# DB-Test

Generated by Doxygen 1.8.6

Mon Nov 10 2014 01:31:51

# **Contents**

1	Nam	nespace	Index																				1
	1.1	Names	space List	t .										 									1
2	Hier	archica	l Index																				3
	2.1	Class	Hierarchy											 									3
3	Clas	ss Index																					5
	3.1	Class	List											 									5
4	File	Index																					7
	4.1	File Lis	st											 									7
5	Nam	nespace	Docume	enta	atio	n																	9
	5.1	DBUtil	Namespa	ace	Ref	fere	nce							 									9
	5.2	HDDTe	est Names	spa	ice F	Refe	eren	ice						 									9
		5.2.1	Detailed	l De	escr	riptic	on							 									9
6	Clas	ss Docu	mentatio	n																			11
	6.1	HDDTe	est::ATest	Cla	ass	Ref	ere	nce						 									11
		6.1.1	Detailed	l De	escr	riptic	on							 									12
		6.1.2	Construc	cto	r & 1	Des	truc	tor	Do	cun	nen	ıtati	on	 									12
			6.1.2.1	1	\Tes	st .								 									12
			6.1.2.2	~	~ <b>AT</b>	Test								 									12
		6.1.3	Member	r Fu	ıncti	ion	Doc	um	ent	atio	n			 									12
			6.1.3.1	e	ec	cute <sup>-</sup>	Test	tAlg	jorit	hm				 									12
			6.1.3.2	s	sleep	<b>p</b> .								 									13
			6.1.3.3	S	start	t .								 									13
			6.1.3.4	S	start	tBac	kgr	our	nd .					 									13
		6.1.4	Member	r Da	ata [	Doc	ume	enta	atio	n .				 									14
			6.1.4.1	c	lisk									 									14
			6.1.4.2	į	sMa	ain								 									14
			6.1.4.3	le	og									 									14
			6111		aam																		11

iv CONTENTS

		6.1.4.5	relationship	 14
		6.1.4.6	runs	 14
6.2	HDDTe	est::Configu	urator Class Reference	 14
	6.2.1	Detailed I	Description	 15
	6.2.2	Construct	tor & Destructor Documentation	 15
		6.2.2.1	Configurator	 15
		6.2.2.2	~Configurator	 15
	6.2.3	Member I	Function Documentation	 15
		6.2.3.1	getTestScenarios	 15
6.3	HDDTe	est::Disk Cl	lass Reference	 15
	6.3.1	Detailed I	Description	 16
	6.3.2	Member I	Function Documentation	 16
		6.3.2.1	del	 16
		6.3.2.2	get	 16
		6.3.2.3	isValid	 17
		6.3.2.4	readExtent	 17
		6.3.2.5	readPage	 17
		6.3.2.6	setExtentSize	 18
		6.3.2.7	setPageSize	 18
		6.3.2.8	writeExtent	 18
		6.3.2.9	writePage	 18
	6.3.3	Member I	Data Documentation	 18
		6.3.3.1	path	 18
6.4	HDDTe	est::Extent	Struct Reference	 18
	6.4.1	Detailed I	Description	 18
	6.4.2	Member I	Data Documentation	 19
		6.4.2.1	number	 19
		6.4.2.2	startKb	 19
6.5	HDDTe	est::FullTab	oleScan Class Reference	 19
	6.5.1	Detailed I	Description	 20
	6.5.2	Construct	tor & Destructor Documentation	 20
		6.5.2.1	FullTableScan	 20
		6.5.2.2	~FullTableScan	 20
	6.5.3	Member I	Function Documentation	 20
		6.5.3.1	executeTestAlgorithm	 20
6.6	HDDTe	est::IndexS	Scan Class Reference	 21
	6.6.1	Detailed I	Description	 21
	6.6.2	Construct	tor & Destructor Documentation	 22
		6.6.2.1	IndexScan	 22
		6.6.2.2	~IndexScan	 22

CONTENTS

	6.6.3	Member Function Documentation	22
		6.6.3.1 executeTestAlgorithm	22
6.7	HDDTe	st::Layout Class Reference	22
	6.7.1	Detailed Description	23
	6.7.2	Constructor & Destructor Documentation	23
		6.7.2.1 Layout	23
		6.7.2.2 ~Layout	23
	6.7.3	Member Function Documentation	23
		6.7.3.1 createRelationships	23
		6.7.3.2 getRelationship	24
	6.7.4	Member Data Documentation	24
		6.7.4.1 diskStart	24
6.8	HDDTe	st::LayoutSettings Struct Reference	24
	6.8.1	Detailed Description	24
	6.8.2	Member Data Documentation	24
		6.8.2.1 mode	24
		6.8.2.2 pageSizeInKB	24
		6.8.2.3 pagesPerExtent	25
		6.8.2.4 relationships	25
6.9	DBUtil:	:Log Class Reference	25
	6.9.1	Detailed Description	25
	6.9.2	Constructor & Destructor Documentation	25
		6.9.2.1 Log	25
		6.9.2.2 ~Log	25
	6.9.3	Member Function Documentation	25
		6.9.3.1 start	25
		6.9.3.2 stop	26
		6.9.3.3 write	26
6.10	DBUtil:	:measurement Struct Reference	27
	6.10.1	Detailed Description	27
	6.10.2	Member Data Documentation	27
		6.10.2.1 duration	27
		6.10.2.2 size	27
6.11	HDDTe	st::Progressbar Class Reference	27
	6.11.1	Detailed Description	28
	6.11.2	Constructor & Destructor Documentation	28
		6.11.2.1 Progressbar	28
		6.11.2.2 ~Progressbar	28
	6.11.3	Member Function Documentation	28
		6.11.3.1 add	28

vi CONTENTS

6.11.4	Member Data Documentation	28
	6.11.4.1 barWidth	28
	6.11.4.2 current	28
	6.11.4.3 name	28
	6.11.4.4 total	28
HDDTe	st::Relationship Class Reference	29
6.12.1	Detailed Description	29
6.12.2	Constructor & Destructor Documentation	29
	6.12.2.1 Relationship	29
	6.12.2.2 ~Relationship	29
6.12.3	Member Function Documentation	29
	6.12.3.1 addExtent	29
	6.12.3.2 getNextExtent	30
	6.12.3.3 getNextPage	30
	6.12.3.4 getProbability	30
	6.12.3.5 getRandomExtent	30
	6.12.3.6 getRandomPage	30
	6.12.3.7 isNextExtent	31
	6.12.3.8 setUnallocatedExtents	31
6.12.4	Member Data Documentation	31
	6.12.4.1 extents	31
	6.12.4.2 name	31
	6.12.4.3 pageSizeInKB	31
	6.12.4.4 pagesPerExtent	31
HDDTe	st::RelationshipConfig Struct Reference	31
6.13.1	Detailed Description	32
6.13.2	Member Data Documentation	32
	6.13.2.1 name	32
	6.13.2.2 size	32
HDDTe	st::TestScenario Class Reference	32
6.14.1	Detailed Description	32
6.14.2	Constructor & Destructor Documentation	32
	6.14.2.1 TestScenario	32
	6.14.2.2 ~TestScenario	32
6.14.3	Member Function Documentation	32
	6.14.3.1 getNumberOfTests	32
	6.14.3.2 run	33
HDDTe	st::TestSettings Struct Reference	33
6.15.1	Detailed Description	33
6.15.2	Member Data Documentation	34
	HDDTe 6.12.1 6.12.2 6.12.3 6.12.3 HDDTe 6.13.1 6.13.2 HDDTe 6.14.1 6.14.2 6.14.3	6.11.4.2 current 6.11.4.3 name 6.11.4.4 total  HDDTest::Relationship Class Reference 6.12.1 Detailed Description 6.12.2 Constructor & Destructor Documentation 6.12.2.1 Relationship 6.12.2.2 ~Relationship 6.12.3.3 Member Function Documentation 6.12.3.1 addExtent 6.12.3.2 getNextExtent 6.12.3.3 getNextPage 6.12.3.4 getProbability 6.12.3.5 getRandomExtent 6.12.3.6 getRandomPage 6.12.3.7 isNextExtent 6.12.3.8 setUnallocatedExtents 6.12.4.1 extents 6.12.4.1 extents 6.12.4.2 name 6.12.4.2 name 6.12.4.3 pageSizeInKB 6.12.4.4 pagesPerExtent  HDDTest::RelationshipConfig Struct Reference 6.13.1 Detailed Description 6.13.2 Member Data Documentation 6.13.2 i name 6.13.2.1 name 6.13.2.2 size  HDDTest::TestScenario Class Reference 6.14.1 Detailed Description 6.14.2 Constructor & Destructor Documentation 6.14.2.1 TestScenario 6.14.3.1 getNumberOfTests

CONTENTS vii

		6.15.2.1 name	34
		6.15.2.2 relationship	34
		6.15.2.3 sleep	34
7	File I	Documentation	35
	7.1	src/DBBenchmark.cpp File Reference	35
	7.1	7.1.1 Function Documentation	35
		7.1.1.1 main	35
	7.2	src/Layout/Layout.cpp File Reference	36
	7.2	src/Layout/Layout.h File Reference	36
	7.4	src/Layout/Relationship.cpp File Reference	37
	7.5	src/Layout/Relationship.h File Reference	38
	7.6	src/Tests/ATest.cpp File Reference	39
	7.7	src/Tests/ATest.h File Reference	39
	7.8	src/Tests/FullTableScan.cpp File Reference	40
		7.8.1 Macro Definition Documentation	41
		7.8.1.1 SRC_TESTS_FULLTABLESCAN_H	41
	7.9	src/Tests/FullTableScan.h File Reference	41
	7.10	src/Tests/IndexScan.cpp File Reference	42
	7.11	src/Tests/IndexScan.h File Reference	42
	7.12	src/Tests/TestScenario.cpp File Reference	43
	7.13	src/Tests/TestScenario.h File Reference	44
	7.14	src/Util/Configurator.cpp File Reference	44
	7.15	src/Util/Configurator.h File Reference	45
	7.16	src/Util/Disk.cpp File Reference	46
	7.17	src/Util/Disk.h File Reference	46
	7.18	src/Util/Log.cpp File Reference	47
	7.19	src/Util/Log.h File Reference	48
	7.20	src/Util/Progressbar.cpp File Reference	49
	7.21	src/Util/Progressbar.h File Reference	50
Ind	dex		51
1110	AGV.		JI

# Chapter 1

# Namespace Index

Here is a list of all namespaces with brief descriptions:	
DBUtil	 ,
HDDTest	

2 Namespace Index

# Chapter 2

# **Hierarchical Index**

# 2.1 Class Hierarchy

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

DDTest::ATest	. 11
HDDTest::FullTableScan	. 19
HDDTest::IndexScan	21
DDTest::Configurator	. 14
DDTest::Disk	. 15
DDTest::Extent	. 18
DDTest::Layout	. 22
DDTest::LayoutSettings	. 24
BUtil::Log	. 25
BUtil::measurement	. 27
DDTest::Progressbar	. 27
DDTest::Relationship	. 29
DDTest::RelationshipConfig	. 31
DDTest::TestScenario	. 32
DDTest::TestSettings	. 33

