Main Page Classes ▼

Files ▼

Q Search

Copy Service Documentation



Classes ▼

Files ▼

Q Search

Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

■ IPCmessageToClient Struct contains the id of the current job, the status and a list of other jobs

© IPCmessageToDaemon Struct contains the source, destination, the task and the type of job

Main Page Classes ▼

Files ▼



Public Attributes | List of all members

IPCmessageToClient Struct Reference

Struct contains the id of the current job, the status and a list of other jobs. More...

#include <IPC.h>

Public Attributes

int jobList [1024]

int jobld

float status

Detailed Description

Struct contains the id of the current job, the status and a list of other jobs.

Parameters

jobList Integer arrray with len of 1024.

jobld Integer, tells us the id / thread id.

status Float, the status of the current job.

Public Attributes I List of all members

IPCmessageToDaemon Struct Reference

Struct contains the source, destination, the task and the type of job. More...

#include <IPC.h>

Main Page

Public Attributes

char source [1024]

char destination [1024]

char task [1024]

int jobID

Detailed Description

Struct contains the source, destination, the task and the type of job.

Parameters

task

source Char array with len of 1024, contains the source from where it should copy.

destination Char array with len of 1024, contains the destination to where it should copy.

Char array with len of 1024, tells the deamon what job it should accomplish: -"copy" = tells the deamon to start a copy tipe job -"status" = gets the status of a current job -"stop" = stops a job -"suspent" = pauses / suspends a job -"resume" = resumes a job

Warning

A wrong typed task will result in the deamon doing nothing.

Parameters jobID Integer, tells us the thread id. Member Data Documentation destination char IPCmessageToDaemon::destination[1024] • jobID int IPCmessageToDaemon::jobID source char IPCmessageToDaemon::source[1024] ◆ task char IPCmessageToDaemon::task[1024] The documentation for this struct was generated from the following file: IPC.h

Main Page

Classes ▼

Files ▼

Q Search

Here is a list of all class members with links to the classes they belong to:

- destination : IPCmessageToDaemon
- jobld : IPCmessageToClient
- jobID : IPCmessageToDaemon
- jobList : IPCmessageToClient
- source : IPCmessageToDaemon
- status : IPCmessageToClient
- task : IPCmessageToDaemon



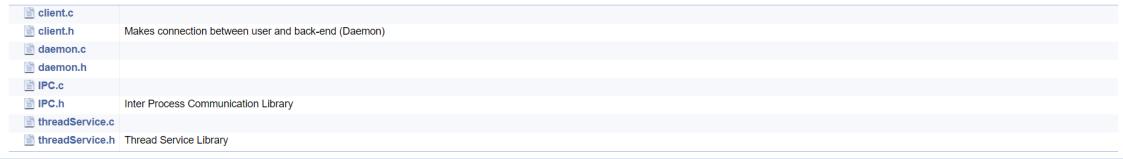
Classes ▼

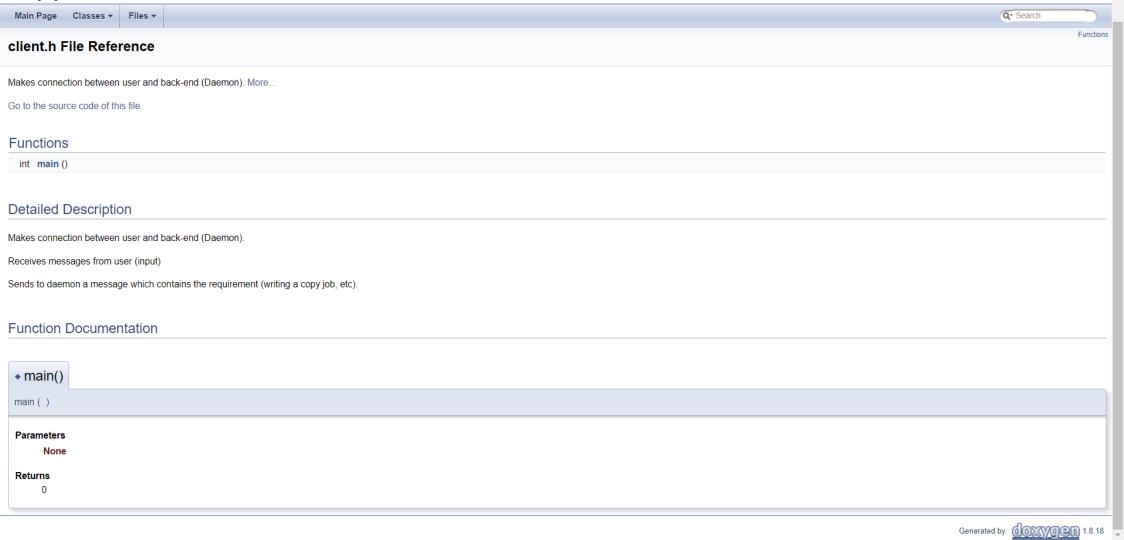
Files ▼



File List

Here is a list of all files with brief descriptions:





