



Delta3D Version 2.4.0

# **dtScript::**

## **Reference Manual**



# Contents

---

<b>1</b>	<b>Main Page</b>	<b>1</b>
<b>2</b>	<b>Directory Documentation</b>	<b>3</b>
2.1	src/dtScript/ Directory Reference . . . . .	3
2.2	inc/dtScript/ Directory Reference . . . . .	4
2.3	inc/ Directory Reference . . . . .	5
2.4	src/ Directory Reference . . . . .	6
<b>3</b>	<b>Namespace Documentation</b>	<b>7</b>
3.1	dtScript Namespace Reference . . . . .	7
3.1.1	Detailed Description . . . . .	7
<b>4</b>	<b>Class Documentation</b>	<b>9</b>
4.1	ScriptManager Class Reference . . . . .	9
4.1.1	Detailed Description . . . . .	9
4.1.2	Constructor & Destructor Documentation . . . . .	9
4.1.2.1	ScriptManager . . . . .	9
4.1.2.2	~ScriptManager . . . . .	9
4.1.3	Member Function Documentation . . . . .	9
4.1.3.1	Load . . . . .	9
4.1.3.2	run . . . . .	10
4.1.3.3	Run . . . . .	10
4.1.3.4	Stop . . . . .	10
4.1.4	Member Data Documentation . . . . .	10
4.1.4.1	mFilename . . . . .	10
4.1.4.2	mFileObject . . . . .	10
<b>5</b>	<b>File Documentation</b>	<b>11</b>
5.1	dtscript.h File Reference . . . . .	11
5.2	export.h File Reference . . . . .	12
5.2.1	Define Documentation . . . . .	12
5.2.1.1	DT_SCRIPT_EXPORT . . . . .	12
5.3	mainpage.h File Reference . . . . .	13
5.3.1	Detailed Description . . . . .	13
5.4	scriptmanager.cpp File Reference . . . . .	14
5.5	scriptmanager.h File Reference . . . . .	15



## Main Page

---

Delta3D is an Open Source engine which can be used for games, simulations, or other graphical applications.

The Delta3D framework exists as a number of modules, each sitting in its own library, enclosed within its own namespace. At the very core lies the dtCore library. This contains basic, low-level functionality which is mostly required for all 3D applications written in C++.

Around and alongside this sit other supporting libraries, such as dtUtil (containing reusable features which are useful for most applications), dtTerrain (for rendering terrain databases), dtGame, dtNet, etc.

Extensive online documentation is available from the Delta3D Docs section to help in using Delta3D.

The project's original reference guides generated by Doxygen from the source code may be viewed at the Delta3D API Documentation section.

To download source code, binaries, dependencies and sample datasets visit the Delta3D Downloads page.

For more about dependencies see the Delta3D Dependencies page.

The documentation you are looking at can be downloaded from [www.3draum.ch](http://www.3draum.ch).

Enjoy!



# Directory Documentation

---

## 2.1 src/dtScript/ Directory Reference

### Files

- file `scriptmanager.cpp`

## 2.2 inc/dtScript/ Directory Reference

### Files

- file **dtscript.h**
- file **export.h**
- file **mainpage.h**
- file **scriptmanager.h**

## 2.3 inc/ Directory Reference

### Directories

- directory dtScript

## 2.4 src/ Directory Reference

### Directories

- directory **dtScript**

# Namespace Documentation

---

### 3.1 dtScript Namespace Reference

Contains the functionality to call Python scripts from a C++ application.

#### Classes

- class **ScriptManager**

*This class assists the user in executing Python scripts from within the C++ Delta3D world.*

#### 3.1.1 Detailed Description

Contains the functionality to call Python scripts from a C++ application.



## Class Documentation

---

### 4.1 ScriptManager Class Reference

This class assists the user in executing Python scripts from within the C++ Delta3D world.

```
#include <inc/dtScript/scriptmanager.h>
```

#### Public Member Functions

- **ScriptManager** (const std::string &name="ScriptManager")
- void **Load** (const std::string &filename)  
*Load a Python script (.py) into memory.*
- void **Run** (const std::string &filename="")  
*Load a Python script and execute it immediately. Use the default paramters to use a pre-loaded script.*
- void **Stop** ()  
*Stops the **ScriptManager** (p. 9) thread. Make sure to call this before you exit your app.*

#### Protected Member Functions

- virtual ~**ScriptManager** ()
- virtual void **run** ()

#### Protected Attributes

- std::string **mFilename**
- PyObject \* **mFileObject**

#### 4.1.1 Detailed Description

This class assists the user in executing Python scripts from within the C++ Delta3D world. Just instantiate a **ScriptManager** (p. 9), call Load(filename) on your Python script, and then successive **Run()** (p. 10) calls will execute it by kicking off a new thread. Alternatively you can call Run(filename) to load and execute in one step.

#### 4.1.2 Constructor & Destructor Documentation

4.1.2.1 **ScriptManager** (const std::string & *name* = "ScriptManager")

4.1.2.2 ~**ScriptManager** () [protected, virtual]

#### 4.1.3 Member Function Documentation

4.1.3.1 void **Load** (const std::string & *filename*)

Load a Python script (.py) into memory.

**4.1.3.2 void run () [protected, virtual]**

**4.1.3.3 void Run (const std::string & filename = "")**

Load a Python script and execute it immediately. Use the default parameters to use a pre-loaded script.

**4.1.3.4 void Stop () [inline]**

Stops the **ScriptManager** (p. 9) thread. Make sure to call this before you exit your app.

#### **4.1.4 Member Data Documentation**

**4.1.4.1 std::string mFilename [protected]**

**4.1.4.2 PyObject\* mFileObject [protected]**

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

- **scriptmanager.h**
- **scriptmanager.cpp**

# File Documentation

---

## 5.1 dtscript.h File Reference

```
#include <dtScript/scriptmanager.h>
```

### Namespaces

- namespace **dtScript**  
*Contains the functionality to call Python scripts from a C++ application.*

## 5.2 export.h File Reference

### Defines

- #define `DT_SCRIPT_EXPORT`

#### 5.2.1 Define Documentation

##### 5.2.1.1 #define `DT_SCRIPT_EXPORT`

## 5.3 mainpage.h File Reference

### 5.3.1 Detailed Description

This file contains Doxygen special commands and text for the **Main Page** (p. ??) and some other minor aspects of this documentation. It is not part of Delta3D.

## 5.4 scriptmanager.cpp File Reference

```
#include <dtScript/scriptmanager.h>  
#include <dtUtil/fileutils.h>
```

## 5.5 scriptmanager.h File Reference

```
#include <Python.h>
#include <dtCore/base.h>
#include <dtScript/export.h>
#include <OpenThreads/Thread>
```

### Classes

- class **ScriptManager**

*This class assists the user in executing Python scripts from within the C++ Delta3D world.*

### Namespaces

- namespace **dtScript**

*Contains the functionality to call Python scripts from a C++ application.*

# Index

---

## - Symbols -

~ScriptManager  
dtScript::ScriptManager, 9

## - D -

DT\_SCRIPT\_EXPORT  
export.h, 12  
dtScript, 7  
dtscript.h, 11  
dtScript::ScriptManager, 9  
    ~ScriptManager, 9  
    Load, 9  
    mFilename, 10  
    mFileObject, 10  
    Run, 10  
    run, 9  
    ScriptManager, 9  
    Stop, 10

## - E -

export.h, 12  
DT\_SCRIPT\_EXPORT, 12

## - I -

inc/ Directory Reference, 5  
inc/dtScript/ Directory Reference, 4

## - L -

Load  
dtScript::ScriptManager, 9

## - M -

mainpage.h, 13  
mFilename  
dtScript::ScriptManager, 10  
mFileObject  
dtScript::ScriptManager, 10

## - R -

Run  
dtScript::ScriptManager, 10  
run  
dtScript::ScriptManager, 9

## - S -

ScriptManager  
dtScript::ScriptManager, 9  
scriptmanager.cpp, 14  
scriptmanager.h, 15  
src/ Directory Reference, 6  
src/dtScript/ Directory Reference, 3  
Stop  
dtScript::ScriptManager, 10