**Hierarchical Index** 

# **Chapter 3**

# **Class Index**

# 3.1 Class List

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

HDDTest::ATest	11
HDDTest::Configurator	14
HDDTest::Disk	15
HDDTest::Extent	18
HDDTest::FullTableScan	
HDDTest::IndexScan	21
HDDTest::Layout	
HDDTest::LayoutSettings	24
DBUtil::Log	
DBUtil::measurement	
HDDTest::Progressbar	27
HDDTest::Relationship	
HDDTest::RelationshipConfig	31
HDDTest::TestScenario	32
HDDTest::TestSettings	33

6 Class Index

# **Chapter 4**

# File Index

# 4.1 File List

Here is a list of all files with brief descriptions:

src/DBBenchmark.cpp	35
src/Layout/Layout.cpp	36
src/Layout/Layout.h	36
src/Layout/Relationship.cpp	37
src/Layout/Relationship.h	38
src/Tests/ATest.cpp	39
src/Tests/ATest.h	39
src/Tests/FullTableScan.cpp	40
src/Tests/FullTableScan.h	41
src/Tests/IndexScan.cpp	42
src/Tests/IndexScan.h	42
src/Tests/TestScenario.cpp	43
src/Tests/TestScenario.h	44
src/Util/Configurator.cpp	44
src/Util/Configurator.h	45
src/Util/Disk.cpp	46
src/Util/Disk.h	46
src/Util/Log.cpp	47
	48
src/Util/Progressbar.cpp	49
erc/Litil/Progresshar h	50

8 File Index

# **Chapter 5**

# **Namespace Documentation**

# 5.1 DBUtil Namespace Reference

## Classes

- struct measurement
- class Log

# 5.2 HDDTest Namespace Reference

#### Classes

- struct RelationshipConfig
- struct LayoutSettings
- class Layout
- struct Extent
- class Relationship
- struct TestSettings
- class ATest
- · class FullTableScan
- class IndexScan
- class TestScenario
- · class Configurator
- class Disk
- class Progressbar

# 5.2.1 Detailed Description

Disk manager

Names	pace	Docu	ment	tation

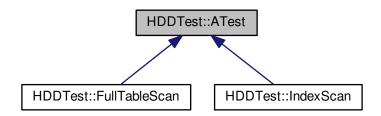
# **Chapter 6**

# **Class Documentation**

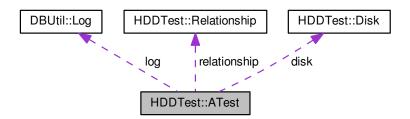
# 6.1 HDDTest::ATest Class Reference

#include <ATest.h>

Inheritance diagram for HDDTest::ATest:



Collaboration diagram for HDDTest::ATest:



# **Public Member Functions**

ATest (std::string, Disk \*, Relationship \*)

- virtual ∼ATest ()
- void start ()
- virtual void executeTestAlgorithm ()
- void sleep ()
- void startBackground ()

## **Public Attributes**

- std::string name
- std::atomic< bool > isMain
- DBUtil::Log \* log

## **Protected Attributes**

- Relationship \* relationship
- Disk \* disk
- std::atomic< bool > runs

## 6.1.1 Detailed Description

Definition at line 27 of file ATest.h.

# 6.1.2 Constructor & Destructor Documentation

6.1.2.1 HDDTest::ATest:( std::string name, Disk \* disk, Relationship \* relationship )

Definition at line 13 of file ATest.cpp.

```
6.1.2.2 HDDTest::ATest::~ATest() [virtual]
```

Definition at line 42 of file ATest.cpp.

## 6.1.3 Member Function Documentation

```
6.1.3.1 void HDDTest::ATest::executeTestAlgorithm() [virtual]
```

Reimplemented in HDDTest::FullTableScan, and HDDTest::IndexScan.

Definition at line 40 of file ATest.cpp.

Here is the caller graph for this function:



## 6.1.3.2 void HDDTest::ATest::sleep()

Definition at line 47 of file ATest.cpp.

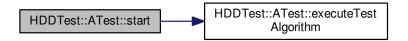
Here is the caller graph for this function:



# 6.1.3.3 void HDDTest::ATest::start ( )

Definition at line 23 of file ATest.cpp.

Here is the call graph for this function:



Here is the caller graph for this function:



# 6.1.3.4 void HDDTest::ATest::startBackground ( )

Definition at line 51 of file ATest.cpp.

Here is the call graph for this function:



Here is the caller graph for this function:

HDDTest::ATest::startBackground HDDTest::TestScenario::run

#### 6.1.4 Member Data Documentation

**6.1.4.1 Disk**\* **HDDTest::ATest::disk** [protected]

Definition at line 42 of file ATest.h.

6.1.4.2 std::atomic < bool > HDDTest::ATest::isMain

Definition at line 31 of file ATest.h.

6.1.4.3 DBUtil::Log\* HDDTest::ATest::log

Definition at line 38 of file ATest.h.

6.1.4.4 std::string HDDTest::ATest::name

Definition at line 30 of file ATest.h.

**6.1.4.5 Relationship\* HDDTest::ATest::relationship** [protected]

Definition at line 41 of file ATest.h.

**6.1.4.6 std::atomic**<**bool**> **HDDTest::ATest::runs** [protected]

Definition at line 43 of file ATest.h.

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

- src/Tests/ATest.h
- src/Tests/ATest.cpp

# 6.2 HDDTest::Configurator Class Reference

#include <Configurator.h>

#### **Public Member Functions**

- Configurator ()
- virtual ∼Configurator ()
- std::vector< TestScenario \* > \* getTestScenarios ()

Scenario generation based on config file.

# 6.2.1 Detailed Description

Definition at line 24 of file Configurator.h.

## 6.2.2 Constructor & Destructor Documentation

6.2.2.1 HDDTest::Configurator::Configurator ( )

Definition at line 12 of file Configurator.cpp.

**6.2.2.2 HDDTest::Configurator::**~**Configurator()** [virtual]

Definition at line 18 of file Configurator.cpp.

#### 6.2.3 Member Function Documentation

```
6.2.3.1 std::vector < TestScenario * > * HDDTest::Configurator::getTestScenarios ( )
```

Scenario generation based on config file.

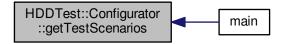
Creates scenarios inc. test configurations, layouts etc.

Returns

vector of test scenarios which can be executed later

Definition at line 34 of file Configurator.cpp.

Here is the caller graph for this function:



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

- src/Util/Configurator.h
- src/Util/Configurator.cpp

# 6.3 HDDTest::Disk Class Reference

#include <Disk.h>

#### **Public Member Functions**

void readPage (uint64\_t)

```
• void readExtent (uint64_t)
```

- void writePage (uint64\_t)
- void writeExtent (uint64\_t)
- void del ()
- void setPageSize (int)

[brief description]

• void setExtentSize (int)

extent-size-setter

## **Static Public Member Functions**

```
    static Disk * get (std::string)
    returns disk
```

## **Public Attributes**

• std::string path

## **Protected Member Functions**

• bool isValid ()

# 6.3.1 Detailed Description

Definition at line 19 of file Disk.h.

# 6.3.2 Member Function Documentation

```
6.3.2.1 void HDDTest::Disk::del()
```

Definition at line 124 of file Disk.cpp.

```
6.3.2.2 Disk * HDDTest::Disk::get ( std::string path ) [static]
```

returns disk

returns a disk pointer

**Parameters** 

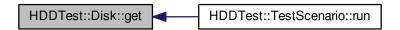
path disk path

Returns

pointer to disk instance

Definition at line 20 of file Disk.cpp.

Here is the caller graph for this function:



6.3.2.3 bool HDDTest::Disk::isValid( ) [protected]

Definition at line 130 of file Disk.cpp.

6.3.2.4 void HDDTest::Disk::readExtent ( uint64\_t start )

Definition at line 97 of file Disk.cpp.

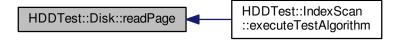
Here is the caller graph for this function:



6.3.2.5 void HDDTest::Disk::readPage ( uint64\_t start )

Definition at line 103 of file Disk.cpp.

Here is the caller graph for this function:



6.3.2.6 void HDDTest::Disk::setExtentSize ( int size )

extent-size-setter

sets the extent size in kb

**Parameters** 

size | Size of a extent in kb

Definition at line 78 of file Disk.cpp.

6.3.2.7 void HDDTest::Disk::setPageSize ( int size )

[brief description]

[long description]

**Parameters** 

size [description]

Definition at line 90 of file Disk.cpp.

6.3.2.8 void HDDTest::Disk::writeExtent ( uint64\_t start )

Definition at line 111 of file Disk.cpp.

6.3.2.9 void HDDTest::Disk::writePage ( uint64\_t start )

Definition at line 117 of file Disk.cpp.

#### 6.3.3 Member Data Documentation

6.3.3.1 std::string HDDTest::Disk::path

Definition at line 34 of file Disk.h.

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

- src/Util/Disk.h
- src/Util/Disk.cpp

## 6.4 HDDTest::Extent Struct Reference

#include <Relationship.h>

## **Public Attributes**

- uint64\_t number
- uint64\_t startKb

# 6.4.1 Detailed Description

Definition at line 15 of file Relationship.h.

# 6.4.2 Member Data Documentation

## 6.4.2.1 uint64\_t HDDTest::Extent::number

Definition at line 17 of file Relationship.h.

## 6.4.2.2 uint64\_t HDDTest::Extent::startKb

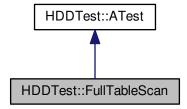
Definition at line 18 of file Relationship.h.

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

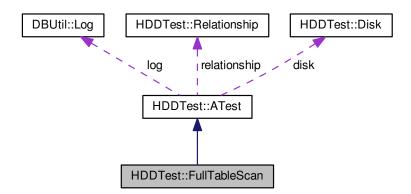
• src/Layout/Relationship.h

# 6.5 HDDTest::FullTableScan Class Reference

Inheritance diagram for HDDTest::FullTableScan:



Collaboration diagram for HDDTest::FullTableScan:



#### **Public Member Functions**

- FullTableScan (std::string, Disk \*, Relationship \*)
- virtual ∼FullTableScan ()
- void executeTestAlgorithm () override

## **Additional Inherited Members**

## 6.5.1 Detailed Description

Definition at line 16 of file FullTableScan.cpp.

#### 6.5.2 Constructor & Destructor Documentation

6.5.2.1 HDDTest::FullTableScan::FullTableScan ( std::string name, Disk \* disk, Relationship \* relationship )

Definition at line 13 of file FullTableScan.h.

**6.5.2.2 HDDTest::FullTableScan::**~FullTableScan() [virtual]

Definition at line 38 of file FullTableScan.h.

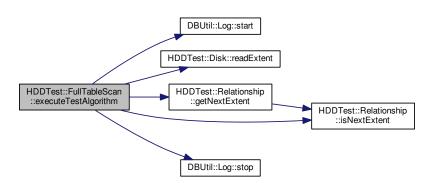
## 6.5.3 Member Function Documentation

**6.5.3.1** void HDDTest::FullTableScan::executeTestAlgorithm() [override], [virtual]

Reimplemented from HDDTest::ATest.

