

Namespace Genesis

Classes

▼ Enter here to filter...

+ **Class1** ([Genesis.Class1.html](#))

([..../obj/api/..../api/Genesis.htm](#))

+ **Genesis.Core**

([..../obj/api/..../api/Genesis.Cor](#))

+ **Genesis.Core.Behaviors**

([..../obj/api/..../api/Genesis.Cor](#))

+ **Genesis.Core.Behaviors.Physics**

([..../obj/api/..../api/Genesis.Cor](#))

+ **Genesis.Core.Behaviors.Physics**

([..../obj/api/..../api/Genesis.Cor](#))

+ **Genesis.Core.GameElements**

([..../obj/api/..../api/Genesis.Cor](#))

+ **Genesis.Graphics**

([..../obj/api/..../api/Genesis.Gra](#))

+ **Genesis.Graphics.Physics**

([..../obj/api/..../api/Genesis.Gra](#))

+ **Genesis.Graphics.RenderDevice**

([..../obj/api/..../api/Genesis.Gra](#))

+ **Genesis.Graphics.Shaders.Oper**

([..../obj/api/..../api/Genesis.Gra](#))

+ **Genesis.Graphics.Shapes**

([..../obj/api/..../api/Genesis.Gra](#))

+ **Genesis.Math**

([..../obj/api/..../api/Genesis.Ma](#))

+ **Genesis.Physics**

([..../obj/api/..../api/Genesis.Phy](#))

+ **Genesis.UI**

([..../obj/api/..../api/Genesis.UI.I](#))

Class Class1

Inheritance

↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (https://learn.microsoft.com/dotnet/api/system.object)
↳ [Class1](#)

+ Genesis

Inherited Members

([..obj/api/..../api/Genesis.htm](#))
[object.ToString\(\)](#) (https://learn.microsoft.com/dotnet/api/system.object.tostring)
+ [Genesis.Core](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](#))
[object.Equals\(object, object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object, system-object\)](#))
+ [Genesis.Core.Behaviors](#)
([..obj/api/..../api/Genesis.Corr](#)) ([https://learn.microsoft.com/dotnet/api/system.object.referenceequals](#))
[object.GetHashCode\(\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.gethashcode](#))
+ [Genesis.Core.Behaviors.Physics](#)
([..obj/api/..../api/Genesis.Corr](#)) ([https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone](#))

+ Genesis.Core.Behaviors.Physics

Assembly: [obj/api/..../api/Genesis.Core.dll](#)

Syntax

+ Genesis.Core.GameElements

([..obj/api/..../api/Genesis.Corr](#))
public class Class1

+ Genesis.Graphics

([..obj/api/..../api/Genesis.Gra](#))

Constructors

+ Genesis.Graphics.Physics

([..obj/api/..../api/Genesis.Gra](#))

Class1()

+ Genesis.Graphics.RenderDevice

([..obj/api/..../api/Genesis.Gra](#))

Declaration

+ Genesis.Graphics.Shaders.Oper

([..obj/api/..../api/Genesis.Gra](#))

+ Genesis.Graphics.Shapes

([..obj/api/..../api/Genesis.Gra](#))

+ Genesis.Math

([..obj/api/..../api/Genesis.Ma](#))

+ Genesis.Physics

([..obj/api/..../api/Genesis.Phy](#))

+ Genesis.UI

([..obj/api/..../api/Genesis.UI.I](#))

Namespace Genesis.Core

Classes

▼ Enter here to filter...

AssetManager (Genesis.Core.AssetManager.html)

(Genesis.Core.h)

Manages game assets such as textures and fonts.

AssetManager

(Genesis.Core.AssetManager.html)

Game (Genesis.Core.Game.html)

(Game (Genesis.Core.Game.html))

Represents the main game class responsible for managing game loops, scenes, rendering, and updates.

GameElement

(Genesis.Core.GameElement.html)

GameElement (Genesis.Core.GameElement.html)

(Genesis.Core.GameEventHandler.h)

Represents a base class for game elements in the Genesis framework.

GenesisWindow

(Genesis.Core.GenesisWindow.html)

GenesisWindow (Genesis.Core.GenesisWindow.html)

(Genesis.Core.IGameBehavior.html)

Input (Genesis.Core.Input.html)

IGameBehavior (Genesis.Core.IGameBehavior.html)

Light (Genesis.Core.Light.html)

Represents the base class for game behaviors in the Genesis framework.

Scene (Genesis.Core.Scene.html)

Scene3D

(Genesis.Core.Scene3D.html)

Input (Genesis.Core.Input.html)

SceneEventHandler

Provides utility methods for handling user input in the Genesis framework.

(Genesis.Core.SceneEventHandler.h)

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.h)

Layer (Genesis.Core.Layer.html)

Storage

Represents a layer containing game elements in the Genesis framework.

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

Light (Genesis.Core.Light.html)

(Genesis.Core.Behaviors.h)

Represents a light source in the Genesis framework.

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

Scene (Genesis.Core.Scene.html)

(Genesis.Core.Behaviors.Physics.h)

Represents a game scene in the Genesis framework.

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.h)

Scene3D (Genesis.Core.Scene3D.html)

+ Genesis.Core.GameElements

Creates a scene for 3D rendering. This scene contains lightning and a optional skybox.

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

Storage (Genesis.Core.Storage.html)

(Genesis.Graphics.html)

Class for dynamic clearing not used elements.

+ Genesis.Graphics.Physics

Utils (Genesis.Core.Utils.html)

Delegates

GameEventHandler (Genesis.Core.GameEventHandler.html)

SceneEventHandler (Genesis.Core.SceneEventHandler.html) (Genesis.Core.html)

SceneSizeEvenHandler (Genesis.Core.SceneSizeEvenHandler.html) (Genesis.Core.AssetManager.html)

AssetManager
(Genesis.Core.AssetManager.html)
Game (Genesis.Core.Game.html)
GameElement
(Genesis.Core.GameElement.html)
GameEventHandler
(Genesis.Core.GameEventHandler.h)
GenesisWindow
(Genesis.Core.GenesisWindow.html)
IGameBehavior
(Genesis.Core.IGameBehavior.html)
Input (Genesis.Core.Input.html)
Layer (Genesis.Core.Layer.html)
Light (Genesis.Core.Light.html)
Scene (Genesis.Core.Scene.html)
Scene3D
(Genesis.Core.Scene3D.html)
SceneEventHandler
(Genesis.Core.SceneEventHandler.h)
SceneSizeEvenHandler
(Genesis.Core.SceneSizeEvenHandler.h)
Storage
(Genesis.Core.Storage.html)
Utils (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors (Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)

+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)

+ Genesis.Core.GameElements (Genesis.Core.GameElements.h)

+ Genesis.Graphics (Genesis.Graphics.html)

+ Genesis.Graphics.Physics

Class AssetManager

Manages game assets such as textures and fonts.

▼ Enter here to filter...

Inheritance

Genesis.Core

↳ [Object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)

([Genesis.Core.html](#))

Inherited Members

([Genesis.Core.AssetManager.html](#))

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

([Game.html](#))

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

([GameElement.html](#))

[object.Equals\(object, object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

([GameEventHandler.html](#))

[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

([GenesisWindow.html](#))

[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

([Genesis.GenesisWindow.html](#))

[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

([IGameBehavior.html](#))

[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

([Genesis.Core.IGameBehavior.html](#))

[Assembly: Genesis](#)

Light ([Genesis.Core.Light.html](#))

Scene ([Genesis.Core.Scene.html](#))

Scene3D

public class AssetManager
([Genesis.Core.Scene3D.html](#))

SceneEventHandler

([Genesis.Core.SceneEventHandler.html](#))

SceneSizeEvenHandler

([Genesis.Core.SceneSizeEvenHandler.html](#))

Storage

[AssetManager\(\)](#) ([Storage.html](#))

Utils ([Genesis.Core.Utils.html](#))

Initializes a new instance of the AssetManager ([Genesis.Core.AssetManager.html](#)) class.

+ **Genesis.Core.Behaviors**

Declaration
([Genesis.Core.Behaviors.html](#))

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

Properties

+ [Genesis.Core.GameElements](#)

([Genesis.Core.GameElements.html](#))

Fonts

+ [Genesis.Graphics](#)

List ([Genesis.Graphics.html](#))

+ [Genesis.Graphics.Physics](#)

Declaration

```
public List<Font> Fonts { get; set; }
```

Property Value

Type	Description
- List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1) < - Genesis.Core Font (Genesis.Graphics.Font.html)> (Genesis.Core.html)	

AssetManager
(Genesis.Core.AssetManager.html)

Textures
Game (Genesis.Core.Game.html)

GameElement
List of loaded textures.
(Genesis.Core.GameElement.html)

Declaration
GameEventHandler

```
(Genesis.Core.GameEventHandler.h  
public List<Genesis.Window.Texture> Textures { get; set; }  
(Genesis.Core.GenesisWindow.html)
```

IGameBehavior
Property Value
(Genesis.Core.IGameBehavior.html)

Type	Description
+ Input (Genesis.Core.Input.html)	

Layer (Genesis.Core.Layer.html)
List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1)<
Light (Genesis.Core.Light.html)>
Texture (Genesis.Graphics.Texture.html)>
Scene (Genesis.Core.Scene.html)

Scene3D
(Genesis.Core.Scene3D.html)

SceneEventHandler

Methods
SceneEventHandler.h

SceneSizeEvenHandler
(Genesis.Core.SceneSizeEvenHandler.html)

AddFont(Font)

(Genesis.Core.Storage.html)
Adds an font
Utils (Genesis.Core.Utils.html)

Declaration
+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)
public void AddFont(Font font)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)
Parameters

Type	Name	Description
(Genesis.Core.Behaviors.Physics)	font	the font to add

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

AddTexture(string, Bitmap)

(Genesis.Graphics.html)
Adds a texture to the asset manager.

+ Genesis.Graphics.Physics

Declaration

```
public Texture AddTexture(string name, Bitmap bitmap)
```

Parameters

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	<i>name</i>	The name of the texture.
Bitmap (Genesis.Core.html) (https://learn.microsoft.com/dotnet/api/system.drawing.bitmap)	<i>bitmap</i>	The bitmap representing the texture.

Returns Game ([Genesis.Core.Game.html](#))

Type	Description
GameElement (Genesis.Core.GameElement.html)	

Texture ([Genesis.Graphics.Texture.html](#)) GameEventHandler ([Genesis.Core.GameEventHandler.html](#))

GenesisWindow ([Genesis.Core.GenesisWindow.html](#))

GameBehavior ([Genesis.Core.GameBehavior.html](#))

DisposeTextures(Game) Disposes of the loaded textures and fonts.

Input ([Genesis.Core.Input.html](#))

Declaration Layer ([Genesis.Core.Layer.html](#))

Light ([Genesis.Core.Light.html](#))

```
public void DisposeTextures(Game game)
```

Scene3D

([Genesis.Core.Scene3D.html](#))

SceneEventHandler

Type ([Genesis.Core.SceneEventHandler.html](#))

SceneSizeEventHandler Game ([Genesis.Core.Game.html](#))

([Genesis.Core.SceneSizeEventHandler.html](#))

Storage

([Genesis.Core.Storage.html](#))

GetFont(string) ([Genesis.Core.Utils.html](#))

Genesis.Core.Behaviors

([Genesis.Core.Behaviors.html](#)) Declaration

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.Behaviors.Physics

Parameters ([Genesis.Core.Behaviors.Physics.html](#))

Type

+ Genesis.Core.GameElements

string (<https://learn.microsoft.com/dotnet/api/system.string>)

([Genesis.Core.GameElements.html](#))

+ Genesis.Graphics

>Returns ([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

Type	Description
Font (Genesis.Graphics.Font.html)	The font with the specified name, or null if not found.

GetRessourcesDirectory()

Gets the resource directory path.

- **Genesis.Core**

Declaration
(Genesis.Core.html)

```
AssetManager
public static string GetRessourcesDirectory()
(Genesis.Core.AssetManager.html)
```

Game (Genesis.Core.Game.html)

Returns
GameElement

Type (Genesis.Core.GameElement.html)

GameEventHandler

string (<https://learn.microsoft.com/dotnet/api/system.string>)

Description

The path to the resource directory.

GetTexture(string)

(Genesis.Core.IGameBehavior.html)

Gets a texture by name.

Layer (Genesis.Core.Layer.html)

Declaration
Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

```
Scene3D Texture GetTexture(string name)
(Genesis.Core.Scene3D.html)
```

Parameters
SceneEventHandler

(Genesis.Core.SceneEventHandler.h)

Type	Name	Description
SceneSizeEvenHandler		

(Genesis.Core.SceneSizeEvenHandler.h)

name

The name of the texture.

Returns
Storage (Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

Type	Description
+ Genesis.Core.Behaviors	

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

The texture with the specified name, or null if not found.

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

ImportAssetLibrary(string)

+ Genesis.Core.Behaviors.Physics

Imports assets from an asset library.

(Genesis.Core.Behaviors.Physics.html)

Declaration

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

```
public void ImportAssetLibrary(string file)
```

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	file	The file path of the asset library to import.

Init(IRenderDevice)

Initializes the assets in the rendering device.

- Genesis.Core

Declaration
[\(Genesis.Core.html\)](#)

```
AssetManager
public void Init(IRenderDevice renderDevice)
  (Genesis.Core.AssetManager.html)
    Game (Genesis.Core.Game.html)
```

Parameters

GameElement

Type	Name	Description
(Genesis.Core.GameElement.html)	renderDevice	The rendering device to load the assets into.

LoadFonts()

Input (Genesis.Core.Input.html)

Layer (Genesis.Core.Layer.html)

Loads fonts from the resource folder.

Light (Genesis.Core.Light.html)

Declaration
[Scene \(Genesis.Core.Scene.html\)](#)

Scene3D

[p\(Genesis.Core.Scene3D.html\)](#)

SceneEventHandler

(Genesis.Core.SceneEventHandler.html)

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.html)

Storage

Loads a system font
[\(Genesis.Core.Storage.html\)](#)

Util (Genesis.Core.Util.html)

+ Genesis.Core.Behaviors

Parameters
[\(Genesis.Core.Behaviors.html\)](#)

+ Genesis.Core.Behaviors.Physics

Parameters
[\(Genesis.Core.Behaviors.Physics.html\)](#)

Type

+ Genesis.Core.Behaviors.Physics

string (<https://learn.microsoft.com/dotnet/api/system.string>)
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ Genesis.Core.GameElements

[\(Genesis.Core.GameElements.html\)](#)

+ Genesis.Graphics

Loads textures from the resource folder.

[\(Genesis.Graphics.html\)](#)

Declaration

+ Genesis.Graphics.Physics

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	font	

```
public void LoadTextures()
```

PackAssets(string)

Packs the assets into an asset library.

Declaration

(Genesis.Core.html)

```
public void PackAssets(string file)
    (Genesis.Core.AssetManager.html)
```

Parameters

GameElement

Type: Genesis.Core.GameElement.html

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	file	The file path to save the asset library.

GenesisWindow

(Genesis.Core.GenesisWindow.html)

IGameBehavior

(Genesis.Core.IGameBehavior.html)

Input (Genesis.Core.Input.html)

Layer (Genesis.Core.Layer.html)

Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

Scene3D

(Genesis.Core.Scene3D.html)

SceneEventHandler

(Genesis.Core.SceneEventHandler.h)

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.h)

Storage

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

Class Game

Represents the main game class responsible for managing game loops, scenes, rendering, and updates.

Enter here to filter...

Inheritance

Genesis.Core

↳ [Object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)

([Genesis.Core.html](#))

Inherited Members

([Genesis.Core.AssetManager.html](#))

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

Game ([Genesis.Core.Game.html](#))

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

GameElement ([Genesis.Core.GameElement.html](#))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

GameEventHandler ([Genesis.Core.GameEventHandler.html](#))

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

GenesisWindow ([Genesis.Core.GenesisWindow.html](#))

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

IGameBehavior ([Genesis.Core.IGameBehavior.html](#))

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Namespace

↳ [Genesis](#) ([Genesis.html](#))

↳ [Genesis.Core](#) ([Genesis.Core.html](#))

Light ([Genesis.Core.Light.html](#))

Scene ([Genesis.Core.Scene.html](#))

Scene3D

public class Game

([Genesis.Core.Scene3D.html](#))

SceneEventHandler

([Genesis.Core.SceneEventHandler.html](#))

SceneSizeEvenHandler

([Genesis.Core.SceneSizeEvenHandler.html](#))

Storage

([Genesis.Core.Storage.html](#))

Constructors

Game(RenderDevice, Viewport)

↳ [Utils](#) ([Genesis.Core.Utils.html](#))

Creates a new instance of the Game class.

+ Genesis.Core.Behaviors

Declaration

([Genesis.Core.Behaviors.html](#))

+ Genesis.Core.Behaviors.Physics

↳ [Game](#) (TrendyLabs.Scene.RenderDevice, Viewport viewport)

([Genesis.Core.Behaviors.Physics.html](#))

genesis.core.Behaviors.Physics

Type

↳ [Genesis.Core.Behaviors.Physics](#)

Name	Description
renderDevice	The rendering device to use.
viewport	The viewport configuration.

+ Genesis.Graphics

([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

Properties

AssetManager

Gets or sets the asset manager for handling game assets.

Declaration

- Genesis.Core

```
public AssetManager AssetManager { get; set; }
```

(Genesis.Core.html)

AssetManager

Property Value
(Genesis.Core.AssetManager.html)

Type Game (Genesis.Core.Game.html)

Description

GameElement
AssetManager (Genesis.Core.AssetManager.html)
(Genesis.Core.GameElement.html)

GameEventHandler

(Genesis.Core.GameEventHandler.h)

DeltaTime

GenesisWindow

(Genesis.Core.GenesisWindow.html)

Gets or sets the time elapsed since the last frame in milliseconds.

GameBehavior

(Genesis.Core.IGameBehavior.html)

Declaration

Input (Genesis.Core.Input.html)

Layer (Genesis.Core.Layer.html)

```
public double DeltaTime { get; set; }
```

Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

Scene3D

(Genesis.Core.Scene3D.html)

Type SceneEventHandler

Description

(Genesis.Core.SceneEventHandler.h)

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.h)

Storage

FPS (Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

Gets or sets the current frames per second achieved by the game loop.

+ Genesis.Core.Behaviors

Declaration

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physic

Property Value

+ Genesis.Core.Behaviors.Physics

Type Genesis.Core.Behaviors.Physic

Description

double (https://learn.microsoft.com/dotnet/api/system.double)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

LastFrame (Genesis.Graphics.html)

Gets or sets the timestamp of the last frame.

+ Genesis.Graphics.Physics

Declaration

```
public long LastFrame { get; set; }
```

Property Value

Type	Description
long (https://learn.microsoft.com/dotnet/api/system.int64) - Genesis.Core (Genesis.Core.html)	

RenderDevice

AssetManager
([Genesis.Core.AssetManager.html](#))
Game ([Genesis.Core.Game.html](#))
Gets or sets the rendering device used by the game.

GameElement

Declaration ([Genesis.Core.GameElement.html](#))

GameEventHandler

Properties GameEventHandle { get; set; }

GenesisWindow

([Genesis.Core.GenesisWindow.html](#))

Property Value

IGameBehavior

Type	Description
Genesis.Core.IGameBehavior.html	
Input (Genesis.Core.Input.html)	
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	

Layer ([Genesis.Core.Layer.html](#))

Light ([Genesis.Core.Light.html](#))

Scene ([Genesis.Core.Scene.html](#))

Run

Scene3D
([Genesis.Core.Scene3D.html](#))

Gets or sets a value indicating whether the game loop is running.

Declaration ([Genesis.Core.SceneEventHandler.h](#))

SceneSizeEvenHandler

([Genesis.Core.SceneSizeEvenHandler.html](#))

Properties public bool Run { get; set; }

Storage

([Genesis.Core.Storage.html](#))

Property Value

+ **Genesis.Core.Behaviors**

(Genesis.Core.Behaviors.html)

bool (<https://learn.microsoft.com/dotnet/api/system.boolean>)

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics.html)

Scenes

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics.html)

Gets or sets the scenes of the game.

Declaration ([Genesis.Core.GameElements.h](#))

(Genesis.Core.GameElements.html)

Properties public List<Scene> Scenes { get; set; }

+ **Genesis.Graphics**

(Genesis.Graphics.html)

Property Value

+ **Genesis.Graphics.Physics**

Type	Description
List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1) < Scene (Genesis.Core.Scene.html)	

SelectedScene

Gets or sets the currently selected scene.

(Genesis.Core.html)

Declaration

```
AssetManager
(Genesis.Core.AssetManager.html)
public Scene SelectedScene { get; set; }
Game (Genesis.Core.Game.html)
```

GameElement

Property Value

GameElement (<https://learn.microsoft.com/dotnet/api/genesis.core.gameelement>)

Type

GameEventHandler (<https://learn.microsoft.com/dotnet/api/genesis.core.gameeventhandler>)

Scene

Scene (<https://learn.microsoft.com/dotnet/api/genesis.core.scene>)

Description

Storage

Input (<https://learn.microsoft.com/dotnet/api/genesis.core.input>)

Gets or sets the storage object for managing game data.

Light (<https://learn.microsoft.com/dotnet/api/genesis.core.light>)

Declaration

Scene (<https://learn.microsoft.com/dotnet/api/genesis.core.scene>)

Scene3D

public Storage Scene3D { get; set; }

SceneEventHandler

(Genesis.Core.SceneEventHandler.html)

Property Value

SceneSizeEvenHandler

Type

Genesis.Core.SceneSizeEvenHandler (<https://learn.microsoft.com/dotnet/api/genesis.core.scenesizeevenhandler>)

Storage

Storage (<https://learn.microsoft.com/dotnet/api/genesis.core.storage>)

(Genesis.Core.Storage.html)

Description

Utils (<https://learn.microsoft.com/dotnet/api/genesis.core.utils>)

Genesis.Core.Behaviors

TargetFPS

(Genesis.Core.Behaviors.html)

Gets or sets the target frames per second for the game loop.

+ Genesis.Core.Behaviors.Physics

Declaration

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.Behaviors.Physics

public int TargetFPS { get; set; }

(Genesis.Core.Behaviors.Physics.html)

Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

Type

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

(Genesis.Graphics.html)

Description

+ Genesis.Graphics.Physics

Viewport

Gets or sets the viewport configuration for rendering.

Declaration

```
public Viewport Viewport { get; set; }
```

Properties

Value

Type	Description
AssetManager Viewport (Genesis.Graphics.Viewport.html) (Genesis.Core.AssetManager.html)	

Methods

AddScene(Scene)

Adds a scene to the list of scenes.
[\(Genesis.Core.IGameBehavior.html\)](#)

Declaration

```
(Genesis.Core.Input.html)  
Layer (Genesis.Core.Layer.html)  
public Scene AddScene(Scene scene)
```

Scene (Genesis.Core.Scene.html)

Scene3D

Parameters

(Genesis.Core.Scene3D.html)

Type	Name	Description
SceneEventHandler (Genesis.Core.SceneEventHandler.html)	scene	The Scene object to be added.

Return Value

Type	Description
Storage (Genesis.Core.Storage.html) Utils (Genesis.Core.Utils.html)	

Scene (Genesis.Core.Scene.html)

+ Genesis.Core.Behaviors

[\(Genesis.Core.Behaviors.html\)](#)

GetElementCenterScreenLocation2D(GameElement)

[\(Genesis.Core.Behaviors.Physics\)](#)

Returns the screen location of the given element with a center anchor.

+ Genesis.Core.Behaviors.Physics

Declaration

[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ Genesis.Core.GameElements

ScreenLocation2D(GameElement element)

[\(Genesis.Core.GameElements.html\)](#)

Parameters

[Genesis.Graphics](#)

[\(Genesis.Graphics.html\)](#)

+ Genesis.Graphics.Physics

Type	Name	Description
GameElement (Genesis.Core.GameElement.html)	element	The GameElement to get the centered screen coordinates for.

Returns

Type	Description
- Vec3 (Genesis.Math.Vec3.html) (Genesis.Core.html)	A Vec3 representing the centered screen coordinates of the element.

AssetManager

GetElementScreenLocation2D(GameElement)

Game (Genesis.Core.Game.html)

Get the screen coordinates of the given element.
GameElement

Declaration

GameEventHandler

(Genesis.Core.GameEventHandler.h)
public Vec3 GetElementScreenLocation2D(GameElement element)

GenesisWindow

(Genesis.Core.GenesisWindow.html)

Parameters

GameBehavior

Type	Name	Description
Input (Genesis.Core.Input.html)		

GameElement (Genesis.Core.GameElement.html)	element	The GameElement to get the screen coordinates for.
---	---------	--

Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

Returns

Scene3D

Type	Description
SceneEvent (Genesis.Core.SceneEvent.html)	A Vec3 representing the screen coordinates of the element.

SceneEventHandler

(Genesis.Core.SceneSizeEvenHandler.html)

GetSceneCord(Vec3)

Storage

(Genesis.Core.Storage.html)

Transforms a display vector to a vector inside the scene.
Utils (Genesis.Core.Utils.html)

Declaration

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

public Vec3 GetSceneCord(Vec3 location)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

Parameters

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	location	The display vector to transform.

+ Genesis.Core.GameElements

Return Value

(Genesis.Core.GameElements.html)

+ Genesis.Graphics

(Genesis.Graphics.html)

Type	Description
Vec3 (Genesis.Math.Vec3.html)	A Vec3 representing the transformed vector inside the scene.

+ Genesis.Graphics.Physics

InitGameElement(GameElement)

Initializes a GameElement within the game environment.

Declaration

```
public void InitGameElement(GameElement element)
```

Parameters

Type	Name	Description
AssetManager GameElement (Genesis.Core.GameElement.html) (Genesis.Core.AssetManager.html)	element	The GameElement to be initialized.

LoadScene(string)

Loads a scene with the given name.
(Genesis.Core.GameEventHandler.h)

Declaration
(Genesis.Core.GenesisWindow.html)

```
public void LoadScene(string name)  
(Genesis.Core.IGameBehavior.html)
```

Input (Genesis.Core.Input.html)

Parameters
(Genesis.Core.Layer.html)

Type	Name	Description
Light (Genesis.Core.Light.html) Scene (Genesis.Core.Scene.html) string (https://learn.microsoft.com/dotnet/api/system.string) (Genesis.Core.Scene3D.html)	name	The name of the scene to be loaded.

SceneEventHandler
(Genesis.Core.SceneEventHandler.h)

MainGameLoop: Handles updates and rendering.
Storage

Declaration
(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

+ **Genesis.Core.Behaviors**

(Genesis.Core.Behaviors.html)

+ **Genesis.Core.Behaviors.Physics**
Start()
(Genesis.Core.Behaviors.Physics.html)

Starts the main game loop.
+ **Genesis.Core.Behaviors.Physics**
Start()
(Genesis.Core.Behaviors.Physics.html)

+ **Genesis.Core.GameElements**
public void Start()
(Genesis.Core.GameElements.html)

+ **Genesis.Graphics**
(Genesis.Graphics.html)
Stop()
+ **Genesis.Graphics.Physics**

Stops the main game loop.

Declaration

```
public void Stop()
```



Genesis.Core **Events** ([Genesis.Core.html](#))

AssetManager
AfterRender
([Genesis.Core.AssetManager.html](#))

Game ([Genesis.Core.Game.html](#))
Event triggered after rendering.
GameElement

Declaration
([Genesis.Core.GameElement.html](#))

GameEventHandler
([Genesis.Core.GameEventHandler.h](#))
public event GameEventHandler AfterRender
GenesisWindow
([Genesis.Core.GenesisWindow.html](#))

Event Type
GameBehavior

Type	Description
Input (Genesis.Core.Input.html)	
GameEventHandler (Genesis.Core.GameEventHandler.html)	

Light ([Genesis.Core.Light.html](#))
Scene ([Genesis.Core.Scene.html](#))

AfterUpdate

([Genesis.Core.Scene3D.html](#))

Event Type
SceneEventHandler
Event triggered after the game update.
([Genesis.Core.SceneEventHandler.h](#))

Declaration
SceneSizeEvenHandler
([Genesis.Core.SceneSizeEvenHandler.h](#))
public event GameEventHandler AfterUpdate
Storage
([Genesis.Core.Storage.html](#))
Utils ([Genesis.Core.Utils.html](#))

Event Type

Type	Description
(Genesis.Core.Behaviors.html)	

GameEventHandler ([Genesis.Core.GameEventHandler.html](#))

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

Event triggered before rendering.
BeforeRenderBehaviors.Physics

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

Event triggered before rendering.

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.html](#))

+ public event GameEventHandler BeforeRender

+ Genesis.Graphics

([Genesis.Graphics.html](#))

Event Type

+ Genesis.Graphics.Physics

Type	Description
GameEventHandler (Genesis.Core.GameEventHandler.html)	

BeforeUpdate

Event triggered before the game update.

- Genesis.Core

Declaration (Genesis.Core.html)

```
AssetManager
public event GameEventHandler BeforeUpdate
(Genesis.Core.AssetManager.html)
```

Game (Genesis.Core.Game.html)

Event Type GameElement

Type (Genesis.Core.GameElement.html)

GameEventHandler

GameEventHandler (Genesis.Core.GameEventHandler.html)

GenesisWindow

(Genesis.Core.GenesisWindow.html)

IGameBehavior

(Genesis.Core.IGameBehavior.html)

Input (Genesis.Core.Input.html)

Layer (Genesis.Core.Layer.html)

Declaration Light

Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

Scene3D Event GameEventHandler OnDispose

(Genesis.Core.Scene3D.html)

Event Type SceneEventHandler

(Genesis.Core.SceneEventHandler.h)

Type SceneSizeEventHandler

GameEventHandler (Genesis.Core.GameEventHandler.html)

Storage

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

OnInit

+ Genesis.Core.Behaviors

Event triggered when the game initializes.

(Genesis.Core.Behaviors.html)

- Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

```
public event GameEventHandler OnInit
```

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Event Type

+ Genesis.Core.GameElements

Type (Genesis.Core.GameElements.h)

GameEventHandler (Genesis.Core.GameEventHandler.html)

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

Description

OnRenderBeginn

Event triggered at the beginning of rendering.

Declaration

```
public event GameEventHandler OnRenderBeginn
```

Type	Description
AssetManager GameEventHandler (Genesis.Core.GameEventHandler.html) (Genesis.Core.AssetManager.html)	

OnPanelEnds Element (L1)

OnRenderEnd(GameElement.html)
GameEventHandler
Event triggered at the end of rendering.
(Genesis.Core.GameEventHandler.h)

Declaration GenesisWindow (GenesisCore.GenesisWindow.html)

```
(Genesis.Core.GenesisWindow.html  
IGameBehavior  
public event GameEventHandler On
```

[Input \(Genesis.Core.Input.html\)](#)

Event Type(Genesis Core Layer html)

- Light (Genesis Core Light.html)

Type Scene (Genesis.Core.Scene.html)
GameSceneHandler (Genesis.Core.GameSceneHandler.html)

(Genesis.Core.Scene3D.html) SceneEventHandler

OnUpdate
SceneSizeEvenHandler
(Genesis.Core.SceneEvent.Handler)

Event triggered during the game update
Storage
Declamation: a speech or shout

Decentralized Storage (Genesis.Core.Storage.html)
Utils (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors

Event Type
+ Genesis.Core.Behaviors.Physics
Type

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physic

+ Genesis.Core.GameElements (Genesis.Core.GameElements.h)

+ Genesis.Graphics
(*Genesis.Graphics.html*)

+ Genesis.Graphics.Physics

Class GameElement

Represents a base class for game elements in the Genesis framework.

▼ Enter here to filter...

Inheritance

Genesis.Core

↳ (Genesis.Core.html) microsoft.com/dotnet/api/system.object)
↳ GameElement
AssetManager
↳ BufferedSprite (Genesis.Core.GameElements.BufferedSprite.html) Genesis.Core.AssetManager.html)
↳ CameraElement (Genesis.Core.GameElements.CameraElement.html) Genesis.Core.Game.html)
↳ Element3D (Genesis.Core.GameElements.Element3D.html) Genesis.Core.GameElement.html)
↳ GameElement
↳ Empty (Genesis.Core.GameElements.Empty.html) Genesis.Core.GameElement.html)
↳ Qube (Genesis.Core.GameElements.Qube.html) Genesis.Core.GameElement.html)
GameEventHandler
↳ RectElement (Genesis.Core.GameElements.RectElement.html) Genesis.Core.GameEventHandler.h)
↳ Sprite (Genesis.Core.GameElements.Sprite.html) Genesis.Core.GenesisWindow.html)
↳ Terrain2D (Genesis.Core.GameElements.Terrain2D.html) Genesis.Core.GenesisWindow.html)
↳ Terrain3D (Genesis.Core.GameElements.Terrain3D.html) Genesis.Core.GenesisWindow.html)
GameBehavior
↳ Light (Genesis.Core.Light.html) Genesis.Core.GameBehavior.html)

Inherited Members

Core.Input.html
Layer (Genesis.Core.Layer.html)
object.ToString() (https://learn.microsoft.com/dotnet/api/system.object.tostring)
Light (Genesis.Core.Light.html)
object.Equals(object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object))
Scene (Genesis.Core.Scene.html)
Scene3D
object.Equals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object))
SceneEventHandler
object.ReferenceEquals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.referenceequals)
SceneEvent.Handler
object.GetHashCode() (https://learn.microsoft.com/dotnet/api/system.object.gethashcode)
SceneSizeEvenHandler
object.GetType() (https://learn.microsoft.com/dotnet/api/system.object.gettype)
SceneSizeEvenHandler
object.MemberwiseClone() (https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)
Storage
Namespace: Genesis (Genesis.html) Core (Genesis.Core.html)
Genesis.Core.Storage.html
Assembly: GenesisCore.Utils.html

Syntax

↑ **Genesis.Core.Behaviors**

(Genesis.Core.Behaviors.html)
public abstract class GameElement

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physic

↳ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physic

GameElement (GameElements)

(Genesis.Core.GameElements.h)

Creates a new instance of the GameElement class.

+ **Genesis.Graphics**

Declaration

(Genesis.Graphics.html)

+ **Genesis.Graphics.Physics**

(Genesis.Graphics.Physics.html)

```
public GameElement()
```

Properties

- Genesis.Core

(Genesis.Core.html)

Behaviors

AssetManager

Gets or sets the list of behaviors associated with the game element.
(Genesis.Core.AssetManager.html)

Declaration

GameElement

(Genesis.Core.GameElement.html)

GameEventHandler

(Genesis.Core.GameEventHandler.h)

Property Value

Type	Description
(Genesis.Core.GenesisWindow.html)	
IGameBehavior	

Layer (Genesis.Core.Layer.html)

Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

Children

Scene3D

(Genesis.Core.Scene3D.html)

Gets or sets the list of child game elements.

SceneEventHandler

Declaration

(Genesis.Core.SceneEventHandler.h)

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler { get; set; })

Storage

(Genesis.Core.Storage.html)

Property Value

Type	Description
(Genesis.Core.Utils.html)	

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1)

GameElement (Genesis.Core.GameElement.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Enabled

(Genesis.Core.Behaviors.Physics)

Gets or sets a value indicating whether the game element is enabled.

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.h)

Type	Description
bool (https://learn.microsoft.com/dotnet/api/system.boolean)	

Location

Gets or sets the 2D coordinates of the game element.

Genesis.Core

Declaration

```
AssetManager
public Vec3 Location { get; set; }
```

Game (<Genesis.Core.Game.html>)

GameElement

Property Value

(<Genesis.Core.GameElement.html>)

Type

Type	Description
GameEventHandler	

(<Genesis.Core.GameEventHandler.h>)

Vec3 (<Genesis.Math.Vec3.html>)

GenesisWindow

(<Genesis.Core.GenesisWindow.html>)

IGameBehavior

(<Genesis.Core.IGameBehavior.html>)

Name

Input (<Genesis.Core.Input.html>)

Gets or sets the name of the game element.

Light (<Genesis.Core.Light.html>)

Declaration

Scene (<Genesis.Core.Scene.html>)

Scene3D

```
public string Name { get; set; }
```

SceneEventHandler

(<Genesis.Core.SceneEventHandler.h>)

Property Value

SceneSizeEvenHandler

Type

Type	Description
(Genesis.Core.SceneSizeEvenHandler.h)	

Storage

string (<https://learn.microsoft.com/dotnet/api/system.string>)

(<Genesis.Core.Storage.html>)

Utils (<Genesis.Core.Utils.html>)

Genesis.Core.Behaviors

Parent

Genesis.Core.Behaviors.html

Gets or sets the parent game element.

+ Genesis.Core.Behaviors.Physics

Declaration

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.Behaviors.Physics

```
public GameElement Parent { get; set; }
```

(Genesis.Core.Behaviors.Physics)

Genesis.Core.GameElements

Type

Type	Description
(Genesis.Core.GameElements.h)	

+ Genesis.Graphics

GameElement (<Genesis.Core.GameElement.html>)

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(<Genesis.Core.Graphics.Physics.html>)

Properties

Gets or sets the properties associated with the game element.

Declaration

```
public Dictionary<string, object> Properties { get; set; }
```

- Genesis.Core

Property Value
[\(Genesis.Core.html\)](#)

Type AssetManager

([Genesis.Core.AssetManager.html](#))
Dictionary<[https://learn.microsoft.com/dotnet/api/system.collections.generic.dictionary-2](#)><
string ([Genesis.Core.Game.html](#)),
GameElement
object ([https://learn.microsoft.com/dotnet/api/system.object](#))>
([Genesis.Core.GameElement.html](#))

GameEventHandler

([Genesis.Core.GameEventHandler.h](#))

Rotation

Property Value
[\(Genesis.Window.html\)](#)

([Genesis.Core.GenesisWindow.html](#))

Gets or sets the 3D rotation of the game element.

IGameBehavior

Declaration

([Genesis.Core.IGameBehavior.html](#))

Input ([Genesis.Core.Input.html](#))

Layer ([Genesis.Core.Layer.html](#))

public Vec3 Rotation { get; set; }

Light ([Genesis.Core.Light.html](#))

Scene ([Genesis.Core.Scene.html](#))

Property Value

Type Scene3D

([Genesis.Core.Scene3D.html](#))

SceneEventHandler

([Genesis.Core.SceneEventHandler.h](#))

SceneSizeEvenHandler

([Genesis.Core.SceneSizeEvenHandler.h](#))

Scene

Storage
([Genesis.Core.Storage.html](#))

Gets or sets the scene to which the game element belongs.

Genesis.Core.Behaviors

Declaration
[\(Genesis.Core.Behaviors.html\)](#)

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

Property Value

+ Genesis.Core.Behaviors.Physics

Type Physics

([Genesis.Core.Behaviors.Physics.html](#))

Scene ([Genesis.Core.Scene.html](#))

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.html](#))

Size

Declaration
[\(Genesis.Graphics.html\)](#)

Gets or sets the 3D size of the game element.

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

Description

Description

Declaration

```
public Vec3 Size { get; set; }
```

Property Value

Type	Description
- Genesis.Core Vec3 (Genesis.Math.Vec3.html) (Genesis.Core.html)	

AssetManager

Tag (Genesis.Core.AssetManager.html)
Game (Genesis.Core.Game.html)

GameElement Gets or sets the tag associated with the game element.

(Genesis.Core.GameElement.html)

Declaration GameEventHandler

(Genesis.Core.GameEventHandler.h)

public string Tag { get; set; }

(Genesis.Core.GenesisWindow.html)

IGameBehavior

Property Value (Genesis.Core.IGameBehavior.html)

Type Input (Genesis.Core.Input.html)

Layer (Genesis.Core.Layer.html)
string (<https://learn.microsoft.com/dotnet/api/system.string>)
Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

Scene3D

UUID (Genesis.Core.Scene3D.html)

SceneEventHandler

Gets or sets the unique identifier for the game element.

(Genesis.Core.SceneEventHandler.h)

Declaration SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.h)

Storage

public string UUID { get; set; }

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

Property Value

+ **Genesis.Core.Behaviors**

Type (Genesis.Core.Behaviors.html)

string (<https://learn.microsoft.com/dotnet/api/system.string>)

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics)

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics)

+ **Genesis.Core.GameElements**

(Genesis.Core.GameElements.h)

AddBehavior (GameBehavior)

+ **Genesis.Graphics**

Adds a behavior to the game element.

(Genesis.Graphics.html)

Declaration

+ **Genesis.Graphics.Physics**

(Genesis.Graphics.Physics)

GetBehavior<T>()

Gets the first game behavior of type T.

Declaration

```
    public IGameBehavior GetBehavior<T>()
```

- Genesis.Core		
Returns (Genesis.Core.html)		
Type	AssetManager	
IGameBehavior	(Genesis.Core\AssetManager.html) (Genesis.Core\GameBehavior.html) Game (Genesis.Core\Game.html)	The first game behavior of type T, or null if not found.

Name	Description
<code>T</code>	(Genesis.Core.GameEventHandler.h) The type of the behavior. GenesisWindow

(Genesis.Core.GenesisWindow.html)
IGameBehavior
GetBehaviors<T>() (Behavior.html)
Input (Genesis.Core.Input.html)
Returns all behaviors of type T
Layer (Genesis.Core.Layer.html)

Light (Genesis Core Light.html)

Input (Genesis.Core.Input.html) wraps all behaviors of type T

Returns all behaviors of type
Layer (Genesis.Core.Layer.html)

[Light \(Genesis.Core.Light.html\)](#)

Declaration Scene (

Scene (genesis.core.Scene.html)

```
Scene3D  
public List<IGameBehavior> GetBehaviors<T>()  
(Genesis.Core.Scene3D.html)
```

SceneEventHandler

Return Genesis.Core.SceneEventHandler.h

Type	Description
SceneSizeEvenHandler (Genesis.Core.SceneSizeEvenHandle)	A list of all behaviors of type T.

Type Parameters

Name	Description
Genesis.Core.Behaviors	The type of the behavior.

Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

+ Genesis.CoreBehaviors.Physics
GetInstance(GameElement)
(Genesis Core Behaviors Physics)

+ Genesis.Core.GameElements Copies the properties from another game element instance to the current one.

~~Designing Core Game Elements~~

DRAFT:UNITS.CORE.GameElements.H

+ **Genesis.Graphics**

(Genesis.Graphics.html)

Parameters

27

Type	Name	Description
GameElement (Genesis.Core.GameElement.html)	element	The game element from which to copy properties.

Init(Game, IRenderDevice)

Called when the game is initialized.

(Genesis.Core.html)

Declaration

AssetManager

```
public virtual void Init(Game game, IRenderDevice renderDevice)
    Game (Genesis.Core.Game.html)
```

GameElement

Parameters

(Genesis.Core.GameElement.html)

Type	Name	Description
GameEventHandler		
(Genesis.Core.GameEventHandler.h)	game	The game instance.

IRenderDevice (Genesis.Graphics.RenderDevice.html)

renderDevice

The rendering device.

OnDestroy(Game)

Called when the game element is disposed.

Scene (Genesis.Core.Scene.html)

Declaration

(Genesis.Core.Scene3D.html)

```
public virtual void OnDestroy(Game game)
    (Genesis.Core.SceneEventHandler.h)
```

SceneSizeEvenHandler

Parameters

(Genesis.Core.SceneSizeEvenHandler.html)

Type	Name	Description
Storage		
(Genesis.Core.Storage.html)	game	The game instance.

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

OnRender(Game, IRenderDevice)

+ Genesis.Core.Behaviors.Physics

Called when the game is rendered.

(Genesis.Core.Behaviors.Physics.html)

Declaration

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

```
public virtual void OnRender(Game game, IRenderDevice renderDevice)
```

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

Parameters

Type	Name	Description
(Genesis.Graphics.html)	game	The game instance.

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Type	Name	Description
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	<i>renderDevice</i>	The rendering device.

OnUpdate(Game, IRenderDevice)

Called when the game is updated.

Genesis.Core

(Genesis.Core.html)

Declaration

AssetManager

```
public virtual void OnUpdate(Game game, IRenderDevice renderDevice)
    Game (Genesis.Core.Game.html)
```

GameElement

Parameters

(Genesis.Core.GameElement.html)

Type	Name	Description
GameEventHandler		
(Genesis.Core.GameEventHandler.h)		
Game (Genesis.Core.Game.html)	<i>game</i>	The game instance.
GenesisWindow		
(Genesis.Core.GenesisWindow.html)		
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	<i>renderDevice</i>	The rendering device.

IGameBehavior

(Genesis.Core.IGameBehavior.html)

Input (Genesis.Core.Input.html)

Layer (Genesis.Core.Layer.html)

Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

Scene3D

(Genesis.Core.Scene3D.html)

SceneEventHandler

(Genesis.Core.SceneEventHandler.h)

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.h)

Storage

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Delegate GameEventHandler

Namespace: Genesis (Genesis.html).Core (Genesis.Core.html)

Assembly: Genesis.dll filter...

Syntax
(Genesis.Core.html)

```
public delegate void GameEventHandler(Game game, IRenderDevice renderDevice)
(Genesis.Core.AssetManager.html)
Game (Genesis.Core.Game.html)
```

Parameters

Type	Name	Description
GameElement (Genesis.Core.GameElement.html)		
GameEventHandler (Genesis.Core.GameEventHandler.html)	game	

IRenderDevice (Genesis.Graphics.IRenderDevice.html)
(Genesis.Core.GenesisWindow.html)

IGameBehavior

(Genesis.Core.IGameBehavior.html)

Input (Genesis.Core.Input.html)

Layer (Genesis.Core.Layer.html)

Light (Genesis.Core.Light.html)

GameEventHandler(object, IntPtr)

Scene (Genesis.Core.Scene.html)

Scene3D

(Genesis.Core.Scene3D.html)

```
public GameEventHandler(object @object, IntPtr method)
(Genesis.Core.SceneEventHandler.h)
```

SceneSizeEvenHandler

SceneSizeEvenHandler (Genesis.Core.SceneSizeEvenHandler.html)

Type	Name	Description
Storage (Genesis.Core.Storage.html)		
object (https://learn.microsoft.com/dotnet/api/system.object)	object	

+ **Genesis.Core.Behaviors**

(Genesis.Core.Behaviors.html)

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics.html)

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics.html)

BeginInvoke(Game, IRenderDevice, AsyncCallback, object)

+ **Genesis.Core.GameElements**

Declaration (Genesis.Core.GameElements.h)

+ **Genesis.Graphics**

callback, object @object)
(Genesis.Graphics.html)

+ **Genesis.Graphics.Physics**

Parameters (Genesis.Graphics.Physics.html)

Type	Name	Description
Game (Genesis.Core.Game.html)	game	
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	renderDevice	
AsyncCallback (https://learn.microsoft.com/dotnet/api/system.asynccallback)	callback	
object (https://learn.microsoft.com/dotnet/api/system.object)	object	
(Genesis.Core.html)		

Returns AssetManager

Type	Description
AssetManager (Genesis.Core.AssetManager.html)	
Game (Genesis.Core.Game.html)	

IAsyncResult (<https://learn.microsoft.com/dotnet/api/system.iasyncresult>)

(Genesis.Core.GameElement.html)
GameEventHandler
(Genesis.Core.GameEventHandler.h)

EndInvoke(IAsyncResult)

GenesisWindow

(Genesis.Core.GenesisWindow.html)

IGameBehavior

(Genesis.Core.IGameBehavior.html)

public virtual void EndInvoke(IAsyncResult result)

Input (Genesis.Core.Input.html)

Layer (Genesis.Core.Layer.html)

Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

Scene3D

IAsyncResult (<https://learn.microsoft.com/dotnet/api/system.iasyncresult>)

Name

Description

result

SceneEventHandler

(Genesis.Core.SceneEventHandler.h)

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.h)

Declaration

(Genesis.Core.Storage.html)

public virtual void EndInvoke(Game game, IRenderDevice renderDevice)

+ Genesis.Core.Behaviors

Path (Genesis.Core.Behaviors.html)

+ Type

Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.h)

Game (Genesis.Core.Game.html)

+ RenderDevice (Genesis.Graphics.IRenderDevice.html)

(Genesis.Core.Behaviors.Physics.h)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Type	Name	Description
Game (Genesis.Core.Game.html)	game	
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	renderDevice	

Class GenesisWindow

Inheritance

↳ Enter here to filter
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ MarshalByRefObject (<https://learn.microsoft.com/dotnet/api/system.marshallbyrefobject>)
↳ AssetManager (<https://learn.microsoft.com/dotnet/api/system.componentmodel.component>)
↳ (Genesis.Core.AssetManager.html)
↳ Control (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control>)
↳ Game (<https://learn.microsoft.com/dotnet/api/genesis.core.game>)
↳ ScrollableControl (<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol>)
↳ GameElement
↳ ContainerControl (<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol>)
↳ (Genesis.Core.GameElement.html)
↳ Form (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form>)
↳ GameEventHandler
↳ GenesisWindow
↳ (Genesis.Core.GameEventHandler.h)

Implements

↳ GenesisWindow
IDropTarget (<https://learn.microsoft.com/dotnet/api/genesis.core.genesiswindow.idroptarget>)
ISynchronizeInvoke (<https://learn.microsoft.com/dotnet/api/system.componentmodel.isynchronizeinvoke>)
IWin32Window (<https://learn.microsoft.com/dotnet/api/genesis.core.gamebehavior.iwin32window>)
IBindableComponent (<https://learn.microsoft.com/dotnet/api/genesis.core.input.ibindablecomponent>)
IComponent (<https://learn.microsoft.com/dotnet/api/system.componentmodel.icomponent>)
IDisposable (<https://learn.microsoft.com/dotnet/api/system.idisposable>)
IContainerControl (<https://learn.microsoft.com/dotnet/api/system.windows.formsicontainercontrol>)
Scene (<https://learn.microsoft.com/dotnet/api/genesis.core.scene>)

Inherited Members

↳ Scene3D
Form.SetVisibleCore(bool) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.setvisiblecore>)
SceneEventHandler
Form.Activate() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.activate>)
Form.SceneEventHandler.h
Form.ActivateMdiChild(Form)
SceneSizeEventHandler
(<https://learn.microsoft.com/dotnet/api/genesis.core.scenesizeeventhandler>)
Form.AddOwnedForm/Form (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.addownedform>)
Storage
Form.AdjustFormScrollbars(bool)
(<https://learn.microsoft.com/dotnet/api/genesis.core.storage>)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.adjustformscrollbars>)
Utils (<https://learn.microsoft.com/dotnet/api/genesis.core.utils>)
Form.Close() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.close>)

↳ Genesis.Core.Behaviors

(<https://learn.microsoft.com/dotnet/api/genesis.core.behaviors>)
Form.CreateControlsInstance() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.createcontrolsinstance>)
Form.CreateHandle() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.createhandle>)

+ Genesis.Core.Behaviors.Physics

(<https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics>)

Form.DefWndProc(Message) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.defwndproc>)
Form.Dispose(bool) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dispose>)

Form.ProcessMnemonic(char)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.processmnemonic>)

Form.CenterToParent() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.centertoparent>)
Form.CenterToScreen() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.centertoscreen>)

+ Genesis.Core.GameElements

(<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements>)

Form.LayoutMdi(MdiLayout) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.layoutmdi>)

Form.OnActivated(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onactivated>)

↳ Genesis.Graphics

(<https://learn.microsoft.com/dotnet/api/genesis.graphics>)
Form.OnBackgroundImageChanged(EventArgs)

+ Genesis.Graphics.Physics

(<https://learn.microsoft.com/dotnet/api/genesis.graphics.physics>)

Form.OnBackgroundImageLayoutChanged(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onbackgroundimagelayoutchanged>)

Form.OnClosing(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onclosing>)

Form.OnClosed(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onclosed>)

+ Genesis.Graphics.RenderDevice

Form.OnFormClosing(FormClosingEventArgs)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onformclosing>)

Form.OnFormClosed(FormClosedEventArgs)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onformclosed>)

Form.OnCreateControl() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.oncreatecontrol>)

Form.OnDeactivate(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.ondeactivate>)

Form.OnEnabledChanged(EventArgs)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onenabledchanged>)

Form.OnEnter(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onenter>)
([Genesis.Core.AssetManager.html](#))

Form.OnFontChanged(EventArgs)
([Game.html](#))
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onfontchanged>)

Form.OnHandleCreated(EventArgs)
([GameElement.html](#))
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onhandlecreated>)

Form.OnHandleDestroyed(EventArgs)
([GameEventHandler.html](#))
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onhandledestroyed>)

Form.OnHelpButtonClicked(CancelEventArgs)
([Genesis.Core.GenesisWindow.html](#))
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onhelpbuttonclicked>)

Form.OnLayout(LayoutEventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onlayout>)
([Genesis.Core.GameBehavior.html](#))

Form.OnLoad(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onload>)
([Input.html](#))

Form.OnMaximizedBoundsChanged(EventArgs)
([Layer.html](#))
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onmaximizedboundschanged>)

Form.OnMaximumSizeChanged(EventArgs)
([Light.html](#))
([Scene.html](#))
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onmaximumsizechanged>)

Form.OnMinimumSizeChanged(EventArgs)
([Scene3D.html](#))
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onminimumsizechanged>)

Form.OnInputLanguageChanged(InputLanguageChangedEventArgs)
([SceneEventHandler.html](#))
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.oninputlanguagechanged>)

Form.OnInputLanguageChanging(InputLanguageChangingEventArgs)
([SceneSizeEventHandler.html](#))
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.oninputlanguagechanging>)

Form.OnVisibleChanged(EventArgs)
([Storage.html](#))
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onvisiblechanged>)

Form.OnMDIChildActivate(EventArgs)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onmdichildactivate>)

+ **Genesis.Core.Behaviors**
(Genesis.Core.Behaviors.html)

+ **Genesis.Core.Behaviors.Physics**
(Genesis.Core.Behaviors.Physics.html)

+ **Genesis.Core.Behaviors.Physics**
(Genesis.Core.Behaviors.Physics.html)

+ **Genesis.Core.GameElements**
(Genesis.Core.GameElements.html)

Form.OnRightToLeftLayoutChanged(EventArgs)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onrighttoleftlayoutchanged>)

Form.OnShown(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onshown>)

Form.OnTextChanged(EventArgs)
([Genesis.Graphics.html](#))
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onTextChanged>)

+ **Genesis.Graphics.Physics**
(Genesis.Graphics.Physics.html)

+ **Genesis.Graphics.RenderDevice**

Form.ProcessDialogKey(Keys)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.processdialogkey>)

Form.ProcessDialogChar(char)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.processdialogchar>)

Form.ProcessKeyPreview(ref Message)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.processkeypreview>)

Form.ProcessTabKey(bool) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.processtabkey>)

Form.RemoveOwnedForm(Form)
AssetManager
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.removeownedform>)

Form.Select(bool, bool) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.select>)

Game (Genesis.Core.Game.html)

Form.GetScaledBounds(Rectangle, SizeF, BoundsSpecified)
GameElement
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.getscaledbounds>)

Form.ScaleControl(SizeF, BoundsSpecified)
GameEventHandler
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.scalecontrol>)

Form.SetBoundsCore(int, int, int, int, BoundsSpecified)
GenesisWindow
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.setboundscore>)

Form.SetClientSizeCore(int, int)
GameBehavior
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.setclientsizecore>)

Form.SetDesktopBounds(int, int, int)
Input (Genesis.Core.Input.html)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.setdesktopbounds>)

Layer (Genesis.Core.Layer.html)

Form.SetDesktopLocation(int, int)
Light (Genesis.Core.Light.html)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.setdesktoplocation>)

Scene (Genesis.Core.Scene.html)

Form.Show(Win32Window) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.show>)

Scene3D

Form.ShowDialog() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.showdialog#system-windows-forms-form-showdialog>)

SceneEventHandler

Form.ShowDialog(Win32Window)
Genesis.Core.SceneEventHandler
([https://learn.microsoft.com/dotnet/api/system.windows.forms.form.showdialog#system-windows-forms-form-showdialog\(system-windows-forms-iwin32window\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.form.showdialog#system-windows-forms-form-showdialog(system-windows-forms-iwin32window)))

Form.ToString() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.tostring>)

Storage

Form.UpdateDefaultButton()
Genesis.Core.Storage.html
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.updatedefaultbutton>)

Utils (Genesis.Core.Utils.html)

Form.OnResizeBegin(EventArgs)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onresizebegin>)

+ **Genesis.Core.Behaviors**

(**Genesis.Core.Behaviors.html**)

Form.OnResizeEnd(EventArgs) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onresizeend>)

Form.OnStyleChanged(EventArgs)

+ **Genesis.Core.Behaviors.Physics**

(**Genesis.Core.Behaviors.Physics.html**)

Form.ValidateChildren() (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onstylechanged>)

+ **Genesis.Core.Behaviors.Physics**

Fo (Genesis.Core.Behaviors.Physics.html)

(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.validatechildren#system-windows-forms-form-validatechildren>)

+ **Genesis.Core.GameElements**

(**Genesis.Core.GameElements.html**)

Form.WndProc(Message) (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.wndproc>)

Form.AcceptButton (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.acceptbutton>)

Form.ActiveForm (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.activeform>)

Form.ActiveMdiChild (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.activemdichild>)

Form.AllowTransparency (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.allowtransparency>)

Form.AutoScroll (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.autoscroll>)

Form.AutoSize (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.autosize>)

+ **Genesis.Graphics.RenderDevice**

Form.AutoSizeMode (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.autosizemode>)
Form.AutoValidate (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.autovalidate>)
Form.BackColor (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.backcolor>)
Form.FormBorderStyle (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.formborderstyle>)
Form.CancelButton (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.cancelbutton>)
Form.ClientSize (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.clientsize>)
Form.ControlBox (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.controlbox>)
Form.CreateParams (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.createparams>)
Form.DefaultSizeMode (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.defaulttimemode>)
Form.DefaultSize (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.defaultsize>)
Form.DesktopBounds (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.desktopbounds>)
Form.DesktopLocation (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.desktoplocation>)
Form.DialogResult (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.dialogresult>)
Form.HelpButton (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.helpbutton>)
Form.Icon (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.icon>)
Form.IsMdiChild (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.ismdichild>)
Form.IsMdiContainer (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.ismdicontainer>)
Form.IsRestrictedWindow (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.isrestrictedwindow>)
Form.KeyPreview (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.keypreview>)
Form.Location (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.location>)
Form.MaximizedBounds (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.maximizedbounds>)
Form.MaximumSize (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.maximumsize>)
Form.Scene (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.scene>)
Form.MainMenuStrip (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.mainmenustrip>)
Form.Scene3D (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.scene3d>)
Form.Menu (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.menu>)
Form.MinimumSize (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.minimumsize>)
Form.MaximizeBoxBox (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.maximizebox>)
Form.MdiChildren (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.mdichildren>)
Form.MdiParent (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.mdiparent>)
Form.MergedMenu (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.mergedmenu>)
Form.MinimizeBox (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.minimizebox>)
Form.Modal (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.modal>)
Form.Opacity (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.opacity>)
Form.OwnedForms (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.ownedforms>)
+ Genesis.Core.Behaviors
(Genesis.Core.Behaviors.html)
Form.RestoreBounds (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.restorebounds>)
+ Genesis.Core.Behaviors.Physics
(Genesis.Core.Behaviors.Physics.html)
Form.RightToLeftLayout (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.righttoleftlayout>)
Form.ShowInTaskbar (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.showintaskbar>)
Form.ShowIcon (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.showicon>)
+ Genesis.Core.Behaviors.Physics
(Genesis.Core.Behaviors.Physics.html)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.showwithoutactivation>)
Form.Size (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.size>)
+ Genesis.Core.GameElements
(Genesis.Core.GameElements.html)
Form.SizeGripStyle (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.sizegripstyle>)
Form.StartPosition (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.startposition>)
Form.Text (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.text>)
+ Genesis.Graphics
(Genesis.Graphics.html)
Form.TopLevel (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.toplevel>)
Form.TopMost (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.topmost>)
Form.TransparencyKey (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.transparencykey>)
+ Genesis.Graphics.Physics
(Genesis.Graphics.Physics.html)
Form.WindowState (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.windowstate>)
Form.AutoSizeChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.autosizechanged>)
+ Genesis.Graphics.RenderDevice

Form.AutoValidateChanged
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.autovaluechanged>)

Form.HelpButtonClicked (<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.helpbuttonclicked>)

Form.MaximizedBoundsChanged
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.form.maximizedboundschanged>)

Form.MaximumSizeChanged
Form.MinimumSizeChanged
Form.MinimumSizeChanged
Form.Deactivate
Form.FormClosing
Form.FormClosed
Form.Load
Form.MdiChildActivate
Form.MenuComplete
Form.MenuStart
Form.InputLanguageChanged
Form.InputLanguageChanging
Form.RightToLeftLayoutChanged
Form.Shown
Form.DpiChanged
Form.ResizeBegin
Form.ResizeEnd
ContainerControl.OnAutoValidateChanged(EventArgs)
ContainerControl.OnParentChanged(EventArgs)
ContainerControl.PerformLayout()
+ **Genesis.Core.Behaviors**
 (Genesis.Core.Behaviors.html)
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.validate#system-windows-forms-containercontrol-validate>)

+ **Genesis.Core.Behaviors.Physics**
 (Genesis.Core.Behaviors.Physics.html)
 ([https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.validate#system-windows-forms-containercontrol-validate\(system.boolean\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.validate#system-windows-forms-containercontrol-validate(system.boolean)))

+ **Genesis.Core.Behaviors.Physics**
 (Genesis.Core.Behaviors.Physics.html)
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.autoscaledimensions>)

+ **Genesis.Core.GameElements**
 (Genesis.Core.GameElements.html)
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.autoscalefactor>)

+ **Genesis.Graphics**
 (Genesis.Graphics.html)
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.autoscalemode>)

ContainerControl.BindingContext
+ **Genesis.Graphics.Physics**
 (Genesis.Graphics.Physics.html)
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.canenableime>)

+ **Genesis.Graphics.RenderDevice**

ContainerControl.ActiveControl
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.activecontrol>)

ContainerControl.CurrentAutoScaleDimensions
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.currentautoscaledimensions>)

ContainerControl.ParentForm
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol.parentform>)

ScollableControl.ScrollStateAutoScrolling
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrollstateautoscrolling>)

AssetManager
ScrollableControl.ScrollStateHScrollVisible
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrollstatehscrollvisible>)

Genesis.Core.AssetManager.html
Game
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrollstatehscrollvisible>)

ScrollableControl.ScrollStateVScrollVisible
GameElement
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrollstatevscrollvisible>)

GameElement
ScrollableControl.ScrollStateUserHasScrolled
GameEventHandler
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrollstateuserhasscrolled>)

ScrollableControl.ScrollStateFullDrag
Genesis.Window
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrollstatefulldrag>)

ScrollableControl.GetScrollState(int)
GameBehavior
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.getscrollstate>)