daemon.h File Reference	Functions
Daemon runs as a background process. More	
Go to the source code of this file.	
Functions	
int main ()	
Detailed Description	
Daemon runs as a background process.	
Receives messages from client	
Starts SEPARATED threads for each copy job.	
Function Documentation	
• main()	
int main ()	
Parameters None	
Returns 0	

Main Page Classes ▼ Files ▼

void IPC_ClientSentMessage (IPCmessageToDaemon msg)

Receive the IPCmessageToDaemon struct. More...

Q Search Classes | Typedefs | Functions

IPC.h File Reference

Inter Process Communication Library. More...

#include <stdio.h> #include <string.h>

typedef struct IPCmessageToDaemon	IPCmessageToDaemo
typedef struct IPCmessageToClient	IPCmessageToClient

Functions	
void	IPC_ClientSentMessage (IPCmes
IPCmessageToDaemon	IPC_DaemonReceiveMessage ()

#includ	de <fcntl.h></fcntl.h>		
#includ	de <sys stat.h=""></sys>		
#includ	de <sys types.h=""></sys>		
#includ	de <unistd.h></unistd.h>		
Go to th	e source code of this file.		
Class	Classes		
struct	IPCmessageToDaemon		
	Struct contains the source, destination, the task and the type of job. More		
struct	IPCmessageToClient		
	Struct contains the id of the current job, the status and a list of other jobs. More $ \\$		
Type	defs		
typedef struct IPCmessageToDaemon IPCmessageToDaemon			

Functions void IPC_ClientSentMessage (IPCmessageToDaemon msg) IPCmessageToDaemon IPC_DaemonReceiveMessage () Receive the IPCmessageToDaemon struct. More... void IPC_DaemonSentMessage (IPCmessageToClient msg) Send the IPCmessageToClient struct to the Client. More... IPCmessageToClient IPC_ClientReceiveMessage () Receive the IPCmessageToClient struct. More... **Detailed Description** Inter Process Communication Library. Inter-Process communication library that allows the deamon and the client to send and receive messages in a defined way. Typedef Documentation IPCmessageToClient typedef struct IPCmessageToClient IPCmessageToClient

typedef struct IPCmessageToDaemon IPCmessageToDaemon

IPCmessageToDaemon

Function Documentation IPC ClientReceiveMessage() IPCmessageToClient IPC_ClientReceiveMessage () Receive the IPCmessageToClient struct. **Parameters** None Returns The message from Client Warning Use only in Clients IPC_ClientSentMessage() void IPC_ClientSentMessage (IPCmessageToDaemon msg) IPC_DaemonReceiveMessage() IPC DaemonReceiveMessage () Receive the IPCmessageToDaemon struct. **Parameters** None

• IPC DaemonReceiveMessage() IPC DaemonReceiveMessage () Receive the IPCmessageToDaemon struct. **Parameters** None Returns The message from Deamon Warning Use only in Daemon IPC DaemonSentMessage() void IPC DaemonSentMessage (IPCmessageToClient msg) Send the IPCmessageToClient struct to the Client. **Parameters** msg The message to be sent to the Client Returns void Warning Use only in Daemon

Classes ▼

Files ▼

Q Search Functions I Variables

threadService.h File Reference

Thread Service Library, More... #include <stdio.h>

#include <pthread.h> #include <unistd.h> #include <errno.h>

#include <signal.h> #include "IPC.h"

Main Page

Go to the source code of this file.

#include <stdlib.h>

#include <sys/stat.h> #include <string.h>

Functions

void stopThread (int index)

Stops a thread found at position index in threads array. More...