Definition at line 18 of file FullTableScan.h.

Here is the call graph for this function:



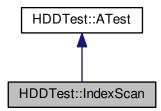
The documentation for this class was generated from the following files:

- src/Tests/FullTableScan.cpp
- src/Tests/FullTableScan.h

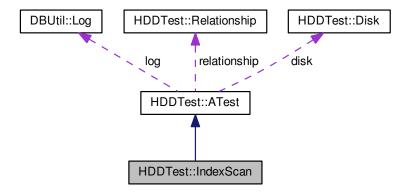
# 6.6 HDDTest::IndexScan Class Reference

#include <IndexScan.h>

Inheritance diagram for HDDTest::IndexScan:



Collaboration diagram for HDDTest::IndexScan:



# **Public Member Functions**

- IndexScan (std::string, Disk \*, Relationship \*)
- virtual  $\sim$ IndexScan ()
- void executeTestAlgorithm () override

## **Additional Inherited Members**

# 6.6.1 Detailed Description

Definition at line 15 of file IndexScan.h.

## 6.6.2 Constructor & Destructor Documentation

6.6.2.1 HDDTest::IndexScan::IndexScan ( std::string name, Disk \* disk, Relationship \* relationship )

Definition at line 14 of file IndexScan.cpp.

**6.6.2.2 HDDTest::IndexScan::**~IndexScan( ) [virtual]

Definition at line 59 of file IndexScan.cpp.

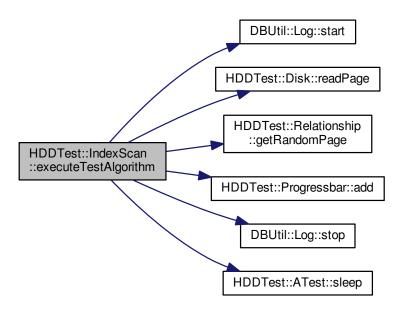
#### 6.6.3 Member Function Documentation

**6.6.3.1 void HDDTest::IndexScan::executeTestAlgorithm()** [override], [virtual]

Reimplemented from HDDTest::ATest.

Definition at line 17 of file IndexScan.cpp.

Here is the call graph for this function:



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

- src/Tests/IndexScan.h
- src/Tests/IndexScan.cpp

# 6.7 HDDTest::Layout Class Reference

#include <Layout.h>

#### **Public Member Functions**

- Layout (struct LayoutSettings)
- virtual ~Layout ()
- void createRelationships (std::vector< struct RelationshipConfig >)
- HDDTest::Relationship \* getRelationship (std::string)

## **Public Attributes**

uint64\_t diskStart

## 6.7.1 Detailed Description

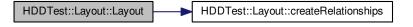
Definition at line 33 of file Layout.h.

#### 6.7.2 Constructor & Destructor Documentation

6.7.2.1 HDDTest::Layout::Layout ( struct LayoutSettings layoutSetting )

Definition at line 13 of file Layout.cpp.

Here is the call graph for this function:



**6.7.2.2 HDDTest::Layout::**  $\sim$  Layout( ) [virtual]

Definition at line 21 of file Layout.cpp.

## 6.7.3 Member Function Documentation

 $\textbf{6.7.3.1} \quad \text{void HDDTest::Layout::createRelationships (} \ \ \textbf{std::vector} \\ < \ \ \textbf{struct RelationshipConfig} > \ \ \textbf{)}$ 

Definition at line 27 of file Layout.cpp.

Here is the caller graph for this function:



6.7.3.2 HDDTest::Relationship \* HDDTest::Layout::getRelationship ( std::string name )

Definition at line 62 of file Layout.cpp.

Here is the caller graph for this function:



#### 6.7.4 Member Data Documentation

6.7.4.1 uint64\_t HDDTest::Layout::diskStart

Definition at line 41 of file Layout.h.

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

- · src/Layout/Layout.h
- src/Layout/Layout.cpp

# 6.8 HDDTest::LayoutSettings Struct Reference

#include <Layout.h>

#### **Public Attributes**

- std::string mode
- uint64\_t pageSizeInKB
- uint64\_t pagesPerExtent
- std::vector < struct</li>
   RelationshipConfig > relationships

# 6.8.1 Detailed Description

Definition at line 25 of file Layout.h.

# 6.8.2 Member Data Documentation

6.8.2.1 std::string HDDTest::LayoutSettings::mode

Definition at line 27 of file Layout.h.

6.8.2.2 uint64\_t HDDTest::LayoutSettings::pageSizeInKB

Definition at line 28 of file Layout.h.

6.8.2.3 uint64\_t HDDTest::LayoutSettings::pagesPerExtent

Definition at line 29 of file Layout.h.

6.8.2.4 std::vector<struct RelationshipConfig> HDDTest::LayoutSettings::relationships

Definition at line 30 of file Layout.h.

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

· src/Layout/Layout.h

# 6.9 DBUtil::Log Class Reference

```
#include <Log.h>
```

#### **Public Member Functions**

- Log ()
- virtual ~Log ()
- void start ()
- void stop (uint64\_t)
- void write (std::string)

## 6.9.1 Detailed Description

Definition at line 25 of file Log.h.

#### 6.9.2 Constructor & Destructor Documentation

```
6.9.2.1 DBUtil::Log::Log()
```

Definition at line 17 of file Log.cpp.

```
6.9.2.2 DBUtil::Log::~Log( ) [virtual]
```

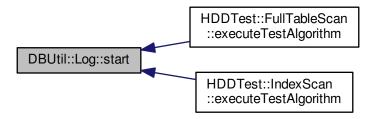
Definition at line 23 of file Log.cpp.

## 6.9.3 Member Function Documentation

```
6.9.3.1 void DBUtil::Log::start()
```

Definition at line 28 of file Log.cpp.

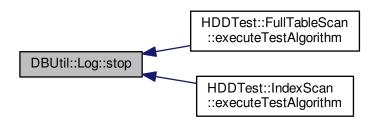
Here is the caller graph for this function:



6.9.3.2 void DBUtil::Log::stop ( uint64\_t size )

Definition at line 33 of file Log.cpp.

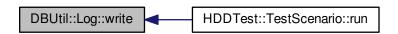
Here is the caller graph for this function:



6.9.3.3 void DBUtil::Log::write ( std::string name )

Definition at line 43 of file Log.cpp.

Here is the caller graph for this function:



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

- src/Util/Log.h
- src/Util/Log.cpp

# 6.10 DBUtil::measurement Struct Reference

```
#include <Log.h>
```

## **Public Attributes**

- uint64 t duration
- uint64\_t size

# 6.10.1 Detailed Description

Definition at line 19 of file Log.h.

## 6.10.2 Member Data Documentation

6.10.2.1 uint64\_t DBUtil::measurement::duration

Definition at line 21 of file Log.h.

6.10.2.2 uint64\_t DBUtil::measurement::size

Definition at line 22 of file Log.h.

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

• src/Util/Log.h

# 6.11 HDDTest::Progressbar Class Reference

```
#include <Progressbar.h>
```

## **Public Member Functions**

- Progressbar (std::string, uint64\_t)
- void add (uint64\_t)
- virtual ∼Progressbar ()

## **Public Attributes**

- uint64\_t total
- uint64\_t current
- · int barWidth
- · std::string name

# 6.11.1 Detailed Description

Definition at line 15 of file Progressbar.h.

#### 6.11.2 Constructor & Destructor Documentation

6.11.2.1 HDDTest::Progressbar::Progressbar ( std::string name, uint64\_t total )

Definition at line 12 of file Progressbar.cpp.

**6.11.2.2 HDDTest::Progressbar::∼Progressbar( )** [virtual]

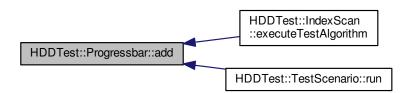
Definition at line 46 of file Progressbar.cpp.

## 6.11.3 Member Function Documentation

6.11.3.1 void HDDTest::Progressbar::add ( uint64\_t addition )

Definition at line 22 of file Progressbar.cpp.

Here is the caller graph for this function:



# 6.11.4 Member Data Documentation

6.11.4.1 int HDDTest::Progressbar::barWidth

Definition at line 22 of file Progressbar.h.

6.11.4.2 uint64\_t HDDTest::Progressbar::current

Definition at line 21 of file Progressbar.h.

6.11.4.3 std::string HDDTest::Progressbar::name

Definition at line 23 of file Progressbar.h.

6.11.4.4 uint64\_t HDDTest::Progressbar::total

Definition at line 20 of file Progressbar.h.

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

- · src/Util/Progressbar.h
- src/Util/Progressbar.cpp

## 6.12 HDDTest::Relationship Class Reference

```
#include <Relationship.h>
```

#### **Public Member Functions**

- Relationship (std::string, uint64\_t, unsigned int, unsigned int)
- virtual ∼Relationship ()
- void addExtent (uint64\_t)
- int getProbability (uint64\_t)
- void setUnallocatedExtents (uint64\_t unallocatedExtents)
- uint64 t getRandomExtent ()
- uint64\_t getRandomPage ()
- uint64\_t getNextExtent ()
- uint64\_t getNextPage ()
- bool isNextExtent ()

#### **Public Attributes**

- std::vector< struct Extent > extents
- std::string name
- unsigned int pagesPerExtent
- unsigned int pageSizeInKB

#### 6.12.1 Detailed Description

Definition at line 21 of file Relationship.h.

#### 6.12.2 Constructor & Destructor Documentation

6.12.2.1 HDDTest::Relationship::Relationship ( std::string *name*, uint64\_t *size*, unsigned int *pagesPerExtent*, unsigned int *pageSizeInKB* )

Definition at line 13 of file Relationship.cpp.

```
6.12.2.2 HDDTest::Relationship::∼Relationship( ) [virtual]
```

Definition at line 23 of file Relationship.cpp.

#### 6.12.3 Member Function Documentation

6.12.3.1 void HDDTest::Relationship::addExtent ( uint64\_t start )

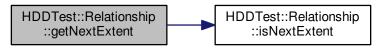
Definition at line 28 of file Relationship.cpp.

30 Class Documentation

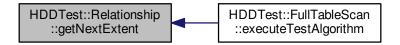
6.12.3.2 uint64\_t HDDTest::Relationship::getNextExtent()

Definition at line 37 of file Relationship.cpp.

Here is the call graph for this function:



Here is the caller graph for this function:



6.12.3.3 uint64\_t HDDTest::Relationship::getNextPage()

6.12.3.4 int HDDTest::Relationship::getProbability ( uint64\_t totalUnallocatedExtents )

Definition at line 57 of file Relationship.cpp.

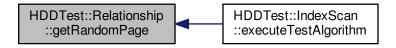
6.12.3.5 uint64\_t HDDTest::Relationship::getRandomExtent ( )

Definition at line 63 of file Relationship.cpp.

6.12.3.6 uint64\_t HDDTest::Relationship::getRandomPage ( )

Definition at line 68 of file Relationship.cpp.

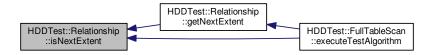
Here is the caller graph for this function:



6.12.3.7 bool HDDTest::Relationship::isNextExtent()

Definition at line 52 of file Relationship.cpp.