ScrollableControl.OnMouseWheel(MouseEventArgs)
Input
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.onmousewheel>)

Layer
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.onrighttoleftchanged>)

Light
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.onrighttoleftchanged>)

Scene
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Control.GetChildAtPoint(Point)
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Control.GetContainerControl()
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Control.Hide() ([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.hide](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.hide#system-windows-forms-control-hide))
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Control.InitLayout() ([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.initlayout](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.initlayout#system-windows-forms-control-initlayout))
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Control.InvalidateLayer() ([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidate#system-windows-forms-control-invalidate\(system-layer\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidate#system-windows-forms-control-invalidate(system-layer)))
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([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.performlayout\(system-windows-forms-control-system-string\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.performlayout#system-windows-forms-control-performlayout(system-windows-forms-control-system-string)))

Control.PointToClient(Point)
(Genesis.Core.Behaviors.Physics.html)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.pointtocalient>)

Control.PointToScreen(Point)
(Genesis.Core.GameElements.html)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.pointtoscreen>)

Control.PreProcessMessage(Message)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.preprocessmessage>)

Control.PreProcessControlMessage(Message)
(Genesis.Graphics.html)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.preprocesscontrolmessage>)

Control.ProcessKeyEventArgs(Message)
(Genesis.Graphics.Physics.html)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.processkeyeventargs>)

+ **Genesis.Graphics.RenderDevice**

Control.RtlTranslateAlignment(ContentAlignment)
([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rtltranslatealignment#system-windows-forms-control-rtltranslatealignment\(system-drawing-contentalignment\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rtltranslatealignment#system-windows-forms-control-rtltranslatealignment(system-drawing-contentalignment)))

Control.RtlTranslateHorizontal(HorizontalAlignment)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rtltranslatehorizontal>)

Control.RtlTranslateLeftRight(LeftRightAlignment)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rtltranslateleftright>)

Control.RtlTranslateContent(ContentAlignment)
AssetManager
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.rtltranslatecontent>)
Genesis.Core.AssetManager.html

Control.Show()
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.show>)

Game (Genesis.Core.Game.html)

Control.SuspendLayout()
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.suspendlayout>)

Control.Update()
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.update>)
Genesis.Core.GameElement.html

Control.UpdateBounds()
GameEventHandler
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.updatebounds#system-windows-forms-control-updatebounds>)
Genesis.Window

Control.UpdateBounds(int, int, int, int)
([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.updatebounds#system-windows-forms-control-updatebounds\(system-int32-system-int32-system-int32-system-int32\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.updatebounds#system-windows-forms-control-updatebounds(system-int32-system-int32-system-int32-system-int32)))

Control.UpdateBounds(int, int, int, int, int)
GameBehavior
([https://learn.microsoft.com/dotnet/api/system.windows.forms.control.updatebounds#system-windows-forms-control-updatebounds\(system-int32-system-int32-system-int32-system-int32-system-int32-system-int32\)](https://learn.microsoft.com/dotnet/api/system.windows.forms.control.updatebounds#system-windows-forms-control-updatebounds(system-int32-system-int32-system-int32-system-int32-system-int32-system-int32)))

Control.UpdateBounds(int, int, int, int, int, int)
Input (Genesis.Core.Input.html)

Control.UpdateBounds(int, int, int, int, int, int, int)
Layer (Genesis.Core.Layer.html)

Control.UpdateBounds(int, int, int, int, int, int, int, int)
Light (Genesis.Core.Light.html)

Control.UpdateZOrder()
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.updatezorder>)

Control.UpdateStyles()
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.updatestyles>)
Scene3D

Control.OnimeModeChanged(EventArgs)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.onimemodechanged>)
SceneEventHandler

Control.AccessibleObject
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.accessibilityobject>)
SceneSizeEventHandler

Control.AccessibleDefaultActionDescription
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.accessibledefaultactiondescription>)
Storage

Control.AccessibleDescription
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.accessibledescription>)
Utils (Genesis.Core.Utils.html)

Control.AccessibleName
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.accessiblename>)

Control.AccessibleRole
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.accessiblerole>)

+ Genesis.Core.Behaviors
(Genesis.Core.Behaviors.html)

Control.AllowDrop
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.allowdrop>)

Control.Anchor
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.anchor>)

+ Genesis.Core.Behaviors.Physics
(Genesis.Core.Behaviors.Physics.html)

Control.AutoScrollOffset
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.autoscrolloffset>)

Control.LayoutEngine
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.layoutengine>)

Control.BackgroundImage
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.backgroundimage>)

+ Genesis.Core.Behaviors.Physics
(Genesis.Core.Behaviors.Physics.html)

Control.BackgroundImageLayout
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.backgroundimagelayout>)

+ Genesis.Core.GameElements
(Genesis.Core.GameElements.html)

Control.Bottom
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.bottom>)

Control.Bounds
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.bounds>)

Control.CanFocus
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.canfocus>)

+ Genesis.Graphics
(Genesis.Graphics.html)

Control.CanRaiseEvents
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.canraiseevents>)

Control.CanSelect
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.canselect>)

+ Genesis.Graphics.Physics
(Genesis.Graphics.Physics.html)

Control.Capture
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.capture>)

Control.CausesValidation
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.causesvalidation>)

+ Genesis.Graphics.RenderDevice

Control.CheckForIllegalCrossThreadCalls
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.checkforillegalcrossthreadcalls>)

Control.ClientRectangle (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.clientrectangle>)

Control.CompanyName (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.companyname>)

Control.ContainsFocus (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.containsfocus>)

Control.ContextMenu (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.contextmenu>)

Control.ContextMenuStrip
AssetManager
Control.Controls (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.controls>)
([Genesis.Core.AssetManager.html](#))

Control.Created (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.created>)

Game (Game Element)
Control.Cursor (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.cursor>)

Control.DataBindings (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.databindings>)
([Genesis.Core.GameElement.html](#))

Control.DefaultBackColor (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultbackcolor>)
GameEventHandler
Control.DefaultCursor (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultcursor>)
([Genesis.Core.GameEventHandler.html](#))

Control.DefaultFont (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultfont>)

Control.DefaultForeColor (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultforecolor>)
([Genesis.Core.GenesisWindow.html](#))

Control.DefaultMargin (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultmargin>)
GameBehavior

Control.DefaultMaximumSize
([Genesis.Core.IGameBehavior.html](#))

Input (Genesis Core Input)
Control.DefaultMinimumSize
Layer (Game Layer)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultminimumsize>)

Light (Game Light)
Control.DefaultPadding (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.defaultpadding>)

Scene (Game Scene)
Control.DeviceDpi (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.devideddpi>)

Scene3D
Control.IsDisposed (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.isdisposed>)
([Genesis.Core.Scene3D.html](#))

Control.Disposing (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.disposing>)
SceneEventHandler

Control.Dock (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dock>)

Control.DoubleBuffered (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.doublebuffered>)
SceneSizeEvenHandler

Control.Enabled (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.enabled>)
([Genesis.Core.SceneSizeEvenHandler.html](#))

Control.Focused (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.focused>)
Storage

Control.Font (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.font>)
([Genesis.Core.Storage.html](#))

Control.FontHeight (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.fontheight>)
Utils (Game Utils)
Control.ForeColor (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.forecolor>)

Control.Handle (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.handle>)

Control.HasChildren (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.haschildren>)
Genesis.Core.Behaviors
Genesis.Core.Behaviors.html

Control.Height (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.height>)

Control.IshandleCreated (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ishandlecreated>)

Control.InvokeRequired (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invokerequired>)

Control.Accessible (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.isaccessible>)

Control.IsMirrored (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.ismirrored>)

Control.Left (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.left>)

Control.Margin (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.margin>)

Control.ModifierKeys (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.modifierkeys>)

Control.MouseButtons (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousebuttons>)

Control.mousePosition (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mouseposition>)

Control.Name (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.name>)
Genesis.Graphics
Genesis.Graphics.html

Control.Parent (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.parent>)

Control.ProductName (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.productname>)
Genesis.Graphics.Physics
Genesis.Graphics.Physics.html

Control.ProductVersion (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.productversion>)

+ Genesis.Graphics.RenderDevice

Control.RecreatingHandle
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.recreatinghandle>)

Control.Region (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.region>)

Control.RenderRightToLeft
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.renderrighttoleft>)

Control.ResizeRedraw (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.resizeredraw>)

Control.Right (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.right>)

Control.RightToLeft (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.righttoleft>)

Control.ScaleChildren (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.scalechildren>)
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.site>)

Control.Site (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.site>)

Control.TabIndex (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.tabindex>)

Control.GameElement
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.tabstop>)

Control.Tag (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.tag>)

Control.TopEvent.Handler
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.top>)

Control.TopLevelControl (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.toplevelcontrol>)

Control.Genesis.Window
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.showkeyboards>)

Control.ShowKeyboardCues
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.showfocusc>)

Control.ShowFocusCues (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.showfocusc>)
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.usewaitcursor>)

Control.Input (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.visible>)

Control.Layer (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.width>)

Control.Light (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.preferredsize>)

Control.Scene (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.padding>)

Control.Scene3D
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.imemode>)

Control.ImeModeBase (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.imemodebase>)

Control.Scene.EventHandler
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.propagatingimemode>)

Control.BackColorChanged
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.backcolorchanged>)

Control.ClientSizeChanged
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.backgroundimagechanged>)

Control.BackgroundImageLayoutChanged
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.backgroundimagelayoutchanged>)

+ **Genesis.Core.Behaviors**

Control.BindingContextChanged
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.causesvalidationchanged>)

Control.ClientSizeChanged
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.clientsizechanged>)

Control.ContextMenuChanged
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.contextmenuchanged>)

+ **Genesis.Core.GameElements**

Control.ContextMenuStripChanged
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.contextmenustripchanged>)

Control.CursorChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.cursorchanged>)

Control.DockChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dockchanged>)

Control.EnabledChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.enabledchanged>)

+ **Genesis.Graphics.Physics**

Control.FontChanged
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.forecolorchanged>)

Control.ForeColorChanged
 (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.forecolorchanged>)

+ **Genesis.Graphics.RenderDevice**

Control.LocationChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.locationchanged>)
Control.MarginChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.marginchanged>)
Control.RegionChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.regionchanged>)
Control.RightToLeftChanged
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.righttoleftchanged>)
Control.SizeChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.sizechanged>)
Control.TabIndexChanged
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.tabindexchanged>)
Control.TabStopChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.tabstopchanged>)
AssetManager
(<https://learn.microsoft.com/dotnet/api/genesis.core.assetmanager.html>)
Control.TextChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.textchanged>)
Game
(<https://learn.microsoft.com/dotnet/api/genesis.core.game.html>)
Control.VisibleChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.visiblechanged>)
GameElement
(<https://learn.microsoft.com/dotnet/api/genesis.core.gameelement.html>)
Control.ControlAdded (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.controladded>)
GameEventHandler
(<https://learn.microsoft.com/dotnet/api/genesis.core.gameeventhandler.html>)
Control.ControlRemoved (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.controlremoved>)
Genesis.Window
(<https://learn.microsoft.com/dotnet/api/genesis.core.genesiswindow.html>)
Control.DragEnter (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dragenter>)
Control.DragOver (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dragover>)
GameBehavior
(<https://learn.microsoft.com/dotnet/api/genesis.core.gamebehavior.html>)
Control.DragLeave (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dragleave>)
Genesis.Core.GameBehavior
(<https://learn.microsoft.com/dotnet/api/genesis.core.gamebehavior.html>)
Control.GiveFeedback (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.givefeedback>)
Input
(<https://learn.microsoft.com/dotnet/api/genesis.core.input.html>)
Control.HandleCreated (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.handlecreated>)
Layer
(<https://learn.microsoft.com/dotnet/api/genesis.core.layer.html>)
Control.HandleDestroyed (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.handledestroyed>)
Light
(<https://learn.microsoft.com/dotnet/api/genesis.core.light.html>)
Control.HelpRequested (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.helprequested>)
Scene
(<https://learn.microsoft.com/dotnet/api/genesis.core.scene.html>)
Control.Invalidated (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.invalidated>)
Scene3D
(<https://learn.microsoft.com/dotnet/api/genesis.core.scene3d.html>)
Control.PaddingChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.paddingchanged>)
Control.Paint (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.paint>)
SceneEventHandler
(<https://learn.microsoft.com/dotnet/api/genesis.core.sceneeventhandler.html>)
Control.QueryContinueDrag
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.querycontinuedrag>)
SceneSizeEvenHandler
(<https://learn.microsoft.com/dotnet/api/genesis.core.scenesizeevenhandler.html>)
Control.QueryAccessibilityHelp
(<https://learn.microsoft.com/dotnet/api/genesis.core.queryaccessibilityhelp.html>)
Control.Storage
(<https://learn.microsoft.com/dotnet/api/genesis.core.storage.html>)
Control.DoubleClick (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.doubleclick>)
Control.Enter (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.enter>)
Utils
(<https://learn.microsoft.com/dotnet/api/genesis.core.utils.html>)
Control.GotFocus (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.gotfocus>)
Control.KeyDown (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.keydown>)
Control.KeyPress (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.keypress>)
Control.KeyUp (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.keyup>)
Genesis.Core.Behaviors.Physics
(<https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics.html>)
Control.Leave (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.leave>)
Control.LostFocus (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.lostfocus>)
Genesis.Core.Behaviors.Physics
(<https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics.html>)
Control.MouseClick (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mouseclick>)
Genesis.Core.Behaviors.Physic
(<https://learn.microsoft.com/dotnet/api/genesis.core.physic.html>)
Control.MouseDoubleClick (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousedoubleclick>)
Genesis.Core.GameElements
(<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.html>)
Control.MouseCaptureChanged
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousecapturechanged>)
Control.MouseDown (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousedown>)
Genesis.Graphics
(<https://learn.microsoft.com/dotnet/api/genesis.graphics.html>)
Control.MouseEnter (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mouseenter>)
Control.MouseLeave (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mouseleave>)
Genesis.Graphics.Physics
(<https://learn.microsoft.com/dotnet/api/genesis.graphics.physics.html>)
Control.DpiChangedBeforeParent
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dpichangedbeforeparent>)
Genesis.Graphics.RenderDevice

Control.DpiChangedAfterParent
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dpichangedafterparent>)

Control.MouseHover (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousehover>)

Control.MouseMove (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousemove>)

Control.MouseUp (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mouseup>)

Control.MouseWheel (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.mousewheel>)

Control.Move (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.move>)

Control.PreviewKeyDown (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.previewkeydown>)

Control.Resize (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.resize>)
 ([Genesis.Core.AssetManager.html](#))

Control.ChangeUICues (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.changeuicues>)
 ([Game.Genesis.Core.Game.html](#))

Control.StyleChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.stylechanged>)
 ([Game.Genesis.Core.Game.html](#))

Control.SystemColorsChanged
 ([Genesis.Core.GameElement.html](#))
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.systemcolorschanged>)

Control.GameEventHandler
 ([Game.EventHandler.html](#))

Control.Validating (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.validating>)
 ([Genesis.Core.GameEventHandler.html](#))

Control.Validated (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.validated>)
 ([Genesis.Window.html](#))

Control.ParentChanged (<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.parentchanged>)
 ([Genesis.Core.GenesisWindow.html](#))

Control.IMemModeChanged
 ([GameBehavior.html](#))
 ([Genesis.Core.IGameBehavior.html](#))

Component.Dispose()

(<https://learn.microsoft.com/dotnet/api/system.componentmodel.component.dispose#system-componentmodel-component-dispose>)

Component.Input ([Genesis.Core.Input.html](#))
 (<https://learn.microsoft.com/dotnet/api/system.componentmodel.component.getservice>)

Component.Scene3D
 ([Scene3D.html](#))
 ([Scene.Genesis.Core.Scene.html](#))

Component.Events (<https://learn.microsoft.com/dotnet/api/system.componentmodel.component.events>)
 ([Genesis.Core.Scene3D.html](#))

Component.Container (<https://learn.microsoft.com/dotnet/api/system.componentmodel.component.container>)
 ([SceneEventHandler.html](#))

Component.DesignMode
 ([Genesis.Core.SceneEvent.Handler.html](#))
 ([SceneSizeEventHandler.html](#))

Component.Disposed (<https://learn.microsoft.com/dotnet/api/system.componentmodel.component.disposed>)
 ([Genesis.Core.SceneSizeEvent.Handler.html](#))

MarshalByRefObject.MemberwiseClone(bool)
 Storage
(<https://learn.microsoft.com/dotnet/api/system.marshallbyrefobject.memberwiseclone>)
 ([Genesis.Core.Storage.html](#))

MarshalByRefObject.GetLifetimeService()
 Utils
(<https://learn.microsoft.com/dotnet/api/system.marshallbyrefobject.getlifetimeservice>)

MarshalByRefObject.InitializeLifetimeService()
 ([Genesis.Core.Behaviors.html](#))
 ([Genesis.Core.Behaviors.Physic.html](#))

MarshalByRefObject.CreateObjRef(Type)
 ([Genesis.Core.Behaviors.Physic.html](#))

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

+ Genesis.Graphics

Namespace: [Genesis.Core](#) ([Genesis.html](#)).Core ([Genesis.Core.html](#))

Assembly: Genesis.dll

+ Genesis.Graphics.Physics

Syntax
 ([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

```
public class GenesisWindow : Form, IDropTarget, ISynchronizeInvoke, IWin32Window, IBindableComponent, IComponent, IDisposable, IContainerControl
```

Constructors

AssetManager
GenesisWindow()
(Genesis.Core.AssetManager.html)
Declaration
Game (Genesis.Core.Game.html)
GameElement
(Genesis.Core.GameElement.html)
public GenesisWindow()
GameEventHandler
(Genesis.Core.GameEventHandler.h)
GenesisWindow
(Genesis.Core.GenesisWindow.html)
IGameBehavior
(Genesis.Core.IGameBehavior.html)

Properties
Input (Genesis.Core.Input.html)
Layer (Genesis.Core.Layer.html)
Light (Genesis.Core.Light.html)
Declaration
Scene (Genesis.Core.Scene.html)
Scene3D
p(Genesis.Core.Scene3DElement;)
SceneEventHandler
(Genesis.Core.SceneEventHandler.h)

Property Value
SceneSizeEvenHandler
Type Genesis.Core.SceneSizeEvenHandler
Storage
Game (Genesis.Core.Game.html)
(Genesis.Core.Storage.html)
Utils (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors

Methods
(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics
(Genesis.Core.Behaviors.Physics)
Init(Game)
Declaration

+ Genesis.Core.Behaviors.Physics
(Genesis.Core.Behaviors.Physics)

+ public virtual void Init(Game game)

+ Genesis.Core.GameElements
(Genesis.Core.GameElements.h)

Parameters

+ Genesis.Graphics
Type
(Genesis.Graphics.html)

Game (Genesis.Core.Game.html)

+ Genesis.Graphics.Physics
(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

Parameters

game (String)

Description

game

Description

OnResize(EventArgs)

Declaration

```
protected override void OnResize(EventArgs e)
```



Parameters

Type	Name	Description
AssetManager (Genesis.Core.AssetManager.html) EventArgs (https://learn.microsoft.com/dotnet/api/system.eventargs) Game (Genesis.Core.Game.html)	e	

Overrides

GameElement
(Genesis.Core.GameElement.html)

Form.OnResize(EventArgs) (https://learn.microsoft.com/dotnet/api/system.windows.forms.form.onresize)

GameEvent.Handler
(Genesis.Core.GameEventHandler.h)

GenesisWindow

Start(Game)
(Genesis.Core.GenesisWindow.html)

Declaration

IGameBehavior
(Genesis.Core.IGameBehavior.html)

Input
(Genesis.Core.Input.html)
public virtual void Start(Game game)

Layer
(Genesis.Core.Layer.html)

Light
(Genesis.Core.Light.html)

Parameters

Scene
(Genesis.Core.Scene.html)

Type	Name	Description
Scene3D (Genesis.Core.Scene3D.html)		

Game
(Genesis.Core.Game.html)

Scene.EventHandler
(Genesis.Core.Scene.EventHandler.h)

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.html)

Update(Game)

Declaration

Storage
(Genesis.Core.Storage.html)

Utils
(Genesis.Core.Utils.html)

+ public virtual void Update(Game game)

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

Parameters

+ Genesis.Core.Behaviors.Physics

Type
(Genesis.Core.Behaviors.Physics.html)

Game
(Genesis.Core.Game.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

Implements

Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

IDropTarget
(https://learn.microsoft.com/dotnet/api/system.windows.forms.idroptarget)

ISynchronizeInvoke
(https://learn.microsoft.com/dotnet/api/system.componentmodel.isynchronizeinvoke)

IWin32Window
(https://learn.microsoft.com/dotnet/api/system.windows.forms.iwin32window)

IBindableComponent
(https://learn.microsoft.com/dotnet/api/system.windows.forms.ibindablecomponent)

IComponent
(https://learn.microsoft.com/dotnet/api/system.componentmodel.icomponent)

IDisposable
(https://learn.microsoft.com/dotnet/api/system.idisposable)

IContainerControl
(https://learn.microsoft.com/dotnet/api/system.windows.forms.IContainerControl)

+ Genesis.Graphics.RenderDevice



AssetManager
(Genesis.Core.AssetManager.html)
Game (Genesis.Core.Game.html)
GameElement
(Genesis.Core.GameElement.html)
GameEventHandler
(Genesis.Core.GameEventHandler.h)
GenesisWindow
(Genesis.Core.GenesisWindow.html)
IGameBehavior
(Genesis.Core.IGameBehavior.html)
Input (Genesis.Core.Input.html)
Layer (Genesis.Core.Layer.html)
Light (Genesis.Core.Light.html)
Scene (Genesis.Core.Scene.html)
Scene3D
(Genesis.Core.Scene3D.html)
SceneEventHandler
(Genesis.Core.SceneEventHandler.h)
SceneSizeEvenHandler
(Genesis.Core.SceneSizeEvenHandler.h)
Storage
(Genesis.Core.Storage.html)
Utils (Genesis.Core.Utils.html)

- + **Genesis.Core.Behaviors**
[\(Genesis.Core.Behaviors.html\)](#)
- + **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)
- + **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)
- + **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)
- + **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)
- + **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)
- + **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)

Class IGameBehavior

Represents the base class for game behaviors in the Genesis framework.

▼ Enter here to filter...

Inheritance

(Genesis.Core.AssetManager.html)
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ Game (Genesis.Core.Game.html)
↳ IGameBehavior
↳ GameElement
↳ AnimationBehavior (Genesis.Core.Behaviors.AnimationBehavior.html)
↳ Genesis.Core.GameElement.html
↳ SpriteMovementController (Genesis.Core.Behaviors.SpriteMovementController.html)
↳ GameEventHandler
↳ PhysicsBehavior (Genesis.Physics.PhysicsBehavior.html)
↳ Genesis.Core.GameEventHandler.h

Inherited Members

(Genesis.Core.GenesisWindow.html)
object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
IGameBehavior
object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))
Input (Genesis.Core.Input.html)
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-system-object)))
Layer (Genesis.Core.Layer.html)
Light (Genesis.Core.Light.html)
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
Scene (Genesis.Core.Scene.html)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
Scene3D
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
SceneEventHandler

Namespace: Genesis (Genesis.html) Core (Genesis.Core.html)
(Genesis.Core.SceneEventHandler.h)

Asserts

Genesis.Core.SceneEventHandler

Syntax

(Genesis.Core.SceneSizeEvenHandler.cs)
Storage
(Genesis.Core.Storage.html)
public abstract class IGameBehavior
Utils (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

IGameBehavior()

+ Genesis.Core.Behaviors.Physics

Declaration
(Genesis.Core.Behaviors.Physics.html)

+ protected IGameBehavior()

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

+ Genesis.Graphics

(Genesis.Graphics.html)

Properties

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Parent

+ Genesis.Graphics.RenderDevice

Gets or sets the parent game element to which this behavior is attached.

(Genesis.Graphics.RenderDevice.html)

Declaration

```
public GameElement Parent { get; set; }
```

Property Value

Type	Description
GameElement (Genesis.Core.GameElement.html) (Genesis.Core.AssetManagement.html)	

Methods

Game (Genesis.Core.Game.html)

GameElement

(Genesis.Core.GameElement.html)

GameEventHandler

(Genesis.Core.GameEventHandler.h)

GenesisWindow

(Genesis.Core.GenesisWindow.html)

IGameBehavior

Called when the game behavior is being destroyed.

Input (Genesis.Core.Input.html)

Declaration Layer (Genesis.Core.Layer.html)

Light (Genesis.Core.Light.html)

public abstract void OnDestroy(Game game, GameElement parent)

Scene (Genesis.Core.Scene.html)

Scene3D

(Genesis.Core.Scene3D.html)

Parameters

Type	Name	Description
SceneEventHandler (Genesis.Core.SceneEventHandler.h)	game	The game instance.
GameElement (Genesis.Core.GameElement.html)	parent	The parent game element.

OnInit(Game, GameElement)

Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

Called when the game behavior is initialized.

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

public abstract void OnInit(Game game, GameElement parent)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Parameters

+ Genesis.Core.GameElements

Type (Genesis.Core.GameElements.h)

Game (Genesis.Core.Game.html)

+ Genesis.Graphics

(Genesis.Graphics.html)

GameElement (Genesis.Graphics.GameElement.html)

Type	Name	Description
Game (Genesis.Core.Game.html)	game	The game instance.
GameElement (Genesis.Graphics.GameElement.html)	parent	The parent game element.

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

OnRender(Game, GameElement)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

Called when the game behavior is rendered.

Declaration

```
public abstract void OnRender(Game game, GameElement parent)
```



Parameters

Type	Name	Description
Game (Genesis.Core.Game.html) GameElement (Genesis.Core.GameElement.html)	game	The game instance.
GameElement (Genesis.Core.GameElement.html)	parent	The parent game element.

OnUpdate(Game, GameElement)

IGameBehavior

Called when the game behavior is updated.
(Genesis.Core.IGameBehavior.html)

Declaration

```
public abstract void OnUpdate(Game game, GameElement parent)
```

Layer (Genesis.Core.Layer.html)

Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

Scene3D

Parameters

Type	Name	Description
SceneEventHandler (Genesis.Core.SceneEventHandler.html)	game	The game instance.
SceneSizeEventHandler (Genesis.Core.SceneSizeEventHandler.html)	parent	The parent game element.

Storage

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.h)

Class Input

Provides utility methods for handling user input in the Genesis framework.

Enter here to filter...

Inheritance

Game (Genesis.Core.Game.html)
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
 ↳ GameElement
 ↳ Input (Genesis.Core.GameElement.html)

Inherited Members

(Genesis.Core.GameEventHandler.h)
object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
 ↳ GenesisWindow
object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))
 ↳ Genesis.Core.GenesisWindow.html
 ↳ IGameBehavior
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object>equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object>equals(system-object-system-object)))
 ↳ Input (Genesis.Core.Input.html)
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
 ↳ Layer (Genesis.Core.Layer.html)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
 ↳ Light (Genesis.Core.Light.html)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
 ↳ Scene (Genesis.Core.Scene.html)
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
 ↳ Scene3D

Namespace: Genesis (Genesis.html) Core (Genesis.Core.html)
↳ Genesis.Core.Scene3D.html

Assembly Events

SceneEventHandler (Genesis.Core.SceneEventHandler.html)

Syntax

```
SceneSizeEventHandler  
(Genesis.Core.SceneSizeEventHandler.html)  
public class Input  
    Storage  
(Genesis.Core.Storage.html)  
    Utils (Genesis.Core.Utils.html)
```

Constructors

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

Input()

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.Behaviors.Physics
 public Input()
(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

Methods

+ Genesis.Graphics

(Genesis.Graphics.html)

GetAsyncKeyState(int)

(Genesis.Graphics.Physics.html)

Gets the state of the specified key.

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

```
public static extern short GetAsyncKeyState(int vKey)
```

Parameters

Type		Name	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)		vKey	The virtual key code to check.

Returns

Type	Description
short (https://learn.microsoft.com/dotnet/api/system.int16)	True if the key is down; otherwise, false.

GameElement

([Genesis.Core.GameElement.html](https://genesis.core/gameelement.html))
GameEventHandler

short (<https://genesis.core/gameeventhandler.html>)

([Genesis.Core.GameBehavior.html](https://genesis.core/gamebehavior.html))

Gets the state of the specified key.

Layer ([Genesis.Core.Layer.html](https://genesis.core/layer.html))

Declaration ([Genesis.Core.Light.html](https://genesis.core/light.html))

Scene ([Genesis.Core.Scene.html](https://genesis.core/scene.html))

```
public static extern short GetAsyncKeyState(Keys vKey)
```

([Genesis.Core.Scene3D.html](https://genesis.core/scene3d.html))

SceneEventHandler

Parameters ([Genesis.Core.SceneEventHandler.h](https://genesis.core/sceneeventhandler.h))

Type		Name	Description
Keys	(Genesis.Core.SceneSizeEventHandler.html) Storage (https://learn.microsoft.com/dotnet/api/system.windows.forms.keys)	vKey	The virtual key code to check.

Utils ([Genesis.Core.Utils.html](https://genesis.core/utils.html))

Returns

+ **Genesis.Core.Behaviors**

Type ([Genesis.Core.Behaviors.html](https://genesis.core/behaviors.html))

short (<https://learn.microsoft.com/dotnet/api/system.int16>)

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](https://genesis.core/behaviors.physics.html))

GetMousePos ()

([Genesis.Core.Behaviors.Physics.html](https://genesis.core/behaviors.physics.html))

Gets the current mouse position.

+ **Genesis.Core.GameElements**

Declaration ([Genesis.Core.GameElements.h](https://genesis.core/gameelements.h))

+ **Genesis.Graphics**

GetMousePos ()

([Genesis.Graphics.html](https://genesis.core/graphics.html))

Returns

Genesis.Graphics.Physics

Type ([Genesis.Graphics.Physics.html](https://genesis.core/graphics.physics.html))

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](https://genesis.core/renderdevice.html))

GetMousePos ()

([Genesis.Graphics.RenderDevice.html](https://genesis.core/renderdevice.html))

A Vec3 representing the current mouse position.

GetRefMousePos(Game)

Gets the mouse position relative to the control associated with the specified game instance.

Declaration

<pre>public static Vec3 GetRefMousePos(Game game)</pre>		
Parameters		
Game (Genesis.Core.Game.html) GameElement Type (Genesis.Core.GameElement.html)		Name
GameEventHandler Game (Genesis.Core.Game.html) (Genesis.Core.GameEventHandler.h)	game	The game instance.
Returns GenesisWindow (Genesis.Core.GenesisWindow.html)		
Type GameBehavior (Genesis.Core.IGameBehavior.html)	Description	
Vec3 (Genesis.Math.Vec3.html) Input (Genesis.Core.Input.html) Layer (Genesis.Core.Layer.html) Light (Genesis.Core.Light.html)	A Vec3 representing the mouse position relative to the control.	

GetRefMousePos(IntPtr)

Scene3D
Gets the mouse position relative to the control associated with the specified handle.
(Genesis.Core.Scene3D.html)

Declaration

<pre>SceneEvent Handler</pre>	
<pre>public static Vec3 GetRefMousePos(IntPtr handle)</pre>	(Genesis.Core.SceneEventHandler.h)

Storage
(Genesis.Core.Storage.html)

Type Utils (Genesis.Core.Utils.html)		Name	Description
+ Genesis.Core.Behaviors IntPtr (https://learn.microsoft.com/dotnet/api/system.intptr) (Genesis.Core.Behaviors.html)		handle	The handle of the control.

Returns

Type Genesis.Core.Behaviors.Physics
(Genesis.Core.Behaviors.html)

Type Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.html)	Description
+ Genesis.Core.Behaviors.Physics A Vec3 representing the mouse position relative to the control. (Genesis.Core.Behaviors.Physics.html)	

+ Genesis.Core.GameElements
GetRefMousePos(Control)
(Genesis.Core.GameElements.h)

Gets the mouse position relative to the specified control.

Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

GetRefMousePos(Control control)
(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice
Parameters
(Genesis.Graphics.RenderDevice.html)

Type	Name	Description
Control (https://learn.microsoft.com/dotnet/api/system.window.s.forms.control)	control	The control relative to which the mouse position is obtained.

Returns

Type	Description
GameElement Vec3 (Genesis.Math.Vec3.html) (Genesis.Core.GameElement.html)	A Vec3 representing the mouse position relative to the control.

GameEventHandler
([Genesis.Core.GameEventHandler.html](#))

IsKeyDown(Keys)
([Genesis.Core.GenesisWindow.html](#))
Checks if the specified key is currently pressed.
IGameBehavior

Declaration
([Genesis.Core.IGameBehavior.html](#))

```
Input (Genesis.Core.Input.html)
Layer (Genesis.Core.Layer.html)
public static bool IsKeyDown(Keys vKey)
Light (Genesis.Core.Light.html)
Scene (Genesis.Core.Scene.html)
```

Parameters

Type	Name	Description
Scene3D (Genesis.Core.Scene3D.html)		

Key
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.keys>)

vKey

The virtual key to check.

SceneSizeEvenHandler
([Genesis.Core.SceneSizeEvenHandler.html](#))

Type	Description
Storage (Genesis.Core.Storage.html)	

bool
([Genesis.Core.IConvertible.html](#))
([dotnet/api/system.boolean](#))

True if the key is down; otherwise, false.

+ Genesis.Core.Behaviors

([Genesis.Core.Behaviors.html](#))

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.html](#))

+ Genesis.Graphics

([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

([Genesis.Graphics.RenderDevice.html](#))

Class Layer

Represents a layer containing game elements in the Genesis framework.

Enter here to filter...

Inheritance

GameElement
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ Genesis.Core.GameElement.html
↳ Layer
↳ GameEventHandler

Inherited Members

GenesisWindow
object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))
↳ Genesis.Core.IGameBehavior.html
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))
↳ Genesis.Core.Input.html
equals(system-object-system-object)
↳ Genesis.Core.Layer.html
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
Light (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
Scene (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
Scene3D
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
↳ Genesis.Core.Scene3D.html

Namespace

Genesis (Genesis.html).Core (Genesis.Core.html)

Assembly

Genesis.Core (Genesis.Core.html)

Syntax

SceneSizeEvenHandler
(Genesis.Core.SceneSizeEvenHandler.html)

Storage
public class Layer
(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors

Constructors

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

Layer()
(Genesis.Core.Behaviors.Physics.html)

Creates a new instance of the Layer class.

+ Genesis.Core.Behaviors.Physics

Declaration
(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.GameElements

public Layer()
(Genesis.Core.GameElements.html)

+ Genesis.Graphics

Layer(string)
(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

Creates a new instance of the Layer class with the specified name.

(Genesis.Graphics.Physics.html)

Declaration

+ Genesis.Graphics.RenderDevice

public Layer(string name)
(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Oper

Parameters

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	<i>name</i>	The name of the layer.

Layer(string, bool)

Creates a new instance of the Layer class with the specified name and updateElements flag.
[\(Genesis.Core.GameElement.html\)](#)

Declaration

(Genesis.Core.GameEventHandler.h)

```
public Layer(string name, bool updateElements)  
(Genesis.Core.GenesisWindow.html)
```

IGameBehavior

Parameters

(Genesis.Core.IGameBehavior.html)

Type	Name	Description
Input (Genesis.Core.Input.html) Layer (Genesis.Core.Layer.html) string Light (Genesis.Core.Light.html) (https://learn.microsoft.com/dotnet/api/system.string) Scene (Genesis.Core.Scene.html) Scene3D	<i>name</i>	The name of the layer.
bool (Genesis.Core.Scene3D.html) SceneEventHandler (https://learn.microsoft.com/dotnet/api/system.boolean) SceneSizeEvenHandler (Genesis.Core.SceneSizeEvenHandler.html) Storage (Genesis.Core.Storage.html) Utils (Genesis.Core.Utils.html)	<i>updateElements</i>	Flag indicating whether the elements within the layer should be updated.

Properties

+ Genesis.Core.Behaviors

Elements (Genesis.Core.Behaviors.html)

Gets or sets the list of GameElements within the layer.

+ Genesis.Core.Behaviors.Physics

Declaration

+ Genesis.Core.Behaviors.Physics

```
public List<GameElement> Elements { get; set; }
```

+ Genesis.Core.GameElements

Property Value

(Genesis.Core.GameElements.html)

Type	Description
Genesis.Graphics	

+ Genesis.Graphics

List (<https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1>) <

GameElement (Genesis.Core.GameElement.html) >

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Name (Genesis.Graphics.RenderDevice)

(Genesis.Graphics.RenderDevice)

Gets or sets the name of the layer.

+ Genesis.Graphics.Shaders.Oper

Declaration

```
public string Name { get; set; }
```

Property Value

Type	Description
string (https://learn.microsoft.com/dotnet/api/system.string) (Genesis.Core.GameElement.html) GameElement (Genesis.Core.GameEventHandler.html) GameEventHandler (Genesis.Core.GenesisWindow.html) GenesisWindow	

UpdateElements

Gets or sets a value indicating whether the elements within the layer should be updated.

IGameBehavior

Declaration:

```
(Genesis.Core.IGameBehavior.html)  
Input (Genesis.Core.Input.html)  
public bool UpdateElements { get; set; }
```

Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

Property Value

Type	Description
bool (https://learn.microsoft.com/dotnet/api/system.boolean) (Genesis.Core.SceneEventHandler.html)	

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.html)

Storage

Methods

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

Genesis.Core.Behaviors

+ Genesis.Core.Behaviors

Declaration:

(Genesis.Core.Behaviors.Physic

+ Genesis.Core.Behaviors.Physic

(Genesis.Core.Behaviors.Physic (Game game, IRenderDevice renderDevice))

(Genesis.Core.Behaviors.Physic

Parameters

Genesis.Core.GameElements

Type	Name	Description
Genesis.Core.GameElements.h		
+ Genesis.Graphics.Game.html	game	The game instance.

(Genesis.Graphics.html)

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

renderDevice

The rendering device.

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

OnDestroy(Game)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

Destroys all game elements within the layer.

+ Genesis.Graphics.Shaders.Oper

Declaration

```
public void OnDestroy(Game game)
```

Parameters

Type		Name	Description
Game (Genesis.Core.Game.html) GameElement (Genesis.Core.GameElement.html) GameEventHandler (Genesis.Core.GameEventHandler.html) GenesisWindow (Genesis.Core.GenesisWindow.html)		game	The game instance.

OnRender(Game, IRenderDevice)

Renders all game elements within the layer.

IGameBehavior

Declaration:

```
(Genesis.Core.IGameBehavior.html)  
Input (Genesis.Core.Input.html)  
public void OnRender(Game game, IRenderDevice renderDevice)  
Light (Genesis.Core.Light.html)
```

Scene (Genesis.Core.Scene.html)

Parameters

Type		Name	Description
Scene3D (Genesis.Core.Scene3D.html)			
Game (Genesis.Core.Game.html) (Genesis.Core.SceneEventHandler.html)		game	The game instance.

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

(Genesis.Core.SceneSizeEvenHandler.html)

Storage

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

Updates all game elements within the layer if the UpdateElements flag is true.

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

```
public void OnUpdate(Game game, IRenderDevice renderDevice)
```

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

Type

+ Genesis.Core.GameElements

Game (Genesis.Core.Game.html)

(Genesis.Core.GameElements.html)

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Oper

Type		Name	Description
Game (Genesis.Core.Game.html)		game	The game instance.
IRenderDevice (Genesis.Graphics.IRenderDevice.html)		renderDevice	The rendering device.

Class Light

Represents a light source in the Genesis framework.

▼ Enter here to filter...

Inheritance

(Genesis.Core.GameElement.html)
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ GameEventHandler
↳ GameElement (Genesis.Core.GameElement.html)
↳ (Genesis.Core.GameEventHandler.html)
↳ Light
↳ GenesisWindow

Inherited Members

IGameBehavior
GameElement.Init(Game, IRenderDevice)
(Genesis.Core.IGameBehavior.html)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Init_Genesis_Core_Game_Genesis_Graphics_IRenderDevice)
Input (Genesis.Core.Input.html)
Layer (Genesis.Core.Layer.html)
GameElement.OnRender(Game, IRenderDevice)
Light (Genesis.Core.Light.html)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnRender_Genesis_Core_Game_Genesis_Graphics_Scene (Genesis.Core.Scene.html)
IRenderDevice)
Scene3D
GameElement.OnUpdate(Game, IRenderDevice)
(Genesis.Core.Scene3D.html)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnUpdate_Genesis_Core_Game_Genesis_Graphics_SceneEventHandler
IRenderDevice)
(Genesis.Core.SceneEventHandler.h)
GameElement.OnDestroy(Game)
SceneSizeEventHandler
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnDestroy_Genesis_Core_Game_Storage)
(Genesis.Core.SceneSizeEventHandler.h)
GameElement.AddBehavior<T>(T)
Storage
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddBehavior_1__0_)
(Genesis.Core.Storage.html)
GameElement.AddBehavior(IGameBehavior)
Utils (Genesis.Core.Utils.html)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddBehavior_Genesis_Core_IGameBehavior_)

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

(Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetBehaviors_1)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddChild_Genesis_Core_GameElement_)

GameElement.GetInstance(GameElement)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetInstance_Genesis_Core_GameElement_)

GameElement.Name (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Name)

GameElement.Tag (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Tag)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

GameElement.Rotation (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Rotation)

GameElement.Size (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Size)

GameElement.Behaviors (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Behaviors)

GameElement.Scene (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Scene)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

GameElement.Enabled (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Enabled)

GameElement.Properties (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Properties)

GameElement.Children (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Children)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html#Genesis_Core_GameElement_Parent)

GameElement.UUID (Genesis.Core.GameElement.html#Genesis_Core_GameElement_UUID)

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

+ Genesis.Graphics.Shaders.Oper

(Genesis.Graphics.Shaders.Ope

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
 ([Genesis.Core.GameElement.html](#))

Namespace: [Genesis](#).[Genesis.html](#).[Core](#) ([Genesis.Core.html](#))

Assembly: [Genesis.dll](#)
 ([Genesis.Core.GameEventHandler.h](#))

Syntax: [GenesisWindow](#)

 ([Genesis.Core.GenesisWindow.html](#))

public class Light : GameElement

 ([Genesis.Core.IGameBehavior.html](#))

 Input ([Genesis.Core.Input.html](#))

 Layer ([Genesis.Core.Layer.html](#))

 Light ([Genesis.Core.Light.html](#))

 Scene ([Genesis.Core.Scene.html](#))

 Scene3D

Light(string, Vec3)

 ([Genesis.Core.Scene3D.html](#))

 SceneEventHandler

Creates a new instance of the Light class with the specified name and location.

 ([Genesis.Core.SceneEventHandler.h](#))

Declaration: [SceneSizeEvenHandler](#)

 ([Genesis.Core.SceneSizeEvenHandler.html](#))

Storage Light(string name, Vec3 location)

 ([Genesis.Core.Storage.html](#))

 Utils ([Genesis.Core.Utils.html](#))

Parameters

+ **Genesis.Core.Behaviors**

Type

 ([Genesis.Core.Behaviors.html](#))

 string (<https://learn.microsoft.com/dotnet/api/system.string>)

Name

Description

name

The name of the light.

+ **Genesis.Core.Behaviors.Physics**

 ([Genesis.Math.Vec3.html](#))

Vec3 ([Genesis.Math.Vec3.html](#))

The 3D location of the light.

+ **Genesis.Core.Behaviors.Physics**

 ([Genesis.Core.Behaviors.Physics.html](#))

Properties

[Genesis.Core.GameElements](#)

 ([Genesis.Core.GameElements.h](#))

Intensity Graphics

 ([Genesis.Graphics.html](#))

Gets or sets the intensity of the light.

+ **Genesis.Graphics.Physics**

 ([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

 ([Genesis.Graphics.RenderDevice.html](#))

Property Value

+ **Genesis.Graphics.Shaders.Operation**

 ([Genesis.Graphics.Shaders.Operation.html](#))

Type	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	

LightColor

Gets or sets the color of the light.
[\(Genesis.Core.GameElement.html\)](#)

Declaration

(Genesis.Core.GameEventHandler.h)

public COLOR LightColor { get; set; }
[\(Genesis.Core.GenesisWindow.html\)](#)

IGameBehavior

Property Value

[\(Genesis.Core.IGameBehavior.html\)](#)

Type	Description
input ((Genesis.Core.Input.html))	
Layer ((Genesis.Core.Layer.html))	
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	

Scene ([\(Genesis.Core.Scene.html\)](#))

Scene3D

([\(Genesis.Core.Scene3D.html\)](#))

Methods

SceneEventHandler

([\(Genesis.Core.SceneEventHandler.html\)](#))

SceneSizeEvenHandler

GetLightColor()

Storage

Returns the light color in RGB values normalized between 0 and 1.

([\(Genesis.Core.Storage.html\)](#))

Declaration

+ Genesis.Core.Behaviors

([\(Genesis.Core.Behaviors.html\)](#))

+ Genesis.Core.Behaviors.Physics

Returns
[\(Genesis.Core.Behaviors.Physics.html\)](#)

Type

Description

+ Genesis.Core.Behaviors.Physics	
Vec3 ((Genesis.Math.Vec3.html))	A Vec3 representing the normalized RGB values of the light color.

+ Genesis.Core.GameElements

([\(Genesis.Core.GameElements.html\)](#))
GetLightDirection(Camera)

+ Genesis.Graphics

Returns the direction vector from the light to the camera.
[\(Genesis.Graphics.html\)](#)

Declaration

+ Genesis.Graphics.Physics

([\(Genesis.Graphics.Physics.html\)](#)
public Vec3 GetLightDirection(Camera camera)

+ Genesis.Graphics.RenderDevice

([\(Genesis.Graphics.RenderDevice.html\)](#))

+ Genesis.Graphics.Shaders.Operator

([\(Genesis.Graphics.Shaders.Operator.html\)](#))

Type	Name	Description
Camera (Genesis.Graphics.Camera.html)	<i>camera</i>	The camera to which the direction is calculated.

Returns

Type	Description
Vec3 (Genesis.Math.Vec3.html) (Genesis.Core.GameElement.html) GameEventHandler (Genesis.Core.GameEventHandler.h) GenesisWindow (Genesis.Core.GenesisWindow.html) IGameBehavior (Genesis.Core.IGameBehavior.html) Input (Genesis.Core.Input.html) Layer (Genesis.Core.Layer.html) Light (Genesis.Core.Light.html) Scene (Genesis.Core.Scene.html) Scene3D (Genesis.Core.Scene3D.html) SceneEventHandler (Genesis.Core.SceneEventHandler.h) SceneSizeEvenHandler (Genesis.Core.SceneSizeEvenHandler.h) Storage (Genesis.Core.Storage.html) Utils (Genesis.Core.Utils.html)	The normalized vector representing the light direction.

+ Genesis.Core.Behaviors

[\(Genesis.Core.Behaviors.html\)](#)

+ Genesis.Core.Behaviors.Physics

[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ Genesis.Core.Behaviors.Physics

[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ Genesis.Core.GameElements

[\(Genesis.Core.GameElements.html\)](#)

+ Genesis.Graphics

[\(Genesis.Graphics.html\)](#)

+ Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice.html\)](#)

+ Genesis.Graphics.Shaders.Oper

[\(Genesis.Graphics.Shaders.Oper.html\)](#)

Class Scene

Represents a game scene in the Genesis framework.

▼ Enter here to filter...

Inheritance

GameEventHandler
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ Genesis.Core.GameEventHandler.h
↳ Scene
↳ GenesisWindow
↳ Scene3D ([Genesis.Core.Scene3D.html](https://learn.microsoft.com/dotnet/api/genesis.core.scene3d.html))
↳ ([Genesis.Core.GenesisWindow.html](https://learn.microsoft.com/dotnet/api/genesis.core.genesiswindow.html))

Inherited Members

([Genesis.Core.IGameBehavior.html](https://learn.microsoft.com/dotnet/api/genesis.core.igamebehavior.html))
object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
Input ([Genesis.Core.Input.html](https://learn.microsoft.com/dotnet/api/genesis.core.input.html))
object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))
Layer ([Genesis.Core.Layer.html](https://learn.microsoft.com/dotnet/api/genesis.core.layer.html))
Light ([Genesis.Core.Light.html](https://learn.microsoft.com/dotnet/api/genesis.core.light.html))
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))
Scene ([Genesis.Core.Scene.html](https://learn.microsoft.com/dotnet/api/genesis.core.scene.html))
equals(system-object-system-object)
Scene3D
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
SceneEventHandler
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
SceneSizeEvenHandler

Namespace: Genesis ([Genesis.html](https://learn.microsoft.com/dotnet/api/genesis.html)) Core ([Genesis.Core.html](https://learn.microsoft.com/dotnet/api/genesis.core.html))
([Genesis.Core.ScenesizeevenHandler](https://learn.microsoft.com/dotnet/api/genesis.core.scenesizeevenhandler))

Assembly: Genesis.dll

Syntax
([Genesis.Core.Storage.html](https://learn.microsoft.com/dotnet/api/genesis.core.storage.html))
 Utils ([Genesis.Core.Utils.html](https://learn.microsoft.com/dotnet/api/genesis.core.utils.html))

+ Genesis.Core.Behaviors

([Genesis.Core.Behaviors.html](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.html))

+ Genesis.Core.Behaviors.Physics
Constructors
([Genesis.Core.Behaviors.Physics](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics))

+ Genesis.Core.Behaviors.Physics
Scene()
([Genesis.Core.Behaviors.Physics](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics))

Creates a new game scene.

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.html](https://learn.microsoft.com/dotnet/api/genesis.core.gameelements))

+ Genesis.Graphics
 public Scene()
([Genesis.Graphics.html](https://learn.microsoft.com/dotnet/api/genesis.graphics))

+ Genesis.Graphics.Physics
 Scene(string)
([Genesis.Graphics.Physics.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.physics))

+ Genesis.Graphics.RenderDevice
Creates a new game scene with the specified name.
([Genesis.Graphics.RenderDevice](https://learn.microsoft.com/dotnet/api/genesis.graphics.renderdevice))

Declaration
+ Genesis.Graphics.Shaders.OpenGL
 ([Genesis.Graphics.Shaders.OpenGL](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl))

```
public Scene(string name)
```

Parameters

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	name	

Properties

AfterCanvasRender

Event handler triggered after UI canvas rendering.
[Light](#) ([Genesis.Core.Light.html](#))

Declaration
Scene (Genesis.Core.Scene.html)

Declaration

```
Scene3D  
(Genesis.Core.Scene3D.html)  
public SceneEventHandler AfterCanvasRender { get; set; }
```

SceneEventHandler

Storage
(Genesis.Core.Storage.html)

SceneEventHandler ([Genesis.Core.SceneEventHandler.html](#))

Utils ([Genesis.Core.Utils.html](#))

+ Genesis.Core.Behaviors

AfterSceneRenderBehaviors

Event handler triggered after scene rendering.

[Physics](#) ([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.Behaviors.Physics

Declaration
SceneEventHandler ([Genesis.Core.SceneEventHandler.html](#))

+ Genesis.Core.GameElements

Property Value
([Genesis.Core.GameElements.html](#))

+ Genesis.Graphics

SceneEventHandler ([Genesis.Core.SceneEventHandler.html](#))

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

BeforeCanvasPreperation

+ [Graphics.RenderDevice](#)
Event handler triggered before UI canvas preparation.
([Genesis.Graphics.RenderDevice.html](#))

Declaration

+ Genesis.Graphics.Shaders.OpenGL

([Genesis.Graphics.Shaders.OpenGL.html](#))

Type	Description
SceneEventHandler (Genesis.Core.SceneEventHandler.html)	

Camera

Gets or sets the camera used for rendering the scene.

GameEventHandler

Declaration
(Genesis.Core.GameEventHandler.h)
 GenesisWindow
(Genesis.Core.GenesisWindow.html)
 Camera Camera { get; set; }
 IGameBehavior
(Genesis.Core.IGameBehavior.html)

Property Value
 (Genesis.Core.Input.html)

Type	Description
Layer (Genesis.Core.Layer.html)	
Light (Genesis.Core.Light.html)	
Camera (Genesis.Graphics.Camera.html)	
Scene (Genesis.Core.Scene.html)	

Scene3D
(Genesis.Core.Scene3D.html)

CanvasEventHandler

Gets SceneSizeEvenHandler canvases within the scene.
(Genesis.Core.SceneSizeEvenHandler.h)

Declaration
Storage

(Genesis.Core.Storage.html)
public List<Canvas> Canvas { get; set; }
 Utils (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors

Property Value
(Genesis.Core.Behaviors.html)

Type	Description
+ Genesis.Core.Behaviors.Physics <i>(Genesis.Core.Behaviors.Physics.h)</i> <i>List<(https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1)></i> Canvas (Genesis.UI.Canvas.html)	

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.h)

Layers

Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

Gets or sets the list of layers within the scene.

+ Genesis.Graphics

Declaration
(Genesis.Graphics.html)

+ Genesis.Graphics.Physics
(Genesis.Graphics.Physics.html)

Property Value

+ Genesis.Graphics.RenderDevice

Type	Description
+ Genesis.Graphics.RenderDevice <i>(Genesis.Graphics.RenderDevice.h)</i> <i>List<(https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1)></i> Layer (Genesis.Core.Layer.html)	

+ Genesis.Graphics.Shaders.OpenGL
(Genesis.Graphics.Shaders.OpenGL.h)

Name

Gets or sets the name of the scene.

Declaration

```
public string Name { get; set; }
```

Property Value

(Genesis.Core.GameEventHandler.h)

Type

Description

GenesisWindow

(Genesis.Core.GenesisWindow.html)

IGameBehavior

(Genesis.Core.IGameBehavior.html)

Input (Genesis.Core.Input.html)

OnSceneResize

Layer (Genesis.Core.Layer.html)

Light (Genesis.Core.Light.html)

Event handler triggered when the scene is resized.

Scene (Genesis.Core.Scene.html)

Declaration

Scene3D

(Genesis.Core.Scene3D.html)

SceneEventHandler

```
public SceneSizeEvenHandler OnSceneResize { get; set; }
```

(Genesis.Core.SceneEventHandler.h)

SceneSizeEvenHandler

Property Value

(Genesis.Core.SceneSizeEvenHandler.h)

Type

Description

Storage

(Genesis.Core.Storage.html)

SceneSizeEvenHandler (Genesis.Core.SceneSizeEvenHandler.html)

Utils (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

PhysicHandler

+ Genesis.Core.Behaviors.Physics

Gets or sets the physics handler for the scene.

(Genesis.Core.Behaviors.Physics)

Declaration

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

```
public PhysicHandler PhysicHandler { get; set; }
```

+ Genesis.Core.GameElements

Property Value

+ Genesis.Graphics

(Genesis.Graphics.html)

PhysicHandler (Genesis.Physics.PsicHandler.html)

Description

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.h)

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL.h)

AddCanvas(Canvas)

(Genesis.Graphics.Shaders.OpenGL.h)

Methods

(Genesis.Graphics.RenderDevice.h)

(Genesis.Graphics.Shaders.OpenGL.h)

AddCanvas(Canvas)

(Genesis.Graphics.Shaders.OpenGL.h)

Adds a new ui canvas to the scene

Declaration

```
public Canvas AddCanvas(Canvas canvas)
```

Parameters

Type	Name	Description
GameEventHandler (Genesis.Core.GameEventHandler.h) Canvas (Genesis.UI.Canvas.html) GenesisWindow	canvas	

Returns GameBehavior
(Genesis.Core.IGameBehavior.html)

Type	Description
Input (Genesis.Core.Input.html)	
Canvas (Genesis.UI.Canvas.html)	
Layer (Genesis.Core.Layer.html)	
Light (Genesis.Core.Light.html)	
Scene (Genesis.Core.Scene.html)	

AddGameElement(string, GameElement)

(Genesis.Core.Scene3D.html)

Adds GameElement to the scene. It will be placed in the given layer

(Genesis.Core.SceneEventHandler.h)

Declaration

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler)

```
public void AddGameElement(string layerName, GameElement gameElement)
```

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

Parameters

Type	Name	Description
Genesis.Core.Behaviors (Genesis.Core.Behaviors.html)		
string (https://learn.microsoft.com/dotnet/api/system.string)	layerName	

Type	Name	Description
Genesis.Core.Behaviors.Physics GameElement (Genesis.Core.GameElement.html)	gameElement	

+ Genesis.Core.Behaviors.Physics

AddGameElements(string, List<GameElement>)

+ Genesis.Core.GameElements

Adds GameElements into the scene. The elements will be placed in the given layer

(Genesis.Core.GameElements.h)

Declaration

+ Genesis.Graphics

(Genesis.Graphics.html)

```
public void AddGameElements(string layer, List<GameElement> gameElements)
```

+ Genesis.Graphics.Physics

Parameters
(Genesis.Graphics.Physics.html)

Type	Name	Description
Genesis.Graphics.RenderDevice string (https://learn.microsoft.com/dotnet/api/system.string)	layer	
List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1)<GameElement (Genesis.Core.GameElement.html)>	gameElements	

AddLayer(Layer)

Adds a layer to the scene

Declaration

```
public void AddLayer(Layer layer)
```

Parameters

Type	Name	Description
GameEventHandler (Genesis.Core.GameEventHandler.html)		

Type	layer	
Layer (Genesis.Core.Layer.html) IGameBehavior (Genesis.Core.IGameBehavior.html)		

Input (Genesis.Core.Input.html)

Light (Genesis.Core.Light.html)

Adds a layer to the scene
Scene (Genesis.Core.Scene.html)

Declaration

Scene3D
(Genesis.Core.Scene3D.html)

```
public void AddLayer(string layerName)
```

SceneEventHandler
(Genesis.Core.SceneEventHandler.html)

Type	Name	Description
Storage (Genesis.Core.Storage.html)		

Type	layerName	
string (https://learn.microsoft.com/dotnet/api/system.string) Utils (Genesis.Core.Utils.html)		

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

GetCanvas(string)

+ Genesis.Core.Behaviors.Physics

Gets the canvas with the given name.

(Genesis.Core.Behaviors.Physics)

Declaration

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)
public Canvas GetCanvas(string name)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

Parameters

Type
(Genesis.Graphics.html)

string (https://learn.microsoft.com/dotnet/api/system.string)

+ Genesis.Graphics.Physics

Return Type
(Genesis.Graphics.Physics.html)

Type
(Genesis.Graphics.RenderDevice.html)

Canvas (Genesis.Core.Canvas.html)

+ Genesis.Graphics.Shaders.Oper

(Genesis.Graphics.Shaders.Ope

Type	Name	Description
Canvas (Genesis.Core.Canvas.html)	name	

Type	Description
Canvas (Genesis.Core.Canvas.html)	

+ Genesis.Graphics.Shaders.Ope

(Genesis.Graphics.Shaders.Ope

GetElement(string)

Gets the element with the given name. This function searches in every layer until it finds a element with an equal name.

Declaration

```
public GameElement GetElement(string name)  
    GameEventHandler  
(Genesis.Core.GameEventHandler b
```

Parameters			
Type	Name	Description	
Genesis.Core.GameEventHandler.n GenesisWindow (Genesis.Core.GenesisWindow.html)			
string GameBehavior (https://learn.microsoft.com/dotnet/api/system.string) (Genesis.Core.GameBehavior.html)	<i>name</i>		

(Genesis.Core.IGameBehavior.html)	
Input (Genesis.Core.Input.html)	
Returns Layer (Genesis.Core.Layer.html)	
Type Light (Genesis.Core.Light.html)	
Scene (Genesis.Core.Scene.html)	
GameElement (Genesis.Core.GameElement.html)	
Scene3D	

`GetElement(string, string)`

SceneSizeEvenHandler
Gets the element with the given name out of the given layer.
([Genesis.Core.SceneSizeEvenHandler](#))

Declaration

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

```
public GameElement GetElement(string layerName, string name)
```

+ Genesis.Core.Behaviors

(Genesis.CoreBehaviors.html)

Type	Name	Description
Genesis.CoreBehaviors.Physic string (https://learn.microsoft.com/dotnet/api/system.string)	<i>layerName</i>	
Genesis.CoreBehaviors.Physics string (https://learn.microsoft.com/dotnet/api/system.string) Genesis.CoreBehaviors.Physic	<i>name</i>	

Returns

T\Genesis.Core.GameElements.h

+Genesis Graphics ([Genesis.Core.GameElement.html](#))

(Genesis.Graphics.html)

REFERENCES AND NOTES

GetElements(string)

- [Genesis.Graphics.Physics.html](#)

Gets the elements from the given layer

- *Genesis.Graphics.RenderDevice*

Document ID: 1234567890

Genesis.Graphics.Shaders.Operators

Genesis.Graphics.Shaders.OpenGL

Digitized by srujanika@gmail.com

Parameters

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	<i>layername</i>	

Returns

Type	Description
GameEventHandler List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1) < (Genesis.Core.GameEventHandler.h) GameElement (Genesis.Core.GameElement.html)> GenesisWindow	

GetElements(string[])
<https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1>
Gets the elements from the given layers

Declaration
Scene (Genesis.Core.Scene.html)
Scene3D
public List<GameElement> GetElements(string[] layer)
(Genesis.Core.Scene3D.html)

Parameters
SceneEventHandler.h
SceneSizeEvenHandler
(Genesis.Core.SceneSizeEvenHandler.h)
string (<https://learn.microsoft.com/dotnet/api/system.string>)[]

Returns (Genesis.Core.Utils.html)

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)[]	<i>layer</i>	

+ Genesis.Core.Behaviors
<https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1><
GameElement (Genesis.Core.GameElement.html)>

+ Genesis.Core.Behaviors.Physics
GetLayer(string)
<https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1><
GameElement (Genesis.Core.GameElement.html)>

Gets the layer with the given name

+ Genesis.Core.GameElements

Declaration
(Genesis.Core.GameElements.h)

+ Genesis.Graphics
public Layer GetLayer(string layername)
(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

Type
(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice
string (<https://learn.microsoft.com/dotnet/api/system.string>)
(Genesis.Graphics.RenderDevice.h)

Returns
+ Genesis.Graphics.Shaders.OpenGL
(Genesis.Graphics.Shaders.OpenGL.h)

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	<i>layername</i>	

Type	Description
Layer (Genesis.Core.Layer.html)	

GetWidget(string, string)

Gets a entity with the given name from the canvas
GameEventHandler

Declaration
Genesis.Core.GameEventHandler.h

```
    GenesisWindow
    (Genesis.Core.GenesisWindow.html)
public Widget GetWidget(string canvasName, string entityName)
    IGameBehavior
    (Genesis.Core.IGameBehavior.html)
```

Parameters
Input (Genesis.Core.Input.html)

Type	Name	Description
Layer (Genesis.Core.Layer.html)		
Light (Genesis.Core.Light.html)	canvasName	

string (<https://learn.microsoft.com/dotnet/api/system.string>)

Scene (Genesis.Core.Scene.html)

Scene3D
string (<https://learn.microsoft.com/dotnet/api/system.string>)

(Genesis.Core.Scene3D.html)

SceneEventHandler

Returns
(b) (Genesis.Core.SceneEventHandler.h)

Type	Description
SceneSizeEvenHandler (Genesis.Core.SceneSizeEvenHandler.html)	

Widget (Genesis.UI.Widget.html)

Storage

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

Init(Game, IRenderDevice)

+ Genesis.Core.Behaviors

Init (Genesis.Core.Behaviors.html)

Declaration
Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

public virtual void Init(Game game, IRenderDevice renderDevice)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Parameters

+ Genesis.Core.GameElements

Type

(Genesis.Core.GameElements.h)

Game (Genesis.Core.Game.html)

+ Genesis.Graphics

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

(Genesis.Graphics.html)

Name

Description

game

renderDevice

+ Genesis.Graphics.Physics

(Genesis.Graphics_Physics.html)

OnDestroy(Game)

+ Genesis.Graphics.RenderDevice

Destroys the scene data

(Genesis.Graphics.RenderDevice)

Declaration

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL)

```
public virtual void OnDestroy(Game game)
```

Parameters

Type		Name	Description
Game (Genesis.Core.Game.html)		game	

GameEventHandler
(Genesis.Core.GameEventHandler.h)

GenesisWindow
(Genesis.Core.GenesisWindow.html)

OnRender(Game, IRenderDevice)

GameBehavior
(Genesis.Core.IGameBehavior.html)

Declaration

```
public virtual void OnRender(Game game, IRenderDevice renderDevice)
```

Scene (Genesis.Core.Scene.html)

Scene3D
(Genesis.Core.Scene3D.html)

Parameters

Type		Name	Description
SceneEventHandler (Genesis.Core.SceneEventHandler.h)		game	
SceneSizeEvenHandler (Genesis.Core.SceneSizeEvenHandler.html)		renderDevice	

Storage
(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

OnUpdate(Game, IRenderDevice)

+ Genesis.Core.Behaviors

Update the scene and the elements. Called every frame
[\(Genesis.Core.Behaviors.html\)](#)

Declaration

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)
public virtual void OnUpdate(Game game, IRenderDevice renderDevice)

+ Genesis.Core.Behaviors.Physics

Parameters

Type		Name	Description
GameElements (Genesis.Core.GameElements.h)		game	
IRenderDevice (Genesis.Graphics.IRenderDevice.html) (Genesis.Graphics.html)		renderDevice	

+ Genesis.Graphics.Physics

Reference

OnUpdate(Game, Physics).html

Reference

OnUpdate(IRenderDevice).html

Reference

OnUpdate(IRenderDevice, RenderDevice).html

Declaration

+ Genesis.Graphics.Shaders.Operator

Parameters

```
public void RemoveCanvas(Canvas canvas)
```

Parameters

Type		Name	Description
Canvas (Genesis.Ui.Canvas.html)		canvas	

GameEventHandler
(Genesis.Core.GameEventHandler.h)

GenesisWindow
(Genesis.Core.GenesisWindow.html)

RemoveCanvas(string)
Removes the *canvas* with the given name from the scene

(Genesis.Core.IGameBehavior.html)

Declaration
Input (Genesis.Core.Input.html)

Layer (Genesis.Core.Layer.html)

```
public void RemoveCanvas(string canvasName)
```

Scene (Genesis.Core.Scene.html)

Scene3D

Parameters
(Genesis.Core.Scene3D.html)

Type SceneEventHandler

(Genesis.Core.SceneEventHandler.h)
string (<https://learn.microsoft.com/dotnet/api/system.string>)

canvasName

Description

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler)

Storage

RemoveElement(GameElement)

Utils (Genesis.Core.Utils.html)

Removes a element from the scene. This function will look in all layer for the element.