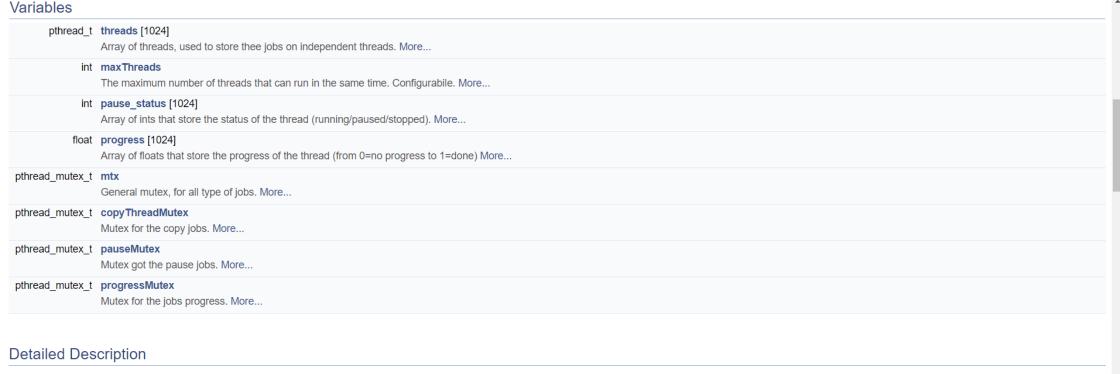
int copyThread (IPCmessageToDaemon *client message)

Starts a new copy job on a new thread;. More... void pauseThread (int jobID)

Pauses a thread with the idex / jobID. More... float statusThread (int jobID)

Gets the progress of a job. More...

void resumeThread (int jobID) Resumes a job that has been paused. More...



Thread Service Library.

Thread Service is a Library that allows the start, pause, resume and cancel of a copy job.

Function Documentation copyThread() int copyThread (IPCmessageToDaemon * client_message) Starts a new copy job on a new thread;. **Parameters** client_message Informations got form the client like from where to where to copy. Returns Integer, is the index of the new thread. Needs to be stored in order to know what thread it is. pauseThread() void pauseThread (int jobID) Pauses a thread with the idex / jobID. **Parameters** jobID Integer, the job that needs to be paused Returns void

```
resumeThread()
void resumeThread (int jobID)
Resumes a job that has been paused.
Parameters
      jobID Integer, the job that needs to be resumed
Returns
     void
statusThread()
float statusThread ( int jobID )
Gets the progress of a job.
Parameters
      jobID Integer, the job that i want to know it's progress
Returns
     Float, the progress of the job
stopThread()
void stopThread ( int index )
Stops a thread found at position index in threads array.
```





◆ progressMutex
phtread_mutex_t progressMutex
Mutex for the jobs progress.
◆ threads
pthread_t threads[1024]
Array of threads, used to store thee jobs on independent threads.

Classes ▼

Files ▼

Q Search

Here is a list of all file members with links to the files they belong to:

- C -

Main Page

- config(): threadService.c
 - · copy(): threadService.c
 - copyThread(): threadService.h, threadService.c
 - · copyThreadMutex: threadService.h
- i -
- IPC ClientReceiveMessage(): IPC.h
- IPC ClientReciveMessage(): IPC.c • IPC_ClientSentMessage(): IPC.h , IPC.c
- IPC_DaemonReceiveMessage(): IPC.h
- IPC DaemonReciveMessage(): IPC.c
- IPC DaemonSentMessage(): IPC.c , IPC.h
- IPCmessageToClient : IPC.h
- IPCmessageToDaemon : IPC.h
- m -

- p -

- main(): client.c , client.h , daemon.h , daemon.c
- maxThreads: threadService.h
- mtx : threadService.h
- - · pause status: threadService.h pauseMutex : threadService.h
 - pauseThread(): threadService.h, threadService.c progress : threadService.h

```
• IPC ClientReciveMessage(): IPC.c
   • IPC ClientSentMessage(): IPC.h , IPC.c
   • IPC DaemonReceiveMessage(): IPC.h
   • IPC DaemonReciveMessage(): IPC.c
   • IPC DaemonSentMessage(): IPC.c , IPC.h
   • IPCmessageToClient : IPC.h
   • IPCmessageToDaemon : IPC.h
- m -
   • main(): client.c , client.h , daemon.h , daemon.c

    maxThreads: threadService.h

    mtx: threadService.h

- p -
   • pause status : threadService.h
   · pauseMutex : threadService.h
   • pauseThread(): threadService.h, threadService.c
   · progress : threadService.h
   · progressMutex : threadService.h
-r-

    resumeThread(): threadService.c , threadService.h

- s -

    statusThread(): threadService.c , threadService.h

   • stopThread(): threadService.c, threadService.h
- t -
   · threads: threadService.h
                                                                                                                                                                                     - dominan
```

IPC ClientReceiveMessage(): IPC.h