Here is the caller graph for this function:



6.12.3.8 void HDDTest::Relationship::setUnallocatedExtents ( uint64\_t unallocatedExtents ) [inline]

Definition at line 30 of file Relationship.h.

#### 6.12.4 Member Data Documentation

6.12.4.1 std::vector<struct Extent> HDDTest::Relationship::extents

Definition at line 43 of file Relationship.h.

6.12.4.2 std::string HDDTest::Relationship::name

Definition at line 44 of file Relationship.h.

6.12.4.3 unsigned int HDDTest::Relationship::pageSizeInKB

Definition at line 47 of file Relationship.h.

6.12.4.4 unsigned int HDDTest::Relationship::pagesPerExtent

Definition at line 46 of file Relationship.h.

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

- src/Layout/Relationship.h
- src/Layout/Relationship.cpp

# 6.13 HDDTest::RelationshipConfig Struct Reference

#include <Layout.h>

#### **Public Attributes**

- · unsigned int size
- · std::string name

32 Class Documentation

#### 6.13.1 Detailed Description

Definition at line 18 of file Layout.h.

#### 6.13.2 Member Data Documentation

6.13.2.1 std::string HDDTest::RelationshipConfig::name

Definition at line 21 of file Layout.h.

6.13.2.2 unsigned int HDDTest::RelationshipConfig::size

Definition at line 20 of file Layout.h.

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

src/Layout/Layout.h

#### 6.14 HDDTest::TestScenario Class Reference

```
#include <TestScenario.h>
```

#### **Public Member Functions**

- TestScenario (std::string, std::vector< std::string > \*, std::unordered\_map< std::string, Layout \* > \*, Test-Settings, std::vector< TestSettings >)
- virtual ~TestScenario ()
- void run ()
- int getNumberOfTests ()

## 6.14.1 Detailed Description

Definition at line 19 of file TestScenario.h.

#### 6.14.2 Constructor & Destructor Documentation

6.14.2.1 HDDTest::TestScenario::TestScenario ( std::string name, std::vector< std::string > \* diskPaths, std::unordered\_map< std::string, Layout \* > \* layouts, TestSettings mainThreadSettings, std::vector< TestSettings > backgroundThreadsSettings)

Definition at line 15 of file TestScenario.cpp.

```
6.14.2.2 HDDTest::TestScenario::∼TestScenario() [virtual]
```

Definition at line 24 of file TestScenario.cpp.

#### 6.14.3 Member Function Documentation

6.14.3.1 int HDDTest::TestScenario::getNumberOfTests ( )

Definition at line 79 of file TestScenario.cpp.

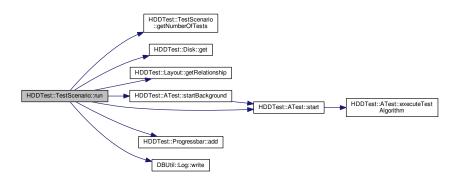
Here is the caller graph for this function:



#### 6.14.3.2 void HDDTest::TestScenario::run ( )

Definition at line 30 of file TestScenario.cpp.

Here is the call graph for this function:



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

- src/Tests/TestScenario.h
- src/Tests/TestScenario.cpp

# 6.15 HDDTest::TestSettings Struct Reference

#include <ATest.h>

#### **Public Attributes**

- std::string name
- std::uint64\_t sleep
- std::string relationship

## 6.15.1 Detailed Description

Definition at line 19 of file ATest.h.

34 Class Documentation

## 6.15.2 Member Data Documentation

6.15.2.1 std::string HDDTest::TestSettings::name

Definition at line 21 of file ATest.h.

6.15.2.2 std::string HDDTest::TestSettings::relationship

Definition at line 23 of file ATest.h.

6.15.2.3 std::uint64\_t HDDTest::TestSettings::sleep

Definition at line 22 of file ATest.h.

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

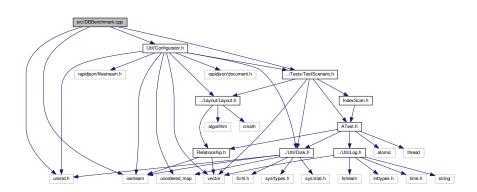
src/Tests/ATest.h

# **Chapter 7**

# **File Documentation**

# 7.1 src/DBBenchmark.cpp File Reference

```
#include <iostream>
#include <unistd.h>
#include "Util/Configurator.h"
#include "Tests/TestScenario.h"
Include dependency graph for DBBenchmark.cpp:
```



#### **Functions**

• int main ()

#### 7.1.1 Function Documentation

7.1.1.1 int main ( )

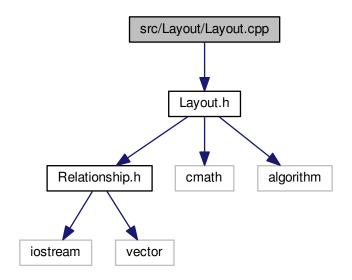
Definition at line 13 of file DBBenchmark.cpp.

Here is the call graph for this function:



# 7.2 src/Layout/Layout.cpp File Reference

#include "Layout.h"
Include dependency graph for Layout.cpp:



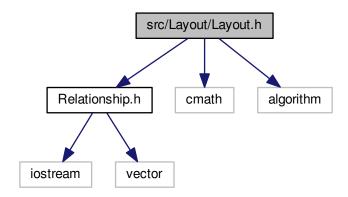
#### **Namespaces**

HDDTest

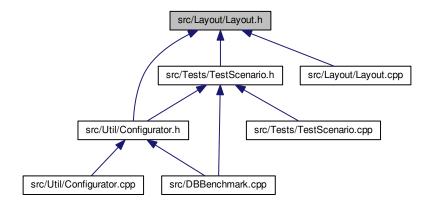
# 7.3 src/Layout/Layout.h File Reference

#include "Relationship.h"
#include <cmath>
#include <algorithm>

Include dependency graph for Layout.h:



This graph shows which files directly or indirectly include this file:



## Classes

- struct HDDTest::RelationshipConfig
- struct HDDTest::LayoutSettings
- class HDDTest::Layout

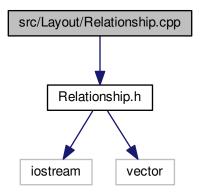
## **Namespaces**

HDDTest

# 7.4 src/Layout/Relationship.cpp File Reference

#include "Relationship.h"

Include dependency graph for Relationship.cpp:



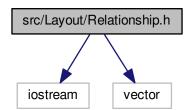
## **Namespaces**

HDDTest

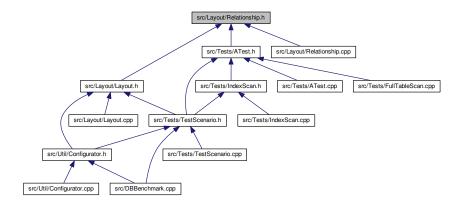
# 7.5 src/Layout/Relationship.h File Reference

#include <iostream>
#include <vector>

Include dependency graph for Relationship.h:



This graph shows which files directly or indirectly include this file:



#### Classes

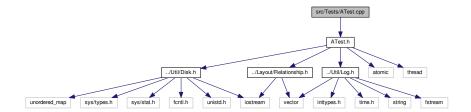
- struct HDDTest::Extent
- class HDDTest::Relationship

## **Namespaces**

HDDTest

# 7.6 src/Tests/ATest.cpp File Reference

#include "ATest.h"
Include dependency graph for ATest.cpp:



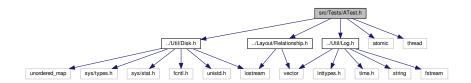
#### **Namespaces**

HDDTest

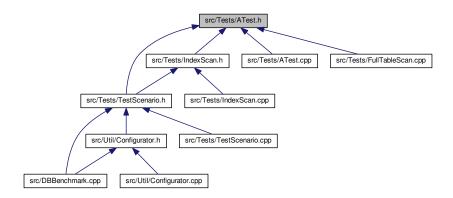
#### 7.7 src/Tests/ATest.h File Reference

#include "../Util/Disk.h"

```
#include "../Layout/Relationship.h"
#include "../Util/Log.h"
#include <atomic>
#include <thread>
Include dependency graph for ATest.h:
```



This graph shows which files directly or indirectly include this file:



#### **Classes**

- struct HDDTest::TestSettings
- class HDDTest::ATest

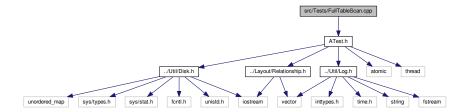
#### **Namespaces**

HDDTest

# 7.8 src/Tests/FullTableScan.cpp File Reference

#include "ATest.h"

Include dependency graph for FullTableScan.cpp:



#### Classes

class HDDTest::FullTableScan

## **Namespaces**

HDDTest

#### Macros

• #define SRC\_TESTS\_FULLTABLESCAN\_H\_

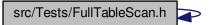
#### 7.8.1 Macro Definition Documentation

7.8.1.1 #define SRC\_TESTS\_FULLTABLESCAN\_H\_

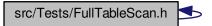
Definition at line 9 of file FullTableScan.cpp.

# 7.9 src/Tests/FullTableScan.h File Reference

#include "FullTableScan.h"
Include dependency graph for FullTableScan.h:



This graph shows which files directly or indirectly include this file:

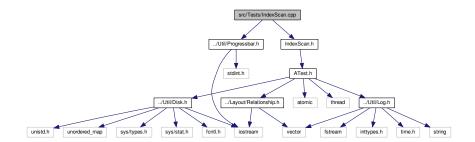


#### **Namespaces**

HDDTest

# 7.10 src/Tests/IndexScan.cpp File Reference

#include "IndexScan.h"
#include "../Util/Progressbar.h"
Include dependency graph for IndexScan.cpp:

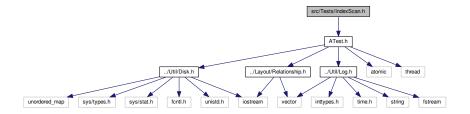


## **Namespaces**

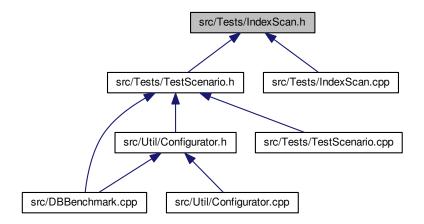
HDDTest

## 7.11 src/Tests/IndexScan.h File Reference

#include "ATest.h"
Include dependency graph for IndexScan.h:



This graph shows which files directly or indirectly include this file:



#### Classes

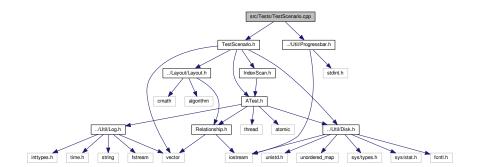
• class HDDTest::IndexScan

#### **Namespaces**

HDDTest

# 7.12 src/Tests/TestScenario.cpp File Reference

```
#include "TestScenario.h"
#include "../Util/Progressbar.h"
Include dependency graph for TestScenario.cpp:
```