+ **Genesis.Core.Behaviors**

Declaration
(Genesis.Core.Behaviors.html)

+ **Genesis.Core.Behaviors.Physics**

```
public void RemoveElement(GameElement element)
```

(Genesis.Core.Behaviors.Physics)

Parameters
(Genesis.Core.Behaviors.Physics)

Type GameElement

(Genesis.Core.GameElements.html)

Name

Description

element

(Genesis.Core.GameElements.h)

+ **Genesis.Graphics**

RemoveElement(string, GameElement)

(Genesis.Graphics.html)

Removes a element from the given layer

+ **Genesis.Graphics.Physics**

(Genesis.Graphics.Physics.html)

Declaration

+ **Genesis.Graphics.RenderDevice**

```
public void RemoveElement(string layerName, GameElement element)
```

(Genesis.Graphics.RenderDevice)

+ **Genesis.Graphics.Shaders.Operator**

(Genesis.Graphics.Shaders.Operator)

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	<i>layerName</i>	
GameElement (Genesis.Core.GameElement.html)	<i>element</i>	

▼

RemoveLayer(Layer)

GameEventHandler

[RemoveLayer\(Genesis.Core.GameEventHandler.h\)](#)

GenesisWindow

Declaration
([Genesis.Core.GenesisWindow.html](#))

IGameBehavior

[public void RemoveLayer\(Layer layer\)](#)

Input ([Genesis.Core.Input.html](#))

Layer ([Genesis.Core.Layer.html](#))

Light ([Genesis.Core.Light.html](#))

Type Scene ([Genesis.Core.Scene.html](#))

Scene3D

Layer ([Genesis.Core.Layer.html](#))

([Genesis.Core.Scene3D.html](#))

SceneEventHandler

([Genesis.Core.SceneEventHandler.h](#))

ResizeScene(Viewport)

([Genesis.Core.SceneSizeEventHandler.h](#))

Resizes the scene by invoking the event handler for scene resize.

Storage

Declaration
([Genesis.Core.Storage.html](#))

Utils ([Genesis.Core.Utils.html](#))

+ **Genesis.Core.Behaviors**

([Genesis.Core.Behaviors.html](#))

Parameters

+ **Genesis.Core.Behaviors.Physics**

Type [Genesis.Core.Behaviors.Physics](#)

Viewport

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Graphics.Viewport.html](#))

(**Genesis.Core.Behaviors.Physics**)

Type	Name	Description
Genesis.Core.Behaviors.Physics	<i>viewport</i>	The viewport containing information about the new dimensions.

+ **Genesis.Core.GameElements**

([Genesis.Core.GameElements.html](#))

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

+ **Genesis.Graphics.Shaders.Operator**

([Genesis.Graphics.Shaders.Operator.html](#))

Class Scene3D

Creates a scene for 3D rendering. This scene contains lightning and a optional skybox.

▼ Enter here to filter...

Inheritance

GameEventHandler

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ Scene ([Genesis.Core.Scene.html](#))
↳ Scene3D ([Genesis.Core.GenesisWindow.html](#))

Inherited Members

([Genesis.Core.IGameBehavior.html](#))

Scene.AddLayer(Layer) ([Genesis.Core.Scene.html#Genesis_Core_Scene_AddLayer_Genesis_Core_Layer_](#))
Scene.AddLayer(string) ([Genesis.Core.Scene.html#Genesis_Core_Scene_AddLayer_System_String_](#))
Scene.AddLayer(Layer) ([Genesis.Core.Layer.html](#))
Scene.AddCanvas(Canvas) ([Genesis.Core.Scene.html#Genesis_Core_Scene_AddCanvas_Genesis_UI_Canvas_](#))
Scene.Light (Light) ([Genesis.Core.Light.html](#))
Scene.RemoveLayer(Layer) ([Genesis.Core.Scene.html#Genesis_Core_Scene_RemoveLayer_Genesis_Core_Layer_](#))
Scene.GetLayer(string) ([Genesis.Core.Scene.html#Genesis_Core_Scene_GetLayer_System_String_](#))
Scene3D
Scene.AddGameElement(string, GameElement)
([Genesis.Core.Scene.html#Genesis_Core_Scene_AddGameElement_System_String_Genesis_Core_GameElement_](#))
Scene.EventHandler
Scene.AddGameElements(string, List<GameElement>)
([Genesis.Core.Scene.html#Genesis_Core_Scene_AddGameElements_System_String_System_Collections_Generic_List_Genesis_Core_GameElement_](#))
Scene.SizeEventHandler
Scene.GetElements(string) ([Genesis.Core.Scene.html#Genesis_Core_Scene_GetElements_System_String_](#))
Scene.GetElements(string[]) ([Genesis.Core.Scene.html#Genesis_Core_Scene_GetElements_System_String__](#))
Scene.GetElement(string) ([Genesis.Core.Scene.html#Genesis_Core_Scene_GetElement_System_String_](#))
Scene.GetElement(string, string)
([Genesis.Core.Scene.html#Genesis_Core_Scene_GetElement_System_String_System_String_](#))
Scene.GetCanvas(System.String) ([Genesis.Core.Scene.html#Genesis_Core_Scene_GetCanvas_System_String_](#))
Scene.GetWidget(string, string)
([Genesis.Core.Scene.html#Genesis_Core_Scene_GetWidget_System_String_System_String_](#))
Scene.RemoveElement(GameElement)
([Genesis.Core.Scene.html#Genesis_Core_Scene_RemoveElement_Genesis_Core_GameElement_](#))
Scene.RemoveElement(string, GameElement)
([Genesis.Core.Scene.html#Genesis_Core_Scene_RemoveElement_System_String_Genesis_Core_GameElement_](#))
Scene.RemoveCanvas(Canvas)
([Genesis.Core.Scene.html#Genesis_Core_Scene_RemoveCanvas_Genesis_UI_Canvas_](#))
Scene.RemoveCanvas(string) ([Genesis.Core.Scene.html#Genesis_Core_Scene_RemoveCanvas_System_String_](#))

Genesis.Core.Graphics

([Genesis.Graphics.html](#))

Scene.ResizeScene(Viewport) ([Genesis.Core.Scene.html#Genesis_Core_Scene_ResizeScene_Genesis_Graphics_Viewport_](#))

Scene.Name (Genesis.Core.Scene.html#Genesis_Core_Scene_Name)

Scene.Layer (Genesis.Core.Scene.html#Genesis_Core_Scene_Layer)

Scene.Camera (Genesis.Core.Scene.html#Genesis_Core_Scene_Camera)

Scene.Canvas (Genesis.Core.Scene.html#Genesis_Core_Scene_Canvas)

Scene.PhysicHandler (Genesis.Core.Scene.html#Genesis_Core_Scene_PhysicHandler)

Scene.BeforeScenePreperation (Genesis.Core.Scene.html#Genesis_Core_Scene_BeforeScenePreperation)

Scene.BeforeSceneRender (Genesis.Core.Scene.html#Genesis_Core_Scene_BeforeSceneRender)

Scene.AfterSceneRender (Genesis.Core.Scene.html#Genesis_Core_Scene_AfterSceneRender)

Scene.BeforeCanvasPreperation (Genesis.Core.Scene.html#Genesis_Core_Scene_BeforeCanvasPreperation)

Scene.Canvas (Genesis.Core.Scene.html#Genesis_Core_Scene_Canvas)

Scene.BeforeCanvasRender (Genesis.Core.Scene.html#Genesis_Core_Scene_BeforeCanvasRender)
Scene.AfterCanvasRender (Genesis.Core.Scene.html#Genesis_Core_Scene_AfterCanvasRender)
Scene.OnSceneResize (Genesis.Core.Scene.html#Genesis_Core_Scene_OnSceneResize)
object.ToString() (https://learn.microsoft.com/dotnet/api/system.object.tostring)
object.Equals(object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))
object.Equals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object))
GameEventHandler
object.ReferenceEquals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.referenceequals)
GameEventHandler.h
object.GetHashCode() (https://learn.microsoft.com/dotnet/api/system.object.gethashcode)
GenesisWindow
object.GetType() (https://learn.microsoft.com/dotnet/api/system.object.gettype)
GenesisWindow.html
object.MemberwiseClone() (https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)
IGameBehavior

Namespace: Genesis (Genesis.html) **Core:** (Genesis.Core.html)

Assembly: Genesis (Genesis.Core.Input.html)

Syntax: Layer (Genesis.Core.Layer.html)

Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)
public class Scene3D : Scene
Scene3D

(Genesis.Core.Scene3D.html)

SceneEventHandler

Constructors

SceneEventHandler.h

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler)

Scene3D(string, Light)

(Genesis.Core.Storage.html)

Declaration: Utils (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors
(Genesis.Core.Behaviors.html)

Genesis.Core.Behaviors.Physics

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	name	
Light (Genesis.Core.Light.html)	sun	

+ Genesis.Core.GameElements
(Genesis.Core.GameElements.h)

+ Genesis.Graphics.Properties
(Gehesis.Graphics.html)

+ Genesis.Graphics.Physics
Skybox
(Genesis.Graphics.Physics.html)

Declaration:
+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice
public Skybox Skybox { get; set; })

+ Genesis.Graphics.Shaders.Open
PropertyValue
(Genesis.Graphics.Shaders.Ope

+ Genesis.Graphics.Shaders.Shader

Type	Description
Skybox (Genesis.Core.GameElements.Skybox.html)	

Sun

Declaration

```
GameEventHandler
(Genesis.Core.GameEventHandler.h
public Light Sun { get; set; }
GenesisWindow
(Genesis.Core.GenesisWindow.html
IGameBehavior
```

Property Value

```
(Genesis.Core.IGameBehavior.html)
```

Type

```
Input (Genesis.Core.Input.html)
Layer (Genesis.Core.Layer.html)
Light (Genesis.Core.Light.html)
```

```
Scene (Genesis.Core.Scene.html)
```

```
Scene3D
```

```
(Genesis.Core.Scene3D.html)
```

Methods

```
SceneEventHandler
```

```
(Genesis.Core.SceneEventHandler.h
```

```
SceneSizeEventHandler
```

```
(Genesis.Core.SceneSizeEventHandler.h
```

Storage

```
Initial the scene
```

```
(Genesis.Core.Storage.html)
```

Declaration

```
Utils (Genesis.Core.Utils.html)
```

+ Genesis.Core.Behaviors

```
public override void Init(Game game, IRenderDevice renderDevice)
(Genesis.Core.Behaviors.html)
```

+ Genesis.Core.Behaviors.Physics

```
Parameters
Type (Genesis.Core.Behaviors.Physics.html)
```

+ Genesis.Core.Behaviors.Physics

```
Game (Genesis.Core.Game.html)
(Genesis.Core.Behaviors.Physics.html)
```

```
IRenderDevice (Genesis.Graphics.IRenderDevice.html)
```

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

```
Overrides
Scene.Init(Game, IRenderDevice)
```

+ Genesis.Graphics

```
(Genesis.Core.Scene.html#Genesis_Core_Scene_Init_Genesis_Core_Game_Genesis_Graphics_IRenderDevice_)
(Genesis.Graphics.html)
```

+ Genesis.Graphics.Physics

OnDestroy(Game)

```
(Genesis.Graphics.Physics.html)
```

Destroys the scene data.

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.h)

+ Genesis.Graphics.Shaders.OpenGL

```
public override void OnDestroy(Game game)
(Genesis.Graphics.Shaders.OpenGL.html)
```

+ Genesis.Graphics.Shaders.Shader

(Genesis.Graphics.Shaders.Shader.h)

Description

Type	Description
Input (Genesis.Core.Input.html)	

Type	Name	Description
Game (Genesis.Core.Game.html)	game	
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	renderDevice	

Parameters

Type	Name	Description
Game (Genesis.Core.Game.html)	game	

Overrides

Scene.OnDestroy(Game) (Genesis.Core.Scene.html#Genesis_Core_Scene_OnDestroy_Genesis_Core_Game_)

GameEventHandler

(Genesis.Core.GameEventHandler.h)

OnRender(Game, IRenderDevice)

GenesisWindow

(Genesis.Core.GenesisWindow.html)

Renders the Scene

IGameBehavior

Declaration

(Genesis.Core.IGameBehavior.html)

Input (Genesis.Core.Input.html)

public void OnRender(Game game, IRenderDevice renderDevice)

Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

Parameters

Scene3D

Type	Name	Description
Genesis.Core.Scene3D.html		
SceneEventHandler Game (Genesis.Core.Game.html) (Genesis.Core.SceneEventHandler.h)	game	

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

(Genesis.Core.SceneSizeEvenHandler)

Overrides

(Genesis.Core.Storage.html)

Scene.OnRender(Game, IRenderDevice)

Utils (Genesis.Core.Utils.html)

(Genesis.Core.Scene.html#Genesis_Core_Scene_OnRender_Genesis_Core_Game_Genesis_Graphics_IRenderDevice_)

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

OnUpdate(Game, IRenderDevice)

+ Genesis.Core.Behaviors.Physics

Update the scene and the elements. Called every frame

(Genesis.Core.Behaviors.Physics)

Declaration

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

public override void OnUpdate(Game game, IRenderDevice renderDevice)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

Type	Name	Description
Genesis.Graphics (Genesis.Graphics.html)	game	
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	renderDevice	

(Genesis.Graphics.Physics.html)

Overrides

+ Genesis.Graphics.RenderDevice

Scene.OnUpdate(Game, IRenderDevice)

(Genesis.Graphics.RenderDevice)

(Genesis.Core.Scene.html#Genesis_Core_Scene_OnUpdate_Genesis_Core_Game_Genesis_Graphics_IRenderDevice_)

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator)

+ Genesis.Graphics.Shader



GameEventHandler
(Genesis.Core.GameEventHandler.h)
GenesisWindow
(Genesis.Core.GenesisWindow.html)
IGameBehavior
(Genesis.Core.IGameBehavior.html)
Input (Genesis.Core.Input.html)
Layer (Genesis.Core.Layer.html)
Light (Genesis.Core.Light.html)
Scene (Genesis.Core.Scene.html)
Scene3D
(Genesis.Core.Scene3D.html)
SceneEventHandler
(Genesis.Core.SceneEventHandler.h)
SceneSizeEvenHandler
(Genesis.Core.SceneSizeEvenHandler.html)
Storage
(Genesis.Core.Storage.html)
Utils (Genesis.Core.Utils.html)

+ **Genesis.Core.Behaviors**

(Genesis.Core.Behaviors.html)

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics.html)

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics.html)

+ **Genesis.Core.GameElements**

(Genesis.Core.GameElements.html)

+ **Genesis.Graphics**

(Genesis.Graphics.html)

+ **Genesis.Graphics.Physics**

(Genesis.Graphics.Physics.html)

+ **Genesis.Graphics.RenderDevice**

(Genesis.Graphics.RenderDevice.html)

+ **Genesis.Graphics.Shaders.Operations**

(Genesis.Graphics.Shaders.Operations.html)

+ **Genesis.Graphics.Shaders**

Delegate SceneEventHandler

Namespace: Genesis (Genesis.html).Core (Genesis.Core.html)

Assembly: Genesis.dll filter...

Syntax

```
GameEventHandler  
    (Genesis.Core.GameEventHandler.h  
public delegate void SceneEventHandler(Scene scene, Game game, IRenderDevice renderDevice)  
    GenesisWindow  
        (Genesis.Core.GenesisWindow.html)
```

Parameters

Type	Name	Description
(Genesis.Core.IGameBehavior.html) Input (Genesis.Core.Input.html)		
Scene (Genesis.Core.Scene.html)	scene	
Light (Genesis.Core.Light.html) Game (Genesis.Core.Game.html)	game	
Scene (Genesis.Core.Scene.html)		
IRenderDevice (Genesis.Graphics.IRenderDevice.html) (Genesis.Core.Scene3D.html)	renderDevice	

Constructors

SceneEventHandler (Genesis.Core.SceneEventHandler.h)

SceneSizeEvenHandler (Genesis.Core.SceneSizeEvenHandler.h)

SceneEventHandler(object, IntPtr) (Genesis.Core.Storage.html)

Declaration (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors

```
public SceneEventHandler(object @object, IntPtr method)  
(Genesis.Core.Behaviors.html)
```

+ Genesis.Core.Behaviors.Physics

Type	Name	Description
object (https://learn.microsoft.com/dotnet/api/system.object)	object	
IntPtr (https://learn.microsoft.com/dotnet/api/system.IntPtr)	method	

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

Methods (Genesis.Graphics.html)

+ Genesis.Graphics.Physics

BeginInvoke(Scene scene, Game game, IRenderDevice, AsyncCallback, object) (Genesis.Graphics.Physics.html)

Declaration (Genesis.Graphics.RenderDevice.html)

(Genesis.Graphics.RenderDevice)

```
public virtual IAsyncResult BeginInvoke(Scene scene, Game game, IRenderDevice renderDevice,  
    AsyncCallback callback, object state)
```

+ Genesis.Graphics.Shaders.OpenGL (Genesis.Graphics.Shaders.html)

(Genesis.Graphics.Shaders.OpenGL)

+ Genesis.Graphics.Shaders

Parameters

Type	Name	Description
Scene (Genesis.Core.Scene.html)	scene	
Game (Genesis.Core.Game.html)	game	
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	renderDevice	
AsyncResult<GameEventHandler> (https://learn.microsoft.com/dotnet/api/system.asynccallback) (Genesis.Core.GameEventHandler.h object (https://learn.microsoft.com/dotnet/api/system.object) GenesisWindow)	callback	
(Genesis.Core.GenesisWindow.html)	object	

Returns GameBehavior

Type	Description
Input (Genesis.Core.Input.html)	
IAsyncResult (https://learn.microsoft.com/dotnet/api/system.iasyncresult)	
Layer (Genesis.Core.Layer.html)	

Light (Genesis.Core.Light.html)
Scene (Genesis.Core.Scene.html)

EndInvoke(IAsyncResult)

(Genesis.Core.Scene3D.html)

Declaration

```
SceneEventHandler EndInvoke(IAsyncResult result)
    (Genesis.Core.SceneSizeEvenHandler)
```

Storage

Parameters (Genesis.Core.Storage.html)

Type	Name	Description
Utils (Genesis.Core.Utils.html)	result	

+ Genesis.Core.Behaviors

(https://learn.microsoft.com/dotnet/api/system.iasyncresult)

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

Invoke(Scene, Game, IRenderDevice)

Declaration

Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

public virtual void Invoke(Scene scene, Game game, IRenderDevice renderDevice)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

Parameters

Type	Name	Description
(Genesis.Graphics.html)		
Scene (Genesis.Core.Scene.html)	scene	
Game (Genesis.Core.Game.html)	game	

(Genesis.Graphics.Physics.html)

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

+ Genesis.Graphics.Shaders.Op

(Genesis.Graphics.Shaders.Ope

+ Genesis.Graphics.Shaders



GameEventHandler
(Genesis.Core.GameEventHandler.h)
GenesisWindow
(Genesis.Core.GenesisWindow.html)
IGameBehavior
(Genesis.Core.IGameBehavior.html)
Input (Genesis.Core.Input.html)
Layer (Genesis.Core.Layer.html)
Light (Genesis.Core.Light.html)
Scene (Genesis.Core.Scene.html)
Scene3D
(Genesis.Core.Scene3D.html)
SceneEventHandler
(Genesis.Core.SceneEventHandler.h)
SceneSizeEvenHandler
(Genesis.Core.SceneSizeEvenHandler.html)
Storage
(Genesis.Core.Storage.html)
Utils (Genesis.Core.Utils.html)

+ **Genesis.Core.Behaviors**

(Genesis.Core.Behaviors.html)

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics.html)

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics.html)

+ **Genesis.Core.GameElements**

(Genesis.Core.GameElements.html)

+ **Genesis.Graphics**

(Genesis.Graphics.html)

+ **Genesis.Graphics.Physics**

(Genesis.Graphics.Physics.html)

+ **Genesis.Graphics.RenderDevice**

(Genesis.Graphics.RenderDevice.html)

+ **Genesis.Graphics.Shaders.Operations**

(Genesis.Graphics.Shaders.Operations.html)

+ **Genesis.Graphics.Shaders**

Delegate SceneSizeEvenHandler

Namespace: Genesis (Genesis.html).Core (Genesis.Core.html)

Assembly: Genesis.dll filter...

Syntax

```
GameEventHandler  
    (Genesis.Core.GameEventHandler.h  
public delegate void SceneSizeEvenHandler(Scene scene, Viewport viewport)  
    GenesisWindow  
        (Genesis.Core.GenesisWindow.html)
```

Parameters

Type	Name	Description
(Genesis.Core.IGameBehavior.html)		
Input (Genesis.Core.Input.html)		
Scene (Genesis.Core.Scene.html)	scene	
Light (Genesis.Core.Light.html)		
Viewport (Genesis.Graphics.Viewport.html)	viewport	
Scene (Genesis.Core.Scene.html)		

Scene3D
(Genesis.Core.Scene3D.html)

Constructors

SceneEventHandler
(Genesis.Core.SceneEventHandler.h)

SceneSizeEvenHandler(object, IntPtr)

Declaration

```
(Genesis.Core.SceneSizeEvenHandler.h  
public SceneSizeEvenHandler(object @object, IntPtr method)
```

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

Type	Name	Description
(Genesis.Core.Behaviors.Physics)		
object (https://learn.microsoft.com/dotnet/api/system.object)	object	

+ Genesis.Core.Behaviors.Physics

IntPtr (<https://learn.microsoft.com/dotnet/api/system.intptr>)

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

Methods

+ Genesis.Graphics

(Genesis.Graphics.html)

BeginInvoke(Scene, Viewport, AsyncCallback, object)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

```
public virtual IAsyncResult BeginInvoke(Scene scene, Viewport viewport, AsyncCallback callback, object @object)
```

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL.html)

+ Genesis.Graphics.Shaders

Type	Name	Description
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
Viewport (Genesis.Graphics.Viewport.html)	<i>viewport</i>	
AsyncCallback (https://learn.microsoft.com/dotnet/api/system.asynccallback)	<i>callback</i>	
object (https://learn.microsoft.com/dotnet/api/system.object)	<i>object</i>	

GameEventHandler
(Genesis.Core.GameEventHandler.h)

Type	Description
GenesisWindow (Genesis.Core.GenesisWindow.html)	

IGameBehavior
IAsyncResult (<https://learn.microsoft.com/dotnet/api/system.iasyncresult>)
(Genesis.Core.IGameBehavior.html)

Input (Genesis.Core.Input.html)

Layer (Genesis.Core.Layer.html)

EndInvoke(IAsyncResult)

Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

Declaration

```
Scene3D  
(Genesis.Core.Scene3D.html)
public virtual void EndInvoke(IAsyncResult result)
```

SceneEventHandler
(Genesis.Core.SceneEventHandler.h)

Parameters

Type	Name	Description
Storage (Genesis.Core.Storage.html)		

IAsyncResult (<https://learn.microsoft.com/dotnet/api/system.iasyncresult>)

Utils (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors

Invoke(Scene, Viewport)

Declaration

Genesis.Core.Behaviors.Physics

Genesis.Core.Behaviors.Physic

```
public virtual void Invoke(Scene scene, Viewport viewport)
```

+ Genesis.Core.Behaviors

Genesis.Core.Behaviors.Physic

Parameters

Type	Name	Description
Scene (Genesis.Core.Scene.html)	<i>scene</i>	

+ Genesis.Graphics

Viewport (Genesis.Graphics.Viewport.html)

Genesis.Graphics

Genesis.Graphics.html

+ Genesis.Graphics.Physics

Genesis.Graphics.Physics.html

+ Genesis.Graphics.RenderDevice

Genesis.Graphics.RenderDevice.html

+ Genesis.Graphics.Shaders.Oper

Genesis.Graphics.Shaders.Ope

+ Genesis.Graphics.Shader

Class Storage

Class for dynamic clearing not used elements.

▼ Enter here to filter...

Inheritance

GameEventHandler

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

↳ StorageWindow

(Genesis.Core.GenesisWindow.html)

Inherited Members

IGameBehavior

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))

Layer (Genesis.Core.Layer.html)

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

Light (Genesis.Core.Light.html)

equals(system-object-system-object)

Scene (Genesis.Core.Scene.html)

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

Scene3D (Genesis.Core.Scene3D.html)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Namespaces

GameEventHandlers (Genesis.Core.html)

Assembly: Genesis.dll

Storage

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

public class Storage

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

Constructors

(Genesis.Core.Behaviors.Physics)

Storage

(Genesis.Core.Behaviors.Physics)

Create a new Storage instance

+ Genesis.Core.GameElements

Declaration (Genesis.Core.GameElements.h)

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Properties

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

ManagedElements

+ Genesis.Graphics.Shaders.Operator

Declaration (Genesis.Graphics.Shaders.Operator.h)

+ Genesis.Graphics.Shader

```
public List<GameElement> ManagedElements { get; set; }
```

Property Value

Type	Description
List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1)< GameElement>(Genesis.Core.GameElement.html)> (Genesis.Core.GameEventHandler.h GenesisWindow (Genesis.Core.GenesisWindow.html IGameBehavior (Genesis.Core.IGameBehavior.html) Input (Genesis.Core.Input.html) Layer (Genesis.Core.Layer.html) Light (Genesis.Core.Light.html)	

Methods

ManageElement(GameElement)

Add Scene (Genesis.Core.Scene.html)
Scene3D (Genesis.Core.Scene3D.html)

Declaration
(Genesis.Core.Scene3D.html)

SceneEventHandler

```
public void ManageElement(GameElement element)
```

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.html)

Parameters

Storage

Type (Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

GameElement (Genesis.Core.GameElement.html)

Name

Description

element

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

Process(Game, Scene)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

Removes disabled elements from the game and the garbage collector

Declaration

(Genesis.Core.Behaviors.Physics.html)

```
public void Process(Game game, Scene scene)
```

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

Parameters

+ Genesis.Graphics

Type (Genesis.Graphics.html)

Game (Genesis.Core.Game.html)

+ Genesis.Graphics.Physics

Scene (Genesis.Core.Scene.html)

(Genesis.Graphics.Physics.html)

Name

Description

game

scene

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator.html)

+ Genesis.Graphics.Shader

Class Utils

Inheritance

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

↳ Utils
GameEventHandler

Inherited Members

(GameEventHandler.h)

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))
Input (Genesis.Core.Input.html)
Layer (Genesis.Core.Layer.html)
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
Light (Genesis.Core.Light.html)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
Scene (Genesis.Core.Scene.html)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
Scene3D
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
(Genesis.Core.Scene3D.html)

Namespace: Genesis (Genesis.html).Core (Genesis.Core.html)
SceneEventHandler

Assembly

(Genesis.Core.dll)

Syntax

SceneSizeEventHandler
(Genesis.Core.SceneSizeEventHandler.html)
Storage
public class Utils
(Genesis.Core.Storage.html)
Utils (Genesis.Core.Utils.html)

Constructors

(Genesis.Core.Behaviors.html)

Genesis.Core.Behaviors.Physics Utils()

(Genesis.Core.Behaviors.Physics.html)

Declaration

+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

+ Genesis.Graphics Methods

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

CalculateCameraFront(Camera)

(Genesis.Graphics.Physics.html)

Declaration

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

public static Vec3 CalculateCameraFront(Camera camera)

+ Genesis.Graphics.Shaders.Oper

(Genesis.Graphics.Shaders.Oper.html)

+ Genesis.Graphics.Shaders.Shader

Type	Name	Description
Camera (Genesis.Graphics.Camera.html)	camera	

Returns

Type	Description
Vec3 (Genesis.Math.Vec3.html) GameEventHandler	

CalculateCameraFront2(Camera)

IGameBehavior

Declaration
(Genesis.Core.IGameBehavior.html)

Input (Genesis.Core.Input.html)

public Vec3 (Genesis.Math.Vec3.html) CalculateCameraFront2(Camera camera)

Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

Parameters

Scene3D

Type	Name	Description
Genesis.Core.Scene3D.html		

SceneEventHandler

Returns

(Genesis.Core.SceneSizeEventHandler)

Type	Description
Storage	
(Genesis.Core.Storage.html)	
Vec3 (Genesis.Math.Vec3.html)	
Utils (Genesis.Core.Utils.html)	

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

CalculateDirectionVector(Vec3, Vec3)

+ Genesis.Core.Behaviors.Physics

Declaration
(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Parameters

+ Genesis.Core.GameElements

Type	Name	Description
Genesis.Core.GameElements.h		
Vec3 (Genesis.Math.Vec3.html)	pointA	

+ Genesis.Graphics

Type	Description
Vec3 (Genesis.Math.Vec3.html)	pointB

(Genesis.Graphics.html)

(Genesis.Graphics.Physcis.html)

+ Genesis.Graphics.Physics

Returns
(Genesis.Graphics.Physcis.html)

Type	Description
+ Genesis.Graphics.RenderDevice	

Vec3 (Genesis.Math.Vec3.html)

(Genesis.Graphics.RenderDevice)

+ Genesis.Graphics.Shaders.Op

(Genesis.Graphics.Shaders.Op)

CalculateFrontVec3(Vec3, Vec3, float)

+ Genesis.Graphics.Shaders.Op

Declaration

```
public static Vec3 CalculateFrontVec3(Vec3 location, Vec3 rotation, float dist)
```

Parameters

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html) (Genesis.Core.GameEventHandler.h)	location	
Vec3 (Genesis.Math.Vec3.html) GenesisWindow	rotation	
float (https://learn.microsoft.com/dotnet/api/system.single) IGameBehavior	dist	

Returns

Type	Description
Layer (Genesis.Core.Layer.html)	
Light (Genesis.Core.Light.html)	
Vec3 (Genesis.Math.Vec3.html)	
Scene (Genesis.Core.Scene.html)	

Scene3D

(Genesis.Core.Scene3D.html)

CalculatePitch(Vec3, Vec3)

(Genesis.Core.SceneEventHandler.h)
Calculate the pitch
SceneSizeEventHandler

Declaration

Storage

```
public static float CalculatePitch(Vec3 point1, Vec3 point2)  
    Utils (Genesis.Core.Utils.html)
```

+ Genesis.Core.Behaviors

Parameters

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html) (Genesis.Core.Behaviors.Physics)	point1	
Vec3 (Genesis.Math.Vec3.html)	point2	

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Returns

Type	Description
(Genesis.Core.GameElements.html)	

float (<https://learn.microsoft.com/dotnet/api/system.single>)

+ Genesis.Graphics

(Genesis.Graphics.html)

CalculateYaw(Vec3, Vec3)

(Genesis.Graphics.Physics.html)

Calculates the yaw

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

public static float CalculateYaw(Vec3 point1, Vec3 point2)

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL)

Parameters

Vec3 (Genesis.Math.Vec3.html)

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	<i>point1</i>	
Vec3 (Genesis.Math.Vec3.html)	<i>point2</i>	

Returns

Type	Description
GameEventHandler (https://learn.microsoft.com/dotnet/api/system.windows.forms.gameeventhandler)	

GenesisWindow

(Genesis.Core.GenesisWindow.html)

IGameBehavior

ConvertBase64ToBitmap(string)

(Genesis.Core.IGameBehavior.html)

Declaration

Layer (Genesis.Core.Layer.html)

Light (Genesis.Core.Light.html)

```
public static Bitmap ConvertBase64ToBitmap(string base64)
```

Scene (Genesis.Core.Scene.html)

Scene3D

Parameters

Scene3D (Genesis.Core.Scene3D.html)

Type	Name	Description
SceneEventHandler (Genesis.Core.SceneEventHandler.h)		

string (https://learn.microsoft.com/dotnet/api/system.string)

base64

(Genesis.Core.SceneSizeEvenHandler)

Returns

Storage (Genesis.Core.Storage.html)

Type

Utils (Genesis.Core.Utils.html)

Bitmap

(https://learn.microsoft.com/dotnet/api/system.drawing.bitmap)

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

ConvertBitmapToBase64(Bitmap)

(Genesis.Core.Behaviors.Physics)

Declaration

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

```
public static string ConvertBitmapToBase64(Bitmap bitmap)
```

+ Genesis.Core.GameElements

Parameters

GameElements (Genesis.Core.GameElements.h)

Type	Name	Description
Genesis.Graphics (Genesis.Graphics.html)		

Bitmap (https://learn.microsoft.com/dotnet/api/system.drawing.bitmap)

bitmap

+ Genesis.Graphics.Physics

Returns

(Genesis.Graphics.Physics.html)

Type

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

string

+ Genesis.Graphics.RenderDevice

Color

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator)

+ Genesis.Graphics.Shaders.Shader

Color

+ Genesis.Graphics.Shaders.Shader

Convert an System.Drawing.Color into an float array

Declaration

```
public static float[] ConvertColor(Color color)
```



Parameters

Type	Name	Description
GameEventHandler (Genesis.Core.GameEventHandler.h) Color (https://learn.microsoft.com/dotnet/api/system.drawing.color) GenesisWindow (Genesis.Core.GenesisWindow.html)	color	

Returns

GameBehavior

Type	Description
Input (Genesis.Core.Input.html) float (https://learn.microsoft.com/dotnet/api/system.single)[] Light (Genesis.Core.Light.html) Scene (Genesis.Core.Scene.html) Scene3D (Genesis.Core.Scene3D.html)	

ConvertDrawingColor(float, float, float, float)

Declaration

```
SceneEventHandler  
(Genesis.Core.SceneEventHandler.h)  
SceneSizeEvenHandler  
public static Color ConvertDrawingColor(float a, float r, float g, float b)  
(Genesis.Core.SceneSizeEvenHandler.h)
```

Storage

Parameters

Type	Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single) (Genesis.Core.Behaviors.html)	a	
float (https://learn.microsoft.com/dotnet/api/system.single) (Genesis.Core.Behaviors.Physic.html)	r	
float (https://learn.microsoft.com/dotnet/api/system.single) (Genesis.Core.Behaviors.Physic.html)	g	
float (https://learn.microsoft.com/dotnet/api/system.single) (Genesis.Core.Behaviors.Physic.html)	b	

Returns

Genesis.Core.Behaviors.Physic

Type

Type	Description
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	

Genesis.Graphics

(Genesis.Graphics.html)

CreateEmptyNormalMap(int, int)

Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Creates an empty normal map

Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL.html)

Parameters

: Genesis.Graphics.Shaders.OpenGL

Type	Name	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	width	
int (https://learn.microsoft.com/dotnet/api/system.int32)	height	

Returns

Type	Description
GameEventHandler (https://learn.microsoft.com/dotnet/api/system.eventhandler)	

CreateEmptyTexture(int, int)

(<https://learn.microsoft.com/dotnet/api/system.eventhandler>)

Creates an empty texture.

Layer ([Genesis.Core.Layer.html](https://genesis.core.Layer.html))

Declaration ([Genesis.Core.Light.html](https://genesis.core.Light.html))

Scene ([Genesis.Core.Scene.html](https://genesis.core.Scene.html))

Scene3D static Bitmap CreateEmptyTexture(int width, int height)

([Genesis.Core.Scene3D.html](https://genesis.core.Scene3D.html))

SceneEventHandler

Parameters ([Genesis.Core.SceneEventHandler.h](https://genesis.core.SceneEventHandler.h))

Type	Name	Description
SceneSizeEventHandler		
(Genesis.Core.SceneSizeEventHandler.html)		

Genesis.Core.Behaviors

Type	Description
(Genesis.Core.Behaviors.html)	

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](https://genesis.core.Behaviors.Physics.html))

+ Genesis.Core.Behaviors.Physics.EulerToQuaternion(Vec3)

([Genesis.Core.Behaviors.Physics.html](https://genesis.core.Behaviors.Physics.html))

Converts an euler to an quaternion.

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.h](https://genesis.core.GameElements.h))

+ Genesis.Graphics

([Genesis.Graphics.html](https://genesis.graphics.html))

+ Genesis.Graphics.Physics

Parameters ([Genesis.Graphics.Physics.html](https://genesis.graphics.Physics.html))

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	euler	

+ Genesis.Graphics.Shaders.Operations

([Genesis.Graphics.Shaders.Operations.html](https://genesis.graphics.Shaders.Operations.html))

+ Genesis.Graphics.Shaders.Shader

Type	Description
quat	

ForwardVector(Vec3, Vec3, float)

Declaration

```
GameEventHandler
(Genesis.Core.GameEventHandler.h
public static Vec3 ForwardVector(Vec3 v, Vec3 rotaion, float dist)
GenesisWindow
(Genesis.Core.GenesisWindow.html
IGameBehavior
```

Parameters

Type	Name	Description
Input (Genesis.Core.Input.html)		
Layer (Genesis.Core.Layer.html)	v	
Light (Genesis.Core.Light.html)		
Scene (Genesis.Core.Scene.html)	rotaion	
Scene3D (https://learn.microsoft.com/dotnet/api/system.single) (Genesis.Core.Scene3D.html)	dist	

Returns

SceneEventHandler
(Genesis.Core.SceneEventHandler.h)

Type	Description
SceneSizeEvenHandler (Genesis.Core.SceneSizeEvenHandler.html)	

GetCurrentTimeMillis()

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

public static long GetcurrentTimeMillis()
(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.Behaviors.Physics

Returns
Type
(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.GameElements

long (https://learn.microsoft.com/dotnet/api/system.int64)
(Genesis.Core.GameElements.h)

+ Genesis.Graphics

(Genesis.Graphics.html)

GetElementWorldLocation(GameElement)

+ Genesis.Graphics.Physics

Returns the world location of the Element

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.OpenGL

Parameters
(OpenGL.Shaders.html)

+ Genesis.Graphics.Shaders.Shader

Type	Name	Description
GameElement (Genesis.Core.GameElement.html)	<i>element</i>	

Returns

Type	Description
Vec3 (Genesis.Math.Vec3.html) GameEventHandler (Genesis.Core.GameEventHandler.h) GenesisWindow (Genesis.Core.GenesisWindow.html) IGameBehavior (Genesis.Core.IGameBehavior.html)	

GetElementWorldRotation(GameElement)

IGameBehavior

Returns the world rotation for the element

Input (Genesis.Core.Input.html)

Layer (Genesis.Core.Layer.html)

Light (Genesis.Core.Light.html)

public static Vec3 GetElementWorldRotation(GameElement element)

Scene (Genesis.Core.Scene.html)

Scene3D

(Genesis.Core.Scene3D.html)

Parameters

Type	Name	Description
SceneEventHandler (Genesis.Core.SceneEventHandler.h)		

SceneSizeEvenHandler
(Genesis.Core.GameElement.html)

element

Returns

Storage (Genesis.Core.Storage.html)

Type Utils (Genesis.Core.Utils.html)

Description

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

GetElementWorldScale(GameElement)

(Genesis.Core.Behaviors.Physics)

Returns the world scale for the element

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.GameElements

public static Vec3 GetElementWorldScale(GameElement element)

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

Type	Name	Description
GameElement (Genesis.Core.GameElement.html)	<i>element</i>	

(Genesis.Graphics.Physics.html)

element

Returns

Genesis.Graphics.RenderDevice

Type	Description
GameElement (Genesis.Core.GameElement.html)	

(Genesis.Graphics.Physics.html)

Description

+ Genesis.Graphics.Shaders.Operations

(Genesis.Graphics.Shaders.Operations.h)

+ Genesis.Graphics.Shaders

GetModelRotation(GameElement)

Returns the model rotation matrix relativ to the world rotation

Declaration

```
public static mat4 GetModelRotation(GameElement element)
```

GameEventHandler

Parameters
(Genesis.Core.GameEventHandler.h)

Type
genesisWindow

(Genesis.Core.GenesisWindow.html)
GameElement (Genesis.Core.GameElement.html)
IGameBehavior

Name

Description

Returns
Input (Genesis.Core.Input.html)

Type
layer (Genesis.Core.Layer.html)

Description

Light (Genesis.Core.Light.html)

mat4
Scene (Genesis.Core.Scene.html)

Scene3D

(Genesis.Core.Scene3D.html)

GetModelScale(GameElement)

SceneSizeEventHandler

Returns
SceneSizeEventHandler matrix relativ to the world scale

(Genesis.Core.SceneSizeEventHandler)

Declaration

Storage

(Genesis.Core.Storage.html)

```
public static mat4 GetModelScale(GameElement element)
```

Utils (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors

Parameters
(Genesis.Core.Behaviors.html)

Type

+ Genesis.Core.Behaviors.Physics

GameElement (Genesis.Core.GameElement.html)

(Genesis.Core.Behaviors.Physics)

Name

Description

+ Genesis.Core.Behaviors.Physics

Parameters
(Genesis.Core.Behaviors.Physics)

Type

+ Genesis.Core.GameElements

mat4

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

(Genesis.Graphics.html)

GetModelSpaceLocation(GameElement, Vec3)

+ Genesis.Graphics.Physics

Converts world transform to model space transform

(Genesis.Graphics.Physics.html)

Declaration

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator)

+ Genesis.Graphics.Shader

Type	Name	Description
GameElement (Genesis.Core.GameElement.html)	<i>element</i>	
Vec3 (Genesis.Math.Vec3.html)	<i>worldPosition</i>	

Returns

Type	Description
GameEventHandler Vec3 (Genesis.Core.GameElement.html) GenesisWindow IGameBehavior Input (Genesis.Core.Input.html) Converts the world rotation to the model space rotation Layer (Genesis.Core.Layer.html)	

GetModelSpaceRotation(GameElement, Vec3)

Declaration (Genesis.Core.Light.html)

```
Scene (Genesis.Core.Scene.html)
Scene3D static Vec3 GetModelSpaceRotation(GameElement element, Vec3 worldRotation)
(Genesis.Core.Scene3D.html)
```

SceneEventHandler

Parameters (Genesis.Core.SceneEventHandler.h)

Type	Name	Description
SceneSizeEvenHandler GameElement (Genesis.Core.GameElement.html)	<i>element</i>	
Vec3 (Genesis.Math.Vec3.html) Utils (Genesis.Core.Utils.html)	<i>worldRotation</i>	

Returns

Genesis.Core.Behaviors

Type	Description
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)	

+ Genesis.Core.Behaviors.Physics
(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.Behaviors.Physics
GetModelSpaceScale(GameElement, Vec3)
(Genesis.Core.Behaviors.Physics)

Converts the world scale to the model space scale

Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

Declaration (Genesis.Graphics.html)

```
public static Vec3 GetModelSpaceScale(GameElement element, Vec3 worldScale)
```

+ Genesis.Graphics.Physics

Parameters (Genesis.Graphics.Physics.html)

Type	Name	Description
GameElement (Genesis.Core.GameElement.html)	<i>element</i>	
Vec3 (Genesis.Math.Vec3.html)	<i>worldScale</i>	

+ Genesis.Graphics.Shaders.OpenGL
(Genesis.Graphics.Shaders.OpenGL)

Returns

+ Genesis.Graphics.Shaders.OpenGL

Type	Description
Vec3 (Genesis.Math.Vec3.html)	

GetModelTransformation(GameElement)

Returns the model transform matrix relative to the world location
GameEventHandler

Declaration

```
GenesisWindow
(Genesis.Core.GenesisWindow.html)
public static mat4 GetModelTransformation(GameElement element)
IGameBehavior
(Genesis.Core.IGameBehavior.html)
```

Parameters (Genesis.Core.Input.html)

Type	Name	Description
Layer (Genesis.Core.Layer.html)		
Light (Genesis.Core.Light.html)		

GameElement (Genesis.Core.GameElement.html)

element

Scene3D

Returns (Genesis.Core.Scene3D.html)

Type	Description
SceneEventHandler	
(Genesis.Core.SceneEventHandler.html)	
mat4	
SceneSizeEvenHandler	
(Genesis.Core.SceneSizeEvenHandler.html)	
Storage	
(Genesis.Core.Storage.html)	

GetParentModelView(GameElement)

Declaration

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

```
public static mat4 GetParentModelView(GameElement element)
```

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

Parameters

Type	Name	Description
(Genesis.Core.Behaviors.Physics.html)		
GameElement (Genesis.Core.GameElement.html)	<i>element</i>	

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

Type	Description
+ Genesis.Graphics	
(Genesis.Graphics.html)	

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

GetStringBounds(Vec3, string, float, float)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator.html)

+ Genesis.Graphics.Shader

```
public static Rect GetStringBounds(Vec3 location, string text, float fontSize, float spacing)
```

Parameters

Type		Name	Description
Vector<float>	(Genesis.Core.GameEvent.Handler.Ver3.html)	location	
string	(Genesis.Core.GameEventHandler.h https://learn.microsoft.com/dotnet/api/system.string) GenesisWindow	text	
float	(Genesis.Core.GenesisWindow.html https://learn.microsoft.com/dotnet/api/system.single)	fontSize	
IGameBehavior	float (Genesis.Core.IGameBehavior.html https://learn.microsoft.com/dotnet/api/system.single)	spacing	

Input (`Genesis.Core.Input.html`)
Returns (`Genesis.Core.Layer.html`)

Type	Description
Light (Genesis.Core.Light.html)	
Scene (Genesis.Core.Scene.html)	
Rect (Genesis.Math.Rect.html)	

(Genesis.Core.Scene3D.html)
SceneEventHandler
(Genesis.Core.SceneEventHandler.h)
GetStringHeight(string, float, float)
SceneEventArgs

Deck(Genesis.Core.SceneSizeEvenHandle)

Storage

```
public static float GetStringHeight(string text, float fontSize, float spacing)
    Utils (Genesis.Core.Utils.html)
```

† Genesis.Core.Behaviors

Parameters		Name	Description
(Genesis.Core.Behaviors.html)			
Type			
+ Genesis.Core.Behaviors.Physics	string (https://learn.microsoft.com/dotnet/api/system.string)	<i>text</i>	
- (Genesis.Core.Behaviors.Physic	float (https://learn.microsoft.com/dotnet/api/system.single)	<i>fontSize</i>	
+ Genesis.Core.Behaviors.Physics	float (https://learn.microsoft.com/dotnet/api/system.single)	<i>spacing</i>	
(Genesis.Core.Behaviors.Physic			

ReGenesis.Core.GameElements

Type	Description
+ Genesis.Graphics float (https://learn.microsoft.com/dotnet/api/system.single) Genesis.Graphics.html	

• [Gaming Software Plugins](#)

+ Genesis.Graphics.Physics
GetStringWidth(string, float)

Declaration Graphics RenderDevice

4. Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice) [View Source](#) [Report Bug](#)

Genesis Graphics Shaders Overview

Genesis.Graphics.Shaders.Open

(Genesis Parameters)

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	text	
float (https://learn.microsoft.com/dotnet/api/system.single)	fontSize	
float (https://learn.microsoft.com/dotnet/api/system.single)	spacing	

Returns GameEventHandler

Type	Description
Genesis.Core.GameEventHandler.h GenesisWindow float (https://learn.microsoft.com/dotnet/api/system.single) (Genesis.Core.GenesisWindow.html)	

IGameBehavior
(Genesis.Core.IGameBehavior.html)

GetVMirroredPosition(Vec3, Camera)

Layer (Genesis.Core.Layer.html)

Declaration Light (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

Scene3D static Vec3 GetVMirroredPosition(Vec3 vref, Camera camera)
(Genesis.Core.Scene3D.html)

SceneEventHandler

Parameters SceneEventHandler (Genesis.Core.SceneEventHandler.h)

Type	Name	Description
SceneSizeEvenHandler (Genesis.Core.SceneSizeEvenHandler.h)	vref	
Vec3 (Genesis.Math.Vec3.html) Storage (Genesis.Core.Storage.html)	camera	

Returns

+ Genesis.Core.Behaviors

Type	Description
Genesis.Core.Behaviors.html	

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.Behaviors.Physics

GetVMirroredPosition(float, float, float, Camera)

(Genesis.Core.Behaviors.Physics)

Declaration GameElements

(Genesis.Core.GameElements.h)

public static Vec3 GetVMirroredPosition(float x, float y, float z, Camera camera)

+ Genesis.Graphics

(Genesis.Graphics.html)

Parameters

Type	Name	Description
Genesis.Graphics.Physics (Genesis.Graphics.Physics.html)	x	
float (https://learn.microsoft.com/dotnet/api/system.single)	y	
float (https://learn.microsoft.com/dotnet/api/system.single)	z	
Camera (Genesis.Graphics.Camera.html)	camera	

+ Genesis.Graphics.Shaders

(Genesis.Graphics.Shaders.OpenGL.html)

Returns

Type	Description
Vec3 (Genesis.Math.Vec3.html)	



LookAt(Camera, Vec3)

GameEventHandler

Let the camera look at an position
(Genesis.Core.GameEventHandler.h)

Declaration

(Genesis.Core.GenesisWindow.html)

IGameBehavior

public static void LookAt(Camera camera, Vec3 targetPosition)
(Genesis.Core.IGameBehavior.html)

Input (Genesis.Core.Input.html)

Parameters (Genesis.Core.Layer.html)

Type	Name	Description
Light (Genesis.Core.Light.html)		
Scene (Genesis.Core.Scene.html)	camera	

Camera (Genesis.Graphics.Camera.html)

Scene3D (Genesis.Core.Scene3D.html)

Vec3 (Genesis.Math.Vec3.html)

SceneEventHandler

(Genesis.Core.SceneEventHandler.h)

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.h)

Storage

Declaration (Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

public static Vec3 RayDirection(Camera camera, Viewport viewport, float x, float y)

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

Parameters

+ Genesis.Core.Behaviors.Physics

Type

(Genesis.Core.Behaviors.Physics)

Camera (Genesis.Graphics.Camera.html)

+ Genesis.Core.Behaviors.Physics

Viewport (Genesis.Graphics.Viewport.html)

(Genesis.Core.Behaviors.Physics)

float (https://learn.microsoft.com/dotnet/api/system.single)

+ Genesis.Core.GameElements

float (https://learn.microsoft.com/dotnet/api/system.single)

float (https://learn.microsoft.com/dotnet/api/system.single)

Name	Description
camera	
viewport	

x
y

y

x

y

x

y

x

y

x

y

x

y

x

y

x

y

x

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y

```
public static float ToDegrees(float radians)
```

Parameters

Type	Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	<i>radians</i>	

Returns (Genesis.Core.GameEventHandler.h)

Returns	GenesisWindow	Type	(Genesis.Core.GenesisWindow.html)	Description
float	(https://learn.microsoft.com/dotnet/api/system.single)	12.3456789	(System.Single)	

(Genesis.Core.GameBehavior.htm)
Input (Genesis.Core.Input.html)
Layer (Genesis.Core.Layer.html)
ToRadians(float)
Light (Genesis.Core.Light.html)

Declaration

Scene (Genesis.Core.Scene.html)

```
    Scene3D  
        (Genesis.Core.Scene3D.html)  
    public static float ToRadians(float degrees)  
        SceneEventHandler
```

SceneEvent Handler

ScopeSizeEvenHandler Parameters

Parameters

Type	Name	Description
Storage		
float (Genesis.Core.Storage.html)	<i>degrees</i>	
Utils (Genesis.Core.Utils.html)		

Returns + Genesis.CoreBehaviors

Type	Description
<code>Genesis.Core.Behaviors.html</code>	<code>#f1 Genesis.Core.Behaviors.Physics</code>

(Genesis.CoreBehaviors.Physics)

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TransformToWorldCords (Gameplay)

(Genesis.Core.Behaviors.Physic

Declaration + Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

```
public static Vec3 TransformToWorldCords(Game game, float x, float y)
```

+ Genesis.Graphics

(Genesis Graphics.html)

Parameters

Type	Name	Description
(Genesis.Graphics.Physics.html) Game (Genesis.Core.Game.html)	<i>game</i>	
+ Genesis.Graphics.RenderDevice float (https://learn.microsoft.com/dotnet/api/system.single)	<i>x</i>	
(Genesis.Graphics.RenderDevice) float (https://learn.microsoft.com/dotnet/api/system.single)	<i>y</i>	
+ Genesis.Graphics.Shaders.Open		

Type	Description
Vec3 (Genesis.Math.Vec3.html)	

TransformToWorldCords(Camera, Viewport, float, float)

Declaration

```
GameEventHandler
(Genesis.Core.GameEventHandler.h
public static Vec3 TransformToWorldCords(Camera camera, Viewport viewport, float x, float y)
GenesisWindow
(Genesis.Core.GenesisWindow.html
IGameBehavior
```

Parameters

Type	Name	Description
Input (Genesis.Core.Input.html)		
Layer (Genesis.Core.Layer.html)		
Camera (Genesis.Graphics.Camera.html)	camera	
Light (Genesis.Core.Light.html)		
Viewport (Genesis.Graphics.Viewport.html)	viewport	
Scene3D (https://learn.microsoft.com/dotnet/api/system.single)	x	
(Genesis.Core.Scene3D.html)		
SceneEventHandler (https://learn.microsoft.com/dotnet/api/system.single)	y	
(Genesis.Core.SceneEventHandler.h)		

Returns

Type	Description
Storage	
Vec3 (Genesis.Math.Vec3.html)	
Utils (Genesis.Core.Utils.html)	

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

+ Genesis.Graphics.Shaders.Oper

(Genesis.Graphics.Shaders.Oper)

+ Genesis.Graphics.Shader

Namespace Genesis.Core.Behaviors

Classes

▼ Enter here to filter...

+ [Genesis.Core.Behaviors.AnimationBehavior \(Genesis.Core.Behaviors.AnimationBehavior.html\)](#)

([Genesis.Core.html](#))
Represents a behavior that enables sprite animations in the Genesis framework.

- [Genesis.Core.Behaviors](#)

+ [SpriteMovementController \(Genesis.Core.Behaviors.SpriteMovementController.html\)](#)

([Genesis.Core.Behaviors.SpriteMovementController.html](#))

AnimationBehavior

([Genesis.Core.Behaviors.AnimationBehavior.html](#))

SpriteMovementController

([Genesis.Core.Behaviors.SpriteMovementController.html](#))

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

+ [Genesis.Core.GameElements](#)

([Genesis.Core.GameElements.html](#))

+ [Genesis.Graphics](#)

([Genesis.Graphics.html](#))

+ [Genesis.Graphics.Physics](#)

([Genesis.Graphics.Physics.html](#))

+ [Genesis.Graphics.RenderDevice](#)

([Genesis.Graphics.RenderDevice.html](#))

+ [Genesis.Graphics.Shaders.Operations](#)

([Genesis.Graphics.Shaders.Operations.html](#))

+ [Genesis.Graphics.Shapes](#)

([Genesis.Graphics.Shapes.html](#))

+ [Genesis.Math](#)

([Genesis.Math.html](#))

+ [Genesis.Physics](#)

([Genesis.Physics.html](#))

+ [Genesis.UILayer](#)

([Genesis.UILayer.html](#))

Class AnimationBehavior

Represents a behavior that enables sprite animations in the Genesis framework.

Enter here to filter...

Inheritance

+ **Genesis.Core**

↳ [Object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)

([Genesis.Core.html](#))

↳ [AnimationBehavior](#)

- **Genesis.Core.Behaviors**

Inherited Members

([Genesis.Core.Behaviors.html](#))

[IGameBehaviorParent](#) ([Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_Parent](#))

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))

[Genesis.Core.Behaviors.SpriteMove](#)

[object.Equals\(object, object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-system-object-object)))

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Namespace GameElements

([Genesis.Core.html](#)).Behaviors ([Genesis.Core.Behaviors.html](#))

As [GameElements](#)

Syntax

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

public class AnimationBehavior : IGameBehavior

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

Constructors

[AnimationBehavior.RenderDevice](#)

([Genesis.Graphics.RenderDevice.html](#))

[AnimationBehavior.Shaders.Operators](#)

([Genesis.Graphics.Shaders.Operators.html](#))

Initializes a new instance of the AnimationBehavior class.

+ **Genesis.Graphics.Shapes**

Declaration

([Genesis.Graphics.Shapes.html](#))

+ **Genesis.Math**

([Genesis.Math.html](#))

+ **Genesis.Physics**

[AnimationBehavior\(float, float, long, Texture\)](#)

Initializes a new instance of the AnimationBehavior class with specified parameters.

Declaration

```
public AnimationBehavior(float cells, float rows, long frameTime, Texture animationSheet)
```

Parameters

Type		Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)		cells	The number of cells (frames) in a row in the animation sheet.
float - Genesis.Core.Behaviors (https://learn.microsoft.com/dotnet/api/system.genesis.core.behaviors)		rows	The number of rows in the animation sheet.
long - Genesis.Core.Behaviors.Animation (https://learn.microsoft.com/dotnet/api/system.genesis.core.behaviors.animation)		frameTime	The time in milliseconds between animation frames.
Texture (Genesis.Graphics.Texture.html)		animationSheet	The texture containing the animation frames.

+ **Genesis.Core.Behaviors.Physics**
Properties.Behaviors.Physics

+ **Genesis.Core.GameElements**

AnimationSheet
(<https://genesis.core.gameelements.h>)

Contains a **Genesis.Graphics** containing the animation frames.

([Genesis.Graphics.html](https://genesis.graphics.html))

Declaration

+ **Genesis.Graphics.Physics**

(<https://genesis.graphics.physics.html>)

+ **Genesis.Graphics.RenderDevice**

Property Value
(<https://genesis.graphics.renderdevice.html>)

Type

+ **Genesis.Graphics.Shaders.OpenGL**

(<https://genesis.graphics.shaders.opengl.html>)

+ **Genesis.Graphics.Shapes**

(<https://genesis.graphics.shapes.html>)

Animations

+ **Genesis.Math**

Gets or sets the list of animations available for this behavior.

(<https://genesis.math.html>)

Declaration

+ **Genesis.Physics**

(<https://genesis.physics.html>)

public List<Animation> Animations { get; set; }

+ **Genesis.UI** ([Genesis.UI.html](https://genesis.ui.html))

Property Value

Type	Description
Texture (Genesis.Graphics.Texture.html)	

Type	Description
List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1) < Animation (Genesis.Graphics.Animation.html) >	

Cells

genesis.Core

Gets or sets the number of cells (frames) in a row in the animation sheet.

([Genesis.Core.html](#))

Declaration

- Genesis.Core.Behaviors

([Genesis.Core.Behaviors.html](#)) }

AnimationBehavior

Property Value

Type

SpriteMovementController
([Genesis.Core.Behaviors.SpriteMovementController.html](#))

float (<https://learn.microsoft.com/dotnet/api/system.single>)

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

FrameTime

(Genesis.Core.Behaviors.Physics)

Gets or sets the time in milliseconds between animation frames.

+ Genesis.Core.GameElements

Declaration

([Genesis.Core.GameElements.html](#))

+ Genesis.Graphics

public long FrameTime { get; set; }

([Genesis.Graphics.html](#))

genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

long (<https://learn.microsoft.com/dotnet/api/system.int64>)

([Genesis.Graphics.RenderDevice.html](#))

+ Genesis.Graphics.Shaders.Operations

([Genesis.Graphics.Shaders.Operations.html](#))

Gets or sets the number of rows in the animation sheet.

genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

Declaration

+ Genesis.Math

public float Rows { get; set; }

([Genesis.Math.html](#))

+ Genesis.Physics

Property Value

([Genesis.Physics.html](#))

Type

+ Genesis.UI (Genesis.UI.html)

float (<https://learn.microsoft.com/dotnet/api/system.single>)

SelectedAnimation

Gets or sets the currently selected animation.

