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x3000 <unfinished ...>
18662 getpid()
                           = 18662
18664 <... mmap resumed>)
                                 = 0x7f52a34c2000
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 mmap(0x7f52a34c8000, 8192, PROT READ, MAP PRIVATE|MAP FIXED|MAP DENYWRITE,
3, 0x9000 < unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>)
                                = 0x7f52a34c8000
18662 getpid( <unfinished ...>
18664
                 mmap(0x7f52a34ca000,
                                                   8192.
                                                                    PROT READ|PROT WRITE,
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0xa000 <unfinished ...>
18662 <... getpid resumed>)
                              = 18662
18662 poll([{fd=8, events=POLLIN}], 1, 0 < unfinished ...>
18664 <... mmap resumed>)
                                = 0x7f52a34ca000
                               = 0 (Timeout)
18662 <... poll resumed>)
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 close(3 < unfinished ...>
                           = 18662
18662 getpid()
18664 <... close resumed>)
                               =0
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
                                                                      O_RDONLY|O_CLOEXEC
        openat(AT FDCWD, "/lib/x86 64-linux-gnu/libkeyutils.so.1",
18664
<unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... openat resumed>)
                                =3
18662 getpid()
                           = 18662
18664 read(3, <unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18662 pselect6(1, [0], NULL, NULL, {tv sec=0, tv nsec=0}, NULL) = 0 (Timeout)
18664 fstat(3, <unfinished ...>
18662 getpid()
                           = 18662
18664 <... fstat resumed>{st mode=S IFREG|0644, st size=22600, ...}) = 0
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0
<unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>)
                                 = 0x7f52a34bd000
18662 getpid()
                           = 18662
18664 mmap(NULL, 24592, PROT_READ, MAP_PRIVATE|MAP_DENYWRITE, 3, 0 <unfinished ...>
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 <... mmap resumed>)
                                = 0x7f52a34b6000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
                  mmap(0x7f52a34b8000,
                                                                     PROT READ|PROT EXEC,
18664
                                                    8192.
MAP PRIVATE|MAP FIXED|MAP DENYWRITE, 3, 0x2000 <unfinished ...>
18662 getpid()
                           = 18662
18664 <... mmap resumed>)
                                 = 0x7f52a34b8000
18662 \text{ poll}([\{fd=8, events=POLLIN\}], 1, 0) = 0 \text{ (Timeout)}
18664 mmap(0x7f52a34ba000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3, 0x4000 < unfinished ...>
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 <... mmap resumed>)
                                 = 0x7f52a34ba000
18662 getpid()
                           = 18662
18664
                 mmap(0x7f52a34bb000,
                                                   8192,
                                                                    PROT_READ|PROT_WRITE,
```

```
MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE, 3, 0x4000 <unfinished ...>
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 <... mmap resumed>) = 0x7f52a34bb000
18662 pselect6(1, [0], NULL, NULL, {tv_sec=0, tv_nsec=0}, NULL) = 0 (Timeout)
18664 close(3 <unfinished ...>
18662 getpid() = 18662
18664 <... close resumed>) = 0
18662 poll([{fd=8, events=POLLIN}], 1, 0) = 0 (Timeout)
18664 openat(AT_FDCWD, "/lib/x86_64-linux-gnu/libresolv.so.2", O_RDONLY|O_CLOEXEC
```

Вывод

При выполнении работы познакомился с библиотекой ZeroMQ и очередями сообщений. Было тяжело понять, как подступиться к работе и какую информацию изучать.