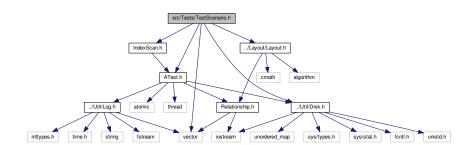


#### **Namespaces**

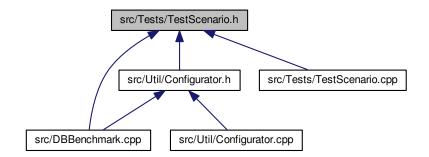
HDDTest

#### 7.13 src/Tests/TestScenario.h File Reference

```
#include <vector>
#include "../Layout/Layout.h"
#include "../Util/Disk.h"
#include "ATest.h"
#include "IndexScan.h"
Include dependency graph for TestScenario.h:
```



This graph shows which files directly or indirectly include this file:



### Classes

· class HDDTest::TestScenario

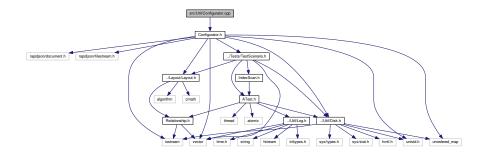
#### **Namespaces**

HDDTest

# 7.14 src/Util/Configurator.cpp File Reference

#include "Configurator.h"

Include dependency graph for Configurator.cpp:

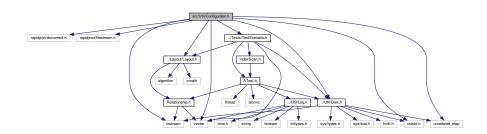


## **Namespaces**

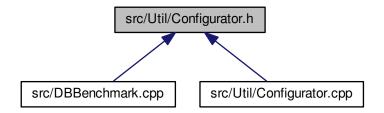
HDDTest

# 7.15 src/Util/Configurator.h File Reference

```
#include <rapidjson/document.h>
#include <rapidjson/filestream.h>
#include <iostream>
#include <unistd.h>
#include <vector>
#include <unordered_map>
#include "../Tests/TestScenario.h"
#include "Disk.h"
#include "../Layout/Layout.h"
Include dependency graph for Configurator.h:
```



This graph shows which files directly or indirectly include this file:



#### **Classes**

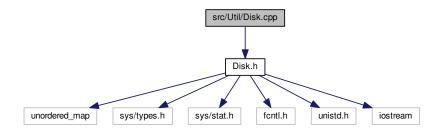
• class HDDTest::Configurator

### **Namespaces**

HDDTest

# 7.16 src/Util/Disk.cpp File Reference

#include "Disk.h"
Include dependency graph for Disk.cpp:



## **Namespaces**

HDDTest

## 7.17 src/Util/Disk.h File Reference

#include <unordered\_map>

```
#include <sys/types.h>
#include <sys/stat.h>
#include <fcntl.h>
#include <unistd.h>
#include <iostream>
Include dependency graph for Disk.h:
```

src/Util/Disk.h

sys/stat.h

fcntl.h

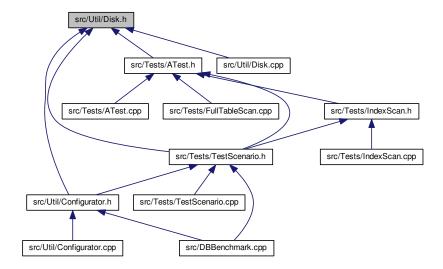
unistd.h

iostream

This graph shows which files directly or indirectly include this file:

sys/types.h

unordered\_map



#### **Classes**

class HDDTest::Disk

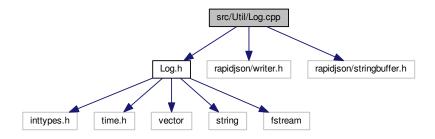
## Namespaces

HDDTest

# 7.18 src/Util/Log.cpp File Reference

```
#include "Log.h"
#include "rapidjson/writer.h"
#include "rapidjson/stringbuffer.h"
```

Include dependency graph for Log.cpp:



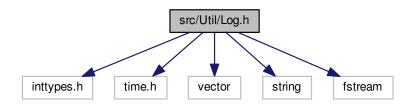
#### **Namespaces**

• DBUtil

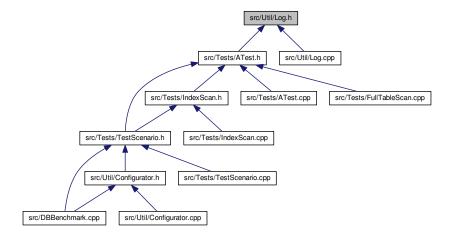
# 7.19 src/Util/Log.h File Reference

```
#include <inttypes.h>
#include <time.h>
#include <vector>
#include <string>
#include <fstream>
```

Include dependency graph for Log.h:



This graph shows which files directly or indirectly include this file:



#### Classes

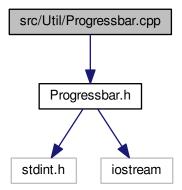
- struct DBUtil::measurement
- · class DBUtil::Log

#### **Namespaces**

• DBUtil

# 7.20 src/Util/Progressbar.cpp File Reference

#include "Progressbar.h"
Include dependency graph for Progressbar.cpp:



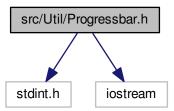
#### **Namespaces**

HDDTest

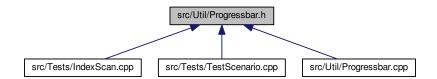
# 7.21 src/Util/Progressbar.h File Reference

#include <stdint.h>
#include <iostream>

Include dependency graph for Progressbar.h:



This graph shows which files directly or indirectly include this file:



#### **Classes**

• class HDDTest::Progressbar

#### **Namespaces**

HDDTest

# Index

~ATest	disk
HDDTest::ATest, 12	HDDTest::ATest, 14
~Configurator	diskStart
HDDTest::Configurator, 15	HDDTest::Layout, 24
~FullTableScan	duration
HDDTest::FullTableScan, 20	DBUtil::measurement, 27
~IndexScan	BBottiminoadaromont, 27
HDDTest::IndexScan, 22	executeTestAlgorithm
~Layout	HDDTest::ATest, 12
HDDTest::Layout, 23	HDDTest::FullTableScan, 20
~Log	HDDTest::IndexScan, 22
DBUtil::Log, 25	extents
~Progressbar	HDDTest::Relationship, 31
HDDTest::Progressbar, 28	• •
~Relationship	FullTableScan
HDDTest::Relationship, 29	HDDTest::FullTableScan, 20
~TestScenario	
HDDTest::TestScenario, 32	get
,	HDDTest::Disk, 16
ATest	getNextExtent
HDDTest::ATest, 12	HDDTest::Relationship, 29
add	getNextPage
HDDTest::Progressbar, 28	HDDTest::Relationship, 30
addExtent	getNumberOfTests
HDDTest::Relationship, 29	HDDTest::TestScenario, 32
	getProbability
barWidth	HDDTest::Relationship, 30
HDDTest::Progressbar, 28	getRandomExtent
	HDDTest::Relationship, 30
Configurator	getRandomPage
HDDTest::Configurator, 15	HDDTest::Relationship, 30
createRelationships	getRelationship
HDDTest::Layout, 23	HDDTest::Layout, 23
current	getTestScenarios
HDDTest::Progressbar, 28	HDDTest::Configurator, 15
DBBenchmark.cpp	HDDTest, 9
main, 35	HDDTest::ATest, 11
DBUtil, 9	∼ATest, 12
DBUtil::Log, 25	ATest, 12
∼Log, 25	disk, 14
Log, 25	executeTestAlgorithm, 12
start, 25	isMain, 14
stop, 26	log, 14
write, 26	name, 14
DBUtil::measurement, 27	relationship, 14
duration, 27	runs, 14
size, 27	sleep, 12
del	start, 13
HDDTest::Disk, 16	startBackground, 13