Declaration

```
public Animation SelectedAnimation { get; set; }
```

Properties

SelectedAnimation

Type	Description
(Genesis.Core.html)	

Behaviors

AnimationBehavior

```
AnimationBehavior  
(Genesis.Core.Behaviors.Animation.html)
```

Behaviors

```
Behaviors  
(Genesis.Core.Behaviors.html)
```

AnimationBehavior

(Genesis.Core.Behaviors.Animation.html)

MovementController

```
MovementController  
(Genesis.Core.Behaviors.SpriteMove
```

Behaviors

Physics

AddAnimation(Animation)

(Genesis.Core.Behaviors.Physics)

Adds an animation to the list of available animations.

+ Genesis.Core.Behaviors.Physics

Declaration

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.GameElements

```
PUBLIC VOID AddAnimation(Animation animation)
```

(Genesis.Core.GameElements.h)

Graphics

Animation

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

```
Animation  
(Genesis.Graphics.Animation.html)
```

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

LoadAnimation(string)

Loads the specified animation by name.

(Genesis.Graphics.Shaders.OpenGL)

Declaration

+ Genesis.Graphics.Shapes

```
PUBLIC VOID LoadAnimation(string name)
```

+ Genesis.Math

Parameters

(Genesis.Math.html)

Type

+ Genesis.Physics

```
string (https://learn.microsoft.com/dotnet/api/system.string)
```

(Genesis.Physics.html)

+ Genesis.UI (Genesis.UI.html)

OnDestroy(Game, GameElement)

Name

Description

animation

Type	Name	Description
Game (Genesis.Core.Game.html)	<i>game</i>	The game instance.
GameElement (Genesis.Core.GameElement.html)	<i>parent</i>	The parent game element.

Overrides

IGameBehavior.OnRender(Game, GameElement)

+ **Genesis.Core**
ameElement)
(Genesis.Core.html)

- **Genesis.Core.Behaviors**
OnUpdate(Game, GameElement)
(Genesis.Core.Behaviors.html)

Called when the game element is updated.

(Genesis.Core.Behaviors.Animation!

Declaration

SpriteMovementController

(Genesis.Core.Behaviors.SpriteMove
public override void OnUpdate(Game game, GameElement parent)

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics.html)

Parameters

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics.html)

+ **Genesis.Core.GameElements**

GameElement (Genesis.Core.GameElement.html)

(Genesis.Core.GameElements.html)

④ Genesis.Graphics

IGameBehavior.OnUpdate(Game, GameElement)

(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnUpdate_Genesis_Core_Game_Genesis_Core_G
ameElement_)
(Genesis.Graphics.Physics.html)

+ **Genesis.Graphics.RenderDevice**

(Genesis.Graphics.RenderDevice.html)

Starts playing the animation.

+ **Genesis.Graphics.Shaders.Oper**

Declaration

(Genesis.Graphics.Shaders.Ope

+ **Genesis.Graphics.Shapes**

(Genesis.Graphics.Shapes.html)

+ **Genesis.Math**

(Genesis.Math.html)

+ **Genesis.Physics**

Stops playing the animation.

(Genesis.Physics.html)

Declaration

+ **Genesis.UI (Genesis.UI.html)**

public void Stop()

▼

- + **Genesis.Core**
[\(Genesis.Core.html\)](#)
- **Genesis.Core.Behaviors**
[\(Genesis.Core.Behaviors.html\)](#)
 - AnimationBehavior
(Genesis.Core.Behaviors.AnimationBehavior)
 - SpriteMovementController
(Genesis.Core.Behaviors.SpriteMovementController)
- + **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)
- + **Genesis.Core.Behaviors.Physics2D**
[\(Genesis.Core.Behaviors.Physics2D.html\)](#)
- + **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)
- + **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)
- + **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)
- + **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)
- + **Genesis.Graphics.Shaders.Operator**
[\(Genesis.Graphics.Shaders.Operator.html\)](#)
- + **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)
- + **Genesis.Math**
[\(Genesis.Math.html\)](#)
- + **Genesis.Physics**
[\(Genesis.Physics.html\)](#)
- + **Genesis.UI** [\(Genesis.UI.html\)](#)

Class SpriteMovementController

Inheritance

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ IGameBehavior ([Genesis.Core.IGameBehavior.html](https://genesis.core.html#Genesis_Core_IGameBehavior.html))

+ Genesis.Core

([Genesis.Core.html](https://genesis.core.html))

↳ **Genesis.Core.Behaviors**
([Genesis.Core.Behaviors.html](https://genesis.core.html#Genesis_Core_Behaviors.html))
object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))
 (AnimationBehavior)
 (Genesis.Core.Behaviors.Animation)
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))
 (Genesis.Core.Behaviors.SpriteMovementController)
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
+ **Genesis.Core.Behaviors.Physics**
Namespace: [Genesis.Core.html](https://genesis.html#Genesis.Core.html).Behaviors ([Genesis.Core.Behaviors.html](https://genesis.core.html#Genesis_Core_Behaviors.html))
Assembly: [Genesis.dll](https://genesis.html#Genesis.dll)

Sy Genesis.Core.GameElements

([Genesis.Core.GameElements.h](https://genesis.core.html#Genesis_Core_GameElements.h))
public class SpriteMovementController : IGameBehavior
+ **Genesis.Graphics**
([Genesis.Graphics.html](https://genesis.core.html#Genesis_Graphics.html))

Constructors

([Genesis.Graphics.Physics.html](https://genesis.core.html#Genesis_Graphics_Physics.html))
+ **SpriteMovementController**
([Genesis.Graphics.RenderDevice.html](https://genesis.core.html#Genesis_Graphics_RenderDevice.html))
Declaration
+ **Genesis.Graphics.Shaders.Operator**
([Genesis.Graphics.Shaders.Oper.html](https://genesis.core.html#Genesis_Graphics_Shaders_Oper.html))
+ **Genesis.Graphics.Shapes**
([Genesis.Graphics.Shapes.html](https://genesis.core.html#Genesis_Graphics_Shapes.html))

P Genesis.Math

([Genesis.Math.html](https://genesis.core.html#Genesis_Math.html))

+ **Genesis.Physics**
Automove
([Genesis.Physics.html](https://genesis.core.html#Genesis_Physics.html))
Declaration
+ **Genesis.UI** ([Genesis.UI.html](https://genesis.core.html#Genesis_UI.html))

```
public bool Automove { get; set; }
```

Property Value

Type	Description
bool (https://learn.microsoft.com/dotnet/api/system.boolean)	

MoveSpeed

Declaration

[\(Genesis.Core.html\)](#)

```
public float MoveSpeed { get; set; }
```

- Genesis.Core.Behaviors

[\(Genesis.Core.Behaviors.html\)](#)

Property Value

AnimationBehavior

Type	Description
Genesis.Core.Behaviors.AnimationBehavior	

+ Genesis.Core.Behaviors.Physics

[\(Genesis.Core.Behaviors.Physics.html\)](#)

Methods

+ Genesis.Core.Behaviors.Physics

[\(Genesis.Core.Behaviors.Physics.html\)](#)

MoveDown()

+ Genesis.Core.GameElements

Declaration

[\(Genesis.Core.GameElements.html\)](#)

+ Genesis.Graphics

```
public void MoveDown()
```

[\(Genesis.Graphics.html\)](#)

+ Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

MoveLeft()

+ Genesis.Graphics.RenderDevice

Declaration

[\(Genesis.Graphics.RenderDevice.html\)](#)

+ Genesis.Graphics.Shaders.Operations

[\(Genesis.Graphics.Shaders.Operations.html\)](#)

+ Genesis.Graphics.Shapes

MoveRight()

+ Genesis.Graphics.Shapes

Declaration

[\(Genesis.Graphics.Shapes.html\)](#)

Declaration

[\(Genesis.Math.html\)](#)

```
public void MoveRight()
```

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

+ Genesis.UI (Genesis.UI.html)

MoveUp()

Declaration

```
public void MoveUp()
```

OnDestroy(Game, GameElement)

Called when the game behavior is being destroyed.

+ Genesis.Core

Declaration
[\(Genesis.Core.html\)](#)

- **Genesis.Core.Behaviors**
[\(Genesis.Core.Behaviors.html\)](#)

Parameters

AnimationBehavior

Type	Name	Description
Genesis.Core.Behaviors.AnimationBehavior	game	The game instance.
GameElement (Genesis.Core.GameElement.html)	parent	The parent game element.

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Overrides
[IGameBehavior.OnDestroy\(Game, GameElement\)](#)

(Genesis.Core.Behaviors.Physics)
GameElement (Genesis.Core.GameElement.html)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

OnInit(Game, GameElement)

+ Genesis.Graphics

Called when the game behavior is initialized.

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

```
public override void OnInit(Game game, GameElement parent)
```

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

Parameters

Type	Name	Description
Game (Genesis.Core.Game.html)	game	The game instance.
GameElement (Genesis.Core.GameElement.html)	parent	The parent game element.

+ Genesis.Math

(Genesis.Math.html)

IGameBehavior.OnInit(Game, GameElement)

(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnInit_Genesis_Core_Game_Genesis_Core_GameElement_)

+ Genesis.Physics

(Genesis.Physics.html)

+ Genesis.UI (Genesis.UI.html)

OnRender(Game, GameElement)

Called when the game behavior is rendered.

Declaration

```
public override void OnRender(Game game, GameElement parent)
```

Parameters

Type	Name	Description
Game (Genesis.Core.Game.html) + Genesis.Core	game	The game instance.
GameElement (Genesis.Core.GameElement.html) (Genesis.Core.GameElement)	parent	The parent game element.

- Genesis.Core.Behaviors

Overrides

(Genesis.Core.Behaviors.html)

IGameBehavior.OnRender(Game, GameElement)

(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnRender_Genesis_Core_Game_Genesis_Core_GameElement_)

SpriteMovementController

(Genesis.Core.Behaviors.SpriteMove

OnUpdate(Game, GameElement)

+ Genesis.Core.Behaviors.Physics

Called before the physics engine is updated.

Parameters

Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

```
public override void OnUpdate(Game game, GameElement parent)
```

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

Parameters

+ Genesis.Graphics

Type

(Genesis.Graphics.html)

Game (Genesis.Core.Game.html)

+ Genesis.Graphics.Physics

GameElement (Genesis.Core.GameElement.html)

(Genesis.Graphics.Physics.html)

Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnUpdate_Genesis_Core_Game_Genesis_Core_GameElement_)

+ Genesis.Graphics.Shaders.Oper

(Genesis.Graphics.Shaders.Ope

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

(Genesis.Math.html)

+ Genesis.Physics

(Genesis.Physics.html)

+ Genesis.UI (Genesis.UI.html)

Namespace Genesis.Core.Behaviors.Physics2D

▼ Enter here to filter...

Classes

+ **Genesis.Core**

([Genesis.Core.html](#))

Rigidbody2D ([Genesis.Core.Behaviors.Physics2D.Rigidbody2D.html](#))

+ [Genesis.Core.Behaviors](#)

Provides behavior for game elements.

([Genesis.Core.Behaviors.html](#))

- **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

Rigidbody2D

([Genesis.Core.Behaviors.Physics2D.Rigidbody2D.html](#))

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

+ **Genesis.Core.GameElements**

([Genesis.Core.GameElements.html](#))

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

+ **Genesis.Graphics.Shaders.Operator**

([Genesis.Graphics.Shaders.Operator.html](#))

+ **Genesis.Graphics.Shapes**

([Genesis.Graphics.Shapes.html](#))

+ **Genesis.Math**

([Genesis.Math.html](#))

+ **Genesis.Physics**

([Genesis.Physics.html](#))

+ **Genesis.UI** ([Genesis.UI.html](#))

Class Rigidbody2D

Represents a 2D physics behavior for game elements.

Enter here to filter...

Inheritance

+ Genesis.Core

↳ Object (<https://learn.microsoft.com/dotnet/api/system.object>)

([Genesis.Core.html](#))

↳ PhysicsBehavior ([Genesis.Physics.PhysicsBehavior.html](#))

+ Genesis.Core.Behaviors

↳ Rigidbody2D

([Genesis.Core.Behaviors.html](#))

Inherited Members

- Genesis.Core.Behaviors.Physics

PhysicsBehavior.OnCollide ([Genesis.Physics.PhysicsBehavior.html#Genesis_Physics_PhysicsBehavior_OnCollide](#))

PhysicsBehavior.Collide(Scene, Game, RigidBody)

([Rigidbody2D.PhysicsBehavior.html#Genesis_Physics_PhysicsBehavior_Collide_Genesis_Core_Scene_Genesis_Core_Ge_GenesisCoreBehaviorBodyPhysics2D.I](#))

IGameBehavior.Parent ([Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_Parent](#))

+ Genesis.Core.Behaviors.Physics

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

([Genesis.Core.Behaviors.Physics.html](#))

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

+ Genesis.Core.GameElements

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

([Genesis.Core.GameElements.html](#))

+ Genesis.Graphics

([Genesis.Graphics.html](#))

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

+ Genesis.Graphics.Physics

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

([Genesis.Graphics.Physics.html](#))

Namespace: [Genesis](#) ([Genesis.html](#)).Core ([Genesis.Core.html](#)).Behaviors ([Genesis.Core.Behaviors.html](#)).Physics2D

([Genesis.Core.Behaviors.Physics2D.html](#))

+ Genesis.Graphics.RenderDevice

Assembly: [Genesis.dll](#)

([Genesis.Graphics.RenderDevice.html](#))

Syntax

+ Genesis.Graphics.Shaders.OpenGL

([Genesis.Graphics.Shaders.OpenGL.html](#))

+ Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

Constructors

+ Genesis.Math

([Genesis.Math.html](#))

Rigidbody2D()

+ Genesis.Physics

Declaration:

([Genesis.Physics.html](#))

+ Genesis.UI (GenesisUI.html)

public Rigidbody2D()

Properties

AngularFactor

Gets or sets the angular factor for the RigidBody's rotation.



Declaration

+ **Genesis.Core**

```
public Vec3 AngularFactor { get; set; }
```

([Genesis.Core.html](#))

+ **Genesis.Core.Behaviors**

Property Value

([Genesis.Core.Behaviors.html](#))

Type

- **Genesis.Core.Behaviors.Physics**

Vec3 ([Genesis.Math.Vec3.html](#))

([Genesis.Core.Behaviors.Physics.html](#))

Description

Rigidbody2D

([Genesis.Core.Behaviors.Physics2D.html](#))

LinearFactor

+ **Genesis.Core.Behaviors.Physics**

Gets or sets the linear factor for the RigidBody's motion.

([Genesis.Core.Behaviors.Physics.html](#))

Declaration

+ **Genesis.Core.GameElements**

([Genesis.Core.GameElements.h](#))

```
public Vec3 LinearFactor { get; set; }
```

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

Vec3 ([Genesis.Math.Vec3.html](#))

Description

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

RigidBody

+ **Genesis.Graphics.Shaders.OpenGL**

([Genesis.Graphics.Shaders.OpenGL.html](#))

Gets or sets the RigidBody associated with this 2D physics behavior.

+ **Genesis.Graphics.Shapes**

([Genesis.Graphics.Shapes.html](#))

```
public Rigidbody Rigidbody { get; set; }
```

+ **Genesis.Math**

([Genesis.Math.html](#))

Property Value

+ **Genesis.Physics**

Type

([Genesis.Physics.html](#))

Rigidbody

+ **Genesis.UI** ([Genesis.UI.html](#))

Description

Methods

CreateRigidbody(PhysicHandler, float)

Creates a Rigidbody with the specified mass using the provided PhysicHandler.

Declaration

```
public void CreateRigidbody(PhysicHandler handler, float mass)
```

Returns

Type	Name	Description
+ Genesis.Core.Behaviors (Genesis.Core.Behaviors.html)	<i>handler</i>	The PhysicHandler responsible for managing physics elements.
- float Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)	<i>mass</i>	The mass of the Rigidbody.

Rigidbody2D
([Genesis.Core.Behaviors.Physics2D.html](#))

+ **Genesis.Core.Behaviors.Physics**
GetPhysicsObject()
([Genesis.Core.Behaviors.Physics.html](#))

Gets the physics object associated with this behavior.

+ **Genesis.Core.GameElements**

Declaration
([Genesis.Core.GameElements.h](#))

+ **Genesis.Graphics**

```
public override object GetPhysicsObject()  
(Genesis.Graphics.html)
```

Returns

Genesis.Graphics.Physics
([Genesis.Graphics.Physics.html](#))

Type	Description
+ Genesis.Graphics.RenderDevice object (https://learn.microsoft.com/dotnet/api/system.object) (Genesis.Graphics.RenderDevice.html)	The Rigidbody physics object.

Overrides

+ **Genesis.Graphics.Shaders.Operator**

PhysicsBehavior.GetPhysicsObject()

([Genesis.Graphics.Shaders.Operator.html](#))

([Genesis.Physics.PhysicsBehavior.html](#))#Genesis_Physics_PhysicsBehavior_GetPhysicsObject()

+ **Genesis.Graphics.Shapes**

([Genesis.Graphics.Shapes.html](#))

GetPhysicsObject<T>()

+ **Genesis.Math**

Gets the physics object associated with this behavior, cast to the specified type.

([Genesis.Math.html](#))

Declaration

+ **Genesis.Physics**

([Genesis.Physics.html](#))

```
public override T GetPhysicsObject<T>()  
(Genesis.Physics.html)
```

+ **Genesis.UI** ([Genesis.UI.html](#))

Returns

Type	Description
T	The Rigidbody physics object cast to the specified type.

Type Parameters

Name	Description
<i>T</i>	The type to which the physics object is cast.

Overrides

PhysicsBehavior.GetPhysicsObject<T>()

(Genesis.Physics.PhysicsBehavior.html#Genesis_Physics_PhysicsBehavior_GetPhysicsObject_1)

+ Genesis.Core

(Genesis.Core.html)

OnDestroy(Game, GameElement)

+ Genesis.Core.Behaviors

Called when the associated game element is being destroyed.

[\(Genesis.Core.Behaviors.html\)](#)

Declaration

Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

```
public override void OnDestroy(Game game, GameElement parent)
    Rigidbody2D
```

(Genesis.Core.Behaviors.Physics2D.I

Parameters

+ Genesis.Core.Behaviors.Physics

Type

(Genesis.Core.Behaviors.Physics)

Game (Genesis.Core.Game.html)

+ Genesis.Core.GameElements

Game Element

(Genesis.Core.GameElements.h)

(Genesis.Core.GameElement.html)

+ Genesis.Graphics

(Genesis.Graphics.html)

Overrides

IGameBehavior.OnDestroy(Game, GameElement)

+ Genesis.Graphics.Physics

(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnDestroy_Genesis_Core_Game_Genesis_Core_

GameElement_)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

+ Genesis.Graphics.Physics.html

OnInit(Game, GameElement)

+ Genesis.Graphics.Shaders.Operator

Called when the associated game element is being initialized.

[\(Genesis.Graphics.Shaders.Operator.html\)](#)

Declaration

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

```
public override void OnInit(Game game, GameElement parent)
```

+ Genesis.Math

(Genesis.Math.html)

Parameters

+ Genesis.Physics

(Genesis.Physics.html)

Game (Genesis.Core.Game.html)

+ Genesis.UI (Genesis.UI.html)

GameElement

(Genesis.Core.GameElement.html)

Overrides

IGameBehavior.OnInit(Game, GameElement)
(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnInit_Genesis_Core_Game_Genesis_Core_GameElement_)

OnRender(Game, GameElement)

Called during the rendering phase of the game update cycle.

Declaration

(Genesis.Core.html)

```
public override void OnRender(Game game, GameElement parent)  
+ Genesis.Core.Behaviors
```

(Genesis.Core.Behaviors.html)

Parameters

Type	Name	Description
Game (Genesis.Core.Game.html)	game	The current game instance.
GameElement Rigidbody2D	parent	The parent game element associated with this behavior.
+ Genesis.Core.Behaviors.Physics		

(Genesis.Core.Behaviors.Physics.html)

Overrides

+ Genesis.Core.GameElements

IGameBehavior.OnRender(Game, GameElement)

(Genesis.Core.GameElements.html#Genesis_Core_IGameBehavior_OnRender_Genesis_Core_Game_Genesis_Core_GameElement_)

+ Genesis.Graphics

(Genesis.Graphics.html)

OnUpdate(Game, GameElement)

Declaration

(Genesis.Graphics.Physcis.html)

Updates the physics components during the game's update cycle.

Declaration

(Genesis.Graphics.RenderDevice.html)

```
public override void OnUpdate(Game game, GameElement parent)  
+ Genesis.Graphics.Shaders.Oper
```

(Genesis.Graphics.Shaders.Oper.html)

Parameters

Type	Name	Description
Game (Genesis.Core.Game.html)	game	The current game instance.
+ Genesis.Math		
GameElement (Genesis.Math.html)	parent	The parent game element associated with this behavior.

+ Genesis.Physics

(Genesis.Physics.html)

IGameBehavior.OnUpdate(Game, GameElement)

+ Genesis.UI (Genesis.UI.html)

(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnUpdate_Genesis_Core_Game_Genesis_Core_GameElement_)

GameElement

UpdateRigidBody()

Updates the RigidBody's motion state based on the parent's location.

Declaration

```
public void UpdateRigidBody()
```

▼

- + **Genesis.Core**
[\(Genesis.Core.html\)](#)
- + **Genesis.Core.Behaviors**
[\(Genesis.Core.Behaviors.html\)](#)
- **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics\)](#)
 - Rigidbody2D
(Genesis.Core.Behaviors.Physics2D.I)
- + **Genesis.Core.Behaviors.Physics2D**
[\(Genesis.Core.Behaviors.Physics2D\)](#)
- + **Genesis.Core.Behaviors.Physics3D**
[\(Genesis.Core.Behaviors.Physics3D\)](#)
- + **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)
- + **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)
- + **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)
- + **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice\)](#)
- + **Genesis.Graphics.Shaders.Operator**
[\(Genesis.Graphics.Shaders.Operator\)](#)
- + **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)
- + **Genesis.Math**
[\(Genesis.Math.html\)](#)
- + **Genesis.Physics**
[\(Genesis.Physics.html\)](#)
- + **Genesis.UI** ([Genesis.UI.html](#))

Namespace Genesis.Core.Behaviors.Physics3D

▼ Enter here to filter...

Classes

+ **Genesis.Core**

([Genesis.Core.html](#)) **ConvexHullBehavior** ([Genesis.Core.Behaviors.Physics3D.ConvexHullBehavior.html](#))

+ **Genesis.Core.Behaviors** Element3D.

([Genesis.Core.Behaviors.html](#))

QubeConvexHull ([Genesis.Core.Behaviors.Physics3D.QubeConvexHull.html](#))

([Genesis.Core.Behaviors.Physics3D.QubeConvexHull.html](#))

StaticMeshBehavior ([Genesis.Core.Behaviors.Physics3D.StaticMeshBehavior.html](#))

([Genesis.Core.Behaviors.Physics3D.StaticMeshBehavior.html](#))

ConvexHullBehavior

([Genesis.Core.Behaviors.Physics3D.ConvexHullBehavior.html](#))

QubeConvexHull

([Genesis.Core.Behaviors.Physics3D.QubeConvexHull.html](#))

StaticMeshBehavior

([Genesis.Core.Behaviors.Physics3D.StaticMeshBehavior.html](#))

+ **Genesis.Core.GameElements**

([Genesis.Core.GameElements.html](#))

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

+ **Genesis.Graphics.Shaders.Operator**

([Genesis.Graphics.Shaders.Operator.html](#))

+ **Genesis.Graphics.Shapes**

([Genesis.Graphics.Shapes.html](#))

+ **Genesis.Math**

([Genesis.Math.html](#))

+ **Genesis.Physics**

Class ConvexHullBehavior

A ConvexHull Rigidbody for Element3D.

Enter here to filter...

Inheritance

+ Genesis.Core

↳ Object (<https://learn.microsoft.com/dotnet/api/system.object>)

([Genesis.Core.html](#))

↳ PhysicsBehavior ([Genesis.Physics.PhysicsBehavior.html](#))

+ Genesis.Core.Behaviors

↳ ConvexHullBehavior

([Genesis.Core.Behaviors.html](#))

Inherited Members

+ Genesis.Core.Behaviors.Physics

PhysicsBehavior.OnCollide ([Genesis.Physics.PhysicsBehavior.html#Genesis_Physics_PhysicsBehavior_OnCollide](#))

([Genesis.Core.Behaviors.Physics.html](#))

IGameBehavior.Parent ([Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_Parent](#))

object.ToString () (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

ConvexHullBehavior

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

([Genesis.Core.Behaviors.Physics3D.html](#))

object.GetHashCode () (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

StaticMeshBehavior

object.GetType () (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone () (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

+ Genesis.Core.GameElements

([Genesis.Core.html](#)).Behaviors ([Genesis.Core.Behaviors.html](#)).Physics3D

([Genesis.Core.Behaviors.Physics3D.html](#))

([Genesis.Core.GameElements.h](#))

Assembly: Genesis.dll

+ Genesis.Graphics

Syntax

([Genesis.Graphics.html](#))

+ public class ConvexHullBehavior : PhysicsBehavior

([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

Constructors

([Genesis.Graphics.RenderDevice.html](#))

+ Genesis.Graphics.Shaders.Operation

ConvexHullBehavior()

([Genesis.Graphics.Shaders.Operation.html](#))

Declaration

+ Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

public ConvexHullBehavior()

+ Genesis.Math

([Genesis.Math.html](#))

+ Genesis.Physics

([Genesis.Physics.html](#))

+ Genesis.UI (Genesis.UI.html)

RigidBody

Declaration

```
public Rigidbody Rigidbody { get; set; }
```

Property Value

Type	Description
Rigidbody + Genesis.Core	(Genesis.Core.html)

+ Genesis.Core.Behaviors

Methods

+ Genesis.Core.Behaviors.Physics

Collide(Scene, Game, Rigidbody)

Declaration

(Genesis.Core.Behaviors.Physics.html)

```
public override void Collide(Scene scene, Game game, Rigidbody collisionObject)  
    ConvexHullBehavior
```

(Genesis.Core.Behaviors.Physics3D.CubeConvexHull)

Parameters

 (PhysicsBehavior)

Type	Name	Description
StaticMeshBehavior	scene	
Scene (Genesis.Core.Scene.html)	game	
Rigidbody + Genesis.Core.GameElements	collisionObject	

+ Genesis.Graphics

Overloads

PhysicsBehavior.Collide(Scene, Game, Rigidbody)

(Genesis.Graphics.Physics.html#Genesis_Physics_PhysicsBehavior_Collide_Genesis_Core_Scene_Genesis_Core_Game_BulletSharp_Rigidbody_)

+ Genesis.Graphics.RenderDevice

CreateRigidBody(PhysicHandler, float)

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator.html)

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

Parameters

+ Genesis.Math

Type

(Genesis.Math.html)

PhysicHandler (Genesis.Physics.PhysicHandler.html)

float (Genesis.Physics.html)

Type	Name	Description
PhysicHandler (Genesis.Physics.PhysicHandler.html)	handler	
float (Genesis.Physics.html)	mass	

+ Genesis.UI (Genesis.UI.html)

GetPhysicsObject()

Declaration

```
public override object GetPhysicsObject()
```



Returns

Type	Description
+ Genesis.Core	

[\(Genesis.Core.html\)](#) <https://docs.microsoft.com/dotnet/api/system.object>

+ Genesis.Core.Behaviors

Overrides

[\(Genesis.Core.Behaviors.html\)](#)

PhysicsBehavior.GetPhysicsObject()

([Genesis.Core.Behaviors.Physics.html](#)) [#Genesis_Physics_PhysicsBehavior_GetPhysicsObject](#)

[\(Genesis.Core.Behaviors.Physics.html\)](#)

GetPhysicsObject<T>()

Declaration

ConvexHullBehavior

```
public override T GetPhysicsObject<T>()
```

QubeConvexHull

(Genesis.Core.Behaviors.Physics3D.html)

Returns

StaticMeshBehavior

Type Description

+T Genesis.Core.GameElements

[\(Genesis.Core.GameElements.html\)](#)

Type Parameters

Genesis.Graphics

Name Description

[\(Genesis.Graphics.html\)](#)

Description

+T Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

Overrides

[+ Genesis.Graphics.RenderDevice](#)

PhysicsBehavior.GetPhysicsObject<T>()

([Genesis.Graphics.RenderDevice.html](#)) [#Genesis_Physics_PhysicsBehavior_GetPhysicsObject_1](#)

+ Genesis.Graphics.Shaders.Op

[\(Genesis.Graphics.Shaders.Op.html\)](#)

+ Genesis.Graphics.Shapes

Called when the Game behavior is being destroyed.

[\(Genesis.Graphics.Shapes.html\)](#)

Declaration

+ Genesis.Math

[\(Genesis.Math.html\)](#)

OnDestroy(Game game, GameElement parent)

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

+ Genesis.UI ([Genesis.UI.html](#))

Type	Name	Description
Game (Genesis.Core.Game.html)	<i>game</i>	The game instance.
GameElement (Genesis.Core.GameElement.html)	<i>parent</i>	The parent game element.

Overrides

IGameBehavior.OnDestroy(Game, GameElement)

(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnDestroy_Genesis_Core_Game_Genesis_Core_GameElement_)
+ Genesis.Core
(Genesis.Core.html)

+ Genesis.Core.Behaviors
OnInit(Game, GameElement)
(Genesis.Core.Behaviors.html)

Called when the game behavior is initialized.

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

- Genesis.Core.Behaviors.Physics
public override void OnInit(Game game, GameElement parent)
(Genesis.Core.Behaviors.Physics.html)

ConvexHullBehavior

Parameters

(Genesis.Core.Behaviors.Physics3D.html)

Type	Name	Description
CubeConvexHull		
(Genesis.Core.Behaviors.Physics3D.html)		

Game (Genesis.Core.Game.html)	<i>game</i>	The game instance.
StaticMeshBehavior		

GameElement (Genesis.Core.GameElement.html)	<i>parent</i>	The parent game element.
---	---------------	--------------------------

+ Genesis.Core.GameElements

Overrides

(Genesis.Core.GameElements.h)

IGameBehavior.OnInit(Game, GameElement)

(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnInit_Genesis_Core_Game_Genesis_Core_GameElement_)
+ Genesis.Graphics
(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.PhysicsElement.html)

Each physics element is rendered.

(Genesis.Graphics.RenderDevice)
Declaration

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL.html)

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

Type	Name	Description
+ Genesis.Math		
Game (Genesis.Core.Game.html)	<i>game</i>	The game instance.

GameElement (Genesis.Core.GameElement.html)	<i>parent</i>	The parent game element.
---	---------------	--------------------------

+ Genesis.Physics

(Genesis.Physics.html)

Overrides

+ Genesis.UI (Genesis.UI.html)

IGameBehavior.OnRender(Game, GameElement)
(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnRender_Genesis_Core_Game_Genesis_Core_GameElement_)

OnUpdate(Game, GameElement)

Called when the game behavior is updated.

Declaration

(Genesis.Core.html)

```
public override void OnUpdate(Game game, GameElement parent)  
+ Genesis.Core.Behaviors
```

(Genesis.Core.Behaviors.html)

Parameters

+ Genesis.Core.Behaviors.Physics

Type

(Genesis.Core.Behaviors.Physics)

Game (Genesis.Core.Game.html)

- Genesis.Core.Behaviors.Physics

GameElement (Genesis.Core.GameElement.html)

(Genesis.Core.Behaviors.Physics)

Name

Description

game The game instance.

parent The parent game element.

ConvexHullBehavior

Overrides

(Genesis.Core.Behaviors.Physics3D.)

IGameBehavior.OnUpdate(Game, GameElement)

QuadraticConvexHull

(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnUpdate_Genesis_Core_Game_Genesis_Core_GameElement_)

StaticMeshBehavior

(Genesis.Core.Behaviors.Physics3D.)

UpdateRigidBodyElements

(Genesis.Core.GameElements.h)

Declaration

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

+ Genesis.Graphics.Shaders.Operations

(Genesis.Graphics.Shaders.Operations)

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

(Genesis.Math.html)

+ Genesis.Physics

(Genesis.Physics.html)

+ Genesis.UI (Genesis.UI.html)

Class QubeConvexHull

Inheritance

↳ Enter here to filter
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ IGameBehavior (Genesis.Core.IGameBehavior.html)
↳ PhysicsBehavior (Genesis.Physics.PhysicsBehavior.html)
↳ QubeConvexHull (Genesis.Core.html)

Inherited Members

+ Genesis.Core.Behaviors

PhysicsBehavior.OnCollide (Genesis.Physics.PhysicsBehavior.html#Genesis_Physics_PhysicsBehavior_OnCollide)
IGameBehavior.Parent (Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_Parent)
object.ToString () (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
object.Equals (System.Object, System.Object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))

- Genesis.Core.Behaviors.Physics
object.Equals (Object, Object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-system-object))

object.ReferenceEquals (Object, Object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
object.GetHashCode () (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
object.GetType () (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.MemberwiseClone () (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
StaticMeshBehavior
Namespace: Genesis (Genesis.html).Core (Genesis.Core.html).Behaviors (Genesis.Core.Behaviors.html).Physics3D
(Genesis.Core.Behaviors.Physics3D.html)

Assembly: Genesis.dll

+ Genesis.Core.GameElements

Syntax
(Genesis.Core.GameElements.h)

+ Genesis.Graphics

QubeConvexHull : PhysicsBehavior
(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

Constructors
(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

QubeConvexHull
(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Operations

(Genesis.Graphics.Shaders.Operations.html)
public QubeConvexHull()

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

Properties
(Genesis.Math.html)

+ Genesis.Physics

RigidBody
(Genesis.Physics.html)

Declarations
(Genesis.Rigidbody.html)

```
public Rigidbody Rigidbody { get; set; }
```

Property Value

Type	Description
Rigidbody	

+ Genesis.Core

(Genesis.Core.html)

Methods

(Genesis.Core.Behaviors.html)

CollideScene, Game, Rigidbody

(Genesis.Core.Behaviors.Physics.html)

Declaration

- Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

ConvexHullBehavior

Parameters

QubeConvexHull

Type (Genesis.Core.Behaviors.Physics3D.QubeConvexHull)

Scene (Genesis.Core.Scene.html)

Name

Description

scene

(Genesis.Core.Behaviors.Physics3D.Scene)

game

Game (Genesis.Core.Game.html)

collisionObject

+ Genesis.Core.GameElements

Rigidbody

(Genesis.Core.GameElements.html)

Genesis.Graphics

(Genesis.Graphics.html)

PhysicsBehavior (Game, Rigidbody)

(Genesis.Physics.PhysicsBehavior.html#Genesis_Physics_PhysicsBehavior_Collide_Genesis_Core_Scene_Genesis_Core_Game_BulletSharp_Rigidbody_)

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

CreateRigidBody(PhysicHandler, float)

(Genesis.Graphics.RenderDevice.html)

Declaration

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL.html)

public void CreateRigidBody(PhysicHandler handler, float mass)

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

(Genesis.Math.html)

PhysicHandler (Genesis.Physics.PhysicHandler.html)

Name

Description

handler

float (<https://learn.microsoft.com/dotnet/api/system.single>)

mass

(Genesis.Physics.html)

+ Genesis.UI (Genesis.UI.html)

GetPhysicsObject()

Declaration

```
public override object GetPhysicsObject()
```



Returns

Type	Description
+ Genesis.Core (Genesis.Core.html)	

+ Genesis.Core.Behaviors

Overrides

[\(Genesis.Core.Behaviors.html\)](#)

PhysicsBehavior.GetPhysicsObject()

([Genesis.Core.Behaviors.Physics.html](#))

[\(Genesis.Core.Behaviors.Physics.html\)](#)

GetPhysicsObject<T> Physics

[\(Genesis.Core.Behaviors.Physics.html\)](#)

Declaration

ConvexHullBehavior

```
public override T GetPhysicsObject<T>()
```

QubeConvexHull

[\(Genesis.Core.Behaviors.Physics3D.html\)](#)

Returns

StaticMeshBehavior

Type	Description
+ Genesis.Core.GameElements (Genesis.Core.GameElements.html)	

Type Parameters

Genesis.Graphics

Name	Description
+ T Genesis.Graphics.Physics (Genesis.Graphics.Physics.html)	

+ Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

Overrides

[+ Genesis.Graphics.RenderDevice](#)
[\(Genesis.Graphics.RenderDevice.html\)](#)

PhysicsBehavior.GetPhysicsObject<T>()

([Genesis.Graphics.RenderDevice.html](#))

[\(Genesis.Graphics.RenderDevice.html\)](#)

+ Genesis.Graphics.Shaders.Operator

[\(Genesis.Graphics.Shaders.Operator.html\)](#)

+ Genesis.Graphics.Shapes

Called when the game behavior is being destroyed.

[\(Genesis.Graphics.Shapes.html\)](#)

Declaration

+ Genesis.Math

[\(Genesis.Math.html\)](#) [OnDestroy](#)(Game game, GameElement parent)

+ Genesis.Physics

Parameters

[\(Genesis.Physics.html\)](#)

+ Genesis.UI ([Genesis.UI.html](#))

Type	Name	Description
Game (Genesis.Core.Game.html)	<i>game</i>	The game instance.
GameElement (Genesis.Core.GameElement.html)	<i>parent</i>	The parent game element.

Overrides

IGameBehavior.OnDestroy(Game, GameElement)

(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnDestroy_Genesis_Core_Game_Genesis_Core_GameElement_)
+ Genesis.Core
(Genesis.Core.html)

+ Genesis.Core.Behaviors
OnInit(Game, GameElement)
(Genesis.Core.Behaviors.html)

Called when the game behavior is initialized.

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

- Genesis.Core.Behaviors.Physics
public override void OnInit(Game game, GameElement parent)
(Genesis.Core.Behaviors.Physics.html)

ConvexHullBehavior

Parameters

(Genesis.Core.Behaviors.Physics3D.html)

Type	Name	Description
CubeConvexHull		
(Genesis.Core.Behaviors.Physics3D.html)		

Game (Genesis.Core.Game.html)	<i>game</i>	The game instance.
StaticMeshBehavior		

GameElement (Genesis.Core.GameElement.html)	<i>parent</i>	The parent game element.
---	---------------	--------------------------

+ Genesis.Core.GameElements

Overrides

(Genesis.Core.GameElements.h)

IGameBehavior.OnInit(Game, GameElement)

(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnInit_Genesis_Core_Game_Genesis_Core_GameElement_)
+ Genesis.Graphics
(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.PhysicsElement.html)

Each physics element is rendered.

(Genesis.Graphics.RenderDevice.html)

Declaration

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL.html)

+ Genesis.Graphics.Shapes

Parameters

(Genesis.Graphics.Shapes.html)

Type	Name	Description
+ Genesis.Math		
Game (Genesis.Core.Game.html)	<i>game</i>	The game instance.

GameElement (Genesis.Core.GameElement.html)	<i>parent</i>	The parent game element.
---	---------------	--------------------------

+ Genesis.Physics

(Genesis.Physics.html)

Overrides

+ Genesis.UI (Genesis.UI.html)

IGameBehavior.OnRender(Game, GameElement)
(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnRender_Genesis_Core_Game_Genesis_Core_GameElement_)

OnUpdate(Game, GameElement)

Called when the game behavior is updated.

Declaration

[\(Genesis.Core.html\)](#)

```
public override void OnUpdate(Game game, GameElement parent)
```

+ [Genesis.Core.Behaviors](#)

[\(Genesis.Core.Behaviors.html\)](#)

Parameters

+ [Genesis.Core.Behaviors.Physics](#)

Type

[\(Genesis.Core.Behaviors.Physics.html\)](#)

Game ([Genesis.Core.Game.html](#))

Name

Description

game

The game instance.

- [Genesis.Core.Behaviors.Physics](#)

GameElement ([Genesis.Core.GameElement.html](#))

parent

The parent game element.

ConvexHullBehavior

Overrides

[\(Genesis.Core.Behaviors.Physics3D.html\)](#)

IGameBehavior.OnUpdate(Game, GameElement)

[\(QuakeConvexHull.html\)](#)

(Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_OnUpdate_Genesis_Core_Game_Genesis_Core_GameElement_)

StaticMeshBehavior

([Genesis.Core.Behaviors.Physics3D.html](#))

UpdateRigidBodyElements

[\(Genesis.Core.GameElements.html\)](#)

Declaration

+ [Genesis.Graphics](#)

[\(Genesis.Graphics.html\)](#)

+ [Genesis.Graphics.Physics](#)

[\(Genesis.Graphics.Physics.html\)](#)

+ [Genesis.Graphics.RenderDevice](#)

[\(Genesis.Graphics.RenderDevice.html\)](#)

+ [Genesis.Graphics.Shaders.Operator](#)

[\(Genesis.Graphics.Shaders.Operator.html\)](#)

+ [Genesis.Graphics.Shapes](#)

[\(Genesis.Graphics.Shapes.html\)](#)

+ [Genesis.Math](#)

[\(Genesis.Math.html\)](#)

+ [Genesis.Physics](#)

[\(Genesis.Physics.html\)](#)

+ [Genesis.UI](#) ([Genesis.UI.html](#))

Class StaticMeshBehavior

Inheritance

↳ Enter here to filter
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ IGameBehavior (Genesis.Core.IGameBehavior.html)
↳ PhysicsBehavior (Genesis.Physics.PhysicsBehavior.html)
↳ StaticMeshBehavior (Genesis.Core.html)

Inherited Members

+ Genesis.Core.Behaviors

PhysicsBehavior.OnCollide (Genesis.Physics.PhysicsBehavior.html#Genesis_Physics_PhysicsBehavior_OnCollide)
IGameBehavior.Parent (Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_Parent)
object.ToString () (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
object.Equals (System.Object, System.Object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))

- Genesis.Core.Behaviors.Physics
object.Equals (Object, Object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-system-object))

object.ReferenceEquals (Object, Object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
object.GetHashCode () (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
object.GetType () (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.MemberwiseClone () (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Namespace: Genesis (Genesis.html).Core (Genesis.Core.html).Behaviors (Genesis.Core.Behaviors.html).Physics3D
(Genesis.Core.Behaviors.Physics3D.html)

Assembly: Genesis.dll

+ Genesis.Core.GameElements

Syntax
(Genesis.Core.GameElements.h)

+ Genesis.Graphics

↳ StaticMeshBehavior : PhysicsBehavior
(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

Constructors
(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

StaticMeshBehavior.RenderDevice
(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Operation

↳ public StaticMeshBehavior()
(Genesis.Graphics.Shaders.Operation.html)

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

Properties
(Genesis.Math.html)

+ Genesis.Physics

RigidBody
(Genesis.Physics.html)

Declarations
(Genesis.RigidBody.html)

```
public Rigidbody Rigidbody { get; set; }
```

Property Value

Type	Description
Rigidbody	

+ Genesis.Core

(Genesis.Core.html)

Methods

(Genesis.Core.Behaviors.html)

Collide(Scene, Game, Rigidbody)

(Genesis.Core.Behaviors.Physics.html)

Gets called when the element collides with another

- Genesis.Core.Behaviors.Physics

Declaration

(Genesis.Core.Behaviors.Physics.html)

ConvexHullBehavior

```
public override void Collide(Scene scene, Game game, Rigidbody collisionObject)
```

(Genesis.Core.Behaviors.Physics3D.html)

QubeConvexHull

Parameters

(Genesis.Core.Behaviors.Physics3D.html)

Type

StaticMeshBehavior

(Genesis.Core.Behaviors.Physics3D.html)

Scene

(Genesis.Core.Scene.html)

+ Genesis.Core.GameElements

Game

(Genesis.Core.Game.html)

+ Genesis.Graphics

(Genesis.Graphics.html)

Overrides

+ Genesis.Graphics.Physics

PhysicsBehavior.Collide(Scene, Game, Rigidbody)

(Genesis.Graphics.Physics.html)

PhysicsBehavior

(Genesis_Physics_PhysicsBehavior_Collide_Genesis_Core_Scene_Genesis_Cor

e_Game_BulletSharp_RigidBody_)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

CreateRigidBody(PhysicHandler, float, Mesh)

+ Genesis.Graphics.Shaders.OpenGL

CreateRigidBody(PhysicHandler, float, Mesh)

Delegates

Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

```
public void CreateRigidBody(PhysicHandler handler, float mass, Mesh mesh)
```

+ Genesis.Math

(Genesis.Math.html)

Parameters

+ Genesis.Physics

Type

(Genesis.Physics.html)

PhysicHandler

(Genesis.Physics.PhysicHandler.html)

+ Genesis.UI

(Genesis.UI.html)

Type	Name	Description
handler		

Type	Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	<i>mass</i>	
Mesh (Genesis.Graphics.Mesh.html)	<i>mesh</i>	

Exceptions

Type	Condition
+ Genesis.Core InvalidOperationException (Genesis.Core.html) (https://learn.microsoft.com/dotnet/api/system.invalidoperationexception)	

+ Genesis.Core.Behaviors

[\(Genesis.Core.Behaviors.html\)](#)

GetPhysicsObject()

+ **Genesis.Core.Behaviors.Physics**

Re([Genesis.Core.Behaviors.Physics.html](#))

Genesis.Core.Behaviors.Physics

[\(Genesis.Core.Behaviors.Physics.html\)](#)

public override object GetPhysicsObject()

 ConvexHullBehavior

 ([Genesis.Core.Behaviors.Physics3D.html](#))

Returns

 CubeConvexHull

 ([Genesis.Core.Behaviors.Physics3D.html](#))

Type	Description
StaticMeshBehavior	

+ Genesis.Core.GameElements

Overrides

[\(Genesis.Core.GameElements.html\)](#)

PhysicsBehavior.GetPhysicsObject()

+ [Genesis.Graphics](#)

[\(Genesis.Graphics.html\)](#)

Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

Declaration

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice<T>\(\).html\)](#)

+ Genesis.Graphics.Shaders.Operation

Return([Genesis.Graphics.Shaders.Operation.html](#))

Type	Description
+ Genesis.Graphics.Shapes	

T	(Genesis.Graphics.Shapes.html)
+ Genesis.Math	

Type Parameters

[\(Genesis.Math.html\)](#)

Name	Description
+ Genesis.Physics	

T	(Genesis.Physics.html)
+ Genesis.UI	(Genesis.UI.html)

OnRender(Game, GameElement)

Renderer callback

Declaration

```
public override void OnRender(Game game, GameElement parent)
```

Parameters

Type [\(Genesis.Core.html\)](#)

Name

Description

+ [Genesis.Core.Behaviors](#)

game

([Genesis.Core.Behaviors.html](#))

GameElement ([Genesis.Core.GameElement.html](#))

parent

+ [Genesis.Core.Behaviors.Physics](#)

Overridden from [Genesis.Core.Behaviors.Physics](#)

IGameBehavior.OnRender(Game, GameElement)

- [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.IGameBehavior.html](#)#[Genesis_Core_IGameBehavior_OnRender_Genesis_Core_Game_Genesis_Core_GameElement_](#))

([Genesis.Core.Behaviors.Physics.html](#))

ConvexHullBehavior

([Genesis.Core.Behaviors.Physics3D.html](#))

OnUpdate(Game, GameElement)

QuoBeConvexHull

([Genesis.Core.Behaviors.Physics3D.html](#))

Update callback

StaticMeshBehavior

Declaration [Genesis.Core.Behaviors.Physics3D.html](#)

+ [Genesis.Core.GameElements](#)

public override void OnUpdate(Game game, GameElement parent)

([Genesis.Core.GameElements.html](#))

+ [Genesis.Graphics](#)

Parameters

([Genesis.Graphics.html](#))

Type

Name

Description

+ [Genesis.Graphics.Physics](#)

Game ([Genesis.Core.Game.html](#))

game

([Genesis.Graphics.Physics.html](#))

GameElement ([Genesis.Core.GameElement.html](#))

parent

+ [Genesis.Graphics.RenderDevice](#)

([Genesis.Graphics.RenderDevice.html](#))

Overrides

IGameBehavior.OnUpdate(Game, GameElement)

([Genesis.Core.IGameBehavior.html](#)#[Genesis_Core_IGameBehavior_OnUpdate_Genesis_Core_Game_Genesis_Core_GameElement_](#))

([Genesis.Graphics.Shaders.OpenGL.html](#))

+ [Genesis.Graphics.Shapes](#)

([Genesis.Graphics.Shapes.html](#))

UpdateRigidBody()

+ [Genesis.Math](#)

Sets the scaling for the RigidBody

([Genesis.Math.html](#))

Declaration

+ [Genesis.Physics](#)

([Genesis.Physics.html](#))

public void UpdateRigidBody()

+ [Genesis.UI \(Genesis.UI.html\)](#)

▼

- + **Genesis.Core**
[\(Genesis.Core.html\)](#)
- + **Genesis.Core.Behaviors**
[\(Genesis.Core.Behaviors.html\)](#)
- + **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)
- **Genesis.Core.Behaviors.Physics3D**
[\(Genesis.Core.Behaviors.Physics3D.html\)](#)
 - ConvexHullBehavior
[\(Genesis.Core.Behaviors.Physics3D.ConvexHullBehavior.html\)](#)
 - QubeConvexHull
[\(Genesis.Core.Behaviors.Physics3D.QubeConvexHull.html\)](#)
 - StaticMeshBehavior
[\(Genesis.Core.Behaviors.Physics3D.StaticMeshBehavior.html\)](#)
- + **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)
- + **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)
- + **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)
- + **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)
- + **Genesis.Graphics.Shaders.Operator**
[\(Genesis.Graphics.Shaders.Operator.html\)](#)
- + **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)
- + **Genesis.Math**
[\(Genesis.Math.html\)](#)
- + **Genesis.Physics**
[\(Genesis.Physics.html\)](#)
- + **Genesis.UI** [\(Genesis.UI.html\)](#)

Namespace Genesis.Core.GameElements

Classes

▼ Enter here to filter...

- [Genesis.Core.Behaviors](#)

BufferedSprite (Genesis.Core.GameElements.BufferedSprite.html)

Represents a game element that creates a buffered sprite with vertices, colors, and texture coordinates.

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics](#))

CameraElement (Genesis.Core.GameElements.CameraElement.html)

+ [Genesis.Core.Behaviors.Physics](#)

Represents a game element that serves as a camera within the game world.

([Genesis.Core.Behaviors.Physics](#))

- [Genesis.Core.GameElements](#)

Element3D (Genesis.Core.GameElements.Element3D.html)

([Genesis.Core.GameElements.h](#))

Represents a 3D element in the game world, such as a 3D model with shaders.

BufferedSprite

([Genesis.Core.GameElements.Buffer](#)

CameraElement

Empty (Genesis.Core.GameElements.Empty.html)

([Genesis.Core.GameElements.Came](#)

Represents an empty game element.

Element3D

([Genesis.Core.GameElements.Elem](#)

Empty

Qube (Genesis.Core.GameElements.Qube.html)

([Genesis.Core.GameElements.Empty](#)

Represents a cube-shaped game element with customizable appearance.

Qube

([Genesis.Core.GameElements.Qube](#)

RectElement

RectElement (Genesis.Core.GameElements.RectElement.html)

([Genesis.Core.GameElements.RectE](#)

Simple rectangle element

Skybox

([Genesis.Core.GameElements.Skyb](#)

Sprite

Skybox (Genesis.Core.GameElements.Skybox.html)

([Genesis.Core.GameElements.Sprite](#)

Represents a skybox element in a 3D environment.

Terrain2D

([Genesis.Core.GameElements.Terrai](#)

Terrain3D

Sprite (Genesis.Core.GameElements.Sprite.html)

([Genesis.Core.GameElements.Terrai](#)

Represents a sprite element in a 2D or 3D environment.

TerrainData

([Genesis.Core.GameElements.Terrai](#)

Terrain2D (Genesis.Core.GameElements.Terrain2D.html)

([Genesis.Graphics.html](#))

+ [Genesis.Graphics.Physics](#)

Terrain3D (Genesis.Core.GameElements.Terrain3D.html)

Represents a 3D terrain element.

+ [Genesis.Graphics.RenderDevice](#)

([Genesis.Graphics.RenderDevic](#)

+ [Genesis.Graphics.Shaders.Oper](#)

Structs

TerrainData ([Genesis.Core.GameElements.TerrainData.html](#))

Represents a 3D terrain element.



- [Genesis.Core.Behaviors](#)
([Genesis.Core.Behaviors.html](#))
- + **Genesis.Core.Behaviors.Physics**
([Genesis.Core.Behaviors.Physics.html](#))
- + **Genesis.Core.Behaviors.Physics**
([Genesis.Core.Behaviors.Physics.html](#))
- **Genesis.Core.GameElements**
([Genesis.Core.GameElements.html](#))
 - BufferedSprite
([Genesis.Core.GameElements.BufferedSprite.html](#))
 - CameraElement
([Genesis.Core.GameElements.CameraElement.html](#))
 - Element3D
([Genesis.Core.GameElements.Element3D.html](#))
 - Empty
([Genesis.Core.GameElements.Empty.html](#))
 - Qube
([Genesis.Core.GameElements.Qube.html](#))
 - RectElement
([Genesis.Core.GameElements.RectElement.html](#))
 - Skybox
([Genesis.Core.GameElements.Skybox.html](#))
 - Sprite
([Genesis.Core.GameElements.Sprite.html](#))
 - Terrain2D
([Genesis.Core.GameElements.Terrain2D.html](#))
 - Terrain3D
([Genesis.Core.GameElements.Terrain3D.html](#))
 - TerrainData
([Genesis.Core.GameElements.TerrainData.html](#))
- + **Genesis.Graphics**
([Genesis.Graphics.html](#))
- + **Genesis.Graphics.Physics**
([Genesis.Graphics.Physics.html](#))
- + **Genesis.Graphics.RenderDevice**
([Genesis.Graphics.RenderDevice.html](#))
- + **Genesis.Graphics.Shaders.Oper**

Class BufferedSprite

Represents a game element that creates a buffered sprite with vertices, colors, and texture coordinates.

▼ Enter here to filter...

Inheritance

([Genesis.Core.Behaviors.html](#))

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

+ **Genesis.Core.Behaviors.Physics**

↳ BufferedSprite

([Genesis.Core.Behaviors.Phy](#)

Inherited Members

+ **Genesis.Core.Behaviors.Physics**

GameElement.OnDestroy(Game)

([Genesis.Core.Behaviors.Phy](#)

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_OnDestroy_Genesis_Core_Game_

Genesis.Core.GameElements

([Genesis.Core.GameElements.h](#)

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_AddBehavior_1__0_)

GameElement.AddBehavior(IGameBehavior)

↳ BufferedSprite

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_AddBehavior_Genesis_Core_IGameBehavior_

([Genesis.Core.GameElements.Buffer](#)

GameElement.GetBehavior<T>() ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_GetBehavior_1)

↳ CameraElement

GameElement.GetBehaviors<T>()

↳ Genesis.Core.GameElements.Came

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_GetBehaviors_1)

Element3D

GameElement.AddChild(GameElement)

↳ Genesis.Core.GameElements.Elem

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_AddChild_Genesis_Core_GameElement_

Empty

GameElement.GetInstance(GameElement)

↳ Genesis.Core.GameElements.Empty

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElementGetInstance_Genesis_Core_GameElement_

Qube

GameElement.Name ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Name)

↳ Genesis.Core.GameElements.Qube

GameElement.Tag ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Tag)

RECTElement

GameElement.Location ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Location)

↳ Genesis.Core.GameElements.RectE

GameElement.Rotation ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Rotation)

Skybox

GameElement.Size ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Size)

↳ Genesis.Core.GameElements.Skybc

GameElement.Behaviors ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Behaviors)

Sprite

GameElement.Scene ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Scene)

↳ Genesis.Core.GameElements.Sprite

GameElement.Enabled ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Enabled)

Terrain2D

GameElement.Properties ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Propertys)

↳ Genesis.Core.GameElements.Terrai

GameElement.Children ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Children)

Terrain3D

GameElement.Parent ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Parent)

↳ Genesis.Core.GameElements.Terrai

GameElement.UUID ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_UUID)

TerrainData

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object))

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

+ **Genesis.Graphics.RenderDevice**

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

([Genesis.Graphics.RenderDevic](#)

Namespace: Genesis (Genesis.html).Core (Genesis.Core.html).GameElements (Genesis.Core.GameElements.html)

* **Genesis.Graphics.Shaders.Ope**

Assembly: Genesis

Syntax

```
public class BufferedSprite : GameElement
```

Constructors

[\(Genesis.Core.Behaviors.html\)](#) BufferedSprite(string, Vec3, Texture)

+ Genesis.Core.Behaviors.Physics

Creates a new buffered sprite with the specified name, location, and texture.

(Genesis.Core.Behaviors.Physics)

Declaration

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

```
public BufferedSprite(string name, Vec3 location, Texture texture)
```

- Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

Parameters

Type	Description	Name	Description
BufferedSprite (Genesis.Core.GameElements.BufferedSprite)			
string (https://learn.microsoft.com/dotnet/api/system.string)	The name of the game element.	name	
Vec3 (Genesis.Core.GameElements.Came lement3D)	The location of the game element.	location	
Texture (Genesis.Core.GameElements.Hemis phere)	The texture applied to the sprite.	texture	

Empty

(Genesis.Core.GameElements.Empty)

Qube

(Genesis.Core.GameElements.Qube)

RectElement

(Genesis.Core.GameElements.RectE
lement)

Skybox

(Genesis.Core.GameElements.Skybo
x)

Gets or sets the list of colors for the sprite.

(Genesis.Core.GameElements.Sprite
Colors)

Declaration

Terrain2D

(Genesis.Core.GameElements.Terrai
n2D)

```
public List<float> Colors { get; set; }
```

(Genesis.Core.GameElements.Terrai
n3D)

TerrainData

Property Value

(Genesis.Core.GameElements.Terrai
nData)

Type

+ Genesis.Graphics

List<(https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1)<

(Genesis.Graphics.html)

float (https://learn.microsoft.com/dotnet/api/system.single)>

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

TexCoords

(Genesis.Graphics.RenderDevice)

(Genesis.Graphics.RenderDevice)

Gets or sets the list of texture coordinates for the sprite.

+ Genesis.Graphics.Shaders.Operator

Declaration

Description

```
public List<float> TexCoords { get; set; }
```

Property Value

Type	Description
List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1)< float (https://learn.microsoft.com/dotnet/api/system.single)> (Genesis.Core.Behaviors.html)	

+ Genesis.Core.Behaviors.Physics

Texture

+ Genesis.Core.Behaviors.Physics

Gets or sets the texture applied to the sprite.

[\(Genesis.Core.Behaviors.Physics\)](#)

Declaration

- Genesis.Core.GameElements

[\(Genesis.Core.GameElements.h\)](#)

```
public Texture Texture { get; set; }
```

BufferedSprite

(Genesis.Core.GameElements.Buffer

Property Value

CameraElement

Type	Description
Genesis.Core.GameElements.CameraElement	

Empty

(Genesis.Core.GameElements.Empty)

Vertices

(Genesis.Core.GameElements.Qube)

Gets or sets the list of vertices for the sprite.

RectElement

Declaration

Skybox

(Genesis.Core.GameElements.Skybox)

```
public List<float> Verticies { get; set; }
```

Sprite

(Genesis.Core.GameElements.Sprite)

Terrain2D

Property Value

Type	Description
Genesis.Core.GameElements.Terrain3D	

List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1)<

float (https://learn.microsoft.com/dotnet/api/system.single)>

(Genesis.Core.GameElements.Terrain3D)

+ Genesis.Graphics

[\(Genesis.Graphics.html\)](#)

Methods

+ Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

AddShape(Vec3, Vec3)

+ Genesis.Graphics.RenderDevice

Adds a new rectangular shape at the given location and with the given size to the sprite.

[\(Genesis.Graphics.RenderDevice\)](#)

Declaration

+ Genesis.Graphics.Shaders.Oper

GameElement.OnRender(Game, IRenderDevice)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnRender_Genesis_Core_Game_Graphics_IREnderDevice_)

OnUpdate(Game, IRenderDevice)

Updates the game element.

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

public override void OnUpdate(Game game, IRenderDevice renderDevice)
(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.Behaviors.Physics

Parameters
(Genesis.Core.Behaviors.Physics)

Type

- Genesis.Core.GameElements

Game (Genesis.Core.Game.html)

(Genesis.Core.GameElements.h)

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

(Genesis.Core.GameElements.Buffer)

Overridden
From CameraElement

GameElement.OnUpdate(Game, IRenderDevice)

(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnUpdate_Genesis_Core_Game_Graphics_IREnderDevice_Genesis_Core.GameElements.Element)

Empty

(Genesis.Core.GameElements.Empty)

Qube

(Genesis.Core.GameElements.Qube)

RectElement

(Genesis.Core.GameElements.RectE)

Skybox

(Genesis.Core.GameElements.Skybo)

Sprite

(Genesis.Core.GameElements.Sprite)

Terrain2D

(Genesis.Core.GameElements.Terrai)

Terrain3D

(Genesis.Core.GameElements.Terrai)

TerrainData

(Genesis.Core.GameElements.Terrai)

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Oper

Class CameraElement

Represents a game element that serves as a camera within the game world.

Enter here to filter...

