

# LittleBenchmark\_HDD

0.10.6

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# Chapter 1

## Class Index

### 1.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

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## Chapter 2

# Class Index

### 2.1 Class List

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

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<a href="#">profileNode</a> . . . . .	9
<a href="#">structRow</a> . . . . .	10
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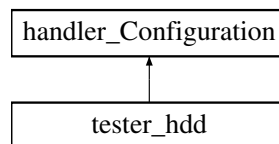


## Chapter 3

# Class Documentation

### 3.1 handler\_Configuration Class Reference

Inheritance diagram for handler\_Configuration:



#### Public Member Functions

- void `setUserDir ()`
- void `addNodeToStored (string, string)`
- void `clearNodes ()`
- void `parseConfigs ()`
- void `saveConfigs ()`

#### Protected Attributes

- boost::filesystem::path `pathProfile`  
*Keeps path to config file.*
- boost::filesystem::path `pathConfig`  
*Keeps path to config file.*
- bool `bLetUpdate`

#### 3.1.1 Member Function Documentation

##### 3.1.1.1 void handler\_Configuration::setUserDir ()

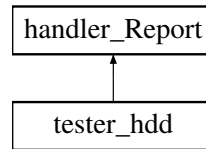
Creates program profile directory for current user

The documentation for this class was generated from the following files:

- handler\_Configuration.hpp
- handler\_Configuration.cpp

## 3.2 handler\_Report Class Reference

Inheritance diagram for handler\_Report:



### Public Member Functions

- [handler\\_Report](#) ()  
*Constructor set all args with default values.*
- void [addStatData](#) (string &, string &, const unsigned &, const unsigned &)  
*Will add data to specified buffers.*
- uint8\_t **findAndAdd** (string &, string &, unsigned &, unsigned &)
- void **FormatDataInVector** ()
- void **SaveToDisk** (boost::filesystem::path)
- string [GeneratDataFromVector](#) ()  
*Return refernce to string value generated from vector.*
- string **GenerateXMLFromVector** ()

### Protected Member Functions

- void [setArgs](#) ()  
*Set Args determinates functionality.*

### Protected Attributes

- vector< string > \* [p\\_vecstr\\_Log](#)  
*keep log output in vector*
- vector< [structRow](#) > \* [p\\_vecstr\\_formattedTXT](#)  
*keep data in vector*
- boost::filesystem::path [pathReport](#)  
*Keeps path to report file.*
- string [strReportFile](#)  
*File to report will be written.*
- bool [bLog](#)  
*To log.*

- bool [bFormattedTxt](#)  
*Generate formatted txt.*
- bool [bGenXML](#)  
*Generate xml.*
- unsigned [uiMultiplySpacer](#)  
*Multiply spacer.*
- unsigned [uiMaxCols](#)  
*Max columns.*
- string [strSpacerChar](#)  
*spacer character*

The documentation for this class was generated from the following files:

- handler\_Report.hpp
- handler\_Report.cpp

## 3.3 profileNode Struct Reference

### Public Member Functions

- **profileNode** (string &, string &)
- string **getData** ()

### Public Attributes

- string **strVar**
- string **strVal**

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

- handler\_Configuration.hpp
- handler\_Configuration.cpp

## 3.4 structRow Struct Reference

### Public Member Functions

- [structRow](#) (unsigned &)

### Public Attributes

- `vector< string > data`  
*Row.*

### 3.4.1 Constructor & Destructor Documentation

#### 3.4.1.1 structRow::structRow (unsigned & *col*)

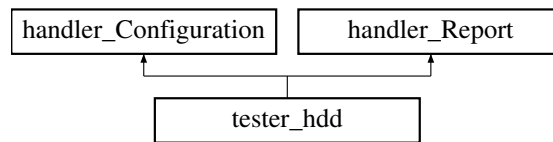
Creates defined number of columns

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

- handler\_Report.hpp
- handler\_Report.cpp

## 3.5 tester\_hdd Class Reference

Inheritance diagram for tester\_hdd:



### Public Member Functions

- `tester_hdd` (int, char \*\*)
- void `Run` ()

### Public Attributes

- bool `bRun`

### 3.5.1 Constructor & Destructor Documentation

#### 3.5.1.1 `tester_hdd::tester_hdd` (int *ac*, char \*\* *av*)

Important notes for Linux: \* In file /etc/nsswitch.conf change passwd compat to passwd file in order to prevent memory leak