52 INDEX

HDDTest::Configurator, 14		
Configurator, 15 getTestScenarios, 15 HDDTest::Disk, 15 del, 16 isValid, 17 path, 18 readExtent, 17 readPage, 17 setExtentSize, 17 setExtentSize, 17 setPageSize, 18 writeExtent, 18 number, 19 startKb, 19 HDDTest::Extent, 18 number, 19 startKb, 19 HDDTest::ApoutSetting, 22 executeTestAlgorithm, 22 indexScan, 22 HDDTest::Layout, 23 createRelationship, 23 diskStart, 24 pageSizeinKB, 24 pagesPerExtent, 24 relationship, 25 hDDTest::Progressbar, 28 add, 28 hDDTest::Polgressbar, 27 ~Progressbar, 28 add, 28 hDDTest::Relationship, 29 addExtent, 29 getNextExtent, 31 getRandomExtent, 30 getRandomExtent, 30 getRandomExtent, 30 getRandomExtent, 30 getRandomExtent, 30 getRandomExtent, 30 getRandomExtent, 31 gageRandomExtent, 30 getRandomExtent, 31 pageSizeinKB, 31	•	•
getTestScenarios, 15  del, 16     get, 16     get, 16     get, 16     get, 16     isValid, 17     path, 18     readExtent, 17     readPage, 17     setExtentSize, 17     setExtentSize, 17     setExtentSize, 18     writePage, 18 HDDTest::TestScenting, 33     name, 34 HDDTest::GetScenario, 32     getNumberOfTests, 32     run, 33     TestScenario, 32     run, 33     TestScenario, 32     HDDTest::TestSettings, 33     name, 34     relationship, 34     silvep3     iname, 34     relationship, 34     islep4     iname, 34     iname, 34     relationship, 34     islep4     iname, 34     iname, 34     relationship, 34     islep4     iname, 34     relationship, 34     islep4     iname, 34     relationship, 34     islep4     iname, 34     iname, 34     relationship, 34     islep4     iname, 31     iname, 34     iname, 32     iname, 34     iname, 3		
HDDTest::Disk, 15 del, 16 get, 16 is Valid, 17 path, 18 readExtent, 17 readPage, 17 setExtentSize, 17 setPageSize, 18 writeExtent, 18 mumber, 19 hDDTest::Extent, 18 number, 19 -FullTableScan, 20 executeTestAlgorithm, 20 FullTableScan, 21 ~IndexScan, 22 executeTestAlgorithm, 22 indexScan, 22 HDDTest::Layout, 23 diskStart, 24 mode, 24 pageSizeInkB, 24 pagesPerExtent, 24 relationship, 23 Layout, 23 HDDTest::LayoutSettings, 24 mode, 24 pagesPerExtent, 24 relationship, 25 hDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 rane, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 -Relationship, 29 adEExtent, 29 getNxmberOfTests, 32 resteRelationship, 29 adEExtent, 29 getNextExtent, 29 getNxmberOfTests, 32 resteRelationship, 29 adEExtent, 29 getNxmberOfTests, 32 resteRelationship, 29 adEExtent, 29 getNxmberOfTests, 32 resteRelationship, 29 adEExtent, 29 getNxmberOfTests, 32 run, 33 TestScenario, 32 getRandomSupe, 30 isNextExtent, 17 meadPage, 18 HDDTest::TestSettings, 32 hDDTest::TestSettings, 32 hDDTest::Aleyout, 23 log HDDTest::LayoutSettings, 24 hDDTest::Relationship, 31 pageSezeInkB, 31		• -
del, 16 get, 17 get, 17 get, 17 get, 17 get, 18 get, 18 get, 19 get, 18 get, 19 get, 18 get, 19 get, 1	<del>-</del>	
get, 16 isValid, 17 path, 18 readExtent, 17 path, 18 readExtentSize, 17 setExtentSize, 17 setExtentSize, 17 setExtentSize, 17 setExtentSize, 17 setExtentSize, 17 setExtent, 18 writeExtent, 18 writeExtent, 18 mumber, 19 startKb, 19 HDDTest::FullTableScan, 19 ~FullTableScan, 20 executeTestAlgorithm, 20 FullTableScan, 20 HDDTest::GulltidesScan, 21 ~IndexScan, 22 executeTestAlgorithm, 22 IndexScan, 22 executeTestAlgorithm, 22 lindexScan, 22 executeTestAlgorithm, 22 lindexScan, 22 executeTestAlgorithm, 22 lindexScan, 22 executeTestAlgorithm, 22 lindexScan, 22 executeTestAlgorithm, 21 lindexScan, 20 HDDTest::Layout, 23 createRelationships, 23 diskStart, 24 pageSizeInKB, 28 HDDTest::Progressbar, 28 dod, 28 barWidth, 28 current, 28 progressbar, 28 total, 28 HDDTest::Relationship, 29 ~Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getNextExtent, 29 getNextExtent, 29 getNextExtent, 29 getNextExtent, 29 getNextExtent, 29 getNextExtent, 31 name, 31 pageSizeInKB, 31	HDDTest::Disk, 15	
isValid, 17 path, 18 readExtent, 17 readPage, 17 setExtentSize, 17 setExtentSize, 18 writeExtent, 18 writePage, 18 HDDTest::Extent, 18 number, 19 startKb, 19 HDDTest::FullTableScan, 19 ~FullTableScan, 20 executeTestAlgorithm, 20 FullTableScan, 21 ~IndexScan, 21 ~IndexScan, 22 layout, 23 createRelationships, 23 diskStart, 24 getRelationships, 23 Layout, 23 HDDTest::LayoutSettings, 24 mode, 24 pageSizeInKB, 24 pageSerExtent, 24 relationships, 25 HDDTest::Disk, 26 pageSerExtent, 24 relationships, 25 HDDTest::ApoutSettings, 24 mode, 24 pageSerExtent, 24 relationships, 25 HDDTest::Capout Settings, 24 mode, 24 pageSerExtent, 24 relationships, 25 HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 dotal, 28 HDDTest::Relationship, 29 addExtent, 29 extents, 31 getNumberOfTests, 32 run, 33 TestSccenario, 32 HDDTest::TestSettings, 34 name, 34 relationship, 34 sleep, 34 relationship, 31 isValid HDDTest::Alationship, 31 isValid HDDTest::Disk, 17 Layout HDDTest::Layout, 23 Log DBUtil::Log, 25 log HDDTest::Atest, 14 HDDTest::ApoutSettings, 24 name HDDTest::ApoutSettings, 24 hDDTest::Relationship, 31 hDDTest::Relationship, 31 pageSizeInKB, 31	del, 16	
path, 18 readExtent, 17 readPage, 17 setExtentSize, 17 setExtent, 18 writePage, 18 HDDTest::Extent, 18 number, 19 startKb, 19 HDDTest::Hallationship, 20 executeTestAlgorithm, 20 FullTableScan, 20 executeTestAlgorithm, 20 FullTableScan, 20 executeTestAlgorithm, 20 FullTableScan, 20 HDDTest::IndexScan, 21 ~IndexScan, 22 IndexScan, 22 executeTestAlgorithm, 22 IndexScan, 22 executeTestAlgorithm, 22 IndexScan, 23 createRelationships, 23 diskSlart, 24 getRelationship, 23 Layout, 23 HDDTest::LayoutSettings, 24 mode, 24 pageSizeInKB, 24 pageSPerExtent, 24 relationships, 25 HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 HDDTest::Relationship, 29 addExtent, 29 extents, 31 getNextPage, 30 getProbability, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizeInKB, 31  readExtent HDDTest::Disk, 17 readPage  readExtent HDDTest::Disk, 17 readPage  readExtent HDDTest::Disk, 17 readPage	get, 16	
readExtent, 17 readPage, 17 selExtentSize, 17 selExtentSize, 17 selPageSize, 18 writeExtent, 18 writePage, 18 HDDTest::Extent, 18 number, 19 startkb, 19 HDDTest::FullTableScan, 20 executeTestAlgorithm, 20 FullTableScan, 20 HDDTest::IndexScan, 21 ~IndexScan, 22 executeTestAlgorithm, 22 indexScan, 22  Layout, 23 createRelationship, 23 diskStart, 24 getRelationship, 23 Layout, 23 HDDTest::LayoutSettings, 24 mode, 24 pagesPerExtent, 24 relationships, 25 HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 HDDTest::Relationship, 29 addExtent, 29 extents, 31 getNextPage, 30 getRandomExtent, 30 getRandomExtent, 30 getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 pageSizeInKB, 31	isValid, 17	getNumberOfTests, 32
readPage, 17 setExtentSize, 17 setExtentSize, 18 writeExtent, 18 writePage, 18 HDDTest::Extent, 18 number, 19 startKb, 19 HDDTest::FullTableScan, 19 ~FullTableScan, 20 executeTestAlgorithm, 20 FullTableScan, 21 ~IndexScan, 22 executeTestAlgorithm, 22 IndexScan, 22 executeTestAlgorithm, 22 landexScan, 22  #HDDTest::Layout, 23 createRelationship, 23 diskStart, 24 getRelationship, 23 Layout, 23 HDDTest::LayoutSettings, 24 mode, 24 pagesPerExtent, 24 relationships, 25 HDDTest::LayoutSettings, 24 mode, 24 pagesPerExtent, 24 relationships, 25 HDDTest::Relationship, 29 add. 28 barWidth, 28 current, 28 name, 28 HDDTest::Relationship, 29 -Relationship, 29 extents, 31 getNextPage, 30 getProbability, 30 getRandomExtent, 30 getRandomExtent, 30 getRandomExtent, 30 getRandomExtent, 30 getRandomExtent, 31 pageSizeInKB, 31	path, 18	,
selExtentSize, 17 setPageSize, 18 writePage, 18 writePage, 18 HDDTest::Extent, 18 number, 19 startKb, 19 HDDTest::FullTableScan, 20 executeTestAlgorithm, 20 FullTableScan, 21 ~IndexScan, 21 ~IndexScan, 21 ~IndexScan, 22 executeTestAlgorithm, 22 execute TestAlgorithm, 23 createRelationship, 23 Layout, 23  HDDTest::Layout, 23  HDDTest::Layout, 24 mode, 24 pageSizeInKB, 24 pageSizeInKB, 24 pageSizeInKB, 24 pageSizeInKB, 24 pageSizeInKB, 28 add, 28 hDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 hDDTest::Relationship, 29 ~Relationship, 29 addExtent, 29 extents, 31 getNextPage, 30 getRandomPage, 30 isNextExtent, 31 pageSizeInKB, 31	readExtent, 17	
selPageSize, 18 writeExtent, 18 writeExtent, 18 writePage, 18 HDDTest::Extent, 18 number, 19 startKb, 19 HDDTest::FullTableScan, 20 executeTestAlgorithm, 20 executeTestAlgorithm, 20 executeTestAlgorithm, 22 indexScan, 22 -Layout, 23 Layout, 23 HDDTest::Layout, 23 Layout, 23 HDDTest::LayoutSettings, 24 mode, 24 pagesSizeInKB, 24 pagesPerExtent, 24 relationship, 25 HDDTest::LayoutSettings, 24 mode, 24 pagesPerExtent, 24 relationship, 25 HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 extents, 31 getNextExtent, 29 extents, 31 getNextExtent, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizeInKB, 31  relationship, 34 sleep, 34 ldexScan IndexScan, 21 ldexScan, 22 ldesMain HDDTest::Aletionship, 31 isValid HDDTest::Aletionship, 31 isValid HDDTest::Layout, 23 Layout Layout Layout HDDTest::Aleyout, 23 Log DButil::Log, 25 log HDDTest::Aleyout, 23 log DBenchmark.cpp, 35 mode HDDTest::AyoutSettings, 24 HDDTest::Relationship, 31 HDDTest::Relationship, 31 HDDTest::Extent, 19 pageSizeInKB HDDTest::Relationship, 31 pageSizeInKB, 31 readExtent HDDTest::Disk, 18 Progressbar HDDTest::Disk, 17 readExtent HDDTest::Disk, 17	readPage, 17	HDDTest::TestSettings, 33
writeExtent, 18 writePage, 18 HDDTest::Extent, 18 number, 19 startKb, 19 HDDTest::FullTableScan, 19 ~FullTableScan, 20 executeTestAlgorithm, 20 FullTableScan, 21 ~IndexScan, 21 ~IndexScan, 21 ~IndexScan, 21 ~IndexScan, 21 HDDTest::Helationship, 31 isValid HDDTest::Disk, 17  Layout, 23 createRelationship, 23 Layout, 23 HDDTest::Ayout, 23 Log DBUil::Log, 25 log HDDTest::Ayout, 23 main Layout, 23 HDDTest::Ayout, 24 pageSizeInKB, 24 pageSizeInKB, 24 pageSizeInKB, 24 pageSizeInKB, 24 padeStz:Relationship, 25 HDDTest::Progressbar, 27 ~Progressbar, 28 total, 28 HDDTest::Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 31 getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 pageSizeInKB, 31	setExtentSize, 17	name, <mark>34</mark>
writePage, 18 HDDTest::Extent, 18 number, 19 startKb, 19 FullTableScan, 20 executeTestAlgorithm, 20 FullTableScan, 20 HDDTest::Layout, 22 executeTestAlgorithm, 22 IndexScan, 22 executeTestAlgorithm, 22 IndexScan, 22 executeTestAlgorithm, 22 IndexScan, 22 executeTestAlgorithm, 22 IndexScan, 23 HDDTest::Layout, 23 createRelationships, 23 diskStart, 24 getRelationship, 23 Layout, 23 HDDTest::LayoutSettings, 24 mode, 24 pageSizeInKB, 24 pagesPerExtent, 24 relationships, 25 HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 adExtent, 29 extents, 31 getNextExtent, 29 getNextPage, 30 getRandomPage, 30 isNextExtent, 31 pageSizeInKB, 31	setPageSize, 18	relationship, 34
HDDTest::Extent, 18 number, 19 startKb, 19 HDDTest::FullTableScan, 19 ~FullTableScan, 20 executeTestAlgorithm, 20 FullTableScan, 20 HDDTest::IndexScan, 21 ~IndexScan, 22 HDDTest::IndexScan, 22 lndexScan, 22 executeTestAlgorithm, 22 IndexScan, 22 HDDTest::Layout, 23 createRelationships, 23 diskStart, 24 getRelationship, 23 Layout, 23 HDDTest::LayoutSettings, 24 mode, 24 pageSizeInKB, 24 pageSizeInKB, 24 relationships, 25 HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 PDTest::Relationship, 29 addExtent, 29 extents, 31 getReadomExtent, 30 getRandomPage, 30 isNextExtent, 31 pageSizeInKB, 31	writeExtent, 18	sleep, 34
HDDTest::Extent, 18 number, 19 startKb, 19 HDDTest::FullTableScan, 20 execute TestAlgorithm, 20 FullTableScan, 20 HDDTest::LindexScan, 21 ~IndexScan, 22 execute TestAlgorithm, 22 IndexScan, 22 HDDTest::Layout, 22 ~Layout, 23 createRelationships, 23 diskStart, 24 getRelationship, 23 Layout, 23 HDDTest::LayoutSettings, 24 mode, 24 pagesPerExtent, 24 relationships, 25 HDDTest::Porgressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 PDTest::Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 31 getRandomPage, 30 isNextExtent, 31 pagesSizelnKB, 31 pagesZizelnKB, 31	writePage, 18	
number, 19 startKb, 19 HDDTest::FullTableScan, 19	HDDTest::Extent, 18	
startKo, 19 HDDTest::FullTableScan, 20 executeTestAlgorithm, 20 FullTableScan, 20 HDDTest::IndexScan, 21  IndexScan, 22 executeTestAlgorithm, 20 executeTestAlgorith, 20 executeTestAlgorith, 21 expout Expout, 23 executeTestAlgorith, 21 expout Expout, 23 executeTestAlgorithm, 22 executeTestAlgorith, 21 expout Expout, 23 executeTestAlgorithe, 21 expout Expout, 23 executeTestAlgorithe, 21 expout Expout, 23 executeTestAlgorith, 21 expout Expout, 23 executeTestAlgorithe, 21 expout Expout	number, 19	•
**Notest::rundescan, 20 executeTestAlgorithm, 20 FullTableScan, 20 HDDTest::lableScan, 20 HDDTest::lableScan, 22 executeTestAlgorithm, 22 indexScan, 22 executeTestAlgorithm, 22 indexScan, 22 HDDTest::Layout, 22 executeTestAlgorithm, 22 indexScan, 22 HDDTest::Layout, 23 createRelationships, 23 diskStart, 24 getRelationship, 23 Layout, 23 HDDTest::LayoutSettings, 24 mode, 24 pageSizeInKB, 24 pageSizeInKB, 24 pageSizeInKB, 24 relationships, 25 HDDTest::Progressbar, 27  Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getNextPage, 30 getProbability, 30 getRandomExtent, 30 getRandomExtent, 31 pageSizeInKB, 31	startKb, 19	
~FullTableScan, 20 execute TestAlgorithm, 20 FullTableScan, 20 HDDTest::IndexScan, 21 ~IndexScan, 22 execute TestAlgorithm, 22 IndexScan, 22 execute TestAlgorithm, 22 IndexScan, 22 HDDTest::Layout, 23 CreateRelationships, 23 diskStart, 24 getRelationship, 23 Layout, 23 HDDTest::LayoutSettings, 24 mode, 24 pageSizeInKB, 24 pageSizeInKB, 24 pageSizeInKB, 24 relationships, 25 HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getNextPage, 30 getProbability, 30 getRandomExtent, 30 getRandomExtent, 31 pageSizeInKB, 31 path HDDTest::Disk, 18 Progressbar, 28 progressbar, 30 getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 pageSizeInKB, 31 pageSizeInKB, 31 pageSizeInKB, 31 pageSizeInKB, 31 path HDDTest::Disk, 18 Progressbar, 28 progressbar, 28 path HDDTest::Disk, 17 readPage		
executeTestAlgorithm, 20 FullTableScan, 20 HDDTest::IndexScan, 21		
FullTableScan, 20 HDDTest::IndexScan, 21		
HDDTest::IndexScan, 21  ~IndexScan, 22 executeTestAlgorithm, 22 IndexScan, 22  HDDTest::Layout, 23 createRelationships, 23 diskStart, 24 getRelationship, 23 Layout, 23  HDDTest::ATest, 14  main DBBenchmark.cpp, 35 mode HDDTest::LayoutSettings, 24 mode, 24 pageSizeInKB, 24 pagesPerExtent, 24 relationships, 25  HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getNextPage, 30 getRandomPage, 30 isNextExtent, 31 pageSizeInKB, 31 readPage	<del>-</del>	