Inheritance

(Genesis.Core.Behaviors.html)	
↳ object (https://learn.microsoft.com/dotnet/api/system.object)	
+ Genesis.Core.Behaviors.Physics	
↳ CameraElement (https://learn.microsoft.com/dotnet/api/genesis.core.gameelement)	
(Genesis.Core.Behaviors.Physics)	
Inherited Members	
+ Genesis.Core.Behaviors.Physics	
GameElement_Init(Game, IRenderDevice)	
(Genesis.Core.Behaviors.Physics)	
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Init_Genesis_Core_Game_Genesis_Graphics_IRende	
+ Genesis.Core.GameElements	
↳ GameElement_OnRender(Game, IRenderDevice)	
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnRender_Genesis_Core_Game_Genesis_Graphics_	
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(Genesis.Core.GameElements.Buffer	
GameElement_OnUpdate(Game, IRenderDevice)	
CameraElement	
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnUpdate_Genesis_Core_Game_Genesis_Graphics_	
Genesis.Core.GameElements.Came	
IRenderDevice)	
Element3D	
GameElement_OnDestroy(Game)	
(Genesis.Core.GameElements.Eleme	
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnDestroy_Genesis_Core_Game_	
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GameElement_AddBehavior<T>(T)	
(Genesis.Core.GameElements.Empty	
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddBehavior_1__0_)	
Qube	
GameElement_AddBehavior(IGameBehavior)	
(Genesis.Core.GameElements.Qube	
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddBehavior_Genesis_Core_IGameBehavior_	
RectElement	
GameElement_GetBehavior<T>()	
(Genesis.Core.GameElements.RectE	
GameElement_GetBehaviors<T>()	
Skybox	
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetBehaviors_1)	
(Genesis.Core.GameElements.Skybo	
GameElement_AddChild(GameElement)	
Sprite	
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddChild_Genesis_Core_GameElement_)	
(Genesis.Core.GameElements.Sprite	
GameElement.GetInstance(GameElement)	
Terrain2D	
(Genesis.Core.GameElement.html#Genesis_Core_GameElement.GetInstance_Genesis_Core_GameElement_)	
(Genesis.Core.GameElements.Terrai	
GameElement_Name (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Name)	
Terrain3D	
GameElement_Tag (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Tag)	
(Genesis.Core.GameElements.Terrai	
GameElement_Behaviors (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Behaviors)	
TerrainData	
GameElement_Scene (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Scene)	
(Genesis.Core.GameElements.Terrai	
GameElement_Enabled (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Enabled)	
+ Genesis.Graphics	
↳ GameElement_Properties (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Properties)	
GameElement_Children (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Children)	
GameElement_Parent (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Parent)	
+ Genesis.Graphics.Physics	
↳ GameElement_UUID (Genesis.Core.GameElement.html#Genesis_Core_GameElement_UUID)	
object.ToString() (https://learn.microsoft.com/dotnet/api/system.object.tostring)	
object.Equals(object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object))	
+ Genesis.Graphics.RenderDevice	
object.Equals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object))	
+ Genesis.Graphics.Shaders.Open	

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Namespace: Genesis ([Genesis.html](#)).Core ([Genesis.Core.html](#)).GameElements ([Genesis.Core.GameElements.html](#))

Assembly: Genesis.dll

Syntax

([Genesis.Core.Behaviors.html](#))

```
public class CameraElement : GameElement  
+ Genesis.Core.Behaviors.Physics
```

([Genesis.Core.Behaviors.Physics](#))

Constructors

([Genesis.Core.Behaviors.Physics](#))

CameraElement(string, Camera)

([Genesis.Core.GameElements.h](#))

Initializes a new instance of the CameraElement class with an existing camera.
BufferedSprite

Declaration

```
CameraElement  
(Genesis.Core.GameElements.Camera)  
public CameraElement(string name, Camera camera)  
Element3D  
(Genesis.Core.GameElements.Element3D)
```

Parameters

Empty

Type	Name	Description
Qube		
string (https://learn.microsoft.com/dotnet/api/system.string)	name	The name of the camera element.

CameraElement(string, Vec3, Vec3, float, float, CameraType)

([Genesis.Core.GameElements.Terrain.h](#))

Initializes a new instance of the CameraElement class with specified parameters.
Terrain3D

Declaration

```
TerrainData  
(Genesis.Core.GameElements.Terrain)  
public CameraElement(string name, Vec3 location, Vec3 cameraSize, float near, float far, CameraType type)
```

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

Parameters

+ **Genesis.Graphics.Physics**

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	name	The name of the camera element.

+ **Genesis.Graphics.Shaders.Oper**

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	<i>location</i>	The initial location of the camera.
Vec3 (Genesis.Math.Vec3.html)	<i>cameraSize</i>	The size of the camera.
float (https://learn.microsoft.com/dotnet/api/system.single) + (Genesis.Core.Behaviors.html) + (Genesis.Core.Behaviors.Physics.html) + (Genesis.Core.Behaviors.Physics.html) + (Genesis.Core.Behaviors.Physics.html) + (Genesis.Core.Behaviors.Physics.html)	<i>near</i>	The near clipping plane distance of the camera.
float (https://learn.microsoft.com/dotnet/api/system.single) + (Genesis.Core.Behaviors.html) + (Genesis.Core.Behaviors.Physics.html) + (Genesis.Core.Behaviors.Physics.html) + (Genesis.Core.Behaviors.Physics.html)	<i>far</i>	The far clipping plane distance of the camera.
CameraType (Genesis.Graphics.CameraType.html)	<i>type</i>	The type of the camera (perspective or orthographic).

- **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)

Properties

[\(Genesis.Core.GameElements.Buffer.html\)](#)
[\(Genesis.Core.GameElements.Camera.html\)](#)
Camera
[\(Genesis.Core.GameElements.Camera.html\)](#)
 Element3D
 Gets or sets the camera associated with this element.
[\(Genesis.Core.GameElements.Element3D.html\)](#)

Declaration

```
(Genesis.Core.GameElements.Empty)
Qube
public Camera Camera { get; set; }
(Genesis.Core.GameElements.Qube)
```

Property Value
[\(Genesis.Core.GameElements.RectElement.html\)](#)

Type	Description
Skybox	
(Genesis.Core.GameElements.Skybox.html)	

[\(Genesis.Core.GameElements.Sprite.html\)](#)
 Sprite

[\(Genesis.Core.GameElements.Sprite.html\)](#)
 Terrain2D

[\(Genesis.Core.GameElements.Terrain.html\)](#)
 Terrain3D

Gets the camera's position within the game world.

[\(Genesis.Core.GameElements.Terrain.html\)](#)
 Declaration
[\(Genesis.Core.GameElements.Terrain.html\)](#)

- + **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)

Properties

Type	Description
(Genesis.Graphics.Physics.html)	
+ (Genesis.Math.Rectangle.html) (Genesis.Graphics.RenderDevice.html)	

Type	Description
+ (Genesis.Graphics.Shaders.Operator.html)	

Rotation

Gets or sets the rotation of the camera.

Declaration

```
public Vec3 Rotation { get; set; }
```

Properties ([Genesis.Core.Behaviors.html](#))

Type	Description
Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics) Vec3 (Genesis.Math.Vec3.html)	

+ [Genesis.Core.Behaviors.Physics](#)

[\(Genesis.Core.Behaviors.Physics\)](#)

Size

- [Genesis.Core.GameElements](#)

[\(Genesis.Core.GameElements.html\)](#)

Declaration

(Genesis.Core.GameElements.Buffer

CameraElement

public Vec3 Size { get; set; }

(Genesis.Core.GameElements.Came

Element3D

Properties ([Genesis.Core.GameElements.Elem](#)

Type	Description
Empty	(Genesis.Core.GameElements.Empty)
Vec3 (Genesis.Math.Vec3.html)	

(Genesis.Core.GameElements.Qube

RectElement

(Genesis.Core.GameElements.RectE

Skybox

(Genesis.Core.GameElements.Skybo

Sprite

(Genesis.Core.GameElements.Sprite

Terrain2D

(Genesis.Core.GameElements.Terrai

Terrain3D

(Genesis.Core.GameElements.Terrai

TerrainData

(Genesis.Core.GameElements.Terrai

+ [Genesis.Graphics](#)

[\(Genesis.Graphics.html\)](#)

+ [Genesis.Graphics.Physics](#)

[\(Genesis.Graphics.Physics.html\)](#)

+ [Genesis.Graphics.RenderDevice](#)

[\(Genesis.Graphics.RenderDevice.html\)](#)

+ [Genesis.Graphics.Shaders.Oper](#)

Class Element3D

Represents a 3D element in the game world, such as a 3D model with shaders.

▼ Enter here to filter...

Inheritance

(Genesis.Core.Behaviors.html)
↳ object (https://learn.microsoft.com/dotnet/api/system.object)
+ Genesis.Core.Behaviors.Physics
↳ Element3D
(Genesis.Core.Behaviors.Physic)
↳ Skybox (Genesis.Core.GameElements.Skybox.html)
+ Genesis.Core.Behaviors.Physics
Inherited Members
(Genesis.Core.Behaviors.Physics)
GameElement.AddBehavior<T>(T)
(Genesis.Core.GameElement)
↳ Genesis_Core_GameElement_AddBehavior_1__0_()
GameElement.AddBehavior(IGameBehavior)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddBehavior_Genesis_Core_IGameBehavior_)
BufferedSprite
GameElement.GetBehavior<T>().(Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetBehavior_1)
(Genesis.Core.GameElements.Buffer)
GameElement.GetBehaviors<T>()
CameraElement
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetBehaviors_1)
(Genesis.Core.GameElements.Came)
GameElement.AddChild(GameElement)
Element3D
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddChild_Genesis_Core_GameElement_)
(Genesis.Core.GameElements.Eleme)
GameElement.GetInstance(GameElement)
Empty
(Genesis.Core.GameElement.html#Genesis_Core_GameElementGetInstance_Genesis_Core_GameElement_)
(Genesis.Core.GameElements.Empty)
GameElement.Name (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Name)
Qube
GameElement.Tag (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Tag)
(Genesis.Core.GameElements.Qube)
GameElement.Location (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Location)
RectElement
GameElement.Rotation (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Rotation)
(Genesis.Core.GameElements.RectE)
GameElement.Size (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Size)
Skybox
GameElement.Behaviors (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Behaviors)
(Genesis.Core.GameElements.Skybc)
GameElement.Scene (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Scene)
Sprite
GameElement.Enabled (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Enabled)
(Genesis.Core.GameElements.Sprite)
GameElement.Properties (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Properties)
Terrain2D
GameElement.Children (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Children)
(Genesis.Core.GameElements.Terrai
GameElement.Parent (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Parent)
Terrain3D
GameElement.UUID (Genesis.Core.GameElement.html#Genesis_Core_GameElement_UUID)
(Genesis.Core.GameElements.Terrai
object.ToString() (https://learn.microsoft.com/dotnet/api/system.object.tostring)
object.Equals(object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object))
+ Genesis.Graphics
object.Equals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object))
(Genesis.Graphics.html)
object.ReferenceEquals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.referenceequals)
+ Genesis.Graphics.Physics
object.GetHashCode() (https://learn.microsoft.com/dotnet/api/system.object.gethashcode)
object.GetType() (https://learn.microsoft.com/dotnet/api/system.object.gettype)
object.MemberwiseClone() (https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)
+ Genesis.Graphics.RenderDevice
Namespace: Genesis (Genesis.html) .Core (Genesis.Core.html).GameElements (Genesis.Core.GameElements.html)
(Genesis.Graphics.RenderDevic
Assembly: Genesis.dll
+ Genesis.Graphics.Shaders.Oper

Syntax

```
public class Element3D : GameElement
```

Constructors

(Genesis.Core.Behaviors.html) Element3D(string, string, Vec3, Vec3, Vec3)

+ Genesis.Core.Behaviors.Physics

Initializes a new instance of the Element3D class with specified parameters.
(Genesis.Core.Behaviors.Physics)

Declaration

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

```
public Element3D(string name, string path, Vec3 location, Vec3 rotation, Vec3 scale)
```

- Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

Parameters

Type	Description	Name	Description
BufferedSprite (Genesis.Core.GameElements.Buffer			
string (https://learn.microsoft.com/dotnet/api/system.string)	The name of the 3D element.	name	
string (Genesis.Core.GameElements.Came			
string (https://learn.microsoft.com/dotnet/api/system.string)	The file path to the 3D model.	path	
Vec3 (Genesis.Core.GameElements.Eleme		location	The initial location of the 3D element.
Empty Vec3 (Genesis.Math.Vec3.html)		rotation	The initial rotation of the 3D element.
Qube Vec3 (Genesis.Math.Vec3.html)		scale	The initial scale of the 3D element.

Properties

(Genesis.Core.GameElements.Skybox.html)

Skybox

Materials

Terrain2D

Gets Gets the materials from the model

Terrain3D

Declaration

(Genesis.Core.GameElements.Terrai

TerrainData

```
public TerrainData Materials { get; set; }
```

+ Genesis.Graphics

Property Value

(Genesis.Graphics.html)

Type

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

List<(Genesis.Graphics.Material.html)>

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

Meshes

(Genesis.Graphics.Shaders.Oper

Description

Gets or sets the meshes from the model

Declaration

```
public List<Mesh> Meshes { get; set; }
```

Property Value		
Type	Description	
(Genesis.Core.Behaviors.html) List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1)< + Genesis.Core.Behaviors.Physics Mesh (Genesis.Graphics.Mesh.html)> (Genesis.Core.Behaviors.Physics.html)		

+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.Shader)

- Genesis.Core.GameElements

Gets or sets the shader program associated with this 3D element.

[\(Genesis.Core.GameElements.h\)](#)

Declaration

BufferedSprite

```
(Genesis.Core.GameElements.Buffer  
public ShaderProgram Shader { get; set; }  
CameraElement
```

(Genesis.Core.GameElements.Came

Element3D

(Genesis.Core.GameElements.Eleme

Property Value		
Type	Description	
Empty		

(Genesis.Core.GameElements.Empty

ShaderProgram ([Genesis.Graphics.ShaderProgram.html](#))

Qube

(Genesis.Core.GameElements.Qube

RectElement

(Genesis.Core.GameElements.RectE

Skybox

(Genesis.Core.GameElements.Skybo

Sprite

GetMaterialBuffers(int)

(Genesis.Core.GameElements.Sprite

Terrain2D

Gets the material buffers for a specific material index.

(Genesis.Core.GameElements.Terrai

Declaration

Terrain3D

(Genesis.Core.GameElements.Terrai

```
public TerrainMaterialBuffer GetMaterialBuffers(int material)
```

(Genesis.Core.GameElements.Terrai

genesis.Graphics

[\(Genesis.Graphics.html\)](#)

Type	Name	Description
(Genesis.Graphics.html) int (https://learn.microsoft.com/dotnet/api/system.int32)	material	The material index.

+ [Genesis.Graphics.Physics](#)

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice.html\)](#)

+ Genesis.Graphics.Shaders.Oper

Type	Description
MaterialBuffer (Genesis.Graphics.MaterialBuffer.html)	A MaterialBuffer containing vertex, normal, and texture coordinate data.

GetShape()

(Genesis.CoreBehaviors.html)
Gets the shape data of the 3D element.

genesis-core-behaviors-physics

+ **Genesis.Core.Behaviors.Physics**
(Genesis.Core.Behaviors.Physics)

Returns

Type `Genesis.Core.GameElements`

[float](https://learn.microsoft.com/dotnet/api/system.single)(<https://learn.microsoft.com/dotnet/api/system.single>)[]

Description

(Genesis.Core.GameElements.Buffer)

Init(Game, IRenderDevice)

Called when the game elements are initialized. Override to provide custom initialization logic.

Called when

Empty Declaration

Quibe

Probationary Period of the Trainee Family

PREHESIS:GK

RectElement (Genesis.Core.GameElements.RectE Parameters

Type	Name	Description
Skybox (Genesis.Core.GameElements.Skybox.html)		
Sprite (Genesis.Core.Game.html) (Genesis.Core.GameElements.Sprite.html)	<i>game</i>	The game instance.
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	<i>renderDevice</i>	The render device used for rendering.

(Genesis.C)

Terrain3D Overrides

```
(Genesis.Core.GameElements.Terrain)
GameElement.Init(Game, IRenderDevice)
TerrainData
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Init_Genesis_Core_Game_Genesis_Graphics_IRende
-D-)
(Genesis.Core.GameElements.Terrai
```

+ Genesis Graphics

(Genesis.Graphics.html)
OnDestroy(Game)

⌘ Genesis.Graphics.Physics

Called when the game element is being destroyed. Override to provide custom cleanup logic.

(Genesis.Graphics.Physics.html
Documentation)

Declaration

+ Genesis.Graphics.RenderDevice
(Genesis.Graphics.RenderDevice game)

+ Genesis Graphics Shaders Open

Parameters

Type	Name	Description
Game (Genesis.Core.Game.html)	game	The game instance.

Overrides

GameElement.OnDestroy(Game)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnDestroy_Genesis_Core_Game_)
(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics OnRender(Game, IRenderDevice) (Genesis.Core.Behaviors.Physics)

Called when the game is being rendered. Override to provide custom rendering logic.

+ Genesis.Core.Behaviors.Physics

Declaration
(Genesis.Core.Behaviors.Physics)

- Genesis.Core.GameElements

public override void OnRender(Game game, IRenderDevice renderDevice)
(Genesis.Core.GameElements.h)

Parameters

Game (Genesis.Core.GameElements.Buffer)

Type	Name	Description
CameraElement	game	The game instance.
Element3D	renderDevice	The render device used for rendering.

Overrides

Empty
(Genesis.Core.GameElements.Empty)

Cube
GameElement.OnRender(Game, IRenderDevice)

(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnRender_Genesis_Core_Game_Graphics_RenderElement_IRenderDevice)
(Genesis.Core.GameElements.RectE)

Declaration

Skybox
(Genesis.Core.GameElements.Skybox)

OnUpdate(Game, IRenderDevice)

Sprite

Called when the game is being updated. Override to provide custom update logic.

Parameters

Terrain2D
(Genesis.Core.GameElements.Terrain)

Terrain3D
public override void OnUpdate(Game game, IRenderDevice renderDevice)
(Genesis.Core.GameElements.Terrain)

Parameters

TerrainData
(Genesis.Core.GameElements.Terrain)

Type	Name	Description
Genesis.Graphics	game	The game instance.
IRenderDevice (Genesis.Core.GameElements.IRenderDevice.html)	renderDevice	The render device used for rendering.

Overrides

+ Genesis.Graphics.RenderDevice

GameElement.OnUpdate(Game, IRenderDevice)

(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnUpdate_Genesis_Core_Game_Graphics_RenderDevice_IRenderDevice)

+ Genesis.Graphics.Shaders.Operator

▼

(Genesis.Core.Behaviors.html)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics\)](#)

- **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.h\)](#)

 BufferedSprite
[\(Genesis.Core.GameElements.BufferedSprite\)](#)
 CameraElement
[\(Genesis.Core.GameElements.CameraElement\)](#)
 Element3D
[\(Genesis.Core.GameElements.Element3D\)](#)
 Empty
[\(Genesis.Core.GameElements.Empty\)](#)
 Qube
[\(Genesis.Core.GameElements.Qube\)](#)
 RectElement
[\(Genesis.Core.GameElements.RectElement\)](#)
 Skybox
[\(Genesis.Core.GameElements.Skybox\)](#)
 Sprite
[\(Genesis.Core.GameElements.Sprite\)](#)
 Terrain2D
[\(Genesis.Core.GameElements.Terrain2D\)](#)
 Terrain3D
[\(Genesis.Core.GameElements.Terrain3D\)](#)
 TerrainData
[\(Genesis.Core.GameElements.TerrainData\)](#)

+ **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)

+ **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)

+ **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice\)](#)

+ **Genesis.Graphics.Shaders.Oper**

Class Empty

Represents an empty game element.

Enter here to filter...

Inheritance

([Genesis.Core.Behaviors.html](#))

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

+ **Genesis.Core.Behaviors.Physics**

↳ Empty

([Genesis.Core.Behaviors.Phy](#)

Inherited Members

+ **Genesis.Core.Behaviors.Physics**

GameElement.Init(Game, IRenderDevice)

([Genesis.Core.Behaviors.Physic](#)

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Init_Genesis_Core_Game_Genesis_Graphics_IRe

+ **Genesis.Core.GameElements**

GameElement.OnRender(Game, IRenderDevice)

([Genesis.Core.GameElements.h](#))

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_OnRender_Genesis_Core_Game_Genesis_Graphics_

BufferedSprite

IRenderDevice)

([Genesis.Core.GameElements.Buffer](#)

GameElement.OnUpdate(Game, IRenderDevice)

CameraElement

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_OnUpdate_Genesis_Core_Game_Genesis_Graphi

IRenderDevice)

Element3D

GameElement.OnDestroy(Game)

([Genesis.Core.GameElements.Elem](#)

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_OnDestroy_Genesis_Core_Game_

Empty

GameElement.AddBehavior<T>(T)

([Genesis.Core.GameElements.Empty](#)

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_AddBehavior_1__0_)

Qube

GameElement.AddBehavior(IGameBehavior)

([Genesis.Core.GameElements.Qube](#)

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_AddBehavior_Genesis_Core_IGameBehavior_

RectElement

GameElement.GetBehavior<T>()

([Genesis.Core.GameElements.RectE](#)

GameElement.GetBehaviors<T>()

Skybox

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_GetBehaviors_1)

([Genesis.Core.GameElements.Skybo](#)

GameElement.AddChild(GameElement)

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_AddChild_Genesis_Core_GameElement_

([Genesis.Core.GameElements.Sprite](#)

GameElement.GetInstance(GameElement)

Terrain2D

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement.GetInstance_Genesis_Core_GameElement_

([Genesis.Core.GameElements.Terrai](#)

GameElement.Name (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Name)

Terrain3D

GameElement.Tag (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Tag)

([Genesis.Core.GameElements.Terrai](#)

GameElement.Location (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Location)

TerrainData

GameElement.Rotation (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Rotation)

([Genesis.Core.GameElements.Terrai](#)

GameElement.Size (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Size)

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

GameElement.Scene (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Scene)

GameElement.Enabled (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Enabled)

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

GameElement.Properties (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Properties)

GameElement.Children (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Children)

GameElement.Parent (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Parent)

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

+ **Genesis.Graphics.Shaders.Ope**

`object.Equals(object)` ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

`object.Equals(object, object)` ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

`object.ReferenceEquals(object, object)` (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

`object.GetHashCode()` (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

`object.GetType()` (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

`object.MemberwiseClone()` (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Core.Behaviors.html)

Namespace: [Genesis](#) ([Genesis.html](#)).Core ([Genesis.Core.html](#)).GameElements ([Genesis.Core.GameElements.html](#))

Assembly: Genesis

Namespace: Genesis.Core.Behaviors

Summary: Genesis.Core.Behaviors

+ Genesis.Core.Behaviors.Physics

`public class Empty : GameElement`

- Genesis.Core.GameElements

Constructors

`BufferedSprite`

`(Genesis.Core.GameElements.Buffer`

Empty()

`(Genesis.Core.GameElements.Came`

Initializes a new instance of the `Empty` class.

`Element3D`

Declaration

`Empty`

`(Genesis.Core.GameElements.Empty)`

`Qube`

`(Genesis.Core.GameElements.Qube)`

`RectElement`

`(Genesis.Core.GameElements.RectE`

`Skybox`

`(Genesis.Core.GameElements.Skybo`

`Sprite`

`(Genesis.Core.GameElements.Sprite)`

`Terrain2D`

`(Genesis.Core.GameElements.Terrai`

`Terrain3D`

`(Genesis.Core.GameElements.Terrai`

`TerrainData`

`(Genesis.Core.GameElements.Terrai`

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Oper

Class Qube

Represents a cube-shaped game element with customizable appearance.

▼ Enter here to filter...

Inheritance

([Genesis.Core.Behaviors.html](#))

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

+ **Genesis.Core.Behaviors.Physics**

↳ Qube

([Genesis.Core.Behaviors.Phy](#)

Inherited Members

+ **Genesis.Core.Behaviors.Physics**

GameElement.OnUpdate(Game, IRenderDevice)

([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_OnUpdate_Genesis_Core_Game_Genesis_Graphics_](#)

+ **Genesis.Core.GameElements**

GameElement.OnDestroy(Game)

([Genesis.Core.GameElements.h](#)

([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_OnDestroy_Genesis_Core_Game_](#)

BufferedSprite

GameElement.AddBehavior<T>(T)

([Genesis.Core.GameElements.Buffer](#)

([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_AddBehavior_1__0_](#))

CaméraElement

GameElement.AddBehavior(IGameBehavior)

([Genesis.Core.GameElements.Came](#)

([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_AddBehavior_Genesis_Core_IGameBehavior_](#)

Element3D

GameElement.GetBehavior<T>().([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_GetBehavior_1](#))

([Genesis.Core.GameElements.Eleme](#)

GameElement.GetBehaviors<T>()

Empty

([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_GetBehaviors_1](#))

([Genesis.Core.GameElements.Empty](#)

GameElement.AddChild(GameElement)

Qube

([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_AddChild_Genesis_Core_GameElement_](#))

([Genesis.Core.GameElements.Qube](#)

GameElement.GetInstance(GameElement)

RectElement

([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElementGetInstance_Genesis_Core_GameElement_](#))

([Genesis.Core.GameElements.RectE](#)

GameElement.Name ([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_Name](#))

Skybox

GameElement.Tag ([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_Tag](#))

([Genesis.Core.GameElements.Skybo](#)

GameElement.Location ([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_Location](#))

Sprite

GameElement.Rotation ([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_Rotation](#))

([Genesis.Core.GameElements.Sprite](#)

GameElement.Size ([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_Size](#))

Terrain2D

GameElement.Behaviors ([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_Behaviors](#))

([Genesis.Core.GameElements.Terrai](#)

GameElement.Scene ([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_Scene](#))

Terrain3D

GameElement.Enabled ([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_Enabled](#))

([Genesis.Core.GameElements.Terrai](#)

GameElement.Propertys ([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_Propertys](#))

TerrainData

GameElement.Children ([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_Children](#))

([Genesis.Core.GameElements.Terrai](#)

GameElement.Parent ([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_Parent](#))

+ **Genesis.Graphics**

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

+ **Genesis.Graphics.Physics**

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)))

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

+ **Genesis.Graphics.RenderDevice**

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

+ **Genesis.Graphics.Shaders.Open**

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Namespace: Genesis ([Genesis.html](#)).Core ([Genesis.Core.html](#)).GameElements ([Genesis.Core.GameElements.html](#))

Assembly: Genesis.dll

Syntax

```
public class Qube : GameElement
```

([Genesis.Core.Behaviors.html](#))

Constructors
+ **Qube(string, Vec3, Vec3)**
([Genesis.Core.Behaviors.html](#))

Qube(string, Vec3)
([Genesis.Core.Behaviors.html](#))

Initializes a new instance of the Qube class with default settings.

- **Genesis.Core.GameElements**

Declaration
([Genesis.Core.GameElements.h](#))

```
public Qube(String name, Vec3 location)
    (Genesis.Core.GameElements.Buffer
```

CameraElement

Parameters
([Genesis.Core.GameElements.Came](#)

Type		Name	Description
Element3D (Genesis.Core.GameElements.Eleme			
string (https://learn.microsoft.com/dotnet/api/system.string) Empty (Genesis.Core.GameElements.Empty)	name		The name of the cube.

Vec3 ([Genesis.Math.Vec3.html](#))
Qube
([Genesis.Core.GameElements.Qube](#)

RectElement

Qube(string, Vec3, Vec3)
([Genesis.Core.GameElements.RectE](#)

Skybox

Initializes a new instance of the Qube class with specified size.
([Genesis.Core.GameElements.Skybo](#)

Sprite

Declaration
([Genesis.Core.GameElements.Sprite](#)

Terrain2D

```
public Qube(string Name, Vec3 location, Vec3 size)
    (Genesis.Core.GameElements.Terrai
```

Terrain3D

Parameters
([Genesis.Core.GameElements.Terrai](#)

Type		Name	Description
TerrainData (Genesis.Core.GameElements.Terrai			
string (https://learn.microsoft.com/dotnet/api/system.string) + Genesis.Graphics	Name		
Vec3 (Genesis.Math.Vec3.html) + Genesis.Graphics.Physics	location		The initial location of the cube.

([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

Qube(string, Vec3, Vec3, Vec3)

([Genesis.Graphics.RenderDevic](#)

Initializes a new instance of the Qube class with specified size and rotation.

+ **Genesis.Graphics.Shaders.Oper**

Declaration

```
public Qube(string name, Vec3 location, Vec3 size, Vec3 rotation)
```

Parameters

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string) (Genesis.Core.Behaviors.html)	<i>name</i>	The name of the cube.
Vec3 (https://learn.microsoft.com/dotnet/api/genesis.math.vec3) + Genesis.Core.Behaviors.Physics	<i>location</i>	The initial location of the cube.
Vec3 (https://learn.microsoft.com/dotnet/api/genesis.math.vec3) - Genesis.Core.Behaviors.Physics	<i>size</i>	The size of the cube.
Vec3 (https://learn.microsoft.com/dotnet/api/genesis.math.vec3) + Genesis.Core.Behaviors.Physics	<i>rotation</i>	The initial rotation of the cube.

- Genesis.Core.GameElements

Properties

BufferedSprite

<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.bufferedsprite>

Color

<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.color>
Gets or sets the color of the cube.

<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.element3d>

<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.empty>

```
public Color Color { get; set; }
```

<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.qube>

Property Value

<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.rectelement>

Skybox

<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.skybox>

Sprite

<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.sprite>

Terrain2D

<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.terrain2d>

Shader

<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.terrain3d>

Gets or sets the shader program associated with this cube.

<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.terrain3d>

Declaration

<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.terrainedata>

<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.terrainedata>

```
public ShaderProgram Shader { get; set; }
```

+ Genesis.Graphics

Properties

Type

<https://learn.microsoft.com/dotnet/api/genesis.graphics.physics.type>

<https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram>

+ Genesis.Graphics.RenderDevice

Devices

Skipped

Shaders

Operations

Gets or sets the cube shape definition.

Declaration

```
public QubeShape Shape { get; set; }
```



Property Value

Type	Description
(Genesis.Core.Behaviors.html) QubeShape (Genesis.Graphics.Shapes.QubeShape.html)	

+ Genesis.Core.Behaviors.Physics

- Genesis.Core.Behaviors.Physics

Methods

- Genesis.Core.GameElements

([Genesis.Core.GameElements.html](#)) GetColors(Color)

BufferedSprite

Gets an array of color values based on the specified color.

([Genesis.Core.GameElements.Buffer.html](#))

CameraElement

([Genesis.Core.GameElements.Camera.html](#))

Element3D

```
public static float[] GetColors(Color color)
```

([Genesis.Core.GameElements.Element3D.html](#))

Empty

([Genesis.Core.GameElements.Empty.html](#))

Type	Name	Description
Qube (Genesis.Core.GameElements.Qube.html)		

Type	Description
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	color

Returns

Skybox

([Genesis.Core.GameElements.Skybox.html](#))

Type	Description
Sprite (Genesis.Core.GameElements.Sprite.html)	An array of color values for the cube faces.

float
(<https://learn.microsoft.com/dotnet/api/system.single>)[]

Terrain2D

([Genesis.Core.GameElements.Terrain2D.html](#))

Terrain3D

([Genesis.Core.GameElements.Terrain3D.html](#))

Init(Game, IRenderDevice)

([Genesis.Core.GameElements.Terrain.html](#))

TerrainData

Initializes the game element.

([Genesis.Core.GameElements.Terrain.html](#))

Declaration

+ Genesis.Graphics

([Genesis.Graphics.html](#))

```
public override void Init(Game game, IRenderDevice renderDevice)
```

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

Parameters

Type	Name	Description
IRenderDevice (Genesis.Graphics.RenderDevice.html)	renderDevice	The render device.

+ Genesis.Graphics.Shaders.Oper

Type	Name	Description
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	renderDevice	The render device used for rendering.

Overrides

GameElement.Init(Game, IRenderDevice)

(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Init_Genesis_Core_Game_Graphics_IRende
rDevice_)

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics OnRender(Game, IRenderDevice)

(Genesis.Core.Behaviors.Physics)

Renders the game element.

+ Genesis.Core.Behaviors.Physics

Declaration:

(Genesis.Core.Behaviors.Physics)

- Genesis.Core.GameElements

public override void OnRender(Game game, IRenderDevice renderDevice)

(Genesis.Core.GameElements.h)

Parameters:

BufferedSprite
(Genesis.Core.GameElements.Buffer

Type	Name	Description
CameraElement (Genesis.Core.GameElements.Came	game	The game instance.
Game (Genesis.Core.Game.html) Element3D	renderDevice	The render device used for rendering.

Empty

(Genesis.Core.GameElements.Empty)

Overrides

Cube

GameElement.OnRender(Game, IRenderDevice)

(Genesis.Core.GameElements.Cube)

IRenderDevice_

(Genesis.Core.GameElements.RectE

Skybox

(Genesis.Core.GameElements.Skybo

Sprite

(Genesis.Core.GameElements.Sprite)

Terrain2D

(Genesis.Core.GameElements.Terrai

Terrain3D

(Genesis.Core.GameElements.Terrai

TerrainData

(Genesis.Core.GameElements.Terrai

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Oper

Class RectElement

Simple rectangle element

▼ Enter here to filter...

Inheritance

([Genesis.Core.Behaviors.html](#))

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

+ **Genesis.Core.Behaviors.Physics**

↳ RectElement

([Genesis.Core.Behaviors.Phy](#)

Inherited Members

+ **Genesis.Core.Behaviors.Physics**

GameElement.Init(Game, IRenderDevice)

([Genesis.Core.Behaviors.Physic](#))

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Init_Genesis_Core_Game_Genesis_Graphics_IRe

+ **Genesis.Core.GameElements**

GameElement.OnUpdate(Game, IRenderDevice)

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_OnUpdate_Genesis_Core_Game_Genesis_Graphics_

BufferedSprite

IRenderDevice)

([Genesis.Core.GameElements.Buffer](#)

GameElement.OnDestroy(Game)

CameraElement

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_OnDestroy_Genesis_Core_Game_

([Genesis.Core.GameElements.Came](#)

GameElement.AddBehavior<T>(T)

Element3D

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_AddBehavior_1__0_)

([Genesis.Core.GameElements.Eleme](#)

GameElement.AddBehavior(IGameBehavior)

Empty

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_AddBehavior_Genesis_Core_IGameBehavior_

([Genesis.Core.GameElements.Empty](#))

GameElement.GetBehavior<T>() ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_GetBehavior_1)

Qube

GameElement.GetBehaviors<T>()

([Genesis.Core.GameElements.Qube](#))

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_GetBehaviors_1)

RectElement

GameElement.AddChild(GameElement)

([Genesis.Core.GameElements.RectE](#)

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_AddChild_Genesis_Core_GameElement_)

Skybox

GameElement.GetInstance(GameElement)

([Genesis.Core.GameElements.Skybc](#))

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement.GetInstance_Genesis_Core_GameElement_)

Sprite

GameElement.Name ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Name)

([Genesis.Core.GameElements.Sprite](#))

GameElement.Tag ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Tag)

Terrain2D

GameElement.Location ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Location)

([Genesis.Core.GameElements.Terrai](#)

GameElement.Rotation ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Rotation)

Terrain3D

GameElement.Size ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Size)

([Genesis.Core.GameElements.Terrai](#))

GameElement.Behaviors ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Behaviors)

TerrainData

GameElement.Scene ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Scene)

([Genesis.Core.GameElements.Terrai](#))

GameElement.Enabled ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Enabled)

+ **Genesis.Graphics**

GameElement.Properties ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Properties)

([Genesis.Graphics.html](#))

GameElement.Parent ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_Parent)

GameElement.UUID ([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_UUID)

object.ToString () (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))

+ **Genesis.Graphics.Physics**

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)))

+ **Genesis.Graphics.RenderDevice**

object.Equals(object, object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object-object)))

+ **Genesis.Graphics.Shaders.Open**

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Namespace: Genesis ([Genesis.html](#)).Core ([Genesis.Core.html](#)).GameElements ([Genesis.Core.GameElements.html](#))

Assembly: Genesis.dll

Syntax

([Genesis.Core.Behaviors.html](#))

```
public class RectElement : GameElement  
+ Genesis.Core.Behaviors.Physics
```

([Genesis.Core.Behaviors.Physics](#))

Constructors

([Genesis.Core.Behaviors.Physics](#))

RectElement(string, Vec3, Vec3)

([Genesis.Core.GameElements.h](#))

Creates a new rectangle
BufferedSprite

Declaration

CameraElement

```
(Genesis.Core.GameElements.CameraElement)  
public RectElement(string name, Vec3 location, Vec3 size)  
Element3D
```

([Genesis.Core.GameElements.Element3D](#))

Parameters

Empty

Type		Name	Description
Qube			
string (https://learn.microsoft.com/dotnet/api/system.string)		name	The name of the rectangle.
RectElement (Genesis.Math.Vec3.html) (Genesis.Core.GameElements.RectElement)		location	The location of the rectangle.
Vec3 (Genesis.Math.Vec3.html)		size	The size of the rectangle.

([Genesis.Core.GameElements.Skybox](#))
Sprite

([Genesis.Core.GameElements.Sprite](#))

Terrain2D

([Genesis.Core.GameElements.Terrain2D](#))

Terrain3D

([Genesis.Core.GameElements.Terrain3D](#))

BorderColor

([Genesis.Core.GameElements.TerrainData](#))

Gets the color of the rectangle's border.

Graphics

([Genesis.Graphics.html](#))

```
public Color BorderColor { get; set; }  
+ Genesis.Graphics.Physics
```

([Genesis.Graphics.Physics.html](#))

Property Value

Type	Description
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	

+ [Genesis.Graphics.RenderDevice](#)

([Genesis.Graphics.RenderDevice](#))

Color (<https://learn.microsoft.com/dotnet/api/system.drawing.color>)

+ [Genesis.Graphics.Shaders.Operator](#)

BorderWidth

Gets or sets the width of the rectangle border.

Declaration

```
public float BorderWidth { get; set; }
```

Properties ([Genesis.Core.Behaviors.html](#))

Type	Description
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)	float (https://learn.microsoft.com/dotnet/api/system.single)

+ Genesis.Core.Behaviors.Physics ([Genesis.Core.Behaviors.Physics](#))

Fill

- [Genesis.Core.GameElements](#)

([Genesis.Core.GameElements](#))

Declaration

([Genesis.Core.GameElements.Buffer](#))

[CameraElement](#)

```
public Color Fill { get; set; }
```

([Genesis.Core.GameElements.Came](#))

[Element3D](#)

Properties ([Genesis.Core.GameElements.Element3D](#))

Type	Description
Empty (Genesis.Core.GameElements.Empty)	

Color (<https://learn.microsoft.com/dotnet/api/system.drawing.color>)

([Genesis.Core.GameElements.Qube](#))

[RectElement](#)

([Genesis.Core.GameElements.RectE](#))

HasBorder

[Skybox](#)

([Genesis.Core.GameElements.Skybox](#))

Gets or sets a value indicating whether the rectangle has a border.

[Sprite](#)

Declaration

([Genesis.Core.GameElements.Sprite](#))

[Terrain2D](#)

```
public bool HasBorder { get; set; }
```

[Terrain3D](#)

([Genesis.Core.GameElements.Terrai](#))

Properties ([TerrainData](#))

Type	Description
Genesis.Core.GameElements.Terrai	

bool (<https://learn.microsoft.com/dotnet/api/system.boolean>)

([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

HasFill ([Genesis.Graphics.Physics.html](#))

Gets or sets a value indicating whether the rectangle has fill color.

+ Genesis.Graphics.RenderDevice

Declaration

+ Genesis.Graphics.Shaders.Oper

```
public bool HasFill { get; set; }
```

Property Value

Type	Description
bool (https://learn.microsoft.com/dotnet/api/system.boolean)	

([Genesis.Core.Behaviors.html](#))

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

- [Genesis.Core.GameElements](#)

Renders the rectangle

([Genesis.Core.GameElements.html](#))

Declaration

BufferedSprite

([Genesis.Core.GameElements.BufferedSprite.html](#))

```
public override void OnRender(Game game, IRenderDevice renderDevice)
```

([Genesis.Core.GameElements.CameraElement.html](#))

([Genesis.Core.GameElements.CameraElement.html](#))

([Genesis.Core.GameElements.Element3D.html](#))

Parameters

([Genesis.Core.GameElements.Element3D.html](#))

Type

Empty

([Genesis.Core.GameElements.Empty.html](#))

Game

([Genesis.Core.Game.html](#))

Qube

([Genesis.Core.GameElements.Qube.html](#))

IRenderDevice ([Genesis.Graphics.RenderDevice.html](#))

([Genesis.Core.GameElements.RenderDevice.html](#))

Name

game

The game instance.

renderDevice

The render device used for rendering.

RectElement

([Genesis.Core.GameElements.RectElement.html](#))

Overloads

GameElement.OnRender(Game, IRenderDevice)

([Genesis.Core.GameElement.OnRender.html](#))

Skybox

([Genesis.Core.GameElements.Skybox.html](#))

IRenderDevice

([Genesis.Core.GameElements.IRenderDevice.html](#))

([Genesis.Core.GameElements.IRenderDevice.html](#))

Sprite

([Genesis.Core.GameElements.Sprite.html](#))

Terrain2D

([Genesis.Core.GameElements.Terrain2D.html](#))

Terrain3D

([Genesis.Core.GameElements.Terrain3D.html](#))

TerrainData

([Genesis.Core.GameElements.TerrainData.html](#))

+ [Genesis.Graphics](#)

([Genesis.Graphics.html](#))

+ [Genesis.Graphics.Physics](#)

([Genesis.Graphics.Physics.html](#))

+ [Genesis.Graphics.RenderDevice](#)

([Genesis.Graphics.RenderDevice.html](#))

+ [Genesis.Graphics.Shaders.Oper](#)

([Genesis.Graphics.Shaders.Operations.html](#))

Class Skybox

Represents a skybox element in a 3D environment.

Enter here to filter...

Inheritance

([Genesis.Core.Behaviors.html](#))

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

+ **Genesis.Core.Behaviors.Physics**

↳ Element3D ([Genesis.Core.GameElements.Element3D.html](#))

(**Genesis.Core.Behaviors.Physics**)

↳ Skybox

+ **Genesis.Core.Behaviors.Physics**

Inherited Members

(**Genesis.Core.Behaviors.Physics**)

Element3D.Init(Game, IRenderDevice)

([Genesis.Core.GameElements.html](#)#Genesis_Core_GameElements_Element3D_Init_Genesis_Core_Game_Elements_Element3D_Init)

(**Genesis.Core.GameElements.h**)

Element3D.OnRender(Game, IRenderDevice)

BufferedSprite

([Genesis.Core.GameElements.Element3D.html](#)#Genesis_Core_GameElements_Element3D_OnRender_Genesis_Core_Game_Elements_Element3D_OnRender)

CameraElement

Element3D.OnDestroy(Game)

([Genesis.Core.GameElements.Came.html](#))

([Genesis.Core.GameElements.Element3D.html](#)#Genesis_Core_GameElements_Element3D_OnDestroy_Genesis_Core_Element3D)

_Game

([Genesis.Core.GameElements.Element3D.html](#))

Element3D.GetShape()

Empty

([Genesis.Core.GameElements.Element3D.html](#)#Genesis_Core_GameElements_Element3D_GetShape)

Element3D.GetMaterialBuffers(int)

Qube

([Genesis.Core.GameElements.Element3D.html](#)#Genesis_Core_GameElements_Element3D_GetMaterialBuffers_Syste_m_Int32)

RectElement

Element3D.Shader

([Genesis.Core.GameElements.RectE.html](#))

([Genesis.Core.GameElements.Element3D.html](#)#Genesis_Core_GameElements_Element3D_Shader)

Skybox

Element3D.Meshes

([Genesis.Core.GameElements.Skybox.html](#))

([Genesis.Core.GameElements.Element3D.html](#)#Genesis_Core_GameElements_Element3D_Meshes)

Sprite

Element3D.Materials

([Genesis.Core.GameElements.Sprite.html](#))

([Genesis.Core.GameElements.Element3D.html](#)#Genesis_Core_GameElements_Element3D_Materials)

Terrain2D

GameElement.AddBehavior<T>(T)

([Genesis.Core.GameElements.Terrai.html](#))

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_AddBehavior_1__0_)

Terrain3D

GameElement.AddBehavior(IGameBehavior)

([Genesis.Core.GameElements.Terrai.html](#))

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_AddBehavior_Genesis_Core_IGameBehavior_1)

TerrainData

GameElement.GetBehavior<T>()

([Genesis.Core.GameElements.Terrai.html](#))

GameElement.GetBehaviors<T>()

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_GetBehaviors_1)

GameElement.AddChild(GameElement)

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_AddChild_Genesis_Core_GameElement_1)

GameElement.CreateInstance(GameElement)

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_GetInstance_Genesis_Core_GameElement_1)

GameElement.Name (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Name)

+ **Genesis.Graphics.RenderDevice**

GameElement.Tag (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Tag)

(**Genesis.Graphics.RenderDevice**)

GameElement.Location (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Location)

GameElement.Rotation (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Rotation)

+ **Genesis.Graphics.Shaders.Open**

GameElement.Size (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Size)
GameElement.Behaviors (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Behaviors)
GameElement.Scene (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Scene)
GameElement.Enabled (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Enabled)
GameElement.Propertys (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Propertys)
GameElement.Children (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Children)
GameElement.Parent (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Parent)
GameElement.UUID (Genesis.Core.GameElement.html#Genesis_Core_GameElement_UUID)
object (https://learn.microsoft.com/dotnet/api/system.object.tostring)
object.Equals(object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))
+ **Genesis.Core.Behaviors.Physics**

(**Genesis.Core.Behaviors.Physics**)
object.Equals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object))

+ **Genesis.Core.Behaviors.Physics**
object.ReferenceEquals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.referenceequals)
(**Genesis.Core.Behaviors.Physics**)
object.GetHashCode() (https://learn.microsoft.com/dotnet/api/system.object.gethashcode)

object.GetType() (https://learn.microsoft.com/dotnet/api/system.object.gettype)

object.MemberwiseClone() (https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)

(**Genesis.Core.GameElements**)

Namespace: Genesis (Genesis.html).Core (Genesis.Core.html).GameElements (Genesis.Core.GameElements.html)

Assembly: Genesis.dll GameElements.Buffer

Syntax

```
CameraElement  
(Genesis.Core.GameElements.CameraElement)  
Element3D  
public class Skybox : Element3D  
(Genesis.Core.GameElements.Element3D)  
Empty  
(Genesis.Core.GameElements.Empty)
```

Constructors

(Genesis.Core.GameElements.Qube)
RectElement

Skybox(string, string, Vec3, Vec3, Vec3)

Skybox

Initializes a new instance of the `Skybox` class with specified name, texture path, location, rotation, and scale.
(Genesis.Core.GameElements.Skybox)

Sprite

(Genesis.Core.GameElements.Sprite)
Terrain2D

```
public Skybox(string name, string path, Vec3 location, Vec3 rotation, Vec3 scale)  
(Genesis.Core.GameElements.Terrain2D)  
Terrain3D
```

Parameters

(Genesis.Core.GameElements.Terrain2D)

Type

(Genesis.Core.GameElements.TerrainData)

string (https://learn.microsoft.com/dotnet/api/system.string)

+ **Genesis.Graphics**

string (https://learn.microsoft.com/dotnet/api/system.string)

(**Genesis.Graphics.html**)

Vec3 (Genesis.Math.Vec3.html)

+ **Genesis.Graphics.Physics**

Vec3 (Genesis.Math.Vec3.html)

+ **Genesis.Graphics.RenderDevice**

(**Genesis.Graphics.RenderDevice**)

+ **Genesis.Graphics.Shaders.Oper**

Type	Name	Description
(Genesis.Core.GameElements.TerrainData)	<i>name</i>	The name of the skybox.
string (https://learn.microsoft.com/dotnet/api/system.string)	<i>path</i>	The path to the texture for the skybox.
Vec3 (Genesis.Math.Vec3.html)	<i>location</i>	The initial location of the skybox.
Vec3 (Genesis.Math.Vec3.html)	<i>rotation</i>	The initial rotation of the skybox.
Vec3 (Genesis.Math.Vec3.html)	<i>scale</i>	The initial scale of the skybox.

Methods

OnUpdate(Game, IRenderDevice)

Updates the skybox position based on the selected scene's camera location.

Declaration

([Genesis.Core.Behaviors.html](#))

```
public override void OnUpdate(Game game, IRenderDevice renderDevice)
```

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

Parameters

Type	Name	Description
(Genesis.Core.Behaviors.Physics.html) Game (Genesis.Core.Game.html)	game	The game instance.
- Genesis.Core.GameElements IRenderDevice (Genesis.Graphics.IRenderDevice.html)	renderDevice	The render device used for rendering.

Overrides

([Genesis.Core.GameElements.BufferElement3D.OnUpdate.html](#))

Element3D.OnUpdate(Game, IRenderDevice)

([Genesis.Core.GameElements.Element3D.html](#)#[Genesis_Core_GameElements_Element3D_OnUpdate_Genesis_Core_Game_Graphics_IRenderDevice_](#))

Element3D

([Genesis.Core.GameElements.Element3D.html](#))

Empty

([Genesis.Core.GameElements.Empty.html](#))

Qube

([Genesis.Core.GameElements.Qube.html](#))

RectElement

([Genesis.Core.GameElements.RectElement.html](#))

Skybox

([Genesis.Core.GameElements.Skybox.html](#))

Sprite

([Genesis.Core.GameElements.Sprite.html](#))

Terrain2D

([Genesis.Core.GameElements.Terrain2D.html](#))

Terrain3D

([Genesis.Core.GameElements.Terrain3D.html](#))

TerrainData

([Genesis.Core.GameElements.TerrainData.html](#))

+ Genesis.Graphics

([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

([Genesis.Graphics.RenderDevice.html](#))

+ Genesis.Graphics.Shaders.Oper

Class Sprite

Represents a sprite element in a 2D or 3D environment.

Enter here to filter...

Inheritance

([Genesis.Core.Behaviors.html](#))

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

+ **Genesis.Core.Behaviors.Physics**

↳ Sprite

([Genesis.Core.Behaviors.Phy](#)

Inherited Members

+ **Genesis.Core.Behaviors.Physics**

GameElement.OnUpdate(Game, IRenderDevice)

([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_OnUpdate_Genesis_Core_Game_Genesis_Graphics_](#)

+ **Genesis.Core.GameElements**

GameElement.AddBehavior<T>()

↳ BufferedSprite

GameElement.AddBehavior(IGameBehavior)

↳ (Genesis.Core.GameElements.Buffer

([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_AddBehavior_Genesis_Core_IGameBehavior_](#)

CameraElement

GameElement.GetBehavior<T>().([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_GetBehavior_1](#))

GameElement.GetBehaviors<T>()

↳ Element3D

([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_GetBehaviors_1](#))

↳ (Genesis.Core.GameElements.Eleme

GameElement.AddChild(GameElement)

↳ Empty

([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_AddChild_Genesis_Core_GameElement_](#))

↳ (Genesis.Core.GameElements.Empty

GameElement.GetInstance(GameElement)

↳ Qube

([Genesis.Core.GameElement.html](#)#[Genesis_Core_GameElement_GetInstance_Genesis_Core_GameElement_](#))

↳ (Genesis.Core.GameElements.Qube

GameElement.Name (Genesis.Core.GameElement.html#[Genesis_Core_GameElement_Name](#))

↳ RectElement

GameElement.Tag (Genesis.Core.GameElement.html#[Genesis_Core_GameElement_Tag](#))

↳ (Genesis.Core.GameElements.RectE

GameElement.Location (Genesis.Core.GameElement.html#[Genesis_Core_GameElement_Location](#))

↳ Skybox

GameElement.Rotation (Genesis.Core.GameElement.html#[Genesis_Core_GameElement_Rotation](#))

↳ (Genesis.Core.GameElements.Skybo

GameElement.Size (Genesis.Core.GameElement.html#[Genesis_Core_GameElement_Size](#))

↳ Sprite

GameElement.Behaviors (Genesis.Core.GameElement.html#[Genesis_Core_GameElement_Behaviors](#))

↳ (Genesis.Core.GameElements.Sprite

GameElement.Scene (Genesis.Core.GameElement.html#[Genesis_Core_GameElement_Scene](#))

↳ Terrain2D

GameElement.Enabled (Genesis.Core.GameElement.html#[Genesis_Core_GameElement_Enabled](#))

↳ (Genesis.Core.GameElements.Terrai

GameElement.Properties (Genesis.Core.GameElement.html#[Genesis_Core_GameElement_Propertys](#))

↳ Terrain3D

GameElement.Children (Genesis.Core.GameElement.html#[Genesis_Core_GameElement_Children](#))

↳ (Genesis.Core.GameElements.Terrai

GameElement.Parent (Genesis.Core.GameElement.html#[Genesis_Core_GameElement_Parent](#))

↳ TerrainData

GameElement.UUID (Genesis.Core.GameElement.html#[Genesis_Core_GameElement_UUID](#))

↳ (Genesis.Core.GameElements.Terrai

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

+ **Genesis.Graphics** ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](#))

([Genesis.Graphics.html](#))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))

+ **Genesis.Graphics.Physics** ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](#))

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

+ **Genesis.Graphics.RenderDevice** ([https://learn.microsoft.com/dotnet/api/system.object.gettype#system-object-gettype](#))

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Genesis.Graphics.Shaders.Open ([https://learn.microsoft.com/dotnet/api/genesis.core.html#genesis.core-gameelements](#)) ([Genesis.Core.GameElements.html](#))

Syntax

```
public class Sprite : GameElement
```

▼

Constructors

([Genesis.Core.Behaviors.html](#))

Sprite(String, Vec3, Vec3, Texture)

([Genesis.Core.Behaviors.Physics](#))

Initializes a new instance of the `Sprite` class with specified name, location, size, and texture.

+ **Genesis.Core.Behaviors.Physics**

Declaration

([Genesis.Core.Behaviors.Physics](#))

- **Genesis.Core.GameElements.Sprite**(Vec3 location, Vec3 size, Texture texture)

([Genesis.Core.GameElements.h](#))

Parameters

Type	Description
CameraElement	
string (https://learn.microsoft.com/dotnet/api/system.string)	<i>name</i> The name of the sprite.
Element3D	
Vec3 (Genesis.Math.Vec3.html)	<i>location</i> The initial location of the sprite.
Empty	
Vec3 (Genesis.Math.Vec3.html)	<i>size</i> The size of the sprite.
Texture (Genesis.Graphics.Texture.html)	<i>texture</i> The texture for the sprite.

([Genesis.Core.GameElements.Qube](#))

RectElement

([Genesis.Core.GameElements.RectElement](#))

Skybox

([Genesis.Core.GameElements.Skybox](#))

Sprite

Color

([Genesis.Core.GameElements.Sprite](#))

Terrain2D

Gets or sets the color of the sprite.

([Genesis.Core.GameElements.Terrain2D](#))

Terrain3D

([Genesis.Core.GameElements.Terrain3D](#))

TerrainData

public Color Color { get; set; }

([Genesis.Core.GameElements.TerrainData](#))

+ **Genesis.Graphics**

Property Value

([Genesis.Graphics.html](#))

Type

+ **Genesis.Graphics.Physics**

Color (<https://learn.microsoft.com/dotnet/api/system.drawing.color>)

([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

OcclusionCulling

+ **Genesis.Graphics.Shaders.Oper**

Description

Gets or sets a value indicating whether occlusion culling is enabled for the sprite.

Declaration

```
public bool OcclusionCulling { get; set; }
```

Property Value		
Type	Description	
(Genesis.Core.Behaviors.html) bool (https://learn.microsoft.com/dotnet/api/system.boolean)		
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)		
+ Genesis.Core.Behaviors.Physics TexCoords (Genesis.Core.Behaviors.Physics)		
Gets or sets the texture coordinates of the sprite.		
- Genesis.Core.GameElements		
Declaration (Genesis.Core.GameElements.h)		
BufferedSprite public TexCoords TexCoords { get; set; } (Genesis.Core.GameElements.Buffer)		
CameraElement (Genesis.Core.GameElements.Came		
Property Value		
Element3D (Genesis.Core.GameElements.Eleme		
Empty TexCoords (Genesis.Graphics.TexCoord		
(Genesis.Core.GameElements.Empty)		
Qube (Genesis.Core.GameElements.Qube)		
Texture		
Element		
(Genesis.Core.GameElements.RectE		
Gets or sets the texture of the sprite.		
Skybox (Genesis.Core.GameElements.Skybo		
Declaration		
Sprite (Genesis.Core.GameElements.Sprite)		
public Texture Texture { get; set; }		
Terrain2D (Genesis.Core.GameElements.Terrai		
Property Value		
Terrain (Genesis.Core.GameElements.Terrai		
TerrainData (Genesis.Core.GameElements.Terrain		
Texture (Genesis.Graphics.Texture.html)		
+ Genesis.Graphics		
(Genesis.Graphics.html)		
Methods Physics		
(Genesis.Graphics.Physics.html)		
CalculateVertices (Genesis.Graphics.RenderDevice)		
Calculates the vertex coordinates of the sprite.		
+ Genesis.Graphics.Shaders.Oper		

Declaration

```
public float[] CalculateVerticies()
```

Returns

Type	Description
float (Genesis.Core.Behaviors.html) (https://learn.microsoft.com/dotnet/api/system.single) + Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)	An array containing the vertex coordinates of the sprite.

+ Genesis.Core.Behaviors.Physics
GetBounds2D()
 (Genesis.Core.Behaviors.Physics)

Gets the 2D bounds of the sprite.

Genesis.Core.GameElements

Declaration

 BufferedSprite
 p
 (Genesis.Core.GameElements).BufferedSprite
 CameraElement
 (Genesis.Core.GameElements.CameraElement)
Returns

 Element3D

Type	Description
Empty Rect (Genesis.Math.Rect.html) ((Genesis.Core.GameElements.Empty))	A rectangular region representing the 2D bounds of the sprite.

 Qube
 (Genesis.Core.GameElements.Qube)

GetCenterLocation()

 (Genesis.Core.GameElements.RectElement)
Gets the center location of the sprite.

 Skybox
 (Genesis.Core.GameElements.Skybox)

Declaration

 Sprite
 (Genesis.Core.GameElements.Sprite)
 public Vec3 GetCenterLocation()
 Terrain2D

 (Genesis.Core.GameElements.Terrain2D)

 Terrain3D
 (Genesis.Core.GameElements.Terrain3D)

 TerrainData
 (Genesis.Core.GameElements.TerrainData)

 Vec3
 (Genesis.Math.Vec3)

Returns

Type	Description
Vec3 (Genesis.Math.Vec3.html)	The center location of the sprite.

+ Genesis.Graphics

 (Genesis.Graphics.html)

Init(Game, IRenderDevice)

+ Genesis.Graphics.Physics

 Initialize the graphics element.

 (Genesis.Graphics.Physics.html)

Declaration

 Graphics.RenderDevice
 (Genesis.Graphics.RenderDevice)

+ Genesis.Graphics.Shaders.Oper

```
public override void Init(Game game, IRenderDevice renderDevice)
```

Parameters

Type		Name	Description
Game (Genesis.Core.Game.html)		game	The game instance.
IRenderDevice (Genesis.Graphics.IRenderDevice.html)		renderDevice	The render device used for rendering.

+ Genesis.Core.Behaviors.Physics

Overrides

(Genesis.Core.Behaviors.Physics)

GameElement.Init(Game, IRenderDevice)

(Genesis.Core.Behaviors.Physics)

GameElement.OnDestroy(Game game)

(Genesis.Core.Behaviors.Physics)

- Genesis.Core.GameElements

OnDestroy(Game) GameElements.h

BufferedSprite

Handles cleanup and resource disposal when the sprite is destroyed.

(Genesis.Core.GameElements.Buffer

Declaration

Element

(Genesis.Core.GameElements.Came

Element3D

public override void OnDestroy(Game game)

(Genesis.Core.GameElements.Elem

Empty

Parameters

(Genesis.Core.GameElements.Empty)

Type

Cube

(Genesis.Core.GameElements.Qube

Game (Genesis.Core.Game.html)

RectElement

(Genesis.Core.GameElements.RectE

Overrides

Skybox

GameElement.OnDestroy(Game)

(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnDestroy_Genesis_Core_Game_)

(Genesis.Core.GameElements.Sprite

Terrain2D

OnRender(Game, IRenderDevice)

(Genesis.Core.GameElements.Terrai

Terrain3D

Renders the sprite element.

(Genesis.Core.GameElements.Terrai

Declaration

Data

(Genesis.Core.GameElements.Terrai

```
public override void OnRender(Game game, IRenderDevice renderDevice)
```

+ Genesis.Graphics

(Genesis.Graphics.html)

Parameters

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Game (Genesis.Core.Game.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

+ Genesis.Graphics.Shaders.Oper

Overrides

GameElement.OnRender(Game, IRenderDevice)

(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnRender_Genesis_Core_Game_Genesis_Graphics_IREnderDevice_)

▼

(Genesis.Core.Behaviors.html)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics\)](#)

- **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.h\)](#)

 BufferedSprite
[\(Genesis.Core.GameElements.BufferedSprite\)](#)
 CameraElement
[\(Genesis.Core.GameElements.CameraElement\)](#)
 Element3D
[\(Genesis.Core.GameElements.Element3D\)](#)
 Empty
[\(Genesis.Core.GameElements.Empty\)](#)
 Qube
[\(Genesis.Core.GameElements.Qube\)](#)
 RectElement
[\(Genesis.Core.GameElements.RectElement\)](#)
 Skybox
[\(Genesis.Core.GameElements.Skybox\)](#)
 Sprite
[\(Genesis.Core.GameElements.Sprite\)](#)
 Terrain2D
[\(Genesis.Core.GameElements.Terrain2D\)](#)
 Terrain3D
[\(Genesis.Core.GameElements.Terrain3D\)](#)
 TerrainData
[\(Genesis.Core.GameElements.TerrainData\)](#)

+ **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)

+ **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)

+ **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)

+ **Genesis.Graphics.Shaders.Oper**

Class Terrain2D

Represents a 2D terrain element.

Enter here to filter...

Inheritance

(Genesis.Core.Behaviors.html)	
↳ object (https://learn.microsoft.com/dotnet/api/system.object)	
+ Genesis.Core.Behaviors.Physics	GameElement (https://learn.microsoft.com/dotnet/api/genesis.core.gameelement.html)
	↳ Terrain2D
(Genesis.Core.Behaviors.Physics)	
Inherited Members	
+ Genesis.Core.Behaviors.Physics	GameElement.OnUpdate (Game , IRenderDevice)
(Genesis.Core.Behaviors.Physics)	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnUpdate_Genesis_Core_Game_Graphics_Resources)
+ Genesis.Core.GameElements	GameElement.AddBehavior (T)
(Genesis.Core.GameElements.h)	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddBehavior_1__0_)
BufferedSprite	GameElement.AddBehavior (IGameBehavior)
(Genesis.Core.GameElements.Buffer)	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddBehavior_Genesis_Core_IGameBehavior_CameraElement)
CameraElement	GameElement.GetBehavior (<T>) ()
(Genesis.Core.GameElements.Camera)	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetBehavior_1)
Element3D	GameElement.GetBehaviors (<T>())
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetBehaviors_1)	(Genesis.Core.GameElements.Element)
Empty	GameElement.AddChild (GameElement)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddChild_Genesis_Core_GameElement_Empty)	(Genesis.Core.GameElements.Empty)
GameElement	GameElement.GetInstance (GameElement)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetInstance_Genesis_Core_GameElement_Qube)	(Genesis.Core.GameElements.Qube)
Qube	GameElement.Name (GameElement)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Name)	(Genesis.Core.GameElements.Rect)
Rect	GameElement.Tag (GameElement)
(Genesis.Core.GameElements.Rect)	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Location)
Skybox	GameElement.Location (GameElement)
(Genesis.Core.GameElements.Skybox)	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Rotation)
Sprite	GameElement.Size (GameElement)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Size)	(Genesis.Core.GameElements.Sprite)
Sprite	GameElement.Behaviors (GameElement)
(Genesis.Core.GameElements.Sprite)	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Scene)
Scene	GameElement.Terrain2D
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Terrain2D)	(Genesis.Core.GameElements.Terrain)
Terrain2D	GameElement.Enabled (GameElement)
(Genesis.Core.GameElements.Terrain)	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Terrain3D)
Terrain3D	GameElement.Properties (GameElement)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Properties)	(Genesis.Core.GameElements.Terrain)
Properties	GameElement.Children (GameElement)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Children)	(Genesis.Core.GameElements.TerrainData)
Children	GameElement.Parent (GameElement)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Parent)	(Genesis.Core.GameElements.TerrainData)
Parent	GameElement.UUID (GameElement)
(Genesis.Core.GameElements.TerrainData)	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Uuid)
UUID	object.ToString() (https://learn.microsoft.com/dotnet/api/system.object.ToString)
+ Genesis.Graphics	object.Equals (object , object) ()
(Genesis.Graphics.html)	
object.Equals(object, object)	(https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals#system-object-equals(system-object-system-object))
+ Genesis.Graphics.Physics	object.ReferenceEquals (object , object) ()
(Genesis.Graphics.Physics.html)	
object.GetHashCode()	(https://learn.microsoft.com/dotnet/api/system.object.gethashcode) (https://learn.microsoft.com/dotnet/api/system.object.gethashcode)
+ Genesis.Graphics.RenderDevice	object.GetType() ()
(Genesis.Graphics.RenderDevice.html)	
object.MemberwiseClone()	(https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone) (https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)
+ Genesis.Graphics.Shaders.OpenGL	(Genesis.Core.html).GameElements (https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.html)

Syntax

```
public class Terrain2D : GameElement
```



Constructors

([Genesis.Core.Behaviors.html](#))

Terrain2D(string, Vec3, float, float, float, Texture)

([Genesis.Core.Behaviors.Physics.html](#))

Initializes a new instance of the Terrain2D class with specified name, location, cell counts, cell size, and texture.

