

TP SSOO KernelCrafters

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Chapter 1

Data Structure Index

1.1 Data Structures

Here are the data structures with brief descriptions:

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Chapter 2

File Index

2.1 File List

Here is a list of all documented files with brief descriptions:

entradasalida/include/ main.h	??
kernel/include/ main.h	??
memoria/include/ main.h	
Main.h from memoria	7
utils/include/ communication.h	??
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Chapter 3

Data Structure Documentation

3.1 t_buffer Struct Reference

Data Fields

- int **size**
- void * **stream**

The documentation for this struct was generated from the following file:

- [utils/include/protocol.h](#)

3.2 t_packet Struct Reference

Collaboration diagram for t_packet:

Data Fields

- op_code **code**
- [t_buffer](#) * **buffer**

The documentation for this struct was generated from the following file:

- [utils/include/protocol.h](#)

3.3 t_process_conection_args Struct Reference

Data Fields

- t_log * **logger**
- int **fd**
- char * **server_name**

The documentation for this struct was generated from the following file:

- [utils/include/comunication.h](#)

Chapter 4

File Documentation

4.1 memoria/include/main.h File Reference

main.h from memoria

```
#include "../include/utils.h"
```

Include dependency graph for main.h:

4.2 utils/include/protocol.h File Reference

Network Protocol Connection Functions.

```
#include "opcode.h"
#include <assert.h>
#include <commons/collections/list.h>
#include <commons/log.h>
#include <netdb.h>
#include <signal.h>
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <sys/socket.h>
#include <unistd.h>
```

Include dependency graph for protocol.h: This graph shows which files directly or indirectly include this file:

Data Structures

- struct [t_buffer](#)
- struct [t_packet](#)

Functions

- `t_buffer * create_buffer ()`
Create a buffer object.
- `t_packet * create_packet (op_code code, t_buffer *buffer)`
Create a packet object.
- `void add_to_packet (t_packet *packet, void *stream, int size)`
Add the buffer to the packet.
- `void * serialize_packet (t_packet *packet, int buffer_size)`
Serialize the packet.
- `void destroy_packet (t_packet *packet)`
Destroy the packet object.
- `void send_packet (t_packet *packet, int client_socket)`
Send the packet to the server.
- `t_list * fetch_packet (int client_socket)`
Fetch the packet from the client.
- `void * fetch_buffer (int *size, int client_socket)`
- `int fetch_codop (int client_socket)`
Fetch code operation from client.

4.2.1 Detailed Description

Network Protocol Connection Functions.

Author

KernelCrafters (you@domain.com)

Version

1.0

Date

2024-04-16

Copyright

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4.2.2 Function Documentation

4.2.2.1 add_to_packet()

```
void add_to_packet (
    t_packet * packet,
    void * stream,
    int size )
```

Add the buffer to the packet.

Parameters

<i>packet</i>	
<i>stream</i>	
<i>size</i>	

4.2.2.2 create_buffer()

```
t_buffer* create_buffer ( )
```

Create a buffer object.

Returns

t_buffer*

Implementar stream

4.2.2.3 create_packet()

```
t_packet* create_packet (
    op_code code,
    t_buffer * buffer )
```

Create a packet object.

Parameters

<i>code</i>	
<i>buffer</i>	

Returns

t_packet*

4.2.2.4 destroy_packet()

```
void destroy_packet (
    t_packet * packet )
```

Destroy the packet object.

Parameters

<i>packet</i>	
---------------	--

4.2.2.5 fetch_codop()

```
int fetch_codop (
    int client_socket )
```

Fetch code operation from client.

Parameters

<i>client_socket</i>	
----------------------	--

Returns

int

4.2.2.6 fetch_packet()

```
t_list* fetch_packet (
    int client_socket )
```

Fetch the packet from the client.

Parameters

<i>client_socket</i>	
----------------------	--

Returns

t_list*

4.2.2.7 send_packet()

```
void send_packet (
    t_packet * packet,
    int client_socket )
```

Send the packet to the server.

Parameters

<i>packet</i>	
<i>client_socket</i>	

4.2.2.8 serialize_packet()

```
void* serialize_packet (
    t_packet * packet,
    int buffer_size )
```

Serialize the packet.

Parameters

<i>packet</i>	
<i>buffer_size</i>	

Returns

void*

4.3 utils/include/sockets.h File Reference

Socket Connection Functions.

```
#include <stdio.h>
#include <stdlib.h>
#include <sys/socket.h>
#include <unistd.h>
#include <netdb.h>
#include <commons/log.h>
#include <commons/collections/list.h>
#include <string.h>
#include <assert.h>
#include <pthread.h>
```

Include dependency graph for sockets.h: This graph shows which files directly or indirectly include this file:

Functions

- int [create_connection](#) (t_log *logger, char *ip, char *port)
Create conection with server.
- void [close_connection](#) (int *client_socket)
Close conection with server.
- int **initialize_server** (t_log *logger, const char *name, char *ip, char *port)
- int **wait_client** (t_log *logger, const char *name, int server_socket)
- int **wait_client_threaded** (t_log *logger, const char *name, int server_socket, void *(*serve_client))

4.3.1 Detailed Description

Socket Connection Functions.

Author

KernelCrafters (you@domain.com)

Version

1.0

Date

2024-04-16

Copyright

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4.3.2 Function Documentation

4.3.2.1 close_conection()

```
void close_conection (
    int * client_socket )
```

Close conection with server.

Parameters

<i>client_socket</i>	client_fd to close connection
----------------------	-------------------------------

4.3.2.2 create_conection()

```
int create_conection (
    t_log * logger,
    char * ip,
    char * port )
```

Create conection with server.

Parameters

<i>logger</i>	Logger from commons libraries
<i>ip</i>	ip to connect
<i>port</i>	Port to connect

Returns

int Return client_socket

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