~IndexScan, 22 executeTestAlgorithm, 22 IndexScan, 22 HDDTest::Layout, 23 CreateRelationships, 23 diskStart, 24 getRelationship, 23 Layout, 23 HDDTest::LayoutSettings, 24 mode, 24 pageSizeInKB, 24 pagesPerExtent, 24 relationships, 25 HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 Progressbar, 28 HDDTest::Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getNextPage, 30 getProbability, 30 getRandomPage, 30 iNextExtent, 31 pageSizeInKB, 31 readExtent HDDTest::Disk, 18 progressbar, 28 readExtent HDDTest::Disk, 17 readPage		HDDTest::Disk, 17
executeTestAlgorithm, 22 IndexScan, 22 HDDTest::Layout, 23 Log DBUtil::Log, 25 log DBUtil::Log, 26 log DBU		Lovout
IndexScan, 22  HDDTest::Layout, 22  ~Layout, 23  createRelationships, 23  diskStart, 24  getRelationship, 23  Layout, 23  HDDTest::LayoutSettings, 24  mode, 24  pageSizeInKB, 24  pageSizeInKB, 24  relationships, 25  HDDTest::Progressbar, 27  ~Progressbar, 28  add, 28  barWidth, 28  current, 28  name, 28  Progressbar, 28  total, 28  HDDTest::Relationship, 29  ~Relationship, 29  addExtent, 29  extents, 31  getNextExtent, 29  getRandomExtent, 30  getRandomPage, 30  isNextExtent, 31  pageSizeInKB, 31  pageSizeInKB, 31  pageSizeInKB, 31  readExtent  HDDTest::ATest, 14  HDDTest::ATest, 14  HDDTest::ATest, 14  HDDTest::Atest, 14  HDDTest::Relationship, 31  HDDTest::Relationship, 31  pageSizeInKB  Progressbar, 28  HDDTest::Relationship, 31  pagesPerExtent  HDDTest::LayoutSettings, 24  HDDTest::LayoutSettings, 24  HDDTest::Relationship, 31  pagesPerExtent  HDDTest::Disk, 18  Progressbar  HDDTest::Disk, 18  Progressbar  HDDTest::Progressbar, 28  readExtent  HDDTest::Disk, 17  readPage		-
HDDTest::Layout, 22  ~Layout, 23 createRelationships, 23 diskStart, 24 getRelationship, 23 Layout, 23  HDDTest::LayoutSettings, 24 mode, 24 pageSizeInKB, 24 pageSizeInKB, 24 relationships, 25  HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getNextPage, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizeInKB, 31  HDDTest::Disk, 17 readPage  MADTest::ATest, 14 HDDTest::AyoutSettings, 24 HDDTest::ATest, 14 HDDTest::AyoutSettings, 24 HDDTest::Relationship, 31 HDDTest::Relationship, 31 HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 pageSizeInKB, 18 Progressbar HDDTest::Disk, 18 Progressbar HDDTest::Disk, 17 readPage		
~Layout, 23 createRelationships, 23 diskStart, 24 getRelationship, 23 Layout, 23  HDDTest::LayoutSettings, 24 mode, 24 pageSizeInKB, 24 pagesPerExtent, 24 relationships, 25  HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 ~Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getRelationship, 30 getProbability, 30 getProbability, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizeInKB, 31  main DBBenchmark.cpp, 35 mode HDDTest::ATest, 14 HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 HDDTest::Relationship, 31 HDDTest::Relationship, 31 HDDTest::Extent, 19 pageSizeInKB HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 pagesPerExtent HDDTest::Relationship, 31 HDDTest::Relationship, 31 PagesPerExtent HDDTest::Relationship, 31 Progressbar HDDTest::Disk, 18 Progressbar HDDTest::Progressbar, 28  readExtent HDDTest::Disk, 17 readPage		_
createRelationships, 23 diskStart, 24 getRelationship, 23 Layout, 23  HDDTest::LayoutSettings, 24 mode, 24 pageSizeInKB, 24 pagesPerExtent, 24 relationships, 25  HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getNextPage, 30 getProbability, 30 getRandomPage, 30 isNextExtent, 31 pageSizeInKB, 21 main DBBenchmark.cpp, 35 main DBBenchmark.cpp, 35 mode HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::ATest, 14 HDDTest::Relationship, 31 HDDTest::Relationship, 31 HDDTest::Relationship, 31 PageSizeInKB HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 Path HDDTest::Disk, 18 Progressbar HDDTest::Disk, 17 readPage	-	_
diskStart, 24 getRelationship, 23 Layout, 23  HDDTest::LayoutSettings, 24 mode, 24 pageSizeInKB, 24 pagesPerExtent, 24 relationships, 25  HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28  HDDTest::Relationship, 29 ~Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getNextPage, 30 getRandomPage, 30 isNextExtent, 31 pageSizeInKB, 31  main DBBenchmark.cpp, 35 mode  HDDTest::LayoutSettings, 24 HDDTest::ATest, 14 HDDTest::ATest, 14 HDDTest::Progressbar, 28 HDDTest::Relationship, 31 HDDTest::Relationship, 31 pageSizeInKB HDDTest::Extent, 19  pageSizeInKB HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::Disk, 18 Progressbar HDDTest::Disk, 18 Progressbar HDDTest::Progressbar, 28		-
getRelationship, 23 Layout, 23  HDDTest::LayoutSettings, 24 mode, 24 pageSizeInKB, 24 pagesPerExtent, 24 relationships, 25  HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getRandomPage, 30 getRandomPage, 30 isNextExtent, 31 pageSizeInKB, 31  main DBBenchmark.cpp, 35 mode HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::ATest, 14 HDDTest::Progressbar, 28 HDDTest::Relationship, 31 HDDTest::Relationship, 31 pageSizeInKB HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 path HDDTest::Disk, 18 Progressbar HDDTest::Disk, 18 Progressbar HDDTest::Disk, 17 readPage	·	HDD lestA lest, 14
Layout, 23  HDDTest::LayoutSettings, 24  mode, 24  pageSizeInKB, 24  pagesPerExtent, 24  relationships, 25  HDDTest::Progressbar, 27  ~Progressbar, 28  add, 28  barWidth, 28  current, 28  name, 28  Progressbar, 28  total, 28  HDDTest::Relationship, 29  ~Relationship, 29  addExtent, 29  getNextPage, 30  getProbability, 30  getRandomPage, 30  isNextExtent, 31  pageSizeInKB, 31  mode  HDDTest::LayoutSettings, 24  HDDTest::LayoutSettings, 24  HDDTest::Relationship, 31  path  HDDTest::LayoutSettings, 24  HDDTest::Disk, 18  Progressbar  HDDTest::Progressbar, 28  readExtent  HDDTest::Progressbar, 28		main
HDDTest::LayoutSettings, 24 mode, 24 pageSizeInKB, 24 pagesPerExtent, 24 relationships, 25 HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 ~Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getRandomPage, 30 isNextExtent, 31 pageSizeInKB, 31  mode HDDTest::LayoutSettings, 24 HDDTest::Arest, 14 HDDTest::Progressbar, 28 HDDTest::Relationship, 31 HDDTest::Relationship, 31 HDDTest::Extent, 19 pageSizeInKB HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 path HDDTest::Disk, 18 Progressbar HDDTest::Progressbar, 28  readExtent HDDTest::Progressbar, 28	•	
mode, 24 pageSizeInKB, 24 pagesPerExtent, 24 relationships, 25 HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 ~Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getProbability, 30 getRandomPage, 30 isNextExtent, 31 pageSizeInKB, 31  readExtent pageSizeInKB, 31  readExtent pageSizeInKB, 31  readExtent pageSizeInKB, 31  name  HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 pagesPerExtent HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 path HDDTest::Disk, 18 Progressbar HDDTest::Progressbar, 28  readExtent HDDTest::Progressbar, 28		• •
pageSizeInKB, 24 pagesPerExtent, 24 relationships, 25 HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getNextPage, 30 getProbability, 30 getRandomPage, 30 isNextExtent, 31 pageSizeInKB, 21  name HDDTest::ATest, 14 HDDTest::Progressbar, 28 HDDTest::Relationship, 31 HDDTest::Relationship, 31 HDDTest::Extent, 19  pageSizeInKB HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 pagesPerExtent HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 path HDDTest::Disk, 18 Progressbar HDDTest::Disk, 18 Progressbar HDDTest::Progressbar, 28  readExtent HDDTest::Disk, 17 readPage		HDDTest::LavoutSettings, 24
pagesPerExtent, 24 relationships, 25  HDDTest::Progressbar, 27 ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 ~Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizeInKB, 31  HDDTest::ATest, 14 HDDTest::Progressbar, 28 HDDTest::Relationship, 31 HDDTest::Relationship, 34 HDDTest::Extent, 19  pageSizeInKB HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 pageSizeInKB, 18 Progressbar HDDTest::Disk, 18 Progressbar HDDTest::Progressbar, 28  readExtent HDDTest::Disk, 17 readPage		=
relationships, 25  HDDTest::Progressbar, 27  ~Progressbar, 28  add, 28  barWidth, 28  current, 28  name, 28  Progressbar, 28  total, 28  HDDTest::Relationship, 29  ~Relationship, 29  addExtent, 29  getNextExtent, 29  getRandomExtent, 30  getRandomPage, 30  isNextExtent, 31  name, 31  pageSizeInKB, 31  HDDTest::Relationship, 31  HDDTest::Relationship, 31  HDDTest::LayoutSettings, 24  HDDTest::LayoutSettings, 24  HDDTest::LayoutSettings, 24  HDDTest::Relationship, 31  pageSperExtent  HDDTest::LayoutSettings, 24  HDDTest::LayoutSettings, 24  HDDTest::Relationship, 31  path  HDDTest::Disk, 18  Progressbar  HDDTest::Progressbar, 28  readExtent  HDDTest::Disk, 17  readPage	• •	name
HDDTest::Progressbar, 27  ~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship 31 HDDTest::Relationship 32 HDDTest::Relationship 34 number HDDTest::Extent, 19  pageSizeInKB HDDTest::LayoutSettings, 24 HDDTest::Relationship, 29 AddExtent, 29 extents, 31 getNextExtent, 29 getNextPage, 30 getProbability, 30 getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizeInKB, 31  HDDTest::Progressbar, 28 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::Disk, 18 Progressbar HDDTest::Disk, 18 Progressbar HDDTest::Progressbar, 28		HDDTest::ATest, 14
~Progressbar, 28 add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Extent, 19  pageSizeInKB HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 pagesPerExtent HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 pagesPerExtent HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 pagesPerExtent HDDTest::LayoutSettings, 24 HDDTest::Lay		HDDTest::Progressbar, 28
add, 28 barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 ARelationship, 29 extents, 31 getNextExtent, 29 getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizelnKB, 31  HDDTest::Relationship, 31 pageSizelnKB HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 pagesPerExtent HDDTest::Relationship, 31 pagesPerExtent HDDTest::Relationship, 31 pagesPerExtent HDDTest::Progressbar HDDTest::Progressbar, 28  readExtent HDDTest::Disk, 18 readPage	•	HDDTest::Relationship, 31
barWidth, 28 current, 28 name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 ARelationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizeInKB HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 pagesPerExtent HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 pagesPerExtent HDDTest::Relationship, 31 path HDDTest::Disk, 18 Progressbar HDDTest::Disk, 18 Progressbar HDDTest::Progressbar, 28  readExtent HDDTest::Disk, 17 readPage	5	HDDTest::RelationshipConfig, 32
current, 28 name, 28 Progressbar, 28 total, 28  HDDTest::Relationship, 29 ~Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizeInKB HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::Disk, 18 Progressbar HDDTest::Disk, 18 Progressbar HDDTest::Progressbar, 28	•	HDDTest::TestSettings, 34
name, 28 Progressbar, 28 total, 28 HDDTest::Relationship, 29 ~Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getProbability, 30 getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizeInKB  HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::LayoutSettings, 24 HDDTest::Disk, 18 Progressbar HDDTest::Disk, 18 Progressbar HDDTest::Progressbar, 28		number
Progressbar, 28 total, 28 HDDTest::Relationship, 29     ~Relationship, 29     addExtent, 29     extents, 31     getNextExtent, 29     getRandomExtent, 30     getRandomPage, 30 isNextExtent, 31     pageSizeInKB      HDDTest::LayoutSettings, 24     HDDTest::LayoutSettings, 24     HDDTest::Relationship, 31  path     HDDTest::Disk, 18  Progressbar     HDDTest::Disk, 18  Progressbar     HDDTest::Progressbar, 28  readExtent     HDDTest::Disk, 17  readPage		HDDTest::Extent, 19
total, 28  HDDTest::Relationship, 29  ~Relationship, 29  addExtent, 29  extents, 31  getNextExtent, 29  getProbability, 30  getRandomExtent, 30  getRandomPage, 30  isNextExtent, 31  name, 31  pageSizeInKB  HDDTest::LayoutSettings, 24  HDDTest::LayoutSettings, 24  HDDTest::LayoutSettings, 24  HDDTest::Disk:Relationship, 31  path  HDDTest::Disk, 18  Progressbar  HDDTest::Progressbar, 28  readExtent  HDDTest::Disk, 17  readPage	,	
HDDTest::Relationship, 29  ~Relationship, 29  addExtent, 29  extents, 31  getNextExtent, 29  getProbability, 30  getRandomExtent, 30  getRandomPage, 30  isNextExtent, 31  name, 31  pageSizeInKB, 31  HDDTest::Relationship, 31  pagesPerExtent  HDDTest::LayoutSettings, 24  HDDTes	_	• •
~Relationship, 29 addExtent, 29 extents, 31 getNextExtent, 29 getNextPage, 30 getProbability, 30 getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizeInKB, 31  pagesPerExtent HDDTest::LayoutSettings, 24 HDDTest::Disk:Relationship, 31 path HDDTest::Disk, 18 Progressbar HDDTest::Progressbar, 28  readExtent HDDTest::Disk, 17 readPage		•
addExtent, 29 extents, 31 getNextExtent, 29 getNextPage, 30 getProbability, 30 getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSi elextent HDDTest::LayoutSettings, 24 HDDTest::Relationship, 31 path HDDTest::Disk, 18 Progressbar HDDTest::Progressbar, 28	•	•
extents, 31  getNextExtent, 29 getNextPage, 30 getProbability, 30 getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizeInKB, 31  HDDTest::Relationship, 31 path HDDTest::Disk, 18 Progressbar HDDTest::Progressbar, 28  readExtent HDDTest::Disk, 17 readPage	•	• •
getNextExtent, 29 getNextPage, 30 getProbability, 30 getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizeInKB, 31  path HDDTest::Disk, 18 Progressbar HDDTest::Progressbar, 28 readExtent HDDTest::Disk, 17 readPage		
getNextPage, 30  getProbability, 30  getRandomExtent, 30  getRandomPage, 30  isNextExtent, 31  name, 31  pageSizeInKB, 31  HDDTest::Disk, 18  Progressbar  HDDTest::Progressbar, 28  HDDTest::Disk, 17  readExtent  HDDTest::Disk, 17  readPage	•	
getProbability, 30 getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizeInKB, 31  Progressbar HDDTest::Progressbar, 28  readExtent HDDTest::Disk, 17 readPage		•
getRandomExtent, 30 getRandomPage, 30 isNextExtent, 31 name, 31 pageSizeInKB, 31  HDDTest::Progressbar, 28 readExtent HDDTest::Disk, 17 readPage	-	
getRandomPage, 30 isNextExtent, 31 readExtent name, 31 HDDTest::Disk, 17 pageSizeInKB, 31 readPage		_
isNextExtent, 31 readExtent name, 31 HDDTest::Disk, 17 pageSizeInKB, 31 readPage		HDDTest::Progressbar, 28
name, 31 HDDTest::Disk, 17 pageSizeInKB, 31 readPage		roadExtont
pageSizeInKB, 31 readPage		
· ·		
pagesi elexient, or nonlestDisk, 1/	• •	_
	pagesi elexient, or	1100 163(013K, 17

Relationship    HDDTest::Relationship, 29 relationship    HDDTest::ATest, 14    HDDTest::TestSettings, 34 relationships    HDDTest::LayoutSettings, 25 run    HDDTest::TestScenario, 33 runs	write DBUtil::Log, 26 writeExtent HDDTest::Disk, 18 writePage HDDTest::Disk, 18
HDDTest::ATest, 14	
setExtentSize	
HDDTest::Disk, 17	
setPageSize	
HDDTest::Disk, 18	
setUnallocatedExtents	
HDDTest::Relationship, 31	
size	
DBUtil::measurement, 27	
HDDTest::RelationshipConfig, 32	
sleep	
HDDTest::ATest, 12	
HDDTest::TestSettings, 34	
src/DBBenchmark.cpp, 35	
src/Layout/Layout.cpp, 36	
src/Layout/Layout.h, 36	
src/Layout/Relationship.cpp, 37	
src/Layout/Relationship.h, 38	
src/Tests/ATest.cpp, 39	
• •	
src/Tests/ATest.h, 39	
src/Tests/FullTableScan.cpp, 40	
src/Tests/FullTableScan.h, 41	
src/Tests/IndexScan.cpp, 42	
src/Tests/IndexScan.h, 42	
src/Tests/TestScenario.cpp, 43	
src/Tests/TestScenario.h, 44	
src/Util/Configurator.cpp, 44	
src/Util/Configurator.h, 45	
src/Util/Disk.cpp, 46	
src/Util/Disk.h, 46	
src/Util/Log.cpp, 47	
src/Util/Log.h, 48	
src/Util/Progressbar.cpp, 49	
src/Util/Progressbar.h, 50	
start	
DBUtil::Log, 25	
HDDTest::ATest, 13	
startBackground	
HDDTest::ATest, 13	
startKb	
HDDTest::Extent, 19	
stop	
DBUtil::Log, 26	
<b>.</b>	
TestScenario	
HDDTest::TestScenario, 32	
total	
HDDTest::Progressbar, 28	