Number of columns

Set output args

### 3.5.2 Member Function Documentation

#### 3.5.2.1 void `tester_hdd::Run` ()

Create threads and insert it to list

Running threads from list

If multithreading is disable program will wait for thread to do its job before running next one

With multithreading wating for all started threads to end its jobs

The documentation for this class was generated from the following files:

- `tester_hdd.hpp`
- `tester_hdd.cpp`

### 3.6 buskol::ThreadTemplates::thread\_1< ClassT > Class Template Reference

Thread\_1 is very simple thread template which constaints few controle methods and entry for statistics.

```
#include <myThreadTemplates.hpp>
```

#### Public Member Functions

- **thread\_1** (ClassT \*parent, list< string \* > \*list=NULL, bool show=false)
- void [start](#) ()
- void [start\\_self\\_test](#) ()
- void [join](#) ()
- void [join](#) (unsigned val)
- string [GetThreadID](#) ()
- void [UpdateStats](#) (string \*str)
- virtual [~thread\\_1](#) ()

#### Static Public Member Functions

- static void [self\\_test](#) ()
- static void [Execute\\_](#) (ClassT \*p)

#### 3.6.1 Detailed Description

```
template<class ClassT> class buskol::ThreadTemplates::thread_1< ClassT >
```

Thread\_1 is very simple thread template which constaints few controle methods and entry for statistics.

#### 3.6.2 Constructor & Destructor Documentation

**3.6.2.1** `template<class ClassT> virtual buskol::ThreadTemplates::thread_1< ClassT >::~~thread_1 () [inline, virtual]`

Virtual destructor which can show time of execution

#### 3.6.3 Member Function Documentation

**3.6.3.1** `template<class ClassT> static void buskol::ThreadTemplates::thread_1< ClassT >::Execute_ (ClassT *p) [inline, static]`

Static linker for dynamic method

**3.6.3.2** `template<class ClassT> void buskol::ThreadTemplates::thread_1< ClassT >::join (unsigned val) [inline]`

Join thread after specified time in seconds



**3.6.3.3** `template<class ClassT> void buskol::ThreadTemplates::thread_1< ClassT >::join ()`  
`[inline]`

Join thread

**3.6.3.4** `template<class ClassT> static void buskol::ThreadTemplates::thread_1< ClassT`  
`>::self_test () [inline, static]`

This method is only for test purpose!

**3.6.3.5** `template<class ClassT> void buskol::ThreadTemplates::thread_1< ClassT >::start ()`  
`[inline]`

Creates Thread and links it dynamic using static method

**3.6.3.6** `template<class ClassT> void buskol::ThreadTemplates::thread_1< ClassT`  
`>::start_self_test () [inline]`

This method is only for test purpose!

**3.6.3.7** `template<class ClassT> void buskol::ThreadTemplates::thread_1< ClassT`  
`>::UpdateStats (string * str) [inline]`

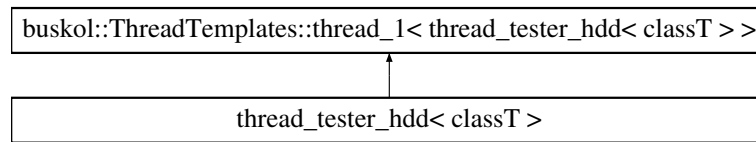
Push statistic information

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

- myThreadTemplates.hpp

### 3.7 thread\_tester\_hdd< classT > Class Template Reference

Inheritance diagram for thread\_tester\_hdd< classT >:



#### Public Member Functions

- **thread\_tester\_hdd** (vector< uint64\_t > &, boost::filesystem::path &, unsigned &, unsigned &, unsigned &, unsigned &, uint16\_t &, mode\_t &, bool, bool, bool, classT \*)
- **thread\_tester\_hdd** (classT \*)
- void **setNewData** (vector< unsigned > &, boost::filesystem::path &)
- void [Execute](#) ()

```
template<class classT> class thread_tester_hdd< classT >
```

#### 3.7.1 Member Function Documentation

##### 3.7.1.1 template<class classT > void thread\_tester\_hdd< classT >::Execute () [inline]

Write test

Both read test

Cleaning after rw tests

hybrird drive test which is normal test but with reversed order

Write test

Both read test

Cleaning after rw tests

Write test

Cleaning after rw tests

The documentation for this class was generated from the following files:

- thread\_tester\_hdd.hpp
- thread\_tester\_hdd.cpp

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