

## Exception

1.0.4

Generated by Doxygen 1.8.4

Tue Apr 29 2014 12:50:33



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# Chapter 1

## Hierarchical Index

### 1.1 Class Hierarchy

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

std::exception	
std::runtime_error	
Exception . . . . .	5



## Chapter 2

# Class Index

### 2.1 Class List

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

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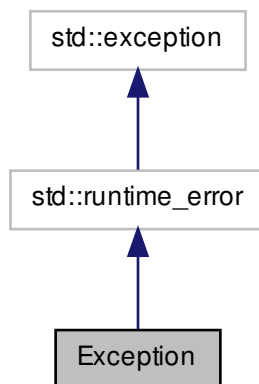
## Chapter 3

# Class Documentation

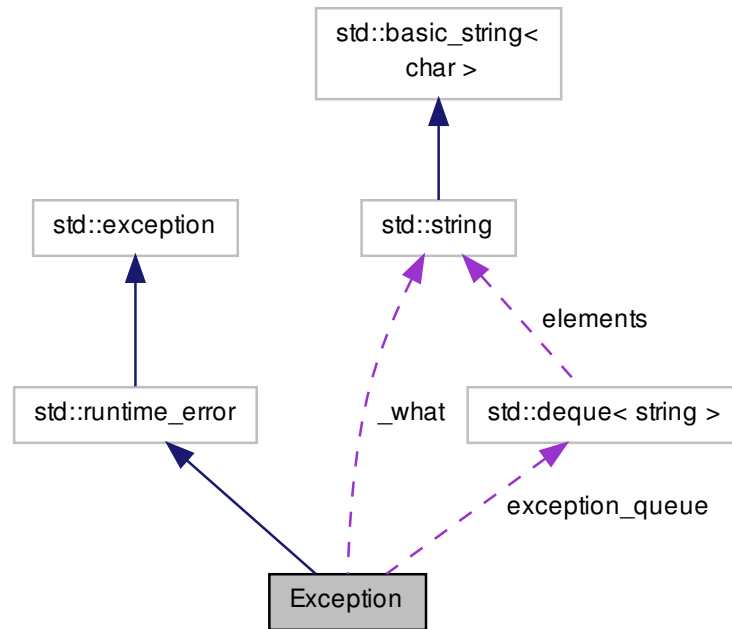
### 3.1 Exception Class Reference

```
#include <Exception.h>
```

Inheritance diagram for Exception:



Collaboration diagram for Exception:



## Public Member Functions

- `Exception ()`
- `Exception (const Exception &e)`
- `Exception (const string &arg)`
- `Exception & operator= (const Exception &rhs)`
- `deque< string >::const_iterator begin () const`
- `deque< string >::const_iterator end () const`
- `string get_message (void) const`
- `void set_message (const string &msg)`
- `void set_rethrow_message (const string &file, const int linenum)`
- `const char * what () const throw ()`
- `void update_what ()`

## Protected Member Functions

- `virtual void print (ostream &os=cerr) const`

## Protected Attributes

- `deque< string > exception_queue`
- `string _what`

## Friends

- ostream & operator<< (ostream &os, [Exception](#) &a)
- ostream & operator<< (ostream &os, [Exception](#) \*a)

### 3.1.1 Detailed Description

The class [Exception](#), all the subclasses as defined by the user, are a form of conditions that a reasonable application might want to catch.

### 3.1.2 Constructor & Destructor Documentation

#### 3.1.2.1 `Exception::Exception ( )` `[inline]`

Constructs an [Exception](#) with no specified detail message.

#### 3.1.2.2 `Exception::Exception ( const string & arg )` `[inline]`

Constructs an [Exception](#) with a specified detail message.

### 3.1.3 Member Function Documentation

#### 3.1.3.1 `deque<string>::const_iterator Exception::begin ( ) const` `[inline]`

Get the iterator pointing to the beginning of the dequeue.

Referenced by print().

#### 3.1.3.2 `deque<string>::const_iterator Exception::end ( ) const` `[inline]`

Get the iterator pointing to the end of the dequeue.

Referenced by print().

#### 3.1.3.3 `string Exception::get_message ( void ) const` `[inline]`

Get the most current message

#### 3.1.3.4 `void Exception::print ( ostream & os = cerr ) const` `[protected]`, `[virtual]`

Prints this and its backtrace to the specified output stream.

References begin(), and end().

#### 3.1.3.5 `void Exception::set_message ( const string & msg )`

Add a message.

### 3.1.4 Friends And Related Function Documentation

#### 3.1.4.1 ostream& operator<< ( ostream & os, Exception & a ) [friend]

Prints this and its backtrace to the specified output stream.

#### 3.1.4.2 ostream& operator<< ( ostream & os, Exception \* a ) [friend]

Prints this and its backtrace to the specified output stream.

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

- Exception.h
- Exception.cc

## Chapter 4

# Example Documentation

### 4.1 test.cc

This is an example of how to use the Test class. More details about this example.

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