+ **Genesis.Core.Behaviors.Physics**

Declaration

([Genesis.Core.Behaviors.Physics.html](#))

- **Genesis.Core.GameElements**, Vec3 location, float cellsX, float cellsY, float cellSize, Tex

([Genesis.Core.GameElements.h](#))

BufferedSprite

([Genesis.Core.GameElements.BufferedSprite.h](#))

Type	Name	Description
CameraElement (Genesis.Core.GameElements.CameraElement.html)		
string (Terrain3D.html)	<i>name</i>	The name of the terrain.
Vec3 (Genesis.Math.Vec3.html)	<i>location</i>	The initial location of the terrain.
float (Genesis.Core.GameElements.Fleet.html)	<i>cellsX</i>	The number of cells in the X direction.
Qube float (Genesis.Core.GameElements.Qube.html)	<i>cellsY</i>	The number of cells in the Y direction.
RectElement float (Genesis.Core.GameElements.RectElement.html)	<i>cellSize</i>	The size of each cell.
Texture Skybox (Genesis.Graphics.Texture.html)	<i>texture</i>	The texture for the terrain.

([Genesis.Core.GameElements.Skybox.h](#))

Sprite

([Genesis.Core.GameElements.Sprite.h](#))

Terrain2D

([Genesis.Core.GameElements.Terrain2D.html](#))

Terrain3D

CellSize
([Genesis.Core.GameElements.Terrain2D.html](#))

TerrainData

Gets or sets the size of each cell.
([Genesis.Core.GameElements.Terrain2D.html](#))

Declaration

([Genesis.Graphics.html](#))

```
public float CellSize { get; set; }
```

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

Property Value

Type	Description
(Genesis.Graphics.RenderDevice.html)	
float (Genesis.Graphics.RenderDevice.html)	

+ **Genesis.Graphics.Shaders.Operator**

CellsX

Gets or sets the number of cells in the X direction.

Declaration

```
public float CellsX { get; set; }
```

Properties (Genesis.Core.Behaviors.html)

Type	Description
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)	float (https://learn.microsoft.com/dotnet/api/system.single)

+ Genesis.Core.Behaviors.Physics

[\(Genesis.Core.Behaviors.Physics\)](#)

CellsY

- Genesis.Core.GameElements

Gets or sets the number of cells in the Y direction.

Declaration

(Genesis.Core.GameElements.Buffer

CameraElement

```
public float CellsY { get; set; }
```

(Genesis.Core.GameElements.Came

Element3D

Properties (Genesis.Core.GameElements.Element.html)

Type	Description
+ Empty (Genesis.Core.GameElements.Empty)	

Empty

(Genesis.Core.GameElements.Empty)

float (<https://learn.microsoft.com/dotnet/api/system.single>)

(Genesis.Core.GameElements.Qube

RectElement

(Genesis.Core.GameElements.RectE

Texture

Skybox

(Genesis.Core.GameElements.Skybo

Gets or sets the texture of the terrain.

Sprite

Declaration

(Genesis.Core.GameElements.Sprite

Terrain2D

```
public TerrainElement Terrain; }
```

Terrain3D

(Genesis.Core.GameElements.Terrai

Properties (Genesis.Core.GameElements.TerrainData.html)

Type [Genesis.Core.GameElements.Terrai](#)

Type	Description
+ Genesis.Graphics (Genesis.Graphics.html)	

(Genesis.Graphics)

+ Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

Methods

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice](#)

GetBounds()

+ Genesis.Graphics.Shaders.Oper

Gets the 2D bounds of the terrain.

Declaration

```
public Rect GetBounds()
```

>Returns

Type	Description
(Genesis.Core.Behaviors.html)	

Rect ([Genesis.Math.Rect.html](#)) A rectangular region representing the 2D bounds of the terrain.

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics](#))

+ [Genesis.Core.Behaviors.Physics](#)

[Init\(Game, IRenderDevice\)](#)
([Genesis.Core.Behaviors.Physics](#))

Initializes the terrain element.

- **Genesis.Core.GameElements**

Declaration

([Genesis.Core.GameElements.h](#))

BufferedSprite

```
public override void Init(Game game, IRenderDevice renderDevice)
```

CameraElement

([Genesis.Core.GameElements.CameraElement.html](#))

Parameters

Element3D

Type	Name	Description
(Genesis.Core.GameElements.Element3D.html)		

Empty (Genesis.Core.Game.html)

Name

Description

([Genesis.Core.GameElements.Empty.html](#))

game

The game instance.

IRenderDevice ([Genesis.Graphics.IRenderDevice.html](#))

renderDevice

The render device used for rendering.

([Genesis.Core.GameElements.Qube.html](#))

Overrides

Element

([Genesis.Core.GameElements.Rect.html](#))

Skybox (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Init_Genesis_Core_Game_Graphics_IRenderDevice)

([Genesis.Core.GameElements.Skybox.html](#))

Sprite

([Genesis.Core.GameElements.Sprite.html](#))

OnDestroy(Game)

([Genesis.Core.GameElements.Terrain3D.html](#))

Handles cleanup and resource disposal when the terrain is destroyed.

Declaration

([Genesis.Core.GameElements.Terrain3D.html](#))

TerrainData

```
public override void OnDestroy(Game game)
```

+ [Genesis.Graphics](#)

([Genesis.Graphics.html](#))

+ [Genesis.Graphics.Physics](#)

([Genesis.Graphics.Physics.html](#))

Game ([Genesis.Core.Game.html](#))

Name

Description

game

The game instance.

+ [Genesis.Graphics.RenderDevice](#)

Overrides

([Genesis.Graphics.RenderDevice.html](#))

+ [Genesis.Graphics.Shaders.Oper](#)

GameElement.OnDestroy(Game)

(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnDestroy_Genesis_Core_Game_)

OnRender(Game, IRenderDevice)

Renders the terrain element.

Declaration

(Genesis.Core.Behaviors.html)

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics)

Parameters

+ **Genesis.Core.Behaviors.Physics**

Type

(Genesis.Core.Behaviors.Physics)

- **Game**

(Genesis.Core.Game.html)

- **Genesis.Core.GameElements**

(Genesis.Core.GameElements.html)

IRenderDevice

(Genesis.Core.RenderDevice.html)

Type	Name	Description
Game (Genesis.Core.Game.html)	game	The game instance.
IRenderDevice (Genesis.Core.RenderDevice.html)	renderDevice	The render device used for rendering.

BufferedSprite

Overridden by

(Genesis.Core.GameElements.Buffer

GameElement

GameElement.OnRender(Game, IRenderDevice)

(Genesis.Core.GameElements.GameElement.html#Genesis_Core_GameElement_OnRender_Genesis_Core_Game_Graphics_IRe

nderDevice)

(Genesis.Core.GameElements.Element)

Empty

(Genesis.Core.GameElements.Empty)

Qube

(Genesis.Core.GameElements.Qube)

RectElement

(Genesis.Core.GameElements.RectE

Skybox

(Genesis.Core.GameElements.Skybo

Sprite

(Genesis.Core.GameElements.Sprite)

Terrain2D

(Genesis.Core.GameElements.Terrai

Terrain3D

(Genesis.Core.GameElements.Terrai

TerrainData

(Genesis.Core.GameElements.Terrai

+ **Genesis.Graphics**

(Genesis.Graphics.html)

+ **Genesis.Graphics.Physics**

(Genesis.Graphics.Physics.html)

+ **Genesis.Graphics.RenderDevice**

(Genesis.Graphics.RenderDevice.html)

+ **Genesis.Graphics.Shaders.Oper**

Class Terrain3D

Represents a 3D terrain element.

▼ Enter here to filter...

Inheritance

(Genesis.Core.Behaviors.html)	
↳ object (https://learn.microsoft.com/dotnet/api/system.object)	
+ Genesis.Core.Behaviors.Physics	GameElement (https://learn.microsoft.com/dotnet/api/genesis.core.gameelement.html)
	↳ Terrain3D
(Genesis.Core.Behaviors.Physic	
Inherited Members	
+ Genesis.Core.Behaviors.Physics	GameElement.OnUpdate (Game , IPrenderDevice)
(Genesis.Core.Behaviors.Physic	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnUpdate_Genesis_Core_Game_Genesis_Graphics_
+ Genesis.Core.GameElements	+Renderable
(Genesis.Core.GameElements.h	GameElement.OnDestroy (Game)
	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnDestroy_Genesis_Core_Game_
	BufferedSprite
	GameElement.AddBehavior <T> (T)
	(Genesis.Core.GameElements.Buffer
	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddBehavior_1__0_)
	CaméraElement
	GameElement.AddBehavior (IGameBehavior)
	(Genesis.Core.GameElements.Came
	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddBehavior_Genesis_Core_IGameBehavior_
	Element3D
	GameElement.GetBehavior <T> ()
	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetBehavior_1)
	GameElement.GetBehaviors <T> ()
	Empty
	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetBehaviors_1)
	(Genesis.Core.GameElements.Empty
	GameElement.AddChild (GameElement)
	Qube
	(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddChild_Genesis_Core_GameElement_)
	(Genesis.Core.GameElements.Qube
	GameElement.GetInstance (GameElement)
	RectElement
	(Genesis.Core.GameElement.html#Genesis_Core_GameElementGetInstance_Genesis_Core_GameElement_)
	(Genesis.Core.GameElements.RectE
	GameElement.Name (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Name)
	Skybox
	GameElement.Tag (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Tag)
	GameElement.Location (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Location)
	Sprite
	GameElement.Rotation (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Rotation)
	(Genesis.Core.GameElements.Sprite
	GameElement.Size (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Size)
	Terrain2D
	GameElement.Behaviors (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Behaviors)
	(Genesis.Core.GameElements.Terrai
	GameElement.Scene (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Scene)
	Terrain3D
	GameElement.Enabled (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Enabled)
	(Genesis.Core.GameElements.Terrai
	GameElement.Propertys (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Propertys)
	TerrainData
	GameElement.Children (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Children)
	(Genesis.Core.GameElements.Terrai
	GameElement.Parent (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Parent)
Genesis.Graphics	Genesis.Core.GameElement.html#Genesis_Core_GameElement_UUID
(Genesis.Graphics.html)	object.ToString() (https://learn.microsoft.com/dotnet/api/system.object.tostring)
	object.Equals (object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object))
+ Genesis.Graphics.Physics	
(Genesis.Graphics.Physics.html)	object.Equals (object, object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object))
+ Genesis.Graphics.RenderDevice	object.ReferenceEquals (object, object) (https://learn.microsoft.com/dotnet/api/system.object.referenceequals)
(Genesis.Graphics.RenderDevice	object.GetHashCode() (https://learn.microsoft.com/dotnet/api/system.object.gethashcode)
+ Genesis.Graphics.Shaders.Open	object.GetType() (https://learn.microsoft.com/dotnet/api/system.object.gettype)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Namespace: Genesis ([Genesis.html](#)).Core ([Genesis.Core.html](#)).GameElements ([Genesis.Core.GameElements.html](#))

Assembly: Genesis.dll

Syntax

```
public class Terrain3D : GameElement
```

([Genesis.Core.Behaviors.html](#))

Constructors ([Genesis.Core.Behaviors.Physics.html](#))

([Genesis.Core.Behaviors.Physics.html](#))

Terrain3D (string, Vec3) Physics ([Terrain3D \(string, Vec3\) Physics.html](#))

([Genesis.Core.Behaviors.Physics.html](#))

Initializes a new instance of the Terrain3D class with default values.

- **Genesis.Core.GameElements**

Declaration

([Genesis.Core.GameElements.h](#))

```
public Terrain3D(string name, Vec3 location)
```

([Genesis.Core.GameElements.Buffer.html](#))

CameraElement

Parameters ([Genesis.Core.GameElements.CameraElement.html](#))

Element3D

([Genesis.Core.GameElements.Element3D.html](#))

Name

Description

string (<https://learn.microsoft.com/dotnet/api/system.string>)

name

The name of the terrain.

Empty

([Genesis.Core.GameElements.Empty.html](#))

location

The initial location of the terrain.

Vec3 ([Genesis.Math.Vec3.html](#))

Qube

([Genesis.Core.GameElements.Qube.html](#))

RectElement

Terrain3D (string, Vec3, int, int, int, int) ([Terrain3D \(string, Vec3, int, int, int, int\).html](#))

Skybox

Initializes a new instance of the Terrain3D class with specified name, location, cell counts, and cell dimensions.

([Genesis.Core.GameElements.Skybox.html](#))

Sprite

([Genesis.Core.GameElements.Sprite.html](#))

Terrain2D

public Terrain3D(string name, Vec3 location, int cellsX, int cellsZ, int cellWidth, int cellHeight)

([Genesis.Core.GameElements.Terrain2D.html](#))

Terrain3D

([Genesis.Core.GameElements.Terrain3D.html](#))

Parameters ([TerrainData.html](#))

Element3D

([Genesis.Core.GameElements.Element3D.html](#))

Name

Description

string (<https://learn.microsoft.com/dotnet/api/system.string>)

name

The name of the terrain.

([Genesis.Graphics.html](#))

Vec3 ([Genesis.Math.Vec3.html](#))

location

The initial location of the terrain.

+ **Genesis.Graphics** ([Genesis.Graphics.html](#))

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

([Genesis.Graphics.Physics.html](#))

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

cellsX

The number of cells in the X direction.

+ **Genesis.Graphics.RenderDevice** ([Genesis.Graphics.RenderDevice.html](#))

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

cellsZ

The number of cells in the Z direction.

+ **Genesis.Graphics.Shaders.OpenGL** ([Genesis.Graphics.Shaders.OpenGL.html](#))

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

cellWidth

The width of each cell.

+ **Genesis.Graphics.Shaders.OpenGL** ([Genesis.Graphics.Shaders.OpenGL.html](#))

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

cellHeight

The height of each cell.

Type	Description
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	

TerrainData

Gets or sets the terrain data.

([Genesis.Core.Behaviors.html](#))

Declaration

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

- Type **Genesis.Core.GameElements**

([Genesis.Core.GameElements.html](#))

BufferedSprite

([Genesis.Core.GameElements.BufferedSprite.html](#))

CameraElement

([Genesis.Core.GameElements.CameraElement.html](#))

Element3D

([Genesis.Core.GameElements.Element3D.html](#))

CreateTerrainTileColor(Color)

([Genesis.Core.GameElements.Empty.html](#))

Creates color data for a terrain tile.

([Genesis.Core.GameElements.Qube.html](#))

Declaration

RectElement

([Genesis.Core.GameElements.RectElement.html](#))

```
public static float[] CreateTerrainTileColor(Color color)
```

Skybox

([Genesis.Core.GameElements.Skybox.html](#))

Sprite

([Genesis.Core.GameElements.Sprite.html](#))

Type **Terrain2D**

([Genesis.Core.GameElements.Terrain2D.html](#))

Color (<https://learn.microsoft.com/dotnet/api/system.drawing.color>)

Terrain3D

([Genesis.Core.GameElements.Terrain3D.html](#))

Returns **TerrainData**

Type **TerrainData**

float (<https://learn.microsoft.com/dotnet/api/system.single>)[]

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

GenerateTerrain(Bitmap, float, float)

([Genesis.Graphics.Physics.html](#))

Generates terrain data from a heightmap.

+ **Genesis.Graphics.RenderDevice**

Declaration

([Genesis.Graphics.RenderDevice.html](#))

+ **Genesis.Graphics.Shaders.Oper**

```
public static TerrainData GenerateTerrain(Bitmap heightmap, float heightScale, float cellSize)
```

Parameters

Type	Name	Description
Bitmap (https://learn.microsoft.com/dotnet/api/system.drawing.bitmap) (Genesis.Core.Behaviors.html)	heightmap	
float (https://learn.microsoft.com/dotnet/api/system.single) + Genesis.Core.Behaviors.Physics	heightScale	
float (https://learn.microsoft.com/dotnet/api/system.single) (Genesis.Core.Behaviors.Physics)	cellSize	

+ Genesis.Core.Behaviors.Physics

Returns
(Genesis.Core.Behaviors.Physics)

Type

- Genesis.Core.GameElements

TerrainData ([Genesis.Core.GameElements.TerrainData.html](https://genesis.core.gameelements.terrandata.html))
(Genesis.Core.GameElements.h)

BufferedSprite

(Genesis.Core.GameElements.Buffer
CAMERAELEMENT)

GenerateTerrainData(int, int, int, int, Color, Color)

(Genesis.Core.GameElements.Came

Generates terrain data based on specified parameters.
Element3D

(Genesis.Core.GameElements.Eleme

Empty

(Genesis.Core.GameElements.Empty

```
public static TerrainData GenerateTerrainData(int cellsX, int cellsZ, int cellWidth, int cel
```

lHeight, Color colorA, Color colorB)

(Genesis.Core.GameElements.Qube

RectElement

Parameters

(Genesis.Core.GameElements.RectE

Type	Name	Description
Skybox		
(Genesis.Core.GameElements.Skybox		
int (https://learn.microsoft.com/dotnet/api/system.int32) Sprite	cellsX	
int (https://learn.microsoft.com/dotnet/api/system.int32) Terrain2D	cellsZ	
int (https://learn.microsoft.com/dotnet/api/system.int32) Terrain3D	cellWidth	
int (https://learn.microsoft.com/dotnet/api/system.int32) (Genesis.Core.GameElements.Terrai	cellHeight	
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	colorA	
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	colorB	

+ Genesis.Graphics

Returns
(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

TerrainData ([Genesis.Core.GameElements.TerrainData.html](https://genesis.core.gameelements.terrandata.html))

Description

Type	Description
(Genesis.Graphics.Physics.html)	

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevic

GenerateTerrainTile(float, float, int, int)

+ Genesis.Graphics.Shaders.Oper

Generates a tile for the terrain grid.

Declaration

```
public static float[] GenerateTerrainTile(float x, float z, int cellWidth, int cellHeight)
```



Parameters

Type	Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	x	
float (https://learn.microsoft.com/dotnet/api/system.single)	z	
int (https://learn.microsoft.com/dotnet/api/system.int32)	cellWidth	
int (https://learn.microsoft.com/dotnet/api/system.int32)	cellHeight	

- Genesis.Core.GameElements

Returns [\(Genesis.Core.GameElements.h\)](#)

Type	Description
BufferedSprite ((Genesis.Core.GameElements.Buffer float (https://learn.microsoft.com/dotnet/api/system.single)[]	

(Genesis.Core.GameElements.Came
Element3D

Init(Game, IRenderDevice)

Empty

Initializes the terrain element.

(Genesis.Core.GameElements.Empty

Qube

(Genesis.Core.GameElements.Qube

RectElement

```
public override void Init(Game game, IRenderDevice renderDevice)
```

(Genesis.Core.GameElements.RectE

Skybox

(Genesis.Core.GameElements.Skybo

Sprite

(Genesis.Core.GameElements.Sprite

Terrain2D

(Genesis.Core.Game.html)

(Genesis.Core.GameElements.Terrai

IRenderDevice ([\(Genesis.Graphics.IRenderDevice.html\)](#))

(Genesis.Core.GameElements.Terrai

Terrain3D

(Genesis.Core.GameElements.Terrai

Overrides

TerrainData

GameElementData([\(Game, IRenderDevice\)](#))

(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Init_Genesis_Core_Game_Genesis_Graphics_IRe

+ **Genesis.Graphics**

Device)

([\(Genesis.Graphics.html\)](#))

+ **Genesis.Graphics.Physics**

OnRender(Game, IRenderDevice)

([\(Genesis.Graphics.Physics.html\)](#))

Renders the terrain element.

+ **Genesis.Graphics.RenderDevice**

Declaration ([\(Genesis.Graphics.RenderDevice.html\)](#))

+ **Genesis.Graphics.Shaders.Oper**

```
public override void OnRender(Game game, IRenderDevice renderDevice)
```

Parameters

Type	Name	Description
Game (Genesis.Core.Game.html)	game	
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	renderDevice	

+ Genesis.Core.Behaviors.Physics

Overrides

(Genesis.Core.Behaviors.Physics)

GameElement.OnRender(Game, IRenderDevice)

(Genesis.Core.Behaviors.Physics)

IRenderDevice.OnRender(IRenderDevice)

(Genesis.Core.Behaviors.Physics)

- Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

BufferedSprite

(Genesis.Core.GameElements.Buffer

CameraElement

(Genesis.Core.GameElements.Came

Element3D

(Genesis.Core.GameElements.Elem

Empty

(Genesis.Core.GameElements.Empty

Qube

(Genesis.Core.GameElements.Qube

RectElement

(Genesis.Core.GameElements.RectE

Skybox

(Genesis.Core.GameElements.Skyb

Sprite

(Genesis.Core.GameElements.Sprite

Terrain2D

(Genesis.Core.GameElements.Terrai

Terrain3D

(Genesis.Core.GameElements.Terrai

TerrainData

(Genesis.Core.GameElements.Terrai

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Oper

Struct TerrainData

Represents a 3D terrain element.

Enter here to filter...

Inherited Members -----

[\(Genesis.Core.Behaviors.html\)](#)

Value type.Equals(object) (<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

Value Type.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.valuetype.gethashcode>)

Value Type.ToString() (<https://learn.microsoft.com/dotnet/api/system.valuetype.tostring>)

object.Equals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals>)

[\(Genesis.Core.Behaviors.Physics.html\)](#)

[\(Genesis.Core.Behaviors.Physics.html\)](#)

[\(Genesis.Core.Behaviors.Physics.html\)](#)

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

[- Genesis.Core.GameElements](#)

Namespace: Genesis (Genesis.html).Core (Genesis.Core.html).GameElements (Genesis.Core.GameElements.html)

[\(Genesis.Core.GameElements.html\)](#)

Assembly: Genesis.dll

BufferedSprite

(Genesis.Core.GameElements.BufferedSprite)

CameraElement

public struct TerrainData : CameraElement

Element3D

(Genesis.Core.GameElements.Element3D)

Empty

(Genesis.Core.GameElements.Empty)

Qube

(Genesis.Core.GameElements.Qube)

RectElement

(Genesis.Core.GameElements.RectElement)

Declaration

(Genesis.Core.GameElements.Skybox)

public int cellHeight

(Genesis.Core.GameElements.Sprite)

Terrain2D

(Genesis.Core.GameElements.Terrain2D)

Field Value

(Genesis.Core.GameElements.TerrainData)

Type

Terrain3D

(Genesis.Core.GameElements.Terrain3D)

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

TerrainData

(Genesis.Core.GameElements.TerrainData)

Description

Type	Description
Terrain3D	

Type	Description
Terrain3D	

Type	Description
Terrain3D	

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Terrain3D	

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Terrain3D	

Type	Description

Type	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	

cellsX

Declaration
(Genesis.Core.Behaviors.html)
+ **Genesis.Core.Behaviors.Physics**
(Genesis.Core.Behaviors.Physics)

Field Value
+ **Genesis.Core.Behaviors.Physics**
Type **(Genesis.Core.Behaviors.Physics)**

- **Genesis.Core.GameElements**
(Genesis.Core.GameElements.h)

 BufferedSprite
cellsZ
(Genesis.Core.GameElements.BufferedSprite)

Declaration
(b)
 CameraElement
 Element3D
 public int **cellsZ**
(Genesis.Core.GameElements.Element3D)

 Empty
Field Value
Qube

Type **(Genesis.Core.GameElements.Qube)**
int (<https://learn.microsoft.com/dotnet/api/system.int32>)

 RectElement
 Skybox

colors
Sprite
 (Genesis.Core.GameElements.Sprite)

Declaration
 Terrain2D
 Terrain3D
 public float[] **colors**
 Terrain3D

 (Genesis.Core.GameElements.Terrain3D)

Field Value
TerrainData

Type **(Genesis.Core.GameElements.TerrainData)**
+ **Genesis.Graphics**

 float (<https://learn.microsoft.com/dotnet/api/system.single>)[]
(Genesis.Graphics.html)

+ **Genesis.Graphics.Physics**

tri
(Genesis.Graphics.Physics.html)

Declaration
 (Genesis.Graphics.RenderDevice)

+ **Genesis.Graphics.Shaders.Oper**

Type	Description

```
public int tris
```

Field Value

Type	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	

(Genesis.Core.Behaviors.html)

+ **Genesis.Core.Behaviors.Physics**
verticies
([Genesis.Core.Behaviors.Physics](#))

Declaration
+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics](#))

public float[] verticies

- **Genesis.Core.GameElements**

([Genesis.Core.GameElements.h](#))

Type	Description
BufferedSprite (Genesis.Core.GameElements.BufferedSprite)	

float (<https://learn.microsoft.com/dotnet/api/system.single>)[]

([Genesis.Core.GameElements.CameraElement](#))

([Genesis.Core.GameElements.CameraElement](#))

([Genesis.Core.GameElements.Element3D](#))

([Genesis.Core.GameElements.Element3D](#))

Empty

([Genesis.Core.GameElements.Empty](#))

Qube

([Genesis.Core.GameElements.Qube](#))

RectElement

([Genesis.Core.GameElements.RectElement](#))

Skybox

([Genesis.Core.GameElements.Skybox](#))

Sprite

([Genesis.Core.GameElements.Sprite](#))

Terrain2D

([Genesis.Core.GameElements.Terrain2D](#))

Terrain3D

([Genesis.Core.GameElements.Terrain3D](#))

TerrainData

([Genesis.Core.GameElements.TerrainData](#))

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

+ **Genesis.Graphics.Shaders.Oper**

Namespace Genesis.Graphics

Classes

▼ Enter here to filter...

Animation (Genesis.Graphics.Animation.html)

(Genesis.Core.Behaviors.Physics) An Animation object with details such as name, starting cell, row, and number of frames.

+ Genesis.Core.Behaviors.Physics

Animation3D (Genesis.Graphics.Animation3D.html)

+ Genesis.Core.GameElements

Camera (Genesis.Graphics.Camera.html)

- Genesis.Graphics

Face (Genesis.Graphics.Face.html)

Animation

(Genesis.Graphics.Animation.html)

Font (Genesis.Graphics.Font.html)

Animation3D

(Genesis.Graphics.Animation3D.html)

Camera

Framebuffer (Genesis.Graphics.Framebuffer.html)

(Genesis.Graphics.Camera.html)

CameraType

Glyphe (Genesis.Graphics.Glyphe.html)

Face

(Genesis.Graphics.Face.html)

Material (Genesis.Graphics.Material.html)

Font

(Genesis.Graphics.Font.html)

Framebuffer

Mesh (Genesis.Graphics.Mesh.html)

(Genesis.Graphics.Framebuffer.html)

Glyphe

(Genesis.Graphics.Glyphe.html)

PerspectiveCamera (Genesis.Graphics.PerspectiveCamera.html)

IRenderDevice

(Genesis.Graphics.IRenderDevice.html)

Material

Shader (Genesis.Graphics.Shader.html)

(Genesis.Graphics.Material.html)

MaterialBuffer

ShaderProgram (Genesis.Graphics.ShaderProgram.html)

Mesh

(Genesis.Graphics.Mesh.html)

TexCoords (Genesis.Graphics.TexCoords.html)

PerspectiveCamera

ValueForSurfacePixelPerspectiveCame

Shader

(Genesis.Graphics.Shader.html)

Texture (Genesis.Graphics.Texture.html)

ShaderProgram

(Genesis.Graphics.ShaderProgram.html)

TexCoords

Viewport (Genesis.Graphics.Viewport.html)

Structs

MaterialBuffer (Genesis.Graphics.MaterialBuffer.html)

Interfaces
+ Genesis.Core.Behaviors.Physics
(Genesis.Core.Behaviors.Physics.html)

IRenderDevice (Genesis.Graphics.IRenderDevice.html)
(Genesis.Core.Behaviors.Physics.html)

Enums
+ Genesis.Core.GameElements
(Genesis.Core.GameElements.html)

CameraType (Genesis.Graphics.CameraType.html)
(Genesis.Graphics.html)

Animation
(Genesis.Graphics.Animation.html)

Animation3D
(Genesis.Graphics.Animation3D.html)

Camera
(Genesis.Graphics.Camera.html)

CameraType
(Genesis.Graphics.CameraType.html)

Face
(Genesis.Graphics.Face.html)

Font
(Genesis.Graphics.Font.html)

Framebuffer
(Genesis.Graphics.Framebuffer.html)

Glyphe
(Genesis.Graphics.Glyphe.html)

IRenderDevice
(Genesis.Graphics.IRenderDevice.html)

Material
(Genesis.Graphics.Material.html)

MaterialBuffer
(Genesis.Graphics.MaterialBuffer.html)

Mesh
(Genesis.Graphics.Mesh.html)

PerspectiveCamera
(Genesis.Graphics.PerspectiveCamera.html)

Shader
(Genesis.Graphics.Shader.html)

ShaderProgram
(Genesis.Graphics.ShaderProgram.html)

TexCoords

Class Animation

Represents an animation definition with details such as name, starting cell, row, and number of frames.

Enter here to filter...

Inheritance

(Genesis.Core.Behaviors.Physic

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics

Inherited Members

+ **Genesis.Core.GameElements**

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

- **Genesis.Graphics**

(Genesis.Graphics.html)

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

NameSpace! Genesis (Genesis.html).Graphics (Genesis.Graphics.html)

(Genesis.Graphics.Camera.html)

Assembly: Genesis.dll

CameraType

(Genesis.Graphics.CameraType.htm

Face

public class Animation

(Genesis.Graphics.Face.html)

Font

(Genesis.Graphics.Font.html)

Framebuffer

(Genesis.Graphics.Framebuffer.html)

Glyphe

(Genesis.Graphics.Glyphe.html)

Animation()

IRenderDevice

Initializes a new instance of the Animation class.

Material

Declaration

(Genesis.Graphics.Material.html)

MaterialBuffer

public Animation()

(Genesis.Graphics.MaterialBuffer.htm

Mesh

(Genesis.Graphics.Mesh.html)

PerspectiveCamera

Animation(string, int, int, int)

Shader

Initializes a new instance of the Animation class with specified parameters.

(Genesis.Graphics.Shader.html)

Declaration

Program

(Genesis.Graphics.ShaderProgram.h

TexCoords Animation(string name, int cell, int row, int frames)

(Genesis.Graphics.TexCoords.html)

- .

Parameters

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	<i>name</i>	The name of the animation.
int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>cell</i>	The starting cell index of the animation.
int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>row</i>	The row index in the animation sheet.
int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>frames</i>	The number of frames in the animation.

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Properties

GameElements

(Genesis.Core.GameElements.h)

C

genesis.Graphics

(Genesis.Graphics.html)

Gets or sets the starting cell index of the animation.

Animation

Declaration

(Genesis.Graphics.Animation.html)

Animation3D

p(Genesis.Graphics.Animation3D.html)

Camera

(Genesis.Graphics.Camera.html)

Property Value

CameraType

Type

(Genesis.Graphics.CameraType.html)

Description

Face	
int (https://learn.microsoft.com/dotnet/api/system.int32)	(Genesis.Graphics.Face.html)

Font

(Genesis.Graphics.Font.html)

F

ramebuffer

(Genesis.Graphics.Framebuffer.html)

Gets or sets the number of frames in the animation.

Glyphe

(Genesis.Graphics.Glyphe.html)

Declaration

IRenderDevice

(Genesis.Graphics.IRenderDevice.html)

Material

(Genesis.Graphics.Material.html)

Property Value

Type

(Genesis.Graphics.MaterialBuffer.html)

Description

Mesh	
int (https://learn.microsoft.com/dotnet/api/system.int32)	(Genesis.Graphics.Mesh.html)

PerspectiveCamera

(Genesis.Graphics.PerspectiveCamera.html)

Shader

(Genesis.Graphics.Shader.html)

N

ame

(Genesis.Graphics.ShaderProgram.html)

Gets or sets the name of the animation.

(Genesis.Graphics.TexCoords.html)

Declaration

TexCoords

(Genesis.Graphics.TexCoords.html)

```
public string Name { get; set; }
```

Property Value

Type	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	

(Genesis.Core.Behaviors.Physic

+ Genesis.Core.Behaviors.Physics

Row (**Genesis.Core.Behaviors.Physic**

Gets or sets the row index in the animation sheet.

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h

- Genesis.Graphics

```
public int Row { get; set; }
```

(Genesis.Graphics.html)

Animation

Property Value

[\(Genesis.Graphics.Animation.html\)](#)

Type	Description
Animation3D (Genesis.Graphics.Animation3D.html) int (https://learn.microsoft.com/dotnet/api/system.int32) (Genesis.Graphics.Camera.html)	

[\(Genesis.Graphics.Camera.html\)](#)

CameraType

[\(Genesis.Graphics.CameraType.html\)](#)

Face

[\(Genesis.Graphics.Face.html\)](#)

Font

[\(Genesis.Graphics.Font.html\)](#)

Framebuffer

[\(Genesis.Graphics.Framebuffer.html\)](#)

Glyphe

[\(Genesis.Graphics.Glyphe.html\)](#)

IRenderDevice

[\(Genesis.Graphics.IRenderDevice.html\)](#)

Material

[\(Genesis.Graphics.Material.html\)](#)

MaterialBuffer

[\(Genesis.Graphics.MaterialBuffer.html\)](#)

Mesh

[\(Genesis.Graphics.Mesh.html\)](#)

PerspectiveCamera

[\(Genesis.Graphics.PerspectiveCamera.html\)](#)

Shader

[\(Genesis.Graphics.Shader.html\)](#)

ShaderProgram

[\(Genesis.Graphics.ShaderProgram.html\)](#)

TexCoords

[\(Genesis.Graphics.TexCoords.html\)](#)

+

Parameters

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	<i>name</i>	
string (https://learn.microsoft.com/dotnet/api/system.string)	<i>directory</i>	

▼

Properties

([Genesis.Core.Behaviors.Physics](#))

+ Genesis.Core.GameElements

Frames

([Genesis.Core.GameElements.h](#))

Declaration

- Genesis.Graphics

([Genesis.Graphics.html](#))

public List<Model> Frames { get; set; }

Animation

([Genesis.Graphics.Animation.html](#))

Property Value

Animation3D

Type ([Genesis.Graphics.Animation3D.html](#))

Camera

List (<https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1>) <Model>

([Genesis.Graphics.Camera.html](#))

CameraType

([Genesis.Graphics.CameraType.html](#))

Name

([Genesis.Graphics.Face.html](#))

Declaration

Font

([Genesis.Graphics.Font.html](#))

Framebuffer

Name { get; set; }

([Genesis.Graphics.Framebuffer.html](#))

Glyphe

Property Value

([Genesis.Graphics.Glyphe.html](#))

Type ([RenderDevice.html](#))

Description

string (<https://learn.microsoft.com/dotnet/api/system.string>)

Material

([Genesis.Graphics.Material.html](#))

MaterialBuffer

([Genesis.Graphics.MaterialBuffer.html](#))

Methods

([Genesis.Graphics.Mesh.html](#))

PerspectiveCamera

CopyTextures(Model)

([Genesis.Graphics.PerspectiveCamera.html](#))

Declaration

([Genesis.Graphics.Shader.html](#))

ShaderProgram

public void CopyTextures(Model model)

([Genesis.Graphics.ShaderProgram.html](#))

TexCoords

([Genesis.Graphics.TexCoords.html](#))

Texture

([Genesis.Graphics.Texture.html](#))

Type	Name	Description
Model	<i>model</i>	

InitAnimation(IRenderDevice)

Declaration

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics](#))

+ Genesis.Core.GameElements

Parameters

([Genesis.Core.GameElements.h](#))

Type

- Genesis.Graphics

IRenderDevice ([Genesis.Graphics.IRenderDevice.html](#))

([Genesis.Graphics.html](#))

Animation

([Genesis.Graphics.Animation.html](#))

LoadFramesFromDirectory(string)

([Genesis.Graphics.Animation3D.html](#))

Declaration

Camera

([Genesis.Graphics.Camera.html](#))

public void LoadFramesFromDirectory(string directory)

CameraType

([Genesis.Graphics.CameraType.html](#))

Face

([Genesis.Graphics.Face.html](#))

Type

Font

([Genesis.Graphics.Font.html](#))

string (<https://learn.microsoft.com/dotnet/api/system.string>)

directory

Framebuffer

([Genesis.Graphics.Framebuffer.html](#))

Glyphe

([Genesis.Graphics.Glyphe.html](#))

IRenderDevice

([Genesis.Graphics.IRenderDevice.html](#))

Material

([Genesis.Graphics.Material.html](#))

MaterialBuffer

([Genesis.Graphics.MaterialBuffer.html](#))

Mesh

([Genesis.Graphics.Mesh.html](#))

PerspectiveCamera

([Genesis.Graphics.PerspectiveCamera.html](#))

Shader

([Genesis.Graphics.Shader.html](#))

ShaderProgram

([Genesis.Graphics.ShaderProgram.html](#))

TexCoords

([Genesis.Graphics.TexCoords.html](#))

Texture

([Genesis.Graphics.Texture.html](#))

Type	Name	Description
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	renderer	

Class Camera

Inheritance

↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)

↳ [Camera](#)

+ **Genesis.Core.Behaviors.Physics**
↳ [PerspectiveCamera](#) ([Genesis.Graphics.PerspectiveCamera.html](#))
(Genesis.Core.Behaviors.Physics)

Inherited Members

+ **Genesis.Core.GameElements**

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

(Genesis.Core.GameElements.h)
[object.Equals\(object\)](#) ()

Genesis.Graphics

[object.Equals\(object, object\)](#) ()

[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

(Genesis.Graphics.Animation.html)
[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

[Animation3D](#)

[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

(Genesis.Graphics.Animation3D.html)
[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

[Camera](#)

Namespace: [Genesis](#) ([Genesis.html](#)) [Graphics](#) ([Genesis.Graphics.html](#))

Assembly: [Genesis.dll](#)

Syntax: [Genesis.Graphics.CameraType.htm](#)

Face

[\(Genesis.Graphics.Face.html\)](#)

Font

[\(Genesis.Graphics.Font.html\)](#)

Framebuffer

Constructors

[\(Genesis.Graphics.Framebuffer.html\)](#)

Glyphe

[\(Genesis.Graphics.Glyphe.html\)](#)

Camera(Vec3, Vec3, float, float)

[\(Genesis.Graphics.IRenderDevice.html\)](#)

Declaration:

Material

[\(Genesis.Graphics.Material.html\)](#)

[public Camera\(Vec3 location, Vec3 size, float near, float far\)](#)

[MaterialBuffer](#)

[\(Genesis.Graphics.MaterialBuffer.html\)](#)

Parameters

Type [\(Genesis.Graphics.Mesh.html\)](#)

PerspectiveCamera

Vec3 [\(Genesis.Math.Vec3.html\)](#)

PerspectiveCamera

Shader

[Vec3](#) ([Genesis.Math.Vec3.html](#))

[\(Genesis.Graphics.Shader.html\)](#)

float [\(https://learn.microsoft.com/dotnet/api/system.single\)](#)

[\(Genesis.Graphics.ShaderProgram.html\)](#)

float [\(https://learn.microsoft.com/dotnet/api/system.single\)](#)

TexCoords

[\(Genesis.Graphics.TexCoords.html\)](#)

Texture

[\(Genesis.Graphics.Texture.html\)](#)

..

Type	Name	Description
PerspectiveCamera	<i>location</i>	
Vec3 (Genesis.Math.Vec3.html)	<i>size</i>	
float (https://learn.microsoft.com/dotnet/api/system.single)	<i>near</i>	
float (https://learn.microsoft.com/dotnet/api/system.single)	<i>far</i>	
(Genesis.Graphics.TexCoords.html)		
Texture		
(Genesis.Graphics.Texture.html)		
..		

Properties

Far

Declaration



+ **Genesis.Core.Behaviors.Physics**
 (Genesis.Core.Behaviors.Physics)

Property Value

+ **Genesis.Core.GameElements**

Type
 (Genesis.Core.GameElements.h)

- **Genesis.Graphics**

(Genesis.Graphics.html)

Animation

Location

(Genesis.Graphics.Animation.html)

Declaration

(Genesis.Graphics.Animation3D.htm

Camera
 public Vec3 Location { get; set; }
 (Genesis.Graphics.Camera.html)

CameraType

Property Value

(Genesis.Graphics.CameraType.htm

Type

Face
 (Genesis.Graphics.Face.html)

Vec3

(Genesis.Math.Vec3.html)

(Genesis.Graphics.Font.html)

Framebuffer

(Genesis.Graphics.Framebuffer.html)

Near

Glyphe

Declaration

(Genesis.Graphics.Glyphe.html)

IRenderDevice

public float Near { get; set; }

Material

(Genesis.Graphics.Material.html)

Property Value

MaterialBuffer

Type

(Genesis.Graphics.MaterialBuffer.htm

Mesh

float

(https://learn.microsoft.com/dotnet/api/system.single)

PerspectiveCamera

(Genesis.Graphics.PerspectiveCame

Shader

(Genesis.Graphics.Shader.html)

Declaration

ShaderProgram

(Genesis.Graphics.ShaderProgram.h

TexCoords Rotation { get; set; }

(Genesis.Graphics.TexCoords.html)

Texture

Property Value

(Genesis.Graphics.Texture.html)

..

Description

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</

Type	Description
Vec3 (Genesis.Math.Vec3.html)	

Size

Declaration
+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)
public Vec3 Size { get; set; }

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)
Property Value

- Type

(Genesis.Graphics.html)

Vec3 (Genesis.Math.Vec3.html)
Animation

(Genesis.Graphics.Animation.html)

Animation3D

Type (Genesis.Graphics.Animation3D.html)

Camera

Declaration
(Genesis.Graphics.Camera.html)

CameraType

public CameraType Type { get; set; }

(Genesis.Graphics.CameraType.html)

Face

Property Value
(Genesis.Graphics.Face.html)

Font

Type (Genesis.Graphics.Font.html)

FrameBuffer

CameraType (Genesis.Graphics.CameraType.html)

(Genesis.Graphics.Framebuffer.html)

Glyphe

(Genesis.Graphics.Glyphe.html)

IRenderDevice

Method (Genesis.Graphics.IRenderDevice.html)

Material

(Genesis.Graphics.Material.html)

GetRect()

MaterialBuffer

Declaration
(Genesis.Graphics.MaterialBuffer.html)

Mesh

(Genesis.Graphics.Mesh.html)

public Rect GetRect()

PerspectiveCamera

(Genesis.Graphics.PerspectiveCamera.html)

Returns
Shader

Type (Genesis.Graphics.Shader.html)

ShaderProgram

Rect (Genesis.Math.Rect.html)

(Genesis.Graphics.ShaderProgram.html)

TexCoords

(Genesis.Graphics.TexCoords.html)

Texture

LookAt(GameElement)

(Genesis.Graphics.Texture.html)

..

Declaration

```
public void LookAt(GameElement element)
```

Parameters

Type	Name	Description
GameElement (Genesis.Core.GameElement.html) (Genesis.Core.Behaviors.Physics)	<i>element</i>	

+ **Genesis.Core.Behaviors.Physics**
+ **Genesis.Core.GameElements**
LookAt(GameElement, bool)

Declaration

Genesis.Graphics

(Genesis.Graphics.html)

```
public void LookAt(GameElement element, bool centerOffset)  
    Animation  
        (Genesis.Graphics.Animation.html)
```

Parameters

Type	Name	Description
GameElement (Genesis.Core.GameElement.html)	<i>element</i>	
bool (https://learn.microsoft.com/dotnet/api/system.boolean) (Genesis.Graphics.CameraType.html)	<i>centerOffset</i>	

Face
([Genesis.Graphics.Face.html](#))
Font
([Genesis.Graphics.Font.html](#))
Framebuffer
([Genesis.Graphics.Framebuffer.html](#))
Glyphe
([Genesis.Graphics.Glyphe.html](#))
IRenderDevice
([Genesis.Graphics.IRenderDevice.html](#))
Material
([Genesis.Graphics.Material.html](#))
MaterialBuffer
([Genesis.Graphics.MaterialBuffer.html](#))
Mesh
([Genesis.Graphics.Mesh.html](#))
PerspectiveCamera
([Genesis.Graphics.PerspectiveCamera.html](#))
Shader
([Genesis.Graphics.Shader.html](#))
ShaderProgram
([Genesis.Graphics.ShaderProgram.html](#))
TexCoords
([Genesis.Graphics.TexCoords.html](#))
Texture
([Genesis.Graphics.Texture.html](#))
..

Enum CameraType

Namespace: Genesis (Genesis.html).Graphics (Genesis.Graphics.html)

Assembly: Genesis.dll
filter...

Syntax
(Genesis.Core.Behaviors.Physics)

+ **Genesis.Core.GameElements**
(**Genesis.Core.GameElements.h**)

- **Genesis.Graphics**
(**Genesis.Graphics.html**)

Fields

Animation

Name	Description
Animation3D	
Ortho	(Genesis.Graphics.Animation3D.html)
CameraPerspective	(Genesis.Graphics.Camera.html)

CameraType

(Genesis.Graphics.CameraType.html)

Face

(Genesis.Graphics.Face.html)

Font

(Genesis.Graphics.Font.html)

Framebuffer

(Genesis.Graphics.Framebuffer.html)

Glyphe

(Genesis.Graphics.Glyphe.html)

IRenderDevice

(Genesis.Graphics.IRenderDevice.html)

Material

(Genesis.Graphics.Material.html)

MaterialBuffer

(Genesis.Graphics.MaterialBuffer.html)

Mesh

(Genesis.Graphics.Mesh.html)

PerspectiveCamera

(Genesis.Graphics.PerspectiveCamera.html)

Shader

(Genesis.Graphics.Shader.html)

ShaderProgram

(Genesis.Graphics.ShaderProgram.html)

TexCoords

(Genesis.Graphics.TexCoords.html)

Class Face

Inheritance

↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [Face](#)

+ Genesis.Core.GameElements

Inherited Members

(Genesis.Core.GameElements.h)
[object.ToString\(\)](https://learn.microsoft.com/dotnet/api/system.object.tostring) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
[**object.Equals**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)) ([\(https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))
(Genesis.Graphics.html)
[**object.Equals**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object))([object](#), [object](#)) ([\(https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)))
[**object.ReferenceEquals**](https://learn.microsoft.com/dotnet/api/system.object.referenceequals)([object](#), [object](#)) ([\(https://learn.microsoft.com/dotnet/api/system.object.referenceequals\)](https://learn.microsoft.com/dotnet/api/system.object.referenceequals))
[**object.GetHashCode**](https://learn.microsoft.com/dotnet/api/system.object.gethashcode)() ([\(https://learn.microsoft.com/dotnet/api/system.object.gethashcode\)](https://learn.microsoft.com/dotnet/api/system.object.gethashcode))
[**object.GetType**](https://learn.microsoft.com/dotnet/api/system.object.gettype)() ([\(https://learn.microsoft.com/dotnet/api/system.object.gettype\)](https://learn.microsoft.com/dotnet/api/system.object.gettype))
[**object.MemberwiseClone**](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)() ([\(https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone))
[\(Genesis.Graphics.Camera.html\)](#)

Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#))
[CameraType](#)

Assembly: [Genesis](#).[Graphics](#).[CameraType](#).htm

Syntax

[\(Genesis.Graphics.Face.html\)](#)

Font
public class Face
[\(Genesis.Graphics.Font.html\)](#)

Framebuffer
[\(Genesis.Graphics.Framebuffer.html\)](#)

Constructors

[\(Genesis.Graphics.Glyphe.html\)](#)

IRenderDevice

Face()
[\(Genesis.Graphics.IRenderDevice.html\)](#)

Declaration

[\(Genesis.Graphics.Material.html\)](#)

MaterialBuffer

public Face()
[\(Genesis.Graphics.MaterialBuffer.html\)](#)

Mesh

[\(Genesis.Graphics.Mesh.html\)](#)

PerspectiveCamera

Face(Texture)
[\(Genesis.Graphics.PerspectiveCamera.html\)](#)

Declaration

[\(Genesis.Graphics.Shader.html\)](#)

ShaderProgram
public Face(Texture texture)
[\(Genesis.Graphics.ShaderProgram.html\)](#)

TexCoords

Parameters
[\(Genesis.Graphics.TexCoords.html\)](#)

Type	Name	Description
Texture (Genesis.Graphics.Texture.html)		
Texture (Genesis.Graphics.Texture.html) Viewport (Genesis.Graphics.Viewport.html)	texture	

Face(Vec3[])

Declaration

```
public Face(Vec3[] vecs)
```



Parameters

Type	Name	Description
+ Genesis.Core.GameElements Vec3 (Genesis.Math.Vec3.html) (Genesis.Core.GameElements.h)	vecs	

- Genesis.Graphics

(Genesis.Graphics.html)

Face(Vec3[], Vec3[], Texture)

Animation

Declaration

Animation3D

```
public Face(Vec3[] vecs, Vec3[] texCords, Texture texture)
```

Camera

(Genesis.Graphics.Camera.html)

Parameters

CameraType

Type	Name	Description
Face		
Vec3 (Genesis.Math.Vec3.html) (Genesis.Graphics.Face.html)	vecs	
Font Vec3 (Genesis.Math.Vec3.html) (Genesis.Graphics.Font.html)	texCords	

Texture (Genesis.Graphics.Texture.html)

(Genesis.Graphics_FRAMEBUFFER.html)

Glyphe

(Genesis.Graphics.Glyphe.html)

Properties

IRenderDevice
(Genesis.Graphics.IRenderDevice.html)

Material

(Genesis.Graphics.Material.html)

MaterialBuffer

Declaration

(Genesis.Graphics.MaterialBuffer.html)

Mesh

```
p<System.Collections.Generic.Dictionary<string, object>> Propertys { get; set; }
```

PerspectiveCamera

(Genesis.Graphics.PerspectiveCamera.html)

Property Value

Shader

Type	Description
Genesis.Graphics.Shader.html	

ShaderProgram
Dictionary (https://learn.microsoft.com/dotnet/api/system.collections.generic.dictionary-2)<
(Genesis.Graphics.ShaderProgram.html),
string (https://learn.microsoft.com/dotnet/api/system.string),
TexCoords
object (https://learn.microsoft.com/dotnet/api/system.object)>
(Genesis.Graphics.TexCoords.html)

Texture

(Genesis.Graphics.Texture.html)

TexCords

(Genesis.Graphics.Viewport.html)

Declaration

```
public List<Vec3> TexCords { get; set; }
```

Property Value

Type	Description
List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1)< + Genesis.Core.GameElements Vec3 (Genesis.Math.Vec3.html)> (Genesis.Core.GameElements.h)	

- Genesis.Graphics

Texture ([Genesis.Graphics.html](#))

Declaration
 Animation
[\(Genesis.Graphics.Animation.html\)](#)

Animation3D
 public Texture Texture { get; set; }
[\(Genesis.Graphics.Animation3D.html\)](#)

Camera

Properties
[\(Genesis.Graphics.Camera.html\)](#)

Type	Description
CameraType (Genesis.Graphics.CameraType.html)	

Face ([Genesis.Graphics.Texture.html](#))
[\(Genesis.Graphics.Face.html\)](#)

Font

[\(Genesis.Graphics.Font.html\)](#)

Vertices

Framebuffer

Declaration
[\(Genesis.Graphics.Framebuffer.html\)](#)

Glyphe

[\(Genesis.Graphics.Glyphe.html\)](#)

public List<Vec3> Vertices { get; set; }

IRenderDevice

[\(Genesis.Graphics.IRenderDevice.html\)](#)

Property Value

Type	Description
MaterialBuffer (Genesis.Graphics.MaterialBuffer.html)	

List (<https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1>)<

Vec3 ([Genesis.Math.Vec3.html](#))>

[\(Genesis.Graphics.Mesh.html\)](#)

PerspectiveCamera

[\(Genesis.Graphics.PerspectiveCamera.html\)](#)

Shader

[\(Genesis.Graphics.Shader.html\)](#)

ShaderProgram

[\(Genesis.Graphics.ShaderProgram.html\)](#)

Methods

InitInterface([IRenderDevice](#))

TexCoords

Declaration
[\(Genesis.Graphics.TexCoords.html\)](#)

Texture

[\(Genesis.Graphics.Texture.html\)](#) Device renderer)

Viewport

[\(Genesis.Graphics.Viewport.html\)](#)

Parameters

Type	Name	Description
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	renderer	

▼

+ **Genesis.Core.GameElements**
(Genesis.Core.GameElements.h)

- **Genesis.Graphics**
(Genesis.Graphics.html)

Animation
(Genesis.Graphics.Animation.html)
Animation3D
(Genesis.Graphics.Animation3D.html)
Camera
(Genesis.Graphics.Camera.html)
CameraType
(Genesis.Graphics.CameraType.html)
Face
(Genesis.Graphics.Face.html)
Font
(Genesis.Graphics.Font.html)
Framebuffer
(Genesis.Graphics.Framebuffer.html)
Glyphe
(Genesis.Graphics.Glyphe.html)
IRenderDevice
(Genesis.Graphics.IRenderDevice.html)
Material
(Genesis.Graphics.Material.html)
MaterialBuffer
(Genesis.Graphics.MaterialBuffer.html)
Mesh
(Genesis.Graphics.Mesh.html)
PerspectiveCamera
(Genesis.Graphics.PerspectiveCamera.html)
Shader
(Genesis.Graphics.Shader.html)
ShaderProgram
(Genesis.Graphics.ShaderProgram.html)
TexCoords
(Genesis.Graphics.TexCoords.html)
Texture
(Genesis.Graphics.Texture.html)
Viewport
(Genesis.Graphics.Viewport.html)

Class Font

Inheritance

↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [Font](#)

+ Genesis.Core.GameElements

Inherited Members

(Genesis.Core.GameElements.h)
[object.ToString\(\)](https://learn.microsoft.com/dotnet/api/system.object.tostring) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
[**object.Equals\(\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))
(Genesis.Graphics.html)
[**object.Equals\(object, object\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)))
[**object.Equals\(system-object-system-object\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object-object)))
[**object.ReferenceEquals\(object, object\)**](https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals(system-object-object)) ([\(https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals\(system-object-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals(system-object-object)))
[object.GetHashCode\(\)](https://learn.microsoft.com/dotnet/api/system.object.gethashcode) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
[object.GetType\(\)](https://learn.microsoft.com/dotnet/api/system.object.gettype) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
[object.MemberwiseClone\(\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
[**object.MemberwiseClone\(CameraType\)**](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone(genesis.graphics.cameraltype)) ([\(https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone\(genesis.graphics.cameraltype\)\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone(genesis.graphics.cameraltype)))
Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#))
[CameraType](#)

Assembly

[Genesis.Graphics.CameraType.htm](#)

Syntax

[Face](#)
([Genesis.Graphics.Face.html](#))
[Font](#)
public class Font
([Genesis.Graphics.Font.html](#))
[Framebuffer](#)
([Genesis.Graphics.Framebuffer.html](#))

Constructors

[Font\(\)](#)
([Genesis.Graphics.IRenderDevice.html](#))
[Declaration](#)
[Material](#)
([Genesis.Graphics.Material.html](#))
[MaterialBuffer](#)
public Font()
([Genesis.Graphics.MaterialBuffer.html](#))
[Mesh](#)
([Genesis.Graphics.Mesh.html](#))
[PerspectiveCamera](#)
([Genesis.Graphics.PerspectiveCamera.html](#))
[Shader](#)
([Genesis.Graphics.Shader.html](#))
[ShaderProgram](#)
([Genesis.Graphics.ShaderProgram.html](#))

Declaration

[TexCoords](#)
([Genesis.Graphics.TexCoords.html](#))
[Textureint](#) **Column** { get; set; }
([Genesis.Graphics.Texture.html](#))
[Viewport](#)
Property Value
([Genesis.Graphics.Viewport.html](#))

Type	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	

FontAtlas

Declaration

+ **Genesis.Core.GameElements**

(<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements>; }

- **Genesis.Graphics**

Property Value

(<https://learn.microsoft.com/dotnet/api/genesis.graphics>)

Type Animation

(<https://learn.microsoft.com/dotnet/api/genesis.graphics.animation>)

Bitmap (<https://learn.microsoft.com/dotnet/api/system.drawing.bitmap>)

Animation3D

(<https://learn.microsoft.com/dotnet/api/genesis.graphics.animation3d>)

Camera

GlyphSize (<https://learn.microsoft.com/dotnet/api/genesis.graphics.camera>)

CameraType

Declaration

(<https://learn.microsoft.com/dotnet/api/genesis.graphics.camertype>)

Face

public float Glyphsize { get; set; }

Font

Property Value

Framebuffer

Type (<https://learn.microsoft.com/dotnet/api/genesis.graphics.framebuffer>)

Glyphe

float (<https://learn.microsoft.com/dotnet/api/system.single>)

(<https://learn.microsoft.com/dotnet/api/genesis.graphics.glyphe>)

IRenderDevice

(<https://learn.microsoft.com/dotnet/api/genesis.graphics.irenderdevice>)

Glyphes

Material

Declaration

MaterialBuffer

(<https://learn.microsoft.com/dotnet/api/genesis.graphics.materialbuffer>)

public List<Glyphe> Glyphes { get; set; }

Mesh

(<https://learn.microsoft.com/dotnet/api/genesis.graphics.mesh>)

Perspective Camera

Type (<https://learn.microsoft.com/dotnet/api/genesis.graphics.perspectivecamera>)

Shader

List<(<https://learn.microsoft.com/dotnet/api/genesis.graphics.shader>)> (<https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1>) <

Glyphe> (<https://learn.microsoft.com/dotnet/api/genesis.graphics.glyphe>)>

(<https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram>)

TexCoords

(<https://learn.microsoft.com/dotnet/api/genesis.graphics.texcoords>)

Name

texture

Declaration

Viewport

(<https://learn.microsoft.com/dotnet/api/genesis.graphics.viewport>)

```
public string Name { get; set; }
```

Property Value

Type	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.h](#))

RenderID

- Genesis.Graphics

Declaration ([Genesis.Graphics.html](#))

```
Animation  
public int RenderID { get; set; }  
(Genesis.Graphics.Animation.html)
```

Animation3D

Property Value ([Genesis.Graphics.Animation3D.html](#))

Type	Description
Camera (Genesis.Graphics.Camera.html)	

```
int (https://learn.microsoft.com/dotnet/api/system.int32)  
(Genesis.Graphics.CameraType.html)
```

Face

([Genesis.Graphics.Face.html](#))

Rows

Font

([Genesis.Graphics.Font.html](#))

Declaration

```
Framebuffer  
(Genesis.Graphics.Framebuffer.html)  
public int Rows { get; set; }  
Glyphe  
(Genesis.Graphics.Glyphe.html)
```

Property Value

Type	Description
Material (Genesis.Graphics.Material.html)	

MaterialBuffer

([Genesis.Graphics.MaterialBuffer.html](#))

Spacing

Mesh
([Genesis.Graphics.Mesh.html](#))

Declaration

```
PerspectiveCamera  
(Genesis.Graphics.PerspectiveCamera.html)  
public float Spacing { get; set; }  
(Genesis.Graphics.Shader.html)
```

ShaderProgram

Property Value ([Genesis.Graphics.ShaderProgram.html](#))

Type	Description
TexCoords (Genesis.Graphics.TexCoords.html)	

```
float (https://learn.microsoft.com/dotnet/api/system.single)  
Texture  
(Genesis.Graphics.Texture.html)
```

Viewport

([Genesis.Graphics.Viewport.html](#))

Methods

Base64ToImage(string)

Declaration

▼

```
public Bitmap Base64ToImage(string base64)
```

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

- Genesis.Graphics

(Genesis.Graphics.html)

string (<https://learn.microsoft.com/dotnet/api/system.string>)

Animation

Return Type

Animation3D

(Genesis.Graphics.Animation3D.html)

Camera

Bitmap (<https://learn.microsoft.com/dotnet/api/system.drawing.bitmap>)

(Genesis.Graphics.Camera.html)

CameraType

(Genesis.Graphics.CameraType.html)

FromFile(string)

(Genesis.Graphics.Face.html)

Declaration

Font

(Genesis.Graphics.Font.html)

```
public void FromFile(string file)
```

Framebuffer

(Genesis.Graphics.Framebuffer.html)

Glyphe

(Genesis.Graphics.Glyphe.html)

Type

RenderDevice

string (<https://learn.microsoft.com/dotnet/api/system.string>)

Name

Description

Material

(Genesis.Graphics.Material.html)

MaterialBuffer

(Genesis.Graphics.MaterialBuffer.html)

GetGlyphe(char)

Declaration

(Genesis.Graphics.Mesh.html)

PerspectiveCamera

```
public Glyphe GetGlyphe(char character)
```

(Genesis.Graphics.PerspectiveCamera.html)

Shader

(Genesis.Graphics.Shader.html)

Type

ShaderProgram

(Genesis.Graphics.ShaderProgram.html)

char (<https://learn.microsoft.com/dotnet/api/system.char>)

Name

Description

(Genesis.Graphics.TexCoords.html)

Return Type

(Genesis.Graphics.Texture.html)

Viewport

(Genesis.Graphics.Viewport.html)

Type	Description
Glyphe (Genesis.Graphics.Glyphe.html)	

LoadSystemFont(string)

Declaration

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

- Genesis.Graphics

Parameters

(Genesis.Graphics.html)

Type	Name	Description
Animation		

string (Genesis.Graphics.Animation.html)
[string \(https://learn.microsoft.com/dotnet/api/system.string\)](https://learn.microsoft.com/dotnet/api/system.string)
 Animation3D

fontName

Returns

Camera

Type	Description
CameraType	

Font (Genesis.Graphics.Font.html)
 (Genesis.Graphics.CameraType.html)

Face

(Genesis.Graphics.Face.html)

Font

(Genesis.Graphics.Font.html)

Framebuffer

(Genesis.Graphics.Framebuffer.html)

Glyphe

(Genesis.Graphics.Glyphe.html)

IRenderDevice

(Genesis.Graphics.IRenderDevice.html)

Material

(Genesis.Graphics.Material.html)

MaterialBuffer

(Genesis.Graphics.MaterialBuffer.html)

Mesh

(Genesis.Graphics.Mesh.html)

PerspectiveCamera

(Genesis.Graphics.PerspectiveCamera.html)

Shader

(Genesis.Graphics.Shader.html)

ShaderProgram

(Genesis.Graphics.ShaderProgram.html)

TexCoords

(Genesis.Graphics.TexCoords.html)

Texture

(Genesis.Graphics.Texture.html)

Viewport

(Genesis.Graphics.Viewport.html)

Class Framebuffer

Inheritance

↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [Framebuffer](#)

+ Genesis.Core.GameElements

Inherited Members

(Genesis.Core.GameElements.h)
[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
Genesis.Graphics
(Genesis.Graphics.html)
[object.Equals\(object, object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))
[Animation](#)
[equals\(system-object-system-object\)](#)
[\(Genesis.Graphics.Animation.html\)](#)
[object.ReferenceEquals\(object, object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals(system-object-object)))
[Animation3D](#)
[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
[\(Genesis.Graphics.Animation3D.htm\)](#)
[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
[Camera](#)
[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
[\(Genesis.Graphics.Camera.html\)](#)
Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#))
CameraType

Assembly: [Genesis.Graphics.CameraType.htm](#)

Syntax

[Face](#)
([Genesis.Graphics.Face.html](#))
[Font](#)
public class Framebuffer
([Genesis.Graphics.Font.html](#))
[Framebuffer](#)
([Genesis.Graphics.Framebuffer.html](#))

Constructors

[Glyphe](#)
([Genesis.Graphics.Glyphe.html](#))
[IRenderDevice](#)
Framebuffer()
([Genesis.Graphics.IRenderDevice.html](#))

[Material](#)
([Genesis.Graphics.Material.html](#))
[MaterialBuffer](#)
public Framebuffer()
([Genesis.Graphics.MaterialBuffer.html](#))
[Mesh](#)
([Genesis.Graphics.Mesh.html](#))
[PerspectiveCamera](#)
([Genesis.Graphics.PerspectiveCamera.html](#))
[Shader](#)
([Genesis.Graphics.Shader.html](#))

Properties
[FramebufferID](#)
([Genesis.Graphics.ShaderProgram.html](#))
[Declaration](#)
[TexCoords](#)
([Genesis.Graphics.TexCoords.html](#))

[Textureint](#) FramebufferID { get; set; }
([Genesis.Graphics.Texture.html](#))
[Viewport](#)
Property Value
([Genesis.Graphics.Viewport.html](#))

Type	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	

RenderBuffer

Declaration

+ **Genesis.Core.GameElements**

```
(Genesis.Core.GameElements.h)
```

- **Genesis.Graphics**

Property Value

([Genesis.Graphics.html](#))

Type Animation

([Genesis.Graphics.Animation.html](#))

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

Animation3D

([Genesis.Graphics.Animation3D.html](#))

Camera

Texture

([Genesis.Graphics.Camera.html](#))

CameraType

Declaration

([Genesis.Graphics.CameraType.html](#))

Face

```
public int Texture { get; set; }
```

Font

Property Value

Framebuffer

([Genesis.Graphics.Framebuffer.html](#))

Glyphe

<https://learn.microsoft.com/dotnet/api/system.int32>

([Genesis.Graphics.Glyphe.html](#))

IRenderDevice

([Genesis.Graphics.IRenderDevice.html](#))

Material

Methods

([Genesis.Graphics.Material.html](#))

MaterialBuffer

([Genesis.Graphics.MaterialBuffer.html](#))

ToTexture()

Mesh

Declaration

PerspectiveCamera

([Genesis.Graphics.PerspectiveCamera.html](#))

Shader

([Genesis.Graphics.Shader.html](#))

Returns

ShaderProgram

Type ([Genesis.Graphics.ShaderProgram.html](#))

TexCoords

Texture ([Genesis.Graphics.Texture.html](#))

([Genesis.Graphics.TexCoordUs.htm](#))

Texture

([Genesis.Graphics.Texture.html](#))

Viewport

([Genesis.Graphics.Viewport.html](#))

Description



- + **Genesis.Core.GameElements**
(Genesis.Core.GameElements.h)
- **Genesis.Graphics**
(Genesis.Graphics.html)

Animation
(Genesis.Graphics.Animation.html)
Animation3D
(Genesis.Graphics.Animation3D.html)
Camera
(Genesis.Graphics.Camera.html)
CameraType
(Genesis.Graphics.CameraType.html)
Face
(Genesis.Graphics.Face.html)
Font
(Genesis.Graphics.Font.html)
Framebuffer
(Genesis.Graphics.Framebuffer.html)
Glyphe
(Genesis.Graphics.Glyphe.html)
IRenderDevice
(Genesis.Graphics.IRenderDevice.html)
Material
(Genesis.Graphics.Material.html)
MaterialBuffer
(Genesis.Graphics.MaterialBuffer.html)
Mesh
(Genesis.Graphics.Mesh.html)
PerspectiveCamera
(Genesis.Graphics.PerspectiveCamera.html)
Shader
(Genesis.Graphics.Shader.html)
ShaderProgram
(Genesis.Graphics.ShaderProgram.html)
TexCoords
(Genesis.Graphics.TexCoords.html)
Texture
(Genesis.Graphics.Texture.html)
Viewport
(Genesis.Graphics.Viewport.html)

Class Glyphe

Inheritance

↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [Glyphe](#)

+ Genesis.Core.GameElements

Inherited Members

(Genesis.Core.GameElements.h)
[object.ToString\(\)](https://learn.microsoft.com/dotnet/api/system.object.tostring) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
[**object.Equals\(\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)) ([\(https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))
(Genesis.Graphics.html)
[**object.Equals\(object, object\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)) ([\(https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)))
[**object.ReferenceEquals\(object, object\)**](https://learn.microsoft.com/dotnet/api/system.object.referenceequals) ([\(https://learn.microsoft.com/dotnet/api/system.object.referenceequals\)](https://learn.microsoft.com/dotnet/api/system.object.referenceequals))
[**object.GetHashCode\(\)**](https://learn.microsoft.com/dotnet/api/system.object.gethashcode) ([\(https://learn.microsoft.com/dotnet/api/system.object.gethashcode\)](https://learn.microsoft.com/dotnet/api/system.object.gethashcode))
[**object.GetType\(\)**](https://learn.microsoft.com/dotnet/api/system.object.gettype) ([\(https://learn.microsoft.com/dotnet/api/system.object.gettype\)](https://learn.microsoft.com/dotnet/api/system.object.gettype))
[**object.MemberwiseClone\(\)**](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone) ([\(https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone))
[**object.MemberwiseClone\(object\)**](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone(system-object)) ([\(https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone\(system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone(system-object)))
Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#))

Assembly

[Genesis.Graphics.CameraType.htm](#)

Syntax

[\(Genesis.Graphics.Face.html\)](#)

Font
public class Glyphe
([Genesis.Graphics.Font.html](#))

Framebuffer
([Genesis.Graphics.Framebuffer.html](#))

Constructors

[\(Genesis.Graphics.Glyphe.html\)](#)

IRenderDevice

Glyphe(char, int, int)
([Genesis.Graphics.IRenderDevice.html](#))

Declaration

[\(Genesis.Graphics.Material.html\)](#)

MaterialBuffer
public Glyphe(char character, int row, int column)
([Genesis.Graphics.MaterialBuffer.html](#))

Mesh

[\(Genesis.Graphics.Mesh.html\)](#)

Type	Name	Description
PerspectiveCamera (Genesis.Graphics.PerspectiveCamera.html)		
char (https://learn.microsoft.com/dotnet/api/system.char)	character	
int (https://learn.microsoft.com/dotnet/api/system.int32)	row	
int (https://learn.microsoft.com/dotnet/api/system.int32)	column	

TexCoords
([Genesis.Graphics.TexCoords.html](#))

Texture

[\(Genesis.Graphics.Texture.html\)](#)

Viewport

[\(Genesis.Graphics.Viewport.html\)](#)

Properties

Character

Declaration

```
public char Character { get; set; }
```



Property Value

Type	Description
+ Genesis.Core.GameElements char (Genesis.Core.GameElements.html)	(https://learn.microsoft.com/dotnet/api/system.char)

- [Genesis.Graphics](#)

([Genesis.Graphics.html](#))

[Column](#)

Animation

Declaration

Animation3D

public int Column { get; set; }

Camera

([Genesis.Graphics.Camera.html](#))

Property Value

CameraType

Type	Description
Face	(Genesis.Graphics.CameraType.html)

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

([Genesis.Graphics.Face.html](#))

Font

([Genesis.Graphics.Font.html](#))

Framebuffer

([Genesis.Graphics.Framebuffer.html](#))

Declaration

Glyphe

([Genesis.Graphics.Glyphe.html](#))

IRenderDevice { get; set; }

([Genesis.Graphics.IRenderDevice.html](#))

Material

Property Value

([Genesis.Graphics.Material.html](#))

Type	Description
MaterialBuffer	(Genesis.Graphics.MaterialBuffer.html)

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

Mesh

([Genesis.Graphics.Mesh.html](#))

PerspectiveCamera

([Genesis.Graphics.PerspectiveCamera.html](#))

Shader

([Genesis.Graphics.Shader.html](#))

ShaderProgram

([Genesis.Graphics.ShaderProgram.html](#))

TexCoords

([Genesis.Graphics.TexCoords.html](#))

Texture

([Genesis.Graphics.Texture.html](#))

Viewport

([Genesis.Graphics.Viewport.html](#))

Interface IRenderDevice

Namespace: Genesis (Genesis.html).Graphics (Genesis.Graphics.html)

Assembly: Genesis.dll
filter...

Syntax

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.h](#))

- Genesis.Graphics

([Genesis.Graphics.html](#))

Methods

([Genesis.Graphics.Animation.html](#))

Animation3D

Begin()

Camera

Declaration

([Genesis.Graphics.Camera.html](#))

CameraType

([Genesis.Graphics.CameraType.html](#))

Face

([Genesis.Graphics.Face.html](#))

Font

BuildFramebuffer(int, int)

Framebuffer

Declaration

([Genesis.Graphics.Framebuffer.html](#))

Glyphe

([Genesis.Graphics.Glyphe.html](#))

IRenderDevice

Parameters

Material

Type ([Genesis.Graphics.Material.html](#))

Name

Description

MaterialBuffer

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

width

([Genesis.Graphics.MaterialBuffer.html](#))

Mesh

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

height

([Genesis.Graphics.Mesh.html](#))

Return PerspectiveCamera

Type ([Genesis.Graphics.PerspectiveCamera.html](#))

Description

Shader

FrameBuffer ([Genesis.Graphics.Shader.html](#))

ShaderProgram

([Genesis.Graphics.ShaderProgram.html](#))

TexCoords

BuildFramebuffer(int, int, Texture)

Texture

([Genesis.Graphics.Texture.html](#))

Viewport

([Genesis.Graphics.Viewport.html](#))

```
Framebuffer BuildFramebuffer(int width, int height, Texture texture)
```

Parameters

Type	Name	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	width	
+ Genesis.Core.GameElements (Genesis.Core.GameElements.h)	height	
Texture (Genesis.Graphics.Texture.html)	texture	

- Genesis.Graphics

Returns [\(Genesis.Graphics.html\)](#)

Type	Description
Animation	
(Genesis.Graphics.Animation.html)	

Framebuffer ([Genesis.Graphics.Framebuffer.html](#))

Animation3D

([Genesis.Graphics.Animation3D.html](#))

Camera

BuildFramebuffer(int, int, int)

CameraType

Declaration ([Genesis.Graphics.CameraType.html](#))

Face

```
Framebuffer BuildFramebuffer(int width, int height, int texture)
```

Font

([Genesis.Graphics.Font.html](#))

Parameters

Type	Name	Description
Framebuffer		
(Genesis.Graphics.Framebuffer.html)		
int (https://learn.microsoft.com/dotnet/api/system.int32)	width	

Glyphe ([Genesis.Graphics.Glyphe.html](#))

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

IRenderDevice ([Genesis.Graphics.IRenderDevice.html](#))

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

Material ([Genesis.Graphics.Material.html](#))

Returns

MaterialBuffer

Type	Description
MaterialBuffer	

([Genesis.Graphics.MaterialBuffer.html](#))

Mesh

Framebuffer ([Genesis.Graphics.Framebuffer.html](#))

([Genesis.Graphics.Mesh.html](#))

PerspectiveCamera

([Genesis.Graphics.PerspectiveCamera.html](#))

CreateDynamicVertexBuffer(float[])

([Genesis.Graphics.Shader.html](#))

Declaration ShaderProgram

([Genesis.Graphics.ShaderProgram.html](#))

```
int CreateDynamicVertexBuffer(float[] floats)
```

([Genesis.Graphics.TexCoords.html](#))

Parameters

([Genesis.Graphics.Texture.html](#))

Viewport

([Genesis.Graphics.Viewport.html](#))

Type	Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)[]	<i>floats</i>	

Returns

Type	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.h](#))

CreateStaticVertexBuffer(float[])

([Genesis.Graphics.html](#))

Declaration:

Animation

i([Genesis.Core.GameElements.h](#)) float[] verticies)

Animation3D

([Genesis.Graphics.Animation3D.html](#))

Parameters

Camera

Type	Name	Description
Genesis.Graphics.Camera.html		

CameraType

float (<https://learn.microsoft.com/dotnet/api/system.single>)[]

([Genesis.Graphics.CameraType.html](#))

Face

Returns ([Genesis.Graphics.Face.html](#))

Type	Description
Font	(Genesis.Graphics.Font.html)

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

Framebuffer

([Genesis.Graphics.Framebuffer.html](#))

Glyphe

([Genesis.Graphics.Glyphe.html](#))

Dispose()

IRenderDevice

Declaration ([Genesis.Graphics.IRenderDevice.html](#))

Material

v([Genesis.Graphics.Material.html](#))

MaterialBuffer

([Genesis.Graphics.MaterialBuffer.html](#))

Mesh

DisposeElement3D(Element3D)

PerspectiveCamera

Declaration ([Genesis.Graphics.PerspectiveCamera.html](#))

Shader

void DisposeElement3D(Element3D element)

([Genesis.Graphics.Shader.html](#))

ShaderProgram

([Genesis.Graphics.ShaderProgram.html](#))

Parameters

TexCoords

Type	Name	Description
Genesis.Graphics.TexCoords.html		

Texture

Element3D ([Genesis.Core.GameElements.Element3D.html](#))

([Genesis.Graphics.Texture.html](#))

Viewport

([Genesis.Graphics.Viewport.html](#))

DisposeFont(Font)

Declaration

```
void DisposeFont(Font font)
```



Parameters

Type	Name	Description
+ Genesis.Core.GameElements Font (Genesis.Core.GameElements.h)	<i>font</i>	

- Genesis.Graphics

(Genesis.Graphics.html)

DisposeTexture(Texture)

Animation

Declaration

Animation3D

(Genesis.Graphics.Animation3D.html)

Camera

(Genesis.Graphics.Camera.html)

Parameters

CameraType

Type	Name	Description
Face		
Texture (Genesis.Graphics.Texture.html) (Genesis.Graphics.Face.html)	<i>texture</i>	

Font

(Genesis.Graphics.Font.html)

Framebuffer

DrawBufferedSprite(BufferedSprite)

(Genesis.Graphics.Framebuffer.html)

Declaration

Glyphe

(Genesis.Graphics.Glyphe.html)

IRenderDevice

(Genesis.Graphics.IRenderDevice.html)

Material

Parameters

(Genesis.Graphics.Material.html)

Type	Name	Description
MaterialBuffer (Genesis.Graphics.MaterialBuffer.html)		

BufferedSprite (Genesis.Core.GameElements.BufferedImage.html)

Mesh

(Genesis.Graphics.Mesh.html)

PerspectiveCamera

(Genesis.Graphics.PerspectiveCamera.html)

DrawElement3D(Element3D)

Shader

Declaration

(Genesis.Graphics.Shader.html)

ShaderProgram

(Genesis.Graphics.ShaderProgram.html)

TexCoords

(Genesis.Graphics.TexCoords.html)

Parameters

Texture

Type	Name	Description
Texture (Genesis.Graphics.Texture.html) (Genesis.Graphics.Viewport.html)	<i>element</i>	

DrawGameElement(GameElement)

Declaration

```
void DrawGameElement(GameElement element)
```



Parameters

Type	Name	Description
+ Genesis.Core.GameElements (Genesis.Core.GameElements.html)	element	

- Genesis.Graphics

(Genesis.Graphics.html)

DrawLine(Vec3, Vec3, Color)

Animation

Declaration

Animation3D

```
void DrawLine(Vec3 from, Vec3 to, Color color)
```

Camera

(Genesis.Graphics.Camera.html)

Parameters

CameraType

Type	Name	Description
Face Vec3 (Genesis.Math.Vec3.html) (Genesis.Graphics.Face.html)	from	
Font Vec3 (Genesis.Math.Vec3.html) (Genesis.Graphics.Font.html)	to	
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	color	

(Genesis.Graphics.Framebuffer.html)

Glyphe

(Genesis.Graphics.Glyphe.html)

DrawMesh(Mesh, Color)

IRenderDevice

Declaration

Material

```
void DrawMesh(Mesh mesh, Color color)
```

MaterialBuffer

(Genesis.Graphics.MaterialBuffer.html)

Parameters

Mesh

Type	Name	Description
PerspectiveCamera Mesh (Genesis.Graphics.Mesh.html) (Genesis.Graphics.PerspectiveCame	mesh	
Shader Color (https://learn.microsoft.com/dotnet/api/system.drawing.color) (Genesis.Graphics.Shader.html)	color	

ShaderProgram

(Genesis.Graphics.ShaderProgram.html)

DrawRect(Rect, Color)

(Genesis.Graphics.TexCoords.html)

Declaration

Texture

(Genesis.Graphics.Texture.html)

```
void DrawRect(Rect rect, Color color)
```

Viewport

(Genesis.Graphics.Viewport.html)

Parameters

Type	Name	Description
Rect (Genesis.Math.Rect.html)	<i>rect</i>	
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	<i>color</i>	

▼

DrawRect(Rect, Color, float)

(Genesis.Core.GameElements.h)

Declaration

- Genesis.Graphics

(Genesis.Graphics.html) void DrawRect(Rect rect, Color color, float borderWidth)

Animation

Parameters (Genesis.Graphics.Animation.html)

Type	Name	Description
Animation3D (Genesis.Graphics.Animation3D.html)		
Rect (Genesis.Math.Rect.html)	<i>rect</i>	
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	<i>color</i>	
float (Genesis.Graphics.CameraType.html) (https://learn.microsoft.com/dotnet/api/system.single)	<i>borderWidth</i>	

Face

(Genesis.Graphics.Face.html)

Font

DrawSkyBox(Skybox)

(Genesis.Graphics.Font.html)

Declaration

(Genesis.Graphics.Framebuffer.html)

Glyphe

void DrawSkyBox(Skybox skybox)

(Genesis.Graphics.Glyphe.html)

IRenderDevice

Parameters (Genesis.Graphics.IRenderDevice.html)

Type	Name	Description
Material (Genesis.Graphics.Material.html)		
Skybox (Genesis.Core.GameElements.Skybox.html)	<i>skybox</i>	

(Genesis.Graphics.MaterialBuffer.html)

Mesh

(Genesis.Graphics.Mesh.html)

DrawSprite(Sprite)

(Genesis.Graphics.Mesh.html)

PerspectiveCamera

Declaration (Genesis.Graphics.PerspectiveCamera.html)

Shader

void DrawSprite(Sprite sprite)

(Genesis.Graphics.Shader.html)

ShaderProgram

(Genesis.Graphics.ShaderProgram.html)

Parameters

Type	Name	Description
TexCoords (Genesis.Graphics.TexCoords.html)		
Texture (Genesis.Graphics.Texture.html)	<i>sprite</i>	

Viewport

(Genesis.Graphics.Viewport.html)

DrawSprite(Vec3, Vec3, Texture)

Declaration

```
void DrawSprite(Vec3 location, Vec3 size, Texture texture)
```



Parameters

Type	Name	Description
+ Genesis.Core.GameElements Vec3 (Genesis.Math.html) Texture (Genesis.Graphics.Texture.html)	<i>location</i>	
- Genesis.Graphics (Genesis.Graphics.html)	<i>size</i>	
Animation (Genesis.Graphics.Animation.html) Animation3D (Genesis.Graphics.Animation3D.html)	<i>texture</i>	

DrawSprite(Vec3, Vec3, Texture, TexCoords)

Declaration

(Genesis.Graphics.Camera.html)

CameraType

```
void DrawSprite(Vec3 location, Vec3 size, Texture texture, TexCoords texCoords)
```

(Genesis.Graphics.CameraType.html)

Face

Parameters

(Genesis.Graphics.Face.html)

Type	Name	Description
Font (Genesis.Graphics.Font.html)		
Vec3 (Genesis.Math.Vec3.html)	<i>location</i>	
Vec3 (Genesis.Math.Vec3.html)	<i>size</i>	
TexCoords (Genesis.Graphics.TexCoords.html)	<i>texture</i>	
IRenderDevice TexCoords (Genesis.Graphics.TexCoords.html)	<i>texCoords</i>	

Material

(Genesis.Graphics.Material.html)

DrawSprite(Vec3, Vec3, Color, Texture)

(Genesis.Graphics.MaterialBuffer.html)

Declaration

Mesh

(Genesis.Graphics.Mesh.html)

```
void DrawSprite(Vec3 location, Vec3 size, Color color, Texture texture)
```

(Genesis.Graphics.PerspectiveCamera.html)

Parameters

(Genesis.Graphics.Shader.html)

Type	Name	Description
ShaderProgram (Genesis.Graphics.ShaderProgram.html)		
Vec3 (Genesis.Math.Vec3.html)	<i>location</i>	
TexCoords Vec3 (Genesis.Math.Vec3.html)	<i>size</i>	
Texture Color (https://learn.microsoft.com/dotnet/api/system.drawing.color) (Genesis.Graphics.Texture.html)	<i>color</i>	
Viewport View (Genesis.Graphics.Texture.html)	<i>texture</i>	
(Genesis.Graphics.Viewport.html)		

DrawSprite(Vec3, Vec3, Color, Texture, TexCoords)

Declaration

```
void DrawSprite(Vec3 location, Vec3 size, Color color, Texture texture, TexCoords texCoords)
```



Parameters

Type	Name	Description
+ Genesis.Core.GameElements		
Vec3 (https://learn.microsoft.com/dotnet/api/system.numerics.vec3)	location	
- Genesis.Graphics		
(Genesis.Graphics.html)		
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	color	
Animation		
Texture (Genesis.Graphics.Texture.html)		
(Genesis.Graphics.Animation.html)	texture	
TexCoords (Genesis.Graphics.TexCoords.html)		
(Genesis.Graphics.Animation3D.html)	texCoords	

DrawString(string, Vec3, float, Font, Color)

Declaration

```
void DrawString(string text, Vec3 location, float fontsize, Font font, Color color)
```

Parameters

Type	Name	Description
Framebuffer		
(Genesis.Graphics.Framebuffer.html)		
Glyphe		
string (https://learn.microsoft.com/dotnet/api/system.string)	text	
IRenderDevice		
Vec3 (Genesis.Math.Vec3.html)		
(Genesis.Graphics.IRenderDevice.html)	location	
Material		
float (https://learn.microsoft.com/dotnet/api/system.single)	fontsize	
Font		
MaterialBuffer		
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	font	
Mesh		
(Genesis.Graphics.Mesh.html)	color	

DrawString(string, Vec3, float, float, Font, Color)

Declaration

```
void DrawString(string text, Vec3 location, float fontsize, float spacing, Font font, Color color)
```

Parameters

Type	Name	Description
Texture		
(Genesis.Graphics.Texture.html)		
Viewport		
string (https://learn.microsoft.com/dotnet/api/system.string)	text	

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	<i>location</i>	
float (https://learn.microsoft.com/dotnet/api/system.single)	<i>fontsize</i>	
float (https://learn.microsoft.com/dotnet/api/system.single) ▼	<i>spacing</i>	
Font (Genesis.Graphics.Font.html)	<i>font</i>	
+ Genesis.Core.GameElements (https://learn.microsoft.com/dotnet/api/system.drawing.color)	<i>color</i>	

([Genesis.Core.GameElements.h](#))

- Genesis.Graphics

DrawTexture(Vec3, Vec3, float, float, Texture) ([Genesis.Graphics.html](#))

Declaration

([Genesis.Graphics.Animation.html](#))

void DrawTexture(**Vec3** location, **Vec3** size, **float** repeatX, **float** repeatY, **Texture** texture)
([Genesis.Graphics.Animation3D.html](#))

Camera

Parameters

([Genesis.Graphics.Camera.html](#))

Type

cameraType

([Genesis.Graphics.CameraType.html](#))

Vec3

([Genesis.Math.Vec3.html](#))

Face

Vec3

([Genesis.Math.Vec3.html](#))

Font

float

(<https://learn.microsoft.com/dotnet/api/system.single>)

([Genesis.Graphics.Font.html](#))

Framebuffer

(<https://learn.microsoft.com/dotnet/api/system.single>)

([Genesis.Graphics.Framebuffer.html](#))

Texture

([Genesis.Graphics.Texture.html](#))

Glyphe

([Genesis.Graphics.Glyphe.html](#))

IRenderDevice

([Genesis.Graphics.IRenderDevice.html](#))

Material

Declaration

([Genesis.Graphics.Material.html](#))

MaterialBuffer

([Genesis.Graphics.MaterialBuffer.html](#))

Mesh

([Genesis.Graphics.Mesh.html](#))

Parameters

PerspectiveCamera

Type

([Genesis.Graphics.PerspectiveCamera.html](#))

Shader

Vec3

([Genesis.Math.Vec3.html](#))[]

([Genesis.Graphics.Shader.html](#))

Color

(<https://learn.microsoft.com/dotnet/api/system.drawing.color>)

([Genesis.Graphics.ShaderProgram.html](#))

TexCoords

([Genesis.Graphics.TexCoords.html](#))

End()

Texture

Declaration

([Genesis.Graphics.Texture.html](#))

Viewport

([Genesis.Graphics.Viewport.html](#))

```
void End()
```

FillRect(Rect, Color)

Declaration

+ Genesis.Core.GameElements

```
void FillRect(Rect rect, Color color)  
(Genesis.Core.GameElements.h)
```

- Genesis.Graphics

Parameters (Genesis.Graphics.html)

Type

Animation

Rect (Genesis.Graphics.Animation.html)

Animation3D

Color (<https://learn.microsoft.com/dotnet/api/system.drawing.color>)
(Genesis.Graphics.Animation3D.htm)

Camera

(Genesis.Graphics.Camera.html)

FinishCanvasRendering(Scene, Canvas)

(Genesis.Graphics.CameraType.html)

Declaration

Face

(Genesis.Graphics.Face.html)

```
void FinishCanvasRendering(Scene scene, Canvas canvas)
```

(Genesis.Graphics.Font.html)

Parameters

Framebuffer (Genesis.Graphics.Framebuffer.html)

Type

Glyphe

(Genesis.Graphics.Glyphe.html)

Scene (Genesis.Core.Scene.html)

IRenderDevice

Canvas (Genesis.Graphics.RenderDevice.html)

Material

(Genesis.Graphics.Material.html)

MaterialBuffer

FinishSceneRendering(Scene)

(Genesis.Graphics.MaterialBuffer.html)

Declaration

Mesh

(Genesis.Graphics.Mesh.html)

PerspectiveCamera

```
void FinishSceneRendering(Scene scene)
```

(Genesis.Graphics.PerspectiveCame

Shader

Parameters

(Genesis.Graphics.Shader.html)

Type

ShaderProgram

(Genesis.Graphics.ShaderProgram.h)

Scene (Genesis.Core.Scene.html)

TexCoords

(Genesis.Graphics.TexCoords.html)

Texture

(Genesis.Graphics.Texture.html)

GetError()

Viewport

(Genesis.Graphics.Viewport.html)

```
int GetError()
```

Returns

Type	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	

+ **Genesis.Core.GameElements**
 ([Genesis.Core.GameElements.h](#))
GetHandle()
- **Genesis.Graphics**
Declaration ([Genesis.Graphics.html](#))

Animation
IntPtr [GetHandle\(\)](#)
 ([Genesis.Graphics.Animation.html](#))
Animation3D

Return ([Genesis.Graphics.Animation3D.html](#))

Type	Description
Camera (Genesis.Graphics.Camera.html)	

IntPtr (<https://learn.microsoft.com/dotnet/api/system.IntPtr>)
 ([Genesis.Graphics.CameraType.html](#))

Face
([Genesis.Graphics.Face.html](#))

Init()

Font

([Genesis.Graphics.Font.html](#))

Declaration
Framebuffer
([Genesis.Graphics.Framebuffer.html](#))

void [Init\(\)](#)
Glyphe

([Genesis.Graphics.Glyphe.html](#))

IRenderDevice

([Genesis.Graphics.IRenderDevice.html](#))

InitElement3D(Element3D)

Material

Declaration ([Genesis.Graphics.Material.html](#))

MaterialBuffer

void [InitElement3D\(Element3D\)](#)
element
Mesh

([Genesis.Graphics.Mesh.html](#))

Parameters PerspectiveCamera

Type	Name	Description
Genesis.Graphics.PerspectiveCamera Shader Element3D (Genesis.Core.GameElements.Element3D.html) (Genesis.Graphics.Shader.html)	element	

ShaderProgram

([Genesis.Graphics.ShaderProgram.html](#))

InitGameElement(GameElement)

([Genesis.Graphics.TexCoords.html](#))

Declaration
Texture

([Genesis.Graphics.Texture.html](#))

viewport GameElement (GameElement element)
([Genesis.Graphics.Viewport.html](#))

Parameters

Type	Name	Description
GameElement (Genesis.Core.GameElement.html)	<i>element</i>	

InitSprite(Sprite)

Declaration

Genesis.Core.GameElements
 (Genesis.Core.GameElements.h)
 void InitSprite(Sprite sprite)
- **Genesis.Graphics**
 (Genesis.Graphics.html)

Parameters

 Animation

Type	Name	Description
Genesis.Graphics.Animation.html		

 Animation3D
 Sprite (Genesis.Core.GameElements.Sprite.html)
 (Genesis.Graphics.Animation3D.htm)

 Camera

 (Genesis.Graphics.Camera.html)

LoadFont(Font)

Declaration

 Face

 (Genesis.Graphics.Face.html)

 void LoadFont(Font font)

 (Genesis.Graphics.Font.html)

Parameters

 Framebuffer

 (Genesis.Graphics.Framebuffer.html)

Type	Name	Description
Glyphe		

 (Genesis.Graphics.Glyphe.html)

 Font (Genesis.Graphics.Font.html)

 IRenderDevice

 (Genesis.Graphics.IRenderDevice.html)

 Material

LoadTexture(Texture)

Declaration

 MaterialBuffer

 (Genesis.Graphics.MaterialBuffer.html)

 Mesh

 void LoadTexture(Texture texture)

 (Genesis.Graphics.Mesh.html)

 PerspectiveCamera

Parameters

 PerspectiveCamera

Type	Name	Description
Shader		

 (Genesis.Graphics.Shader.html)

 ShaderProgram

 (Genesis.Graphics.ShaderProgram.html)

 TexCoords

 (Genesis.Graphics.TexCoords.html)

ModelViewMatrix()

Declaration

 Viewport

 (Genesis.Graphics.Viewport.html)

```
void ModelViewMatrix()
```

PopMatrix()

Declaration

+ Genesis.Core.GameElements

```
void PopMatrix()
```

(Genesis.Core.GameElements.h)

- Genesis.Graphics

(Genesis.Graphics.html)

PrepareCanvasRendering(Scene, Canvas)

Animation

Declaration

Animation

Animation3D

```
void PrepareCanvasRendering(Scene scene, Canvas canvas)
```

Camera

(Genesis.Graphics.Camera.html)

Parameters

CameraType

Type	Description	Name	Description
Genesis.Graphics.CameraType.htm			
Face Scene (Genesis.Core.Scene.html) (Genesis.Graphics.Face.html)		scene	

Font
Font (Genesis.UI.Canvas.html)

(Genesis.Graphics.Font.html)

Framebuffer

(Genesis.Graphics.Framebuffer.html)

PrepareSceneRendering(Scene)

Glyphe

(Genesis.Graphics.Glyphe.html)

Declaration

IRenderDevice

(Genesis.Graphics.IRenderDevice.html)

```
void PrepareSceneRendering(Scene scene)
```

Material

(Genesis.Graphics.Material.html)

Parameters

MaterialBuffer

Type	Description	Name	Description
Mesh (Genesis.Graphics.Mesh.html)			

Scene
(Genesis.Graphics.Scene.html)

PerspectiveCamera

(Genesis.Graphics.PerspectiveCamera.html)

Shader

ProjectionMatrix()

(Genesis.Graphics.Shader.html)

Declaration

ShaderProgram

(Genesis.Graphics.ShaderProgram.html)

```
void ProjectionMatrix()
```

(Genesis.Graphics.TexCoords.html)

Texture

(Genesis.Graphics.Texture.html)

PushMatrix()

(Genesis.Graphics.Viewport.html)

Declaration

```
void PushMatrix()
```

Rotate(float, Vec3)

Declaration

+ **Genesis.Core.GameElements**

(**Genesis.Core.GameElements.h**
 void Rotate(float angle, Vec3 vector))

- **Genesis.Graphics**

(**Genesis.Graphics.html**)

Parameters

Type	Name	Description
Animation (Genesis.Graphics.Animation.html) float (https://learn.microsoft.com/dotnet/api/system.single)	angle	
Vec3 (Genesis.Math.Vec3.html) Camera (Genesis.Graphics.Camera.html) CameraType (Genesis.Graphics.CameraType.html)	vector	

SetCamera(Camera)

Declaration

(**Genesis.Graphics.Face.html**)

Font

void SetCamera(Camera camera)

Framebuffer

(**Genesis.Graphics.Framebuffer.html**)

Parameters

Type	Name	Description
Glyphe (Genesis.Graphics.Glyphe.html)		

IRenderDevice
Camera
(**Genesis.Graphics.Camera.html**)

(**Genesis.Graphics.IRenderDevice.html**)

Material

(**Genesis.Graphics.Material.html**)

SetFramebuffer(Framebuffer)

Declaration

Mesh

(**Genesis.Graphics.Mesh.html**)

void SetFramebuffer(Framebuffer framebuffer)

PerspectiveCamera

Parameters

Type	Name	Description
ShaderProgram (Genesis.Graphics.ShaderProgram.html)		

Framebuffer
(**Genesis.Graphics.ShaderProgram.Framebuffer.html**)

TexCoords

(**Genesis.Graphics.TexCoords.html**)

Texture

SetFramebuffer(int)

(**Genesis.Graphics.Texture.html**)

Declaration

(**Genesis.Graphics.Viewport.html**)

```
void SetFramebuffer(int framebuffer)
```

Parameters

Type	Name	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>framebuffer</i>	

+ **Genesis.Core.GameElements**
 ([Genesis.Core.GameElements.h](#))
SetLightSource(Light)
- **Genesis.Graphics**
Declaration ([Genesis.Graphics.html](#))

Animation
void SetLightSource(Light light)
 ([Genesis.Graphics.Animation.html](#))
Animation3D

Parameters

Type	Name	Description
Camera (Genesis.Graphics.Camera.html)		

Light
 ([Genesis.Core.Light.html](#))
 ([Genesis.Graphics.CameraType.html](#))
Face
 ([Genesis.Graphics.Face.html](#))

TextureClampS()

Font
 ([Genesis.Graphics.Font.html](#))
Framebuffer
 ([Genesis.Graphics.Framebuffer.html](#))
void TextureClampS()
Glyphe

 ([Genesis.Graphics.Glyphe.html](#))
IRenderDevice
 ([Genesis.Graphics.IRenderDevice.html](#))
Material

TextureClampT()

([Genesis.Graphics.Material.html](#))
MaterialBuffer
 ([Genesis.Graphics.MaterialBuffer.html](#))
Mesh
 ([Genesis.Graphics.Mesh.html](#))
PerspectiveCamera

TextureRepeats()

PerspectiveCamera
Shader
 ([Genesis.Graphics.Shader.html](#))
ShaderProgram
 ([Genesis.Graphics.ShaderProgram.html](#))

TexCoords
 ([Genesis.Graphics.TexCoords.html](#))
Texture

TextureRepeatT()

 ([Genesis.Graphics.Texture.html](#))
Viewport
 ([Genesis.Graphics.Viewport.html](#))

```
void TextureRepeatT()
```

Translate(Vec3)

Declaration

+ Genesis.Core.GameElements

```
void Translate(Vec3 vector)  
(Genesis.Core.GameElements.h)
```

- Genesis.Graphics

Parameters

(Genesis.Graphics.html)

Type

Animation

Vec3 (Genesis.Math.Vec3.html)

Name

Description

vector

Animation3D

(Genesis.Graphics.Animation3D.html)

Camera

Translate(float, float, float)

(Genesis.Graphics.Camera.html)

Declaration

Type

(Genesis.Graphics.CameraType.html)

Face

```
void Translate(float x, float y, float z)  
(Genesis.Graphics.Face.html)
```

Font

Parameters

(Genesis.Graphics.Font.html)

Type

Framebuffer

(Genesis.Graphics.Framebuffer.html)

float

(<https://learn.microsoft.com/dotnet/api/system.single>)

Name

Description

x

Glyphe

(Genesis.Graphics.Glyphe.html)

float

(<https://learn.microsoft.com/dotnet/api/system.single>)

y

IRenderDevice

float

(<https://learn.microsoft.com/dotnet/api/system.single>)

z

Material

(Genesis.Graphics.Material.html)

MaterialBuffer

UpdateFramebufferSize(Framebuffer, int, int)

(Genesis.Graphics.MaterialBuffer.html)

Declaration

(Genesis.Graphics.Mesh.html)

PerspectiveCamera

```
void UpdateFramebufferSize(Framebuffer framebuffer, int width, int height)  
(Genesis.Graphics.PerspectiveCame
```

Shader

Parameters

(Genesis.Graphics.Shader.html)

Type

ShaderProgram

(Genesis.Graphics.ShaderProgram.h)

Framebuffer

(Genesis.Graphics.Framebuffer.html)

Name

Description

framebuffer

TexCoords

int (Genesis.Graphics.TexCoords.html)

width

Texture

int (Genesis.Graphics.Texture.html)

height

Viewport

(Genesis.Graphics.Viewport.html)

Viewport(float, float, float)

Declaration

```
void Viewport(float x, float y, float width, float height)
```



Parameters

Type	Name	Description
+ Genesis.Core.GameElements		
float (Genesis.Core.GameElements.html)	x	
- Genesis.Graphics	y	
(Genesis.Graphics.html)	width	
Animation	height	
float (https://learn.microsoft.com/dotnet/api/system.single)		
(Genesis.Graphics.Animation.html)		

Animation3D
([Genesis.Graphics.Animation3D.html](#))
Camera
([Genesis.Graphics.Camera.html](#))
CameraType
([Genesis.Graphics.CameraType.html](#))
Face
([Genesis.Graphics.Face.html](#))
Font
([Genesis.Graphics.Font.html](#))
Framebuffer
([Genesis.Graphics.Framebuffer.html](#))
Glyphe
([Genesis.Graphics.Glyphe.html](#))
IRenderDevice
([Genesis.Graphics.IRenderDevice.html](#))
Material
([Genesis.Graphics.Material.html](#))
MaterialBuffer
([Genesis.Graphics.MaterialBuffer.html](#))
Mesh
([Genesis.Graphics.Mesh.html](#))
PerspectiveCamera
([Genesis.Graphics.PerspectiveCamera.html](#))
Shader
([Genesis.Graphics.Shader.html](#))
ShaderProgram
([Genesis.Graphics.ShaderProgram.html](#))
TexCoords
([Genesis.Graphics.TexCoords.html](#))
Texture
([Genesis.Graphics.Texture.html](#))
Viewport
([Genesis.Graphics.Viewport.html](#))

Class Material

Inheritance

↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [Material](#)

+ Genesis.Core.GameElements

Inherited Members

(Genesis.Core.GameElements.h)
[object.ToString\(\)](https://learn.microsoft.com/dotnet/api/system.object.tostring) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
[**object.Equals\(\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))
(Genesis.Graphics.html)
[**object.Equals\(object, object\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)))
[**object.Equals\(system-object-system-object\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object-system-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object-system-object)))
[**object.ReferenceEquals\(object, object\)**](https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals(system-object-object)) ([\(https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals\(system-object-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals(system-object-object)))
[object.GetHashCode\(\)](https://learn.microsoft.com/dotnet/api/system.object.gethashcode) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
[object.GetType\(\)](https://learn.microsoft.com/dotnet/api/system.object.gettype) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
[object.MemberwiseClone\(\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
[**object.MemberwiseClone\(object\)**](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone(system-object)) ([\(https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone\(system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone(system-object)))
Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#))
[CameraType](#)

Assembly

[Genesis.Graphics.CameraType.htm](#)

Syntax

[Face](#)
([Genesis.Graphics.Face.html](#))
[Font](#)
public class [Material](#)
([Genesis.Graphics.Font.html](#))
[Framebuffer](#)
([Genesis.Graphics.Framebuffer.html](#))

Constructors

[Material\(\)](#)
([Genesis.Graphics.Glyphe.html](#))
[IRenderDevice](#)

([Genesis.Graphics.IRenderDevice.html](#))

[Declaration](#)
([Genesis.Graphics.Material.html](#))

[MaterialBuffer](#)
public [Material\(\)](#)
([Genesis.Graphics.MaterialBuffer.html](#))

[Mesh](#)
([Genesis.Graphics.Mesh.html](#))

[PerspectiveCamera](#)
([Genesis.Graphics.PerspectiveCamera.html](#))

[Properties](#)
[Shader](#)

([Genesis.Graphics.Shader.html](#))

[DiffuseColor](#)
([Genesis.Graphics.ShaderProgram.html](#))

[Declaration](#)
[TexCoords](#)

([Genesis.Graphics.TexCoords.html](#))

[pTextureColor DiffuseColor { get; set; }](#)

([Genesis.Graphics.Texture.html](#))

[Viewport](#)
[Property Value](#)

([Genesis.Graphics.Viewport.html](#))

Type	Description
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	

DiffuseTexture

Declaration

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.h](#)) { get; set; }

- Genesis.Graphics

Property Value

([Genesis.Graphics.html](#))

Type Animation

([Genesis.Graphics.Animation.html](#))

string (<https://learn.microsoft.com/dotnet/api/system.string>)

Animation3D

([Genesis.Graphics.Animation3D.html](#))

Camera

NormalTexture

([Genesis.Graphics.Camera.html](#))

CameraType

Declaration

([Genesis.Graphics.CameraType.html](#))

Face

public string NormalTexture { get; set; }

([Genesis.Graphics.Face.html](#))

Font

Property Value

([Genesis.Graphics.Font.html](#))

Framebuffer

([Genesis.Graphics.Framebuffer.html](#))

Glyphe

string (<https://learn.microsoft.com/dotnet/api/system.string>)

([Genesis.Graphics.Glyphe.html](#))

IRenderDevice

([Genesis.Graphics.IRenderDevice.html](#))

Propetrys

Material

Declaration

([Genesis.Graphics.Material.html](#))

MaterialBuffer

([Genesis.Graphics.MaterialBuffer.html](#))

public Dictionary<string, object> Propetrys { get; set; }

Mesh

([Genesis.Graphics.Mesh.html](#))

Perspective Camera

Property Value

([Genesis.Graphics.PerspectiveCamera.html](#))

Shader

Dict<[Genesis.Graphics.Shader.html](#), <https://learn.microsoft.com/dotnet/api/system.collections.generic.dictionary-2>>

ShaderProgram (<https://learn.microsoft.com/dotnet/api/system.string>),

object ([Genesis.Graphics.ShaderProgram.html](#)) <<https://learn.microsoft.com/dotnet/api/system.object>>

TexCoords

([Genesis.Graphics.TexCoords.html](#))

Texture

([Genesis.Graphics.Texture.html](#))

Viewport

([Genesis.Graphics.Viewport.html](#))

Description

Type	Description
Animation	

Type	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	

Type	Description
Animation3D	

Type	Description
Camera	

Type	Description
CameraType	

Type	Description
Face	

Type	Description
Font	

Type	Description
Framebuffer	

Type	Description
Glyphe	

Type	Description
IRenderDevice	

Type	Description
Material	

Type	Description
MaterialBuffer	

Type	Description
NormalTexture	

Type	Description
Object	

Type	Description
Perspective Camera	

Type	Description
Propetrys	

Type	Description
Shader	

Type	Description
Texture	

Type	Description
Viewport	



- + **Genesis.Core.GameElements**
(Genesis.Core.GameElements.h)
- **Genesis.Graphics**
(Genesis.Graphics.html)

Animation
(Genesis.Graphics.Animation.html)
Animation3D
(Genesis.Graphics.Animation3D.html)
Camera
(Genesis.Graphics.Camera.html)
CameraType
(Genesis.Graphics.CameraType.html)
Face
(Genesis.Graphics.Face.html)
Font
(Genesis.Graphics.Font.html)
Framebuffer
(Genesis.Graphics.Framebuffer.html)
Glyphe
(Genesis.Graphics.Glyphe.html)
IRenderDevice
(Genesis.Graphics.IRenderDevice.html)
Material
(Genesis.Graphics.Material.html)
MaterialBuffer
(Genesis.Graphics.MaterialBuffer.html)
Mesh
(Genesis.Graphics.Mesh.html)
PerspectiveCamera
(Genesis.Graphics.PerspectiveCamera.html)
Shader
(Genesis.Graphics.Shader.html)
ShaderProgram
(Genesis.Graphics.ShaderProgram.html)
TexCoords
(Genesis.Graphics.TexCoords.html)
Texture
(Genesis.Graphics.Texture.html)
Viewport
(Genesis.Graphics.Viewport.html)

Struct MaterialBuffer

Inherited Members

Enter here to filter.

ValueType.Equals(object) (<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

ValueType.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.valuetype.gethashcode>)

ValueType.ToString() (<https://learn.microsoft.com/dotnet/api/system.valuetype.tostring>)

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

Name [spire.Genesis](#) (Genesis.html).Graphics (Genesis.Graphics.html)

Assembly [Genesis](#) (Genesis.Graphics.Animation.html)

Syntax

([Genesis.Graphics.Animation3D.html](#))

Camera

public struct MaterialBuffer
([Genesis.Graphics.Camera.html](#))

CameraType

([Genesis.Graphics.CameraType.html](#))

Face

([Genesis.Graphics.Face.html](#))

Font

([Genesis.Graphics.Font.html](#))

Fields

HasData

Framebuffer

([Genesis.Graphics.Framebuffer.html](#))

Declaration

Glyphe

([Genesis.Graphics.Glyphe.html](#))

IRenderDevice HasData

([Genesis.Graphics.IRenderDevice.html](#))

FieldValue

Material

([Genesis.Graphics.Material.html](#))

Type

MaterialBuffer

([Genesis.Graphics.MaterialBuffer.html](#))

bool

(<https://learn.microsoft.com/dotnet/api/system.boolean>)

Mesh

([Genesis.Graphics.Mesh.html](#))

PerspectiveCamera

Normals

([Genesis.Graphics.PerspectiveCamera.html](#))

Shader

([Genesis.Graphics.Shader.html](#))

ShaderProgram

public float[] Normals

([Genesis.Graphics.ShaderProgram.html](#))

FieldValue

TexCoords

([Genesis.Graphics.TexCoords.html](#))

Texture

([Genesis.Graphics.Texture.html](#))

Viewport

float

(<https://learn.microsoft.com/dotnet/api/system.single>)[]

([Genesis.Graphics.Viewport.html](#))

Type	Description
MaterialBuffer	

Texcords

Declaration

```
public float[] Texcords
```

Field Value

Type	Description
+ Genesis.Core.GameElements float[] (Genesis.Core.GameElements.html)	

- [Genesis.Graphics](#)

([Genesis.Graphics.html](#))

[Vertices](#)

Animation

Declaration

Animation3D

public float[] Vertices ([Genesis.Graphics.Animation3D.html](#))

Camera

([Genesis.Graphics.Camera.html](#))

Field Value

CameraType

Type	Description
Face float (Genesis.Graphics.Face.html)	

Font

([Genesis.Graphics.Font.html](#))

Framebuffer

([Genesis.Graphics.Framebuffer.html](#))

Glyphe

([Genesis.Graphics.Glyphe.html](#))

IRenderDevice

([Genesis.Graphics.IRenderDevice.html](#))

Material

([Genesis.Graphics.Material.html](#))

MaterialBuffer

([Genesis.Graphics.MaterialBuffer.html](#))

Mesh

([Genesis.Graphics.Mesh.html](#))

PerspectiveCamera

([Genesis.Graphics.PerspectiveCamera.html](#))

Shader

([Genesis.Graphics.Shader.html](#))

ShaderProgram

([Genesis.Graphics.ShaderProgram.html](#))

TexCoords

([Genesis.Graphics.TexCoords.html](#))

Texture

([Genesis.Graphics.Texture.html](#))

Viewport

([Genesis.Graphics.Viewport.html](#))

Class Mesh

Inheritance

↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [Mesh](#)

+ Genesis.Core.GameElements

Inherited Members

(Genesis.Core.GameElements.h)
[object.ToString\(\)](https://learn.microsoft.com/dotnet/api/system.object.tostring) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
[**object.Equals\(\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))
(Genesis.Graphics.html)
[**object.Equals\(object, object\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)))
[**object.Equals\(system-object-system-object\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object-object)))
[**object.ReferenceEquals\(object, object\)**](https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals(system-object-object)) ([\(https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals\(system-object-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals(system-object-object)))
[object.GetHashCode\(\)](https://learn.microsoft.com/dotnet/api/system.object.gethashcode) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
[object.GetType\(\)](https://learn.microsoft.com/dotnet/api/system.object.gettype) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
[object.MemberwiseClone\(\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
[**object.MemberwiseClone\(Camera\)**](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone(system-object)) ([\(https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone\(system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone(system-object)))
Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#))
[CameraType](#)

Assembly

[Genesis.Graphics.CameraType.htm](#)

Syntax

[Face](#)
([Genesis.Graphics.Face.html](#))
[Font](#)
public class Mesh
([Genesis.Graphics.Font.html](#))
[Framebuffer](#)
([Genesis.Graphics.Framebuffer.html](#))

Constructors

[Glyphe](#)
([Genesis.Graphics.Glyphe.html](#))
[IRenderDevice](#)
Mesh()
([Genesis.Graphics.IRenderDevice.html](#))
[Material](#)
([Genesis.Graphics.Material.html](#))
[MaterialBuffer](#)
public Mesh()
([Genesis.Graphics.MaterialBuffer.html](#))
[Mesh](#)
([Genesis.Graphics.Mesh.html](#))
[PerspectiveCamera](#)
([Genesis.Graphics.PerspectiveCamera.html](#))
[Shader](#)
([Genesis.Graphics.Shader.html](#))

Properties

[Faces](#)
([Genesis.Graphics.ShaderProgram.html](#))
[Declaration](#)
[TexCoords](#)
([Genesis.Graphics.TexCoords.html](#))
pTextureList<float> Faces { get; set; }
([Genesis.Graphics.Texture.html](#))
[Viewport](#)
Property Value
([Genesis.Graphics.Viewport.html](#))

Type	Description
List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1) < float (https://learn.microsoft.com/dotnet/api/system.single) >	

Indicies

Declaration

Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

```
public List<int> Indicies { get; set; }
```

- Genesis.Graphics

(Genesis.Graphics.html)

Property Value

Animation

Type	Description
(Genesis.Graphics.Animation.html)	

Animation3D	List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1) < int (https://learn.microsoft.com/dotnet/api/system.int32) >
Camera	(Genesis.Graphics.Camera.html)

CameraType

MaterialIndex

Declaration

(Genesis.Graphics.Face.html)

Font

```
public int MaterialIndex { get; set; }
```

Framebuffer

Property Value

Glyphe

Type	Description
(Genesis.Graphics.Glyphe.html)	

int	int (https://learn.microsoft.com/dotnet/api/system.int32)
(Genesis.Graphics.IRenderDevice.html)	(Genesis.Graphics.IRenderDevice.html)

Material

(Genesis.Graphics.Material.html)

Normals

Declaration

(Genesis.Graphics.MaterialBuffer.html)

Mesh

(Genesis.Graphics.Mesh.html)

```
public List<float> Normals { get; set; }
```

PerspectiveCamera

(Genesis.Graphics.PerspectiveCamera.html)

Property Value

Type	Description
------	-------------

ShaderProgram	
---------------	--

List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1) < float (https://learn.microsoft.com/dotnet/api/system.single) >	
--	--

(Genesis.Graphics.TexCoords.html)	
-----------------------------------	--

Texture

(Genesis.Graphics.Texture.html)

Properties

Viewport

(Genesis.Graphics.Viewport.html)

Declaration

```
public Dictionary<string, object> Propeterys { get; set; }
```

Property Value

Type	Description
Dictionary (https://learn.microsoft.com/dotnet/api/system.collections.generic.dictionary-2)< string (https://learn.microsoft.com/dotnet/api/system.string), + Genesis.Core.GameElements object (https://learn.microsoft.com/dotnet/api/system.object)> (Genesis.Core.GameElements.h)	

- **Genesis.Graphics**

TextureCords

Declaration
(Genesis.Graphics.Animation.html)

Animation3D
public List<float> TextureCords { get; set; }
(Genesis.Graphics.Animation3D.htm)

Camera
(Genesis.Graphics.Camera.html)

Type	Description
CameraType (Genesis.Graphics.CameraType.htm)	

List <https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1><
float (Genesis.Graphics.Font.html)/dotnet/api/system.single)>

Font
(Genesis.Graphics.Font.html)

Framebuffer
(Genesis.Graphics.Framebuffer.html)

Glyphe
(Genesis.Graphics.Glyphe.html)

IRenderDevice
public List<float> Vericies { get; set; }
(Genesis.Graphics.IRenderDevice.htm)

Material
(Genesis.Graphics.Material.html)

Type	Description
MaterialBuffer (Genesis.Graphics.MaterialBuffer.htm)	

List <https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1><
float (Genesis.Graphics.Mesh.html)/dotnet/api/system.single)>

PerspectiveCamera
(Genesis.Graphics.PerspectiveCamera.html)

Shader
(Genesis.Graphics.Shader.html)

ShaderProgram
(Genesis.Graphics.ShaderProgram.html)

TexCoords
(Genesis.Graphics.TexCoords.html)

Texture
(Genesis.Graphics.Texture.html)

Viewport
(Genesis.Graphics.Viewport.html)

Class PerspectiveCamera

Inheritance

↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [Camera](https://learn.microsoft.com/dotnet/api/genesis.graphics.camera) ([Genesis.Graphics.Camera.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.camera.html))
↳ [PerspectiveCamera](https://learn.microsoft.com/dotnet/api/genesis.core.perspectivecamera)

+ Genesis.Core.GameElements

Int ([Genesis.Core.GameElements.h](https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.h))

[Genesis.Graphics](https://learn.microsoft.com/dotnet/api/genesis.graphics)

([Genesis.Graphics.Camera.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.camera.html)#[Genesis_Graphics_Camera_LookAt_Genesis_Core_GameElement_](#))
[Camera.LookAt\(GameElement, bool\)](#)
[Animation](#):
([Genesis.Graphics.Camera.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.camera.html)#[Genesis_Graphics_Camera_LookAt_Genesis_Core_GameElement_System_Boolean_](#))
([Genesis.Graphics.Animation.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.animation.html))
[Camera.GetRect\(\)](#):
([Genesis.Graphics.Camera.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.camera.html)#[Genesis_Graphics_Camera_GetRect](#))
[Animation3D](#):
([Genesis.Graphics.Animation3D.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.animation3d.html))
[Camera.Location](#):
([Genesis.Graphics.Camera.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.camera.html)#[Genesis_Graphics_Camera_Location](#))
([Genesis.Graphics.Animation3D.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.animation3d.html))
[Camera.Size](#):
([Genesis.Graphics.Camera.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.camera.html)#[Genesis_Graphics_Camera_Size](#))
[Camera](#):
[Camera.Rotation](#):
([Genesis.Graphics.Camera.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.camera.html)#[Genesis_Graphics_Camera_Rotation](#))
([Genesis.Graphics.Camera.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.camera.html))
[Camera.Near](#):
([Genesis.Graphics.Camera.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.camera.html)#[Genesis_Graphics_Camera_Near](#))
[CameraType](#):
[Camera.Far](#):
([Genesis.Graphics.CameraType.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.camertype.html))
[Camera.Type](#):
([Genesis.Graphics.Camera.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.camera.html)#[Genesis_Graphics_Camera_Type](#))
[Face](#):
[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
([Genesis.Graphics.Face.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.face.html))
[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object>equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object>equals(system-object-object)))
([Genesis.Graphics.Font.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.font.html))
[object.Equals\(object, object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object>equals\(system-object-object-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object>equals(system-object-object-object-object)))
([Genesis.Graphics_FRAMEBUFFER.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.framebuffer.html))
[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
[Glyphe](#):
[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
([Genesis.Graphics.Glyphe.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.glyphe.html))
[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
[IRenderDevice](#):
[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
([Genesis.IRenderDevice.html](https://learn.microsoft.com/dotnet/api/genesis.irenderdevice.html))

Namespace: [Genesis](https://learn.microsoft.com/dotnet/api/genesis.html) ([Genesis.html](https://learn.microsoft.com/dotnet/api/genesis.html)).[Graphics](https://learn.microsoft.com/dotnet/api/genesis.graphics) ([Genesis.Graphics.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.html))

Assembly: [Genesis.Material](https://learn.microsoft.com/dotnet/api/genesis.material)

[Material](https://learn.microsoft.com/dotnet/api/genesis.material)

MaterialBuffer

([Genesis.Graphics.MaterialBuffer.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.materialbuffer.html))

Mesh

public class PerspectiveCamera : Camera
([Genesis.Graphics.Mesh.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.mesh.html))

PerspectiveCamera

([Genesis.Graphics.PerspectiveCamera.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.perspectivecamera.html))

Constructors

([Genesis.Graphics.Shader.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.shader.html))

ShaderProgram

[PerspectiveCamera](https://learn.microsoft.com/dotnet/api/genesis.core.perspectivecamera)([Vec3](#), [Vec3](#), float, float)

Declaration

([Genesis.Graphics.TexCoords.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.texcoords.html))

Texture

public PerspectiveCamera([Vec3](#) location, [Vec3](#) size, float near, float far)
([Genesis.Graphics.Texture.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.texture.html))

Viewport

([Genesis.Graphics.Viewport.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.viewport.html))

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	<i>location</i>	
Vec3 (Genesis.Math.Vec3.html)	<i>size</i>	
float (https://learn.microsoft.com/dotnet/api/system.single) ▼	<i>near</i>	
float (https://learn.microsoft.com/dotnet/api/system.single)	<i>far</i>	

+ **Genesis.Core.GameElements**
(Genesis.Core.GameElements.h)

Methods
(Genesis.Graphics.html)

CameraFront()
([Genesis.Graphics.Animation.html](#))

Declaration:
Animation3D
([Genesis.Graphics.Animation3D.html](#))

Camera/**vec3 CameraFront()**
([Genesis.Graphics.Camera.html](#))

CameraType

Returns: [Genesis.Graphics.CameraType.html](#)

Type	Description
Face (Genesis.Graphics.Face.html)	

Forward(float)
([Genesis.Graphics.Glyphe.html](#))

Declaration:
([Genesis.Graphics.Glyphe.html](#))

IRenderDevice

Genesis.Graphics.RenderDeviceHandle

Material

 ([Genesis.Graphics.Material.html](#))

Parameters:
MaterialBuffer

Type	Name	Description
Genesis.Graphics.MaterialBuffer.html		

Returns: [Genesis.Graphics.PerspectiveCamera.html](#)

Type	Description
Shader (Genesis.Graphics.Shader.html)	

Vec3 (Genesis.Math.Vec3.html)

ShaderProgram
([Genesis.Graphics.ShaderProgram.html](#))

TexCoords
([Genesis.Graphics.TexCoords.html](#))

MoveBackward(float)
([Genesis.Graphics.Texture.html](#))

Viewport
([Genesis.Graphics.Viewport.html](#))

```
public void MoveBackward(float value)
```

Parameters

Type		Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)		value	

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.h](#))

MoveDown(float)

- Genesis.Graphics

Declaration ([Genesis.Graphics.html](#))

```
Animation  
public void MoveDown(float value)  
(Genesis.Graphics.Animation.html)
```

Animation3D

Parameters ([Genesis.Graphics.Animation3D.html](#))

Type		Name	Description
Camera (Genesis.Graphics.Camera.html)			

float CameraType (<https://learn.microsoft.com/dotnet/api/system.single>)
([Genesis.Graphics.CameraType.html](#))

Face

([Genesis.Graphics.Face.html](#))

MoveForward(float)

Font

([Genesis.Graphics.Font.html](#))

Declaration

Framebuffer

```
(Genesis.Graphics.Framebuffer.html)  
public void MoveForward(float value)  
Glyphe
```

([Genesis.Graphics.Glyphe.html](#))

Parameters

IRenderDevice ([Genesis.Graphics.IRenderDevice.html](#))

Type		Name	Description
Material			

float MaterialBuffer (<https://learn.microsoft.com/dotnet/api/system.single>)
([Genesis.Graphics.MaterialBuffer.html](#))

MaterialBuffer

([Genesis.Graphics.MaterialBuffer.html](#))

Mesh

MoveLeft(float)

([Genesis.Graphics.Mesh.html](#))

Declaration

PerspectiveCamera ([Genesis.Graphics.PerspectiveCamera.html](#))

```
(Genesis.Graphics.PerspectiveCamera.html)  
public void MoveLeft(float value)  
(Genesis.Graphics.Shader.html)
```

ShaderProgram

Parameters ([Genesis.Graphics.ShaderProgram.html](#))

Type		Name	Description
TexCoords (Genesis.Graphics.TexCoords.html)			

float Texture (<https://learn.microsoft.com/dotnet/api/system.single>)
([Genesis.Graphics.Texture.html](#))

Viewport

([Genesis.Graphics.Viewport.html](#))

MoveRight(float)

Declaration

```
public void MoveRight(float value)
```



Parameters

Type	Name	Description
+ Genesis.Core.GameElements float (https://learn.microsoft.com/dotnet/api/system.single)	value	

- Genesis.Graphics

(Genesis.Graphics.html)

MoveUp(float)

Animation

Declaration

Animation3D

```
public void MoveUp(float value)
```

Camera

(Genesis.Graphics.Camera.html)

Parameters

CameraType

Type	Name	Description
Face float (https://learn.microsoft.com/dotnet/api/system.single)	value	

Font

(Genesis.Graphics.Font.html)

Framebuffer

RenderToTexture(Game, IRenderDevice, Texture, Vec3)

(Genesis.Graphics.Framebuffer.html)

Declaration

Glyphe

(Genesis.Graphics.Glyphe.html)

```
IRenderDevice RenderToTexture(Game game, IRenderDevice renderer, Texture renderTarget, Vec3 resolution)
```

(Genesis.Graphics.IRenderDevice.html)

Material

(Genesis.Graphics.Material.html)

Parameters

MaterialBuffer

Type	Name	Description
Genesis.Graphics.MaterialBuffer.html		
Mesh Game (Genesis.Core.Game.html) (Genesis.Graphics.Mesh.html)	game	
Perspective Camera IRenderDevice (Genesis.Graphics.IRenderDevice.html)	renderer	
Texture (Genesis.Graphics.Texture.html)	renderTarget	
Shader Vec3 (Genesis.Math.Vec3.html)	resolution	
ShaderProgram (Genesis.Graphics.Shader.html)		
TexCoords (Genesis.Graphics.TexCoords.html)		

RenderToTexture(Game, IRenderDevice, int, Vec3)

Texture

Declaration

(Genesis.Graphics.Texture.html)

Viewport

(Genesis.Graphics.Viewport.html)

```
public void RenderToTexture(Game game, IRenderDevice renderer, int renderTarget, Vec3 resolution)
```

Parameters

Type	Name	Description
Game (Genesis.Core.Game.html) + Genesis.Core.GameElements (Genesis.Core.GameElements.h)	game	
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	renderer	
int (https://learn.microsoft.com/dotnet/api/system.int32) - Genesis.Graphics (Genesis.Graphics.html)	renderTarget	
Vec3 (Genesis.Math.Vec3.html)	resolution	
Animation (Genesis.Graphics.Animation.html) Animation3D (Genesis.Graphics.Animation3D.html) Camera (Genesis.Graphics.Camera.html) CameraType (Genesis.Graphics.CameraType.html) Face (Genesis.Graphics.Face.html) Font (Genesis.Graphics.Font.html) Framebuffer (Genesis.Graphics.Framebuffer.html) Glyphe (Genesis.Graphics.Glyphe.html) IRenderDevice (Genesis.Graphics.IRenderDevice.html) Material (Genesis.Graphics.Material.html) MaterialBuffer (Genesis.Graphics.MaterialBuffer.html) Mesh (Genesis.Graphics.Mesh.html) PerspectiveCamera (Genesis.Graphics.PerspectiveCamera.html) Shader (Genesis.Graphics.Shader.html) ShaderProgram (Genesis.Graphics.ShaderProgram.html) TexCoords (Genesis.Graphics.TexCoords.html) Texture (Genesis.Graphics.Texture.html) Viewport (Genesis.Graphics.Viewport.html)		

Class Shader

Inheritance

↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [Shader](#)

+ Genesis.Core.GameElements

Inherited Members

(Genesis.Core.GameElements.h)
[object.ToString\(\)](https://learn.microsoft.com/dotnet/api/system.object.tostring) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
[**object.Equals**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)) ([\(https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))
(Genesis.Graphics.html)
[**object.Equals**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object))([object](#), [object](#)) ([\(https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)))
[**object.ReferenceEquals**](https://learn.microsoft.com/dotnet/api/system.object.referenceequals)([object](#), [object](#)) ([\(https://learn.microsoft.com/dotnet/api/system.object.referenceequals\)](https://learn.microsoft.com/dotnet/api/system.object.referenceequals))
[**object.GetHashCode**](https://learn.microsoft.com/dotnet/api/system.object.gethashcode)() ([\(https://learn.microsoft.com/dotnet/api/system.object.gethashcode\)](https://learn.microsoft.com/dotnet/api/system.object.gethashcode))
[**object.GetType**](https://learn.microsoft.com/dotnet/api/system.object.gettype)() ([\(https://learn.microsoft.com/dotnet/api/system.object.gettype\)](https://learn.microsoft.com/dotnet/api/system.object.gettype))
[**object.MemberwiseClone**](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)() ([\(https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone))
[\[Camera\]\(#\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.camera)

Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#))

[Assembly:](#) [Genesis](#)

Syntax

[\(Genesis.Graphics.Face.html\)](#)

Font
public class Shader
([Genesis.Graphics.Font.html](#))

[Framebuffer](#)
([Genesis.Graphics.Framebuffer.html](#))

Constructors

[\(Genesis.Graphics.Glyphe.html\)](#)

[IRenderDevice](#)

Shader()
([Genesis.Graphics.IRenderDevice.html](#))

Declaration

[\(Genesis.Graphics.Material.html\)](#)

[MaterialBuffer](#)

public Shader()
([Genesis.Graphics.MaterialBuffer.html](#))

[Mesh](#)

([Genesis.Graphics.Mesh.html](#))

[PerspectiveCamera](#)

Shader(string)
([Genesis.Graphics.PerspectiveCamera.html](#))

Declaration

[\(Genesis.Graphics.Shader.html\)](#)

ShaderProgram

public Shader(string source)
([Genesis.Graphics.ShaderProgram.html](#))

[TexCoords](#)

Parameters
([Genesis.Graphics.TexCoords.html](#))

Type	Name	Description
Texture (Genesis.Graphics.Texture.html)		
string (https://learn.microsoft.com/dotnet/api/system.string)	<i>source</i>	

[\(Genesis.Graphics.Viewport.html\)](#)

Properties

ShaderID

Declaration

▼

```
public int ShaderID { get; set; }
```

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

- Genesis.Graphics

(Genesis.Graphics.html)

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

Animation

(Genesis.Graphics.Animation.html)

Animation3D

Source

(Genesis.Graphics.Animation3D.html)

Declaration

(Genesis.Graphics.Camera.html)

CameraType

```
public string Source { get; set; }
```

(Genesis.Graphics.CameraType.html)

Face

Property Value

(Genesis.Graphics.Face.html)

Type

Font

(Genesis.Graphics.Font.html)

string (<https://learn.microsoft.com/dotnet/api/system.string>)

(Genesis.Graphics_FRAMEBUFFER.html)

Glyphe

(Genesis.Graphics.Glyphe.html)

Methods

IRenderDevice

(Genesis.Graphics.IRenderDevice.html)

Material

(Genesis.Graphics.Material.html)

FromFile(string)

MaterialBuffer

Declaration

(Genesis.Graphics.MaterialBuffer.html)

Mesh

(Genesis.Graphics.MeshFromFile(string filename))

PerspectiveCamera

(Genesis.Graphics.PerspectiveCamera.html)

Parameters

Shader

Type

Genesis.Graphics.Shader.html

ShaderProgram

string (<https://learn.microsoft.com/dotnet/api/system.string>)

(Genesis.Graphics.ShaderProgram.html)

Name

Description

filename

TexCoords

Returns

(Genesis.Graphics.TexCoords.html)

Type

Texture

(Genesis.Graphics.Texture.html)

Shader

(Genesis.Graphics.Shader.html)

Viewport

(Genesis.Graphics.Viewport.html)

Description



- + **Genesis.Core.GameElements**
(Genesis.Core.GameElements.h)
- **Genesis.Graphics**
(Genesis.Graphics.html)

Animation
(Genesis.Graphics.Animation.html)
Animation3D
(Genesis.Graphics.Animation3D.html)
Camera
(Genesis.Graphics.Camera.html)
CameraType
(Genesis.Graphics.CameraType.html)
Face
(Genesis.Graphics.Face.html)
Font
(Genesis.Graphics.Font.html)
Framebuffer
(Genesis.Graphics.Framebuffer.html)
Glyphe
(Genesis.Graphics.Glyphe.html)
IRenderDevice
(Genesis.Graphics.IRenderDevice.html)
Material
(Genesis.Graphics.Material.html)
MaterialBuffer
(Genesis.Graphics.MaterialBuffer.html)
Mesh
(Genesis.Graphics.Mesh.html)
PerspectiveCamera
(Genesis.Graphics.PerspectiveCamera.html)
Shader
(Genesis.Graphics.Shader.html)
ShaderProgram
(Genesis.Graphics.ShaderProgram.html)
TexCoords
(Genesis.Graphics.TexCoords.html)
Texture
(Genesis.Graphics.Texture.html)
Viewport
(Genesis.Graphics.Viewport.html)

Class ShaderProgram

Inheritance

↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [ShaderProgram](#)
↳ [BasicShader](#) ([Genesis.Graphics.Shaders.OpenGL.BasicShader.html](#))
+ **Genesis.Core.GameElements**
 ↳ [\(Genesis.Core.GameElements.h\)](#)
 ↳ [DiffuseLightning](#) ([Genesis.Graphics.Shaders.OpenGL.DiffuseLightning.html](#))
 ↳ [DiffuseNormalLightning](#) ([Genesis.Graphics.Shaders.OpenGL.DiffuseNormalLightning.html](#))
- **Genesis.Graphics**
 ↳ [Shader](#) ([Genesis.Graphics.Shaders.OpenGL.DiffuseNormalShader.html](#))
 ↳ [\(Genesis.Graphics.html\)](#)
 ↳ [DiffuseShader](#) ([Genesis.Graphics.Shaders.OpenGL.DiffuseShader.html](#))
 ↳ [DiffuseSolidShader](#) ([Genesis.Graphics.Shaders.OpenGL.DiffuseSolidShader.html](#))
 ↳ [Animation](#)
 ↳ [MVPRectShader](#) ([Genesis.Graphics.Shaders.OpenGL.MVPRectShader.html](#))
 ↳ [\(Genesis.Graphics.Animation.html\)](#)
 ↳ [MVPShader](#) ([Genesis.Graphics.Shaders.OpenGL.MVPShader.html](#))
 ↳ [Animation3D](#)
 ↳ [MVPSolidShader](#) ([Genesis.Graphics.Shaders.OpenGL.MVPSolidShader.html](#))
 ↳ [\(Genesis.Graphics.Animation3D.html\)](#)
 ↳ [ScreenShader](#) ([Genesis.Graphics.Shaders.OpenGL.ScreenShader.html](#))
 ↳ [Camera](#)
 ↳ [SkyboxShader](#) ([Genesis.Graphics.Shaders.OpenGL.SkyboxShader.html](#))
 ↳ [\(Genesis.Graphics.Camera.html\)](#)
 ↳ [SpriteShader](#) ([Genesis.Graphics.Shaders.OpenGL.SpriteShader.html](#))
 ↳ [CameraType](#)
 ↳ [TerrainShader](#) ([Genesis.Graphics.Shaders.OpenGL.TerrainShader.html](#))
 ↳ [\(Genesis.Graphics.CameraType.html\)](#)
 ↳ [WireframeShader](#) ([Genesis.Graphics.Shaders.OpenGL.WireframeShader.html](#))
 ↳ [Face](#)

Inherited Members

Font
object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
[\(Genesis.Graphics.Font.html\)](#)
object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))
 ↳ [\(Genesis.Graphics_FRAMEBUFFER.html\)](#)
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))
 ↳ [\(Genesis.Graphics_Glyphe.html\)](#)
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
 ↳ [\(IRenderDevice.html\)](#)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
 ↳ [\(Genesis.Graphics.IRenderDevice.html\)](#)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
 ↳ [\(Material.html\)](#)
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
 ↳ [\(Genesis.Graphics.Material.html\)](#)
Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#))
MaterialBuffer

Asserts

[\(Genesis.Graphics.MaterialBuffer.html\)](#)

Syntax

[\(Genesis.Graphics.Mesh.html\)](#)

```
public class ShaderProgram
  (Genesis.Graphics.PerspectiveCamera
    Shader
      (Genesis.Graphics.Shader.html))
```

Constructors

[\(Genesis.Graphics.ShaderProgram.html\)](#)

TexCoords

ShaderProgram()

Texture

[\(Genesis.Graphics.Texture.html\)](#)

Viewport

[\(Genesis.Graphics.Viewport.html\)](#)

```
public ShaderProgram()
```

Properties

+ Genesis.Core.GameElements
FragmentShader
(Genesis.Core.GameElements.h)

Declaration
- Genesis.Graphics

(Genesis.Graphics.html)

```
public Shader FragmentShader { get; set; }
```

Animation

(Genesis.Graphics.Animation.html)

Property Value
Animation3D

Type	Description
Genesis.Graphics.Animation3D.htm	
Camera	

Shader (Genesis.Graphics.Shader.html) (Genesis.Graphics.Camera.html)	
CameraType	
(Genesis.Graphics.CameraType.html)	

ProgramID

(Genesis.Graphics.Face.html)

Declaration
Font

(Genesis.Graphics.Font.html)

```
public int ProgramID { get; set; }
```

(Genesis.Graphics.Framebuffer.html)

Glyphe
Property Value

(Genesis.Graphics.Glyphe.html)

Type	Description
IRenderDevice	

int (https://learn.microsoft.com/dotnet/api/system.int32) Material	
---	--

(Genesis.Graphics.Material.html)

MaterialBuffer

VertexShader
(Genesis.Graphics.MaterialBuffer.html)

Mesh

Declaration
(Genesis.Graphics.Mesh.html)

PerspectiveCamera

```
public Shader VertexShader { get; set; }
```

Shader

(Genesis.Graphics.Shader.html)

Property Value
ShaderProgram

Type	Description
Genesis.Graphics.ShaderProgram.h	

TexCoords Shader (Genesis.Graphics.Shader.html) (Genesis.Graphics.TexCoords.html)	
Texture (Genesis.Graphics.Texture.html)	

Viewport

(Genesis.Graphics.Viewport.html)



- + **Genesis.Core.GameElements**
(Genesis.Core.GameElements.h)
- **Genesis.Graphics**
(Genesis.Graphics.html)

Animation
(Genesis.Graphics.Animation.html)
Animation3D
(Genesis.Graphics.Animation3D.html)
Camera
(Genesis.Graphics.Camera.html)
CameraType
(Genesis.Graphics.CameraType.html)
Face
(Genesis.Graphics.Face.html)
Font
(Genesis.Graphics.Font.html)
Framebuffer
(Genesis.Graphics.Framebuffer.html)
Glyphe
(Genesis.Graphics.Glyphe.html)
IRenderDevice
(Genesis.Graphics.IRenderDevice.html)
Material
(Genesis.Graphics.Material.html)
MaterialBuffer
(Genesis.Graphics.MaterialBuffer.html)
Mesh
(Genesis.Graphics.Mesh.html)
PerspectiveCamera
(Genesis.Graphics.PerspectiveCamera.html)
Shader
(Genesis.Graphics.Shader.html)
ShaderProgram
(Genesis.Graphics.ShaderProgram.html)
TexCoords
(Genesis.Graphics.TexCoords.html)
Texture
(Genesis.Graphics.Texture.html)
Viewport
(Genesis.Graphics.Viewport.html)

Class TexCoords

Values for texture coords

▼ Enter here to filter...

Inheritance

+ Genesis.Core.GameElements

↳ Object (<https://learn.microsoft.com/dotnet/api/system.object>)

([Genesis.Core.GameElements.h](#))

Inherited Members

([Genesis.Graphics.html](#))

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

([Genesis.Graphics.Animation.html](#))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

([Genesis.Graphics.AnimationISD.html](#))

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

NameSpace: Genesis ([Genesis.html.Graphics](#) ([Genesis.Graphics.html](#)))

([Genesis.Graphics.Face.html](#))

Assembly: Genesis.dll

Font

Syntax ([Genesis.Graphics.Font.html](#))

Framebuffer

public class TexCoords ([Genesis.Graphics.Framebuffer.html](#))

Glyphe

([Genesis.Graphics.Glyphe.html](#))

IRenderDevice

([Genesis.Graphics.IRenderDevice.html](#))

Material

([Genesis.Graphics.Material.html](#))

MaterialBuffer

Declaration ([Genesis.Graphics.MaterialBuffer.html](#))

Mesh

public class Mesh ([Genesis.Graphics.Mesh.html](#))

PerspectiveCamera

([Genesis.Graphics.PerspectiveCamera.html](#))

Shader

TexCoords(Vec3, Vec3, Vec3, Vec3)

ShaderProgram

Declaration ([Genesis.Graphics.ShaderProgram.html](#))

TexCoords

public TexCoords (Vec3 topLeft, Vec3 topRight, Vec3 bottomRight, Vec3 bottomLeft) ([Genesis.Graphics.TexCoords.html](#))

Texture

([Genesis.Graphics.Texture.html](#))

Viewport

([Genesis.Graphics.Viewport.html](#))

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	<i>topLeft</i>	
Vec3 (Genesis.Math.Vec3.html)	<i>topRight</i>	
Vec3 (Genesis.Math.Vec3.html) ▼	<i>bottomRight</i>	
Vec3 (Genesis.Math.Vec3.html)	<i>bottomLeft</i>	

+ **Genesis.Core.GameElements**
(Genesis.Core.GameElements.h)

Properties
(Genesis.Graphics.html)

BottomLeft
(Genesis.Graphics.Animation.html)

Declaration:

(Genesis.Graphics.Animation3D.html)

Camera
`public Vec3 BottomLeft { get; set; }`
(Genesis.Graphics.Camera.html)

CameraType

Property Value:
(Genesis.Graphics.CameraType.html)

Type	Description
Face (Genesis.Graphics.Face.html)	

Font
`public Font BottomLeft { get; set; }`
(Genesis.Graphics.Font.html)

Framebuffer

(Genesis.Graphics.Framebuffer.html)

BottomRight
Glyphe

Declaration:
(Genesis.Graphics.Glyphe.html)

IRenderDevice

`public IRenderDevice BottomRight { get; set; }`
Material

(Genesis.Graphics.Material.html)

Property Value:
MaterialBuffer

Type	Description
Genesis.Graphics.MaterialBuffer.html	

Mesh

Vec3
`public Vec3 BottomRight { get; set; }`
(Genesis.Graphics.Mesh.html)

PerspectiveCamera

(Genesis.Graphics.PerspectiveCamera.html)

TopLeft
Shader

(Genesis.Graphics.Shader.html)

Declaration:
ShaderProgram

(Genesis.Graphics.ShaderProgram.html)

`public TexCoords TopLeft { get; set; }`
(Genesis.Graphics.TexCoords.html)

Texture

Property Value:
(Genesis.Graphics.Texture.html)

Viewport

(Genesis.Graphics.Viewport.html)

Type	Description
Vec3 (Genesis.Math.Vec3.html)	

TopRight

Declaration

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h; }

- Genesis.Graphics

Property Value

(Genesis.Graphics.html)

Type Animation

(Genesis.Graphics.Animation.html)

Vec3 (Genesis.Math.Vec3.html)

Animation3D

(Genesis.Graphics.Animation3D.html)

Camera

(Genesis.Graphics.Camera.html)

Methods

GetCameraType

(Genesis.Graphics.CameraType.html)

Face

GetFloats()

(Genesis.Graphics.Face.html)

Font

(Genesis.Graphics.Font.html)

Framebuffer

```
public float[] GetFloats()
```

(Genesis.Graphics.Framebuffer.html)

Glyphe

Return (Genesis.Graphics.Glyphe.html)

Type IRenderDevice

(Genesis.Graphics.IRenderDevice.html)

float[] (<https://learn.microsoft.com/dotnet/api/system.single>)[]

(Genesis.Graphics.Material.html)

MaterialBuffer

(Genesis.Graphics.MaterialBuffer.html)

Mesh

(Genesis.Graphics.Mesh.html)

PerspectiveCamera

(Genesis.Graphics.PerspectiveCamera.html)

Shader

(Genesis.Graphics.Shader.html)

ShaderProgram

(Genesis.Graphics.ShaderProgram.html)

TexCoords

(Genesis.Graphics.TexCoords.html)

Texture

(Genesis.Graphics.Texture.html)

Viewport

(Genesis.Graphics.Viewport.html)

Description

Class Texture

Inheritance

↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [Texture](#)

+ Genesis.Core.GameElements

Inherited Members

(Genesis.Core.GameElements.h)
[object.ToString\(\)](https://learn.microsoft.com/dotnet/api/system.object.tostring) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
[**object.Equals\(\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))
(Genesis.Graphics.html)
[**object.Equals\(object, object\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)))
[**object.Equals\(system-object-system-object\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object-object)))
[**object.ReferenceEquals\(object, object\)**](https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals(system-object-object)) ([\(https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals\(system-object-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals(system-object-object)))
[object.GetHashCode\(\)](https://learn.microsoft.com/dotnet/api/system.object.gethashcode) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
[object.GetType\(\)](https://learn.microsoft.com/dotnet/api/system.object.gettype) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
[object.MemberwiseClone\(\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
[**object.MemberwiseClone\(CameraType\)**](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone(genesis.graphics.cameraltype)) ([\(Genesis.Graphics.Camera.html\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone(genesis.graphics.cameraltype)))
Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#))

Assembly:

[Genesis.Graphics.CameraType.htm](#)

Syntax

[\(Genesis.Graphics.Face.html\)](#)

Font
public class Texture
([Genesis.Graphics.Font.html](#))

Framebuffer
([Genesis.Graphics.Framebuffer.html](#))

Constructors

[\(Genesis.Graphics.Glyphe.html\)](#)

[IRenderDevice](#)

Texture(Bitmap)
([Genesis.Graphics.IRenderDevice.html](#))

[Material](#)

[\(Genesis.Graphics.Material.html\)](#)

MaterialBuffer
public Texture(Bitmap bitmap)
([Genesis.Graphics.MaterialBuffer.html](#))

Mesh

[\(Genesis.Graphics.Mesh.html\)](#)

[PerspectiveCamera](#)

Type
([Genesis.Graphics.PerspectiveCame](#))

[Shader](#) (<https://learn.microsoft.com/dotnet/api/system.drawing.bitmap>)

Name

Description

bitmap

[Texture\(int\)](#)

[\(Genesis.Graphics.TexCoords.html\)](#)

[Texture](#)

[\(Genesis.Graphics.Texture.html\)](#)

[Viewport](#)

[\(Genesis.Graphics.Viewport.html\)](#)

Parameters

Type	Name	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	RenderID	

Texture(string, Bitmap)

Declaration: **Genesis.Core.GameElements**

(**Genesis.Core.GameElements.h**)

```
public Texture(string name, Bitmap bitnmap)
```

- **Genesis.Graphics**

(**Genesis.Graphics.html**)

Parameters

Animation

Type	Name	Description
Genesis.Graphics.Animation.html		
string (https://learn.microsoft.com/dotnet/api/system.string) (Genesis.Graphics.Animation3D.html)	name	

Bitmap (<https://learn.microsoft.com/dotnet/api/system.drawing.bitmap>)

([Genesis.Graphics.Camera.html](#))

CameraType

([Genesis.Graphics.CameraType.html](#))

Properties

([Genesis.Graphics.Face.html](#))

Font

([Genesis.Graphics.Font.html](#))

Bitmap

Framebuffer

Declaration: ([Genesis.Graphics.Framebuffer.html](#))

Glyphe

public [Genesis.Graphics.Glyphe](#) { get; set; }

IRenderDevice

([Genesis.Graphics.IRenderDevice.html](#))

Property Value

Material

Type	Description
Genesis.Graphics.Material.html	

MaterialBuffer

Bitmap (<https://learn.microsoft.com/dotnet/api/system.drawing.bitmap>)
([Genesis.Graphics.MaterialBuffer.html](#))

Mesh

([Genesis.Graphics.Mesh.html](#))

Name

([Genesis.Graphics.PerspectiveCamera.html](#))

Declaration: Shader

([Genesis.Graphics.Shader.html](#))

public string Name { get; set; }

([Genesis.Graphics.ShaderProgram.html](#))

Property Value

TexCoords

([Genesis.Graphics.TexCoords.html](#))

Type

Texture

([Genesis.Graphics.Texture.html](#))

string (<https://learn.microsoft.com/dotnet/api/system.string>)

Viewport

([Genesis.Graphics.Viewport.html](#))

Type	Description

RenderID

Declaration

```
public int RenderID { get; set; }
```



Property Value

Type	Description
+ Genesis.Core.GameElements int (Genesis.Core.GameElements.h) (api/system.int32)	

- [Genesis.Graphics](#)

([Genesis.Graphics.html](#))

Animation
([Genesis.Graphics.Animation.html](#))
Animation3D
([Genesis.Graphics.Animation3D.html](#))
Camera
([Genesis.Graphics.Camera.html](#))
CameraType
([Genesis.Graphics.CameraType.html](#))
Face
([Genesis.Graphics.Face.html](#))
Font
([Genesis.Graphics.Font.html](#))
Framebuffer
([Genesis.Graphics.Framebuffer.html](#))
Glyphe
([Genesis.Graphics.Glyphe.html](#))
IRenderDevice
([Genesis.Graphics.IRenderDevice.html](#))
Material
([Genesis.Graphics.Material.html](#))
MaterialBuffer
([Genesis.Graphics.MaterialBuffer.html](#))
Mesh
([Genesis.Graphics.Mesh.html](#))
PerspectiveCamera
([Genesis.Graphics.PerspectiveCamera.html](#))
Shader
([Genesis.Graphics.Shader.html](#))
ShaderProgram
([Genesis.Graphics.ShaderProgram.html](#))
TexCoords
([Genesis.Graphics.TexCoords.html](#))
Texture
([Genesis.Graphics.Texture.html](#))
Viewport
([Genesis.Graphics.Viewport.html](#))

Class Viewport

Inheritance

↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [Viewport](#)

+ Genesis.Core.GameElements

Inherited Members

(Genesis.Core.GameElements.h)
[object.ToString\(\)](https://learn.microsoft.com/dotnet/api/system.object.tostring) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
[**Genesis.Graphics**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))
(Genesis.Graphics.html)
[**object.Equals\(object, object\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)))
[**object.Equals\(system-object, system-object\)**](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object-object)))
[**object.ReferenceEquals\(object, object\)**](https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals(system-object-object)) ([\(https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals\(system-object-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals(system-object-object)))
[object.GetHashCode\(\)](https://learn.microsoft.com/dotnet/api/system.object.gethashcode) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
[object.GetType\(\)](https://learn.microsoft.com/dotnet/api/system.object.gettype) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
[object.MemberwiseClone\(\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
[Genesis.Graphics.Camera](https://learn.microsoft.com/dotnet/api/genesis.graphics.camera)
[Genesis.Graphics.CameraType](https://learn.microsoft.com/dotnet/api/genesis.graphics.camertype)
Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#))

Assembly

[Genesis.Graphics.CameraType.htm](#)

Syntax

[Face](#)
([Genesis.Graphics.Face.html](#))
[Font](#)
public class Viewport
([Genesis.Graphics.Font.html](#))
[Framebuffer](#)
([Genesis.Graphics.Framebuffer.html](#))

Constructors

[Viewport\(\)](#)
([Genesis.Graphics.IRenderDevice.html](#))
[Material](#)
([Genesis.Graphics.Material.html](#))

[Declaration](#)
public Viewport()
([Genesis.Graphics.MaterialBuffer.html](#))
[Mesh](#)
([Genesis.Graphics.Mesh.html](#))
[PerspectiveCamera](#)
Viewport(float, float)
([Genesis.Graphics.PerspectiveCamera.html](#))

[Shader](#)
([Genesis.Graphics.Shader.html](#))
[ShaderProgram](#)
public Viewport(float width, float height)
([Genesis.Graphics.ShaderProgram.html](#))

[TexCoords](#)
Parameters
([Genesis.Graphics.TexCoords.html](#))

Type	Name	Description
Texture (Genesis.Graphics.Texture.html) float (https://learn.microsoft.com/dotnet/api/system.single) Viewport (Genesis.Graphics.Viewport.html)	width	

Type	Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	height	

Viewport(float, float, float, float)

Declaration

+ **Genesis.Core.GameElements**

([Genesis.Core.GameElements.html](https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.viewport), float width, float height)

- **Genesis.Graphics**

Parameters ([Genesis.Graphics.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.html))

Type	Name	Description
Animation		
float (https://learn.microsoft.com/dotnet/api/system.single)	x	
Animation3D		
float (https://learn.microsoft.com/dotnet/api/system.single)	y	
Camera		
float (https://learn.microsoft.com/dotnet/api/system.single)	width	
(Genesis.Graphics.Camera.html)		
float (https://learn.microsoft.com/dotnet/api/system.single)	height	
(Genesis.Graphics.CameraType.html)		

Face

([Genesis.Graphics.Face.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.face))

Properties

([Genesis.Graphics.Font.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.font))

Framebuffer

([Genesis.Graphics.Framebuffer.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.framebuffer))

Height

Glyphe

Declaration

([Genesis.Graphics.Glyphe.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.glyphe))

IRenderDevice

public [Genesis.Graphics.RenderDevice](https://learn.microsoft.com/dotnet/api/genesis.graphics.renderdevice); }

Material

([Genesis.Graphics.Material.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.material))

Property Value

MaterialBuffer

Type	Description
Genesis.Graphics.MaterialBuffer.html	

Mesh

float (<https://learn.microsoft.com/dotnet/api/system.single>)

([Genesis.Graphics.Mesh.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.mesh))

PerspectiveCamera

([Genesis.Graphics.PerspectiveCamera.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.perspectivecamera))

Width

([Genesis.Graphics.Shader.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.shader))

Declaration

ShaderProgram

([Genesis.Graphics.ShaderProgram.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram))

public float Width { get; set; }

([Genesis.Graphics.TexCoords.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.texcoords))

Texture

Property Value

([Genesis.Graphics.Texture.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.texture))

Viewport

([Genesis.Graphics.Viewport.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.viewport))

Type	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	

X\Y

Declaration

+ **Genesis.Core.GameElements**

([Genesis.Core.GameElements.h](#))

- **Genesis.Graphics**

Property Value

([Genesis.Graphics.html](#))

Type Animation

([Genesis.Graphics.Animation.html](#))

float (<https://learn.microsoft.com/dotnet/api/system.single>)

Animation3D

([Genesis.Graphics.Animation3D.html](#))

Camera

Y (Genesis.Graphics.Camera.html)

CameraType

Declaration

([Genesis.Graphics.CameraType.html](#))

Face

public float X { get; set; }

Font

Property Value

Framebuffer

Type ([Genesis.Graphics.Framebuffer.html](#))

Glyphe

float (<https://learn.microsoft.com/dotnet/api/system.single>)

([Genesis.Graphics.Glyphe.html](#))

IRenderDevice

([Genesis.Graphics.IRenderDevice.html](#))

Material

Methods

([Genesis.Graphics.Material.html](#))

MaterialBuffer

([Genesis.Graphics.MaterialBuffer.html](#))

GetSize()

Mesh

Declaration

PerspectiveCamera

([Genesis.Graphics.PerspectiveCamera.html](#))

Shader

([Genesis.Graphics.Shader.html](#))

Returns

ShaderProgram

Type ([Genesis.Graphics.ShaderProgram.html](#))

TexCoords

Size (<https://learn.microsoft.com/dotnet/api/system.drawing.size>)

Texture

([Genesis.Graphics.Texture.html](#))

Viewport

GetSizer()

([Genesis.Graphics.Viewport.html](#))

Description

Description

Description

Declaration

```
public SizeF GetSizeF()
```

Returns

Type	Description
SizeF (https://learn.microsoft.com/dotnet/api/system.drawing.sizef) + Genesis.Core.GameElements	

([Genesis.Core.GameElements.h](#)

Genesis.Graphics
SetNewViewport(float, float)
([Genesis.Graphics.html](#))

Declaration

Animation

```
(Genesis.Graphics.Animation.html)
public void SetNewViewport(float width, float height)
Animation3D
```

([Genesis.Graphics.Animation3D.html](#)

Parameters

Type	Name	Description
CameraType		
float (Genesis.CameraType.html)	<i>width</i>	

Face

float ([Genesis.CameraType.html](#))

Face

float ([Genesis.Face.html](#))

Font

([Genesis.Graphics.Font.html](#))

Framebuffer

([Genesis.Graphics.Framebuffer.html](#))

Glyphe

([Genesis.Graphics.Glyphe.html](#))

IRenderDevice

([Genesis.Graphics.IRenderDevice.html](#))

Material

([Genesis.Graphics.Material.html](#))

MaterialBuffer

([Genesis.Graphics.MaterialBuffer.html](#))

Mesh

([Genesis.Graphics.Mesh.html](#))

PerspectiveCamera

([Genesis.Graphics.PerspectiveCamera.html](#))

Shader

([Genesis.Graphics.Shader.html](#))

ShaderProgram

([Genesis.Graphics.ShaderProgram.html](#))

TexCoords

([Genesis.Graphics.TexCoords.html](#))

Texture

([Genesis.Graphics.Texture.html](#))

Viewport

([Genesis.Graphics.Viewport.html](#))

Namespace Genesis.Graphics.Physics

Classes

▼ Enter here to filter...

- + **BulletDebugRenderer** ([Genesis.Graphics.Physics.BulletDebugRenderer.html](#))
[\(Genesis.Core.html\)](#)
- + **Genesis.Core.Behaviors**
[\(Genesis.Core.Behaviors.html\)](#)
- + **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)
- + **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)
- + **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)
- + **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)
- **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)
 - BulletDebugRenderer
[\(Genesis.Graphics.Physics.BulletDebugRenderer.html\)](#)
- + **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)
- + **Genesis.Graphics.Shaders.Operator**
[\(Genesis.Graphics.Shaders.Operator.html\)](#)
- + **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)
- + **Genesis.Math**
[\(Genesis.Math.html\)](#)
- + **Genesis.Physics**
[\(Genesis.Physics.html\)](#)
- + **Genesis.UI** ([Genesis.UI.html](#))

Class BulletDebugRenderer

Inheritance

<p>Enter here to filter</p>	
<p>↳ object (https://learn.microsoft.com/dotnet/api/system.object)</p> <p>↳ DebugDraw</p> <p>+ Genesis.Core</p> <p>(Genesis.Core.html)</p> <p>IDisposable (https://learn.microsoft.com/dotnet/api/system.idisposable)</p> <p>+ Genesis.Core.Behaviors</p> <p>Inherited Members: (Genesis.Core.Behaviors.html)</p> <p>+ Genesis.Core.Behaviors.Physics</p> <p>DebugDraw.DrawLine(Vector3, Vector3, Vector3)</p> <p>DebugDraw.DrawLine(ref Vector3, ref Vector3, ref Vector3, ref Vector3)</p> <p>DebugDraw.DrawAabb(ref Vector3, ref Vector3, ref Vector3)</p> <p>DebugDraw.DrawAabbAabb(ref Vector3, ref Vector3, float, float, float, float, ref Vector3, bool, float)</p> <p>+ Genesis.Core.Behaviors.Physics</p> <p>(Genesis.Core.Behaviors.Physics.html)</p> <p>DebugDraw.DrawBox(ref Vector3, ref Vector3, ref Vector3)</p> <p>+ Genesis.Core.GameElements</p> <p>(Genesis.Core.GameElements.html)</p> <p>DebugDraw.DrawGameElement(Vector3, ref Matrix, ref Vector3)</p> <p>DebugDraw.DrawGameElement(float, float, ref Matrix, ref Vector3)</p> <p>(https://learn.microsoft.com/dotnet/api/system.single)</p> <p>+ Genesis.Graphics</p> <p>(Genesis.Graphics.html)</p> <p>DebugDraw.DrawContactPoint(ref Vector3, ref Vector3, float, int, ref Vector3)</p> <p>- Genesis.Graphics.Physics</p> <p>(https://learn.microsoft.com/dotnet/api/system.single)</p> <p>(Genesis.Graphics.Physics.html)</p> <p>DebugDraw.DrawCylinder(float, float, int, ref Matrix, ref Vector3)</p> <p>(https://learn.microsoft.com/dotnet/api/system.single)</p> <p>By BulletDebugRenderer</p> <p>DebugDraw.DrawSphere(BulletDebug, ref Matrix, ref Vector3)</p> <p>(https://learn.microsoft.com/dotnet/api/system.single)</p> <p>+ Genesis.Graphics.RenderDevice</p> <p>(Genesis.Graphics.RenderDevice.html)</p> <p>DebugDraw.DrawSphereSpherePatch(ref Vector3, ref Vector3, ref Vector3, float, float, float, float, float, float, ref Vector3)</p> <p>(https://learn.microsoft.com/dotnet/api/system.single)</p> <p>+ Genesis.Graphics.Shaders.Open</p> <p>(Genesis.Graphics.Shaders.Open.html)</p> <p>DebugDraw.DrawSpherePatch(ref Vector3, ref Vector3, float, float, float, float, float, ref Vector3, float)</p> <p>(https://learn.microsoft.com/dotnet/api/system.single)</p> <p>+ Genesis.Graphics.Shapes</p> <p>(Genesis.Graphics.Shapes.html)</p> <p>DebugDraw.DrawTriangle(ref Vector3, ref Vector3, ref Vector3, ref Vector3, ref Vector3, ref Vector3, float)</p> <p>(https://learn.microsoft.com/dotnet/api/system.single)</p> <p>+ Genesis.Math</p> <p>(Genesis.Math.html)</p> <p>DebugDraw.DrawTransform(Matrix, float)</p> <p>(https://learn.microsoft.com/dotnet/api/system.single)</p> <p>+ Genesis.Physics</p> <p>(Genesis.Physics.html)</p> <p>DebugDraw.Dispose()</p> <p>DebugDraw.Dispose(bool)</p> <p>+ Genesis.UI</p> <p>(Genesis.UI.html)</p> <p>object.ToString()</p> <p>object.Equals(object)</p> <p>object.Equals(object, object)</p>	

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Namespace: Genesis ([Genesis.html](#)).Graphics ([Genesis.Graphics.html](#)).Physics ([Genesis.Graphics.Physics.html](#))

Assembly: Genesis.dll

Syntax

+ Genesis.Core

`public class BulletDebugRenderer : DebugDraw, IDisposable`
[\(Genesis.Core.html\)](#)

+ Genesis.Core.Behaviors

[\(Genesis.Core.Behaviors.html\)](#)
Constructors

+ Genesis.Core.Behaviors.Physics

[\(Genesis.Core.Behaviors.Physics.html\)](#)
BulletDebugRenderer(IRenderDevice)

+ Genesis.Core.Behaviors.Physics

[Declaration](#)
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ Genesis.Core.GameElements

[\(Genesis.Core.GameElements.html\)](#)

Parameters

+ Genesis.Graphics

Type	Name	Description
Genesis.Graphics.html	<i>RenderDevice</i>	

- Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

`BulletDebugRenderer`

[\(Genesis.Graphics.Physics.BulletDebugRenderer.html\)](#)

Properties

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice.html\)](#)

DebugMode

+ Genesis.Graphics.Operations

[Declaration](#)
[\(Genesis.Graphics.Operations.html\)](#)

+ Genesis.Graphics.Shapes

`public override DebugDrawModes DebugMode { get; set; }`
[\(Genesis.Graphics.Shapes.html\)](#)

Genesis.Math

- Genesis.Math

Type	Description
Genesis.Math.html	

+ Genesis_Physics

[\(Genesis.Physics.html\)](#)

Overrides

+ Genesis.UI (Genesis.UI.html)

`BulletSharp.DebugDraw.DebugMode`

Methods

Draw3DText(ref Vector3, string)

Declaration



```
public override void Draw3DText(ref Vector3 location, string textString)
```

+ Genesis.Core

(Genesis.Core.html)

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

Parameters

+ Genesis.Core.Behaviors.Physics

string (<https://learn.microsoft.com/dotnet/api/system.string>)

(Genesis.Core.Behaviors.Physics.html)

Overrides

+ Genesis.Core.Behaviors.Physics

Debug.DrawLine(ref Vector3, string) (<https://learn.microsoft.com/dotnet/api/system.string>)

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.GameElements

DrawLine(ref Vector3, ref Vector3, ref Vector3)

Declaration

+ Genesis.Graphics

(Genesis.Graphics.html)

```
public override void DrawLine(ref Vector3 from, ref Vector3 to, ref Vector3 color)
```

- Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Parameters

Type	Name	Description
BulletDebugRenderer		
(Genesis.Graphics.Physics.BulletDebugRenderer.html)		
Vector3	from	
+ Genesis.Graphics.RenderDevice		
Vector3	to	
+ Genesis.Graphics.Shaders.OpenGL		
(Genesis.Graphics.Shaders.OpenGL.html)		

Overrides

+ Genesis.Graphics.Shapes

BulletSharp.Debug.DrawLine(ref BulletSharp.Math.Vector3, ref BulletSharp.Math.Vector3, ref BulletSharp.Math.Vector3)

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

(Genesis.Math.html)

ReportErrorWarning(string)

Declaration

(Genesis.Physics.html)

```
public override void ReportErrorWarning(string warningString)
```

+ Genesis.UI (Genesis.UI.html)

Parameters

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	<i>warningString</i>	

Overrides

DebugDraw.ReportErrorWarning(string) (<https://learn.microsoft.com/dotnet/api/system.string>)

Implements

+ [Genesis.Core](#)

ID ([Genesis.Core.html](#)) microsoft.com/dotnet/api/system.idisposable)

+ [Genesis.Core.Behaviors](#)

([Genesis.Core.Behaviors.html](#))

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

+ [Genesis.Core.GameElements](#)

([Genesis.Core.GameElements.html](#))

+ [Genesis.Graphics](#)

([Genesis.Graphics.html](#))

- [Genesis.Graphics.Physics](#)

([Genesis.Graphics.Physics.html](#))

BulletDebugRenderer

([Genesis.Graphics.Physics.BulletDebugRenderer.html](#))

+ [Genesis.Graphics.RenderDevice](#)

([Genesis.Graphics.RenderDevice.html](#))

+ [Genesis.Graphics.Shaders.Operations](#)

([Genesis.Graphics.Shaders.Operations.html](#))

+ [Genesis.Graphics.Shapes](#)

([Genesis.Graphics.Shapes.html](#))

+ [Genesis.Math](#)

([Genesis.Math.html](#))

+ [Genesis.Physics](#)

([Genesis.Physics.html](#))

+ [Genesis.UI](#) ([Genesis.UI.html](#))

Namespace Genesis.Graphics.RenderDevice

Classes

▼ Enter here to filter...

+ **ClassicGL** ([Genesis.Graphics.RenderDevice.ClassicGL.html](#))

 ([Genesis.Core.html](#))

+ **GLRenderer** ([Genesis.Graphics.RenderDevice.GLRenderer.html](#))

 ([Genesis.Core.Behaviors.html](#))

+ **Genesis.Core.Behaviors.Physics**

 ([Genesis.Core.Behaviors.Physics.html](#))

+ **Genesis.Core.Behaviors.Physics**

 ([Genesis.Core.Behaviors.Physics.html](#))

+ **Genesis.Core.GameElements**

 ([Genesis.Core.GameElements.html](#))

+ **Genesis.Graphics**

 ([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

 ([Genesis.Graphics.Physics.html](#))

- **Genesis.Graphics.RenderDevice**

 ([Genesis.Graphics.RenderDevice.html](#))

 ClassicGL

 ([Genesis.Graphics.RenderDevice.ClassicGL.html](#))

 GLRenderer

 ([Genesis.Graphics.RenderDevice.GLRenderer.html](#))

+ **Genesis.Graphics.Shaders.Operations**

 ([Genesis.Graphics.Shaders.Operations.html](#))

+ **Genesis.Graphics.Shapes**

 ([Genesis.Graphics.Shapes.html](#))

+ **Genesis.Math**

 ([Genesis.Math.html](#))

+ **Genesis.Physics**

 ([Genesis.Physics.html](#))

- **Genesis.U3D** ([Genesis.U3D.html](#))

Class ClassicGL

Inheritance

↳ [Enter here to filter](#)
↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [ClassicGL](#)

+ Genesis.Core

Implements
[IRenderDevice](#) ([Genesis.Graphics.IRenderDevice.html](https://genesis.graphics.IRenderDevice.html))

In Genesis.CoreBehaviors

([Genesis.Core.Behaviors.html](#))

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))
+ Genesis.Core.Behaviors.Physics
[\(Genesis.Core.Behaviors.Physics\)](#)
[object.Equals\(object, object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))
+ Genesis.Core.Behaviors.Physics
[\(Genesis.Core.Behaviors.Physics\)](#)
[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#)).[RenderDevice](#) ([Genesis.Graphics.RenderDevice.html](#))

+ Genesis.Graphics

Assembly: [Genesis.dll](#)

([Genesis.Graphics.html](#))

Syntax

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

- Genesis.Graphics.RenderDevice

([Genesis.Graphics.RenderDevice.html](#))

Constructors

ClassicGL

([Genesis.Graphics.RenderDevice.ClassicGL](#))

GLRenderer

ClassicGL(IntPtr)

([Genesis.Graphics.RenderDevice.GL](#))

Declaration

+ Genesis.Graphics.Shaders.Operations

([Genesis.Graphics.Shaders.Operations.html](#))

public ClassicGL(IntPtr hwnd)

+ Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

Parameters

+ Genesis.Math

([Genesis.Math.html](#))

IntPtr (<https://learn.microsoft.com/dotnet/api/system.intptr>)

Name	Description
hwnd	

+ Genesis.Physics

([Genesis.Physics.html](#))

+ Genesis.UI (Genesis.UI.html)

Methods

Begin()

Declaration

```
public void Begin()
```

▼

BuildFramebuffer(int, int)

+ Genesis.Core
[\(Genesis.Core.html\)](#)

+ Genesis.Core.Behaviors

public Framebuffer BuildFramebuffer(int width, int height)
[\(Genesis.Core.Behaviors.html\)](#)

+ Genesis.Core.Behaviors.Physics

Parameters
[\(Genesis.Core.Behaviors.Physics.html\)](#)

Type
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ Genesis.Core.Behaviors.Physics
int (<https://learn.microsoft.com/dotnet/api/system.int32>)
[\(Genesis.Core.Behaviors.Physics.html\)](#)

int (<https://learn.microsoft.com/dotnet/api/system.int32>)
+ Genesis.Core.GameElements

[\(Genesis.Core.GameElements.html\)](#)

Returns

+ Type
[\(Genesis.Graphics.html\)](#)

Framebuffer ([Genesis.Graphics.Framebuffer.html](#))

+ Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

BuildFramebuffer(int, int, Texture)

+ Genesis.Graphics.RenderDevice
[\(Genesis.Graphics.RenderDevice.html\)](#)

Parameters

ClassicGL

[\(Genesis.Graphics.RenderDevice.GL.html\)](#)
p(Framebuffer) BuildFramebuffer(int width, int height, Texture texture)

GLRenderer

[\(Genesis.Graphics.RenderDevice.GL.html\)](#)

Parameters

+ Genesis.Graphics.Shaders.Operator

[\(Genesis.Graphics.Shaders.Operator.html\)](#)

int (<https://learn.microsoft.com/dotnet/api/system.int32>)
+ Genesis.Graphics.Shapes

[\(Genesis.Graphics.Shapes.html\)](#)

Texture ([Genesis.Graphics.Texture.html](#))

+ Genesis.Math

[\(Genesis.Math.html\)](#)

Returns

+ Type
[\(Genesis.Physics.html\)](#)

Framebuffer ([Genesis.Graphics.Framebuffer.html](#))

+ Genesis.UI
[\(Genesis.UI.html\)](#)

BuildFramebuffer(int, int, int)

Declaration

```
public Framebuffer BuildFramebuffer(int width, int height, int texture)
```

Parameters

Type	Name	Description
int (https://learn.microsoft.com/dotnet/api/system.int32) + Genesis.Core	<i>width</i>	
int (https://learn.microsoft.com/dotnet/api/system.int32) + Genesis.Core.html	<i>height</i>	
int (https://learn.microsoft.com/dotnet/api/system.int32) + Genesis.Core.Behaviors	<i>texture</i>	

([Genesis.Core.Behaviors.html](#))

Returns

+ **Genesis.Core.Behaviors.Physics**

Type
+ **Genesis.Core.Behaviors.Physic**

Framebuffer ([Genesis.Graphics.Framebuffer.html](#))

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physic](#))

+ **Genesis.Core.GameElements**

CreateDynamicVertexBuffer(float[])

([Genesis.Core.GameElements.h](#))

Declaration

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

Parameters
([Genesis.Graphics.Physics.html](#))

Type	Name	Description
- Genesis.Graphics.RenderDevice		

float (<https://learn.microsoft.com/dotnet/api/system.single>)[]

floats

ClassicGL

Return
+ **Genesis.Graphics.RenderDevice.ClassicGL**

Type
+ **Genesis.Graphics.RenderDevice.GL**

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

+ **Genesis.Graphics.Shaders.Operations**

([Genesis.Graphics.Shaders.Operations.html](#))

CreateStaticVertexBuffer(float[])

([Genesis.Graphics.Shapes.html](#))

Declaration

+ **Genesis.Math**

([Genesis.Math.html](#))

+ **Genesis.Physics**

Parameters
([Genesis.Physics.html](#))

Type	Name	Description
+ Genesis.UI (Genesis.UI.html)		

float (<https://learn.microsoft.com/dotnet/api/system.single>)[]

verticies

Returns

Type	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	

Dispose()

Declaration

Genesis.Core

[\(Genesis.Core.html\)](#)

```
public void Dispose()
```

+ **Genesis.Core.Behaviors**

[\(Genesis.Core.Behaviors.html\)](#)

+ **Genesis.Core.Behaviors.Physics**

[DisposeElement3D\(Element3D\)](#)

[\(Genesis.Core.Behaviors.Physics.html\)](#)

Declaration

+ **Genesis.Core.Behaviors.Physics**

[\(Genesis.Core.Behaviors.Physics.html\)](#)

```
public void DisposeElement3D(Element3D element)
```

+ **Genesis.Core.GameElements**

[\(Genesis.Core.GameElements.html\)](#)

+ **Genesis.Graphics**

[\(Genesis.Graphics.html\)](#)

```
Element3D (Genesis.Core.GameElements.Element3D.html)
```

Name

Description

element

+ **Genesis.Graphics.Physics**

[\(Genesis.Graphics.Physics.html\)](#)

DisposeFont(Font)

- **Genesis.Graphics.RenderDevice**

Declaration

Genesis.Graphics.RenderDevice

ClassicGL

```
public void DisposeFont(Font font)
```

Genesis.Graphics.RenderDevice.ClassicGL

GLRenderer

```
(Genesis.Graphics.RenderDevice.GL.Renderer.html)
```

Parameters

+ **Genesis.Graphics.Shaders.Operations**

[\(Genesis.Graphics.Shaders.Operations.html\)](#)

Font ([Genesis.Graphics.Font.html](#))

Name

Description

font

+ **Genesis.Graphics.Shapes**

[\(Genesis.Graphics.Shapes.html\)](#)

DisposeTexture(Texture)

- **Genesis.Math**

[\(Genesis.Math.html\)](#)

+ **Genesis.Physics**

```
public void DisposeTexture(Texture texture)
```

[\(Genesis.Physics.html\)](#)

+ **Genesis.UI** ([Genesis.UI.html](#))

Parameters

Type	Name	Description
Texture (Genesis.Graphics.Texture.html)	<i>texture</i>	

DrawBufferedSprite(BufferedSprite)

Declaration

+ Genesis.Core

(Genesis.Core.html) BufferedSprite (BufferedSprite bufferedSprite)

+ Genesis.Core.Behaviors

Parameters
(Genesis.Core.Behaviors.html)

Type	Name	Description
+ Genesis.Core.Behaviors.Physics		

BufferedSprite (Genesis.Core.Behaviors.Physics.html)

bufferedSprite

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

DrawElement3D(Element3D)

+ Genesis.Core.GameElements

Declaration

(Genesis.Core.GameElements.html)

+ Genesis.Graphics

Element3D (Element3D element)

(Genesis.Graphics.html)

Parameters
+ Genesis.Graphics.Physics

Type
(Genesis.Graphics.Physics.html)

- Element3D (Element3D element)

Name

Description

element

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

ClassicGL

DrawGameElement(GameElement)

GLRenderer

Declaration
(Genesis.Graphics.RenderDevice.GL.html)

+ Genesis.Graphics.Shaders.Operations

public void DrawGameElement(GameElement element)

(Genesis.Graphics.Shaders.Operations.html)

Parameters
+ Genesis.Graphics.Shapes

Type
(Genesis.Graphics.Shapes.html)

+ Genesis.Math

GameElement (Genesis.Core.GameElement.html)

(Genesis.Math.html)

Name

Description

element

+ Genesis.Physics

DrawPointPhysics(PhysicsWorld) Color)

Declaration
(Genesis.UI (Genesis.UI.html))

```
public void DrawLine(Vec3 from, Vec3 to, Color color)
```

Parameters

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	from	
+ Genesis.Core + Genesis.Core.html Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	to	
+ Genesis.Core.Behaviors (Genesis.Core.Behaviors.html)	color	

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

DrawMesh(Mesh, Color)

+ Genesis.Core.Behaviors.Physics

Declaration

Parameters

+ Genesis.Core.Behaviors.Physics

public void DrawMesh(Mesh mesh, Color color)

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.GameElements

Parameters

(Genesis.Core.GameElements.html)

Type

+ Genesis.Graphics

Mesh (Genesis.Graphics.Mesh.html)

(Genesis.Graphics.html)

Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

DrawRect(Rect, Color, float)

(Genesis.Graphics.RenderDevice.html)

Declaration

ClassicGL

(Genesis.Graphics.RenderDevice.ClassicGL.html)

GLRenderer

(Genesis.Graphics.RenderDevice.GL.html)

Parameters

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator.html)

Rect (Genesis.Math.Rect.html)

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

(Genesis.Math.html)

DrawRect(Rect, Color, float)

+ Genesis.Physics

Declaration

(Genesis.Physics.html)

+ Genesis.UI (Genesis.UI.html)

Rect, Color color, float borderWidth)

Parameters

Type	Name	Description
Rect (Genesis.Math.Rect.html)	rect	
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	color	
float	borderWidth	

Type	Name	Description
Rect (Genesis.Math.Rect.html)	<i>rect</i>	
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	<i>color</i>	
float (https://learn.microsoft.com/dotnet/api/system.single)	<i>borderWidth</i>	

+ **Genesis.Core**
DrawSkyBox(Skybox)
([Genesis.Core.html](#))

Declaration

+ **Genesis.Core.Behaviors**

([Genesis.Core.Behaviors.html](#))

+ **Genesis.Core.Behaviors.Physics**

Pa([Genesis.Core.Behaviors.Physics](#))

+ **Type**
Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

Name

Description

skybox

+ **Genesis.Core.GameElements**

([Genesis.Core.GameElements.h](#))

DrawSprite(Sprite)

+ **Genesis.Graphics**

De([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

Pa([Genesis.Graphics.RenderDevice](#))

([Genesis.Graphics.RenderDevice](#))

Type

Name

Description

ClassicGL

Sprite ([Genesis.Core.GameElements.Sprite.html](#))

sprite

GLRenderer

([Genesis.Graphics.RenderDevice.GL](#))

DrawSprite(Vec3, Vec3, Texture)

+ **Genesis.Graphics.Shaders.OpenGL**

([Genesis.Graphics.Shaders.OpenGL](#))

De([Genesis.Graphics.Shaders.OpenGL](#))

+ **Genesis.Graphics.Shapes**

([Genesis.Graphics.Shapes.html](#))

+ **Genesis.Math**

Pa([Genesis.Math.html](#))

Type

Name

Description

+ **Genesis.Physics**

Vec3 ([Genesis.Math.Vec3.html](#))

([Genesis.Physics.html](#))

location

Vec3 ([Genesis.Math.Vec3.html](#))

+ **Genesis.UI** ([Genesis.UI.html](#))

size

Texture ([Genesis.Graphics.Texture.html](#))

texture

DrawSprite(Vec3, Vec3, Texture, TexCoords)

Declaration

```
public void DrawSprite(Vec3 location, Vec3 size, Texture texture, TexCoords texCoords)
```



Parameters

Type	Name	Description
+ Genesis.Core (Genesis.Core.html)		
- Vec3 (Genesis.Math.html)	<i>location</i>	
+ Genesis.Core.Behaviors (Genesis.Core.Behaviors.html)		
- Texture (Genesis.Graphics.Texture.html)	<i>texture</i>	
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)		
- TexCoords (Genesis.Graphics.TexCoords.html)	<i>texCoords</i>	
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)		

DrawSprite(Vec3, Vec3, Color, Texture)

Declaration

Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

```
public void DrawSprite(Vec3 location, Vec3 size, Color color, Texture texture)
```

+ Genesis.Graphics

(Genesis.Graphics.html)

Parameters

Type	Name	Description
+ Genesis.Graphics.Physics (Genesis.Graphics.Physics.html)		
- Vec3 (Genesis.Math.Vec3.html)	<i>location</i>	
- Genesis.Graphics.RenderDevice (Genesis.Graphics.RenderDevice.html)		
- Vec3 (Genesis.Math.Vec3.html)	<i>size</i>	
- Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	<i>color</i>	
- Texture (Genesis.Graphics.Texture.html)		
- GLRenderer (Genesis.Graphics.RenderDevice.GL.html)	<i>texture</i>	
- GL (Genesis.Graphics.RenderDevice.GL.html)		

DrawSprite(Vec3, Vec3, Color, Texture, TexCoords)

(Genesis.Graphics.Shaders.OpenGL)

Declaration

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

```
public void DrawSprite(Vec3 location, Vec3 size, Color color, Texture texture, TexCoords tex
```

```
Coords)
```

+ Genesis.Math

(Genesis.Math.html)

Parameters

Type	Name	Description
+ Genesis.Physics (Genesis.Physics.html)		
- Vec3 (Genesis.Math.Vec3.html)	<i>location</i>	
+ Genesis.UI (Genesis.UI.html)		
- Vec3 (Genesis.Math.Vec3.html)	<i>size</i>	
- Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	<i>color</i>	

Type	Name	Description
Texture (Genesis.Graphics.Texture.html)	<i>texture</i>	
TexCoords (Genesis.Graphics.TexCoords.html)	<i>texCoords</i>	

▼

DrawString(string, Vec3, float, Font, Color)

+ Genesis.Core

Declaration

(Genesis.Core.html)

+ Genesis.Core.Behaviors

DrawString(string text, Vec3 location, float fontSize, Font font, Color color)

(Genesis.Core.Behaviors.html)

Parameters

+ Genesis.Core.Behaviors.Physics

Type Genesis.Core.Behaviors.Physics

+ Genesis.Core.Behaviors.Physics

string (<https://learn.microsoft.com/dotnet/api/system.string>)

+ Genesis.Core.Behaviors.Physics

Vec3 (<https://learn.microsoft.com/dotnet/api/genesis.math.vec3>)

+ Genesis.Core.GameElements

float (<https://learn.microsoft.com/dotnet/api/system.single>)

(Genesis.Core.GameElements.html)

Font (<https://learn.microsoft.com/dotnet/api/genesis.graphics.font>)

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

DrawString(Physics, Vec3, float, float, Font, Color)

Declaration

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.RenderDevice

DrawString(Physics, Vec3, float, float, Font, Color)

ClassicalGL

Color color)

(Genesis.Graphics.RenderDevice.ClassicalGL.html)

GLRenderer

(Genesis.Graphics.RenderDevice.GL.html)

Parameters

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator.html)

string (<https://learn.microsoft.com/dotnet/api/system.string>)

+ Genesis.Graphics.Shapes

Vec3 (<https://learn.microsoft.com/dotnet/api/genesis.math.vec3>)

(Genesis.Graphics.Shapes.html)

float (<https://learn.microsoft.com/dotnet/api/system.single>)

+ Genesis.Math

float (<https://learn.microsoft.com/dotnet/api/system.single>)

(Genesis.Math.html)

Font (<https://learn.microsoft.com/dotnet/api/genesis.graphics.font>)

+ Genesis.Physics

Color (<https://learn.microsoft.com/dotnet/api/system.drawing.color>)

(Genesis.Physics.html)

+ Genesis.UI (Genesis.UI.html)

DrawTexture(Vec3, Vec3, float, float, Texture)

Declaration

```
public void DrawTexture(Vec3 location, Vec3 size, float repeatX, float repeatY, Texture texture)
```

Parameters

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html) (Genesis.Core.html)	<i>location</i>	
Vec3 (Genesis.Math.Vec3.html)	<i>size</i>	
+ Genesis.Core.Behaviors float (https://learn.microsoft.com/dotnet/api/system.single) (Genesis.Core.Behaviors.html)	<i>repeatX</i>	
float (https://learn.microsoft.com/dotnet/api/system.single) + Genesis.Core.Behaviors.Physics Type (Genesis.Core.Behaviors.Physics)	<i>repeatY</i>	
	<i>texture</i>	

+ **Genesis.Core.Behaviors.Physics**
(Genesis.Core.Behaviors.Physics)
DrawVectors(Vec3[], Color)
+ **Genesis.Core.GameElements**
Declaration
(Genesis.Core.GameElements.h)

+ **Genesis.Graphics**
Declaration
DrawVectors(Vec3[] vecs, Color color)
(Genesis.Graphics.html)

Parameters

Type	Name	Description
Genesis.Graphics.Physics.html		
- Vec3 (Genesis.Graphics.RenderDevice.html) (Genesis.Graphics.RenderDevice)	<i>vecs</i>	
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color) ClassicGL (Genesis.Graphics.RenderDevice.ClassicGL) GLRenderer (Genesis.Graphics.RenderDevice.GL)	<i>color</i>	

End()
Declaration
(Genesis.Graphics.RenderDevice)

+ **Genesis.Graphics.Shaders.Operator**
(Genesis.Graphics.Shaders.Operator)
public void End()
+ **Genesis.Graphics.Shapes**
(Genesis.Graphics.Shapes.html)

+ **Genesis.Math**
FillRect(Rect, Color)
(Genesis.Math.html)
Declaration
+ **Genesis.Physics**
(Genesis.Physics.html) Rect rect, Color color)

+ **Genesis.UI** ([Genesis.UI.html](#))

Parameters

Type	Name	Description
Rect (Genesis.Math.Rect.html)	rect	
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	color	

▼

FinishCanvasRendering(Scene, Canvas)

+ **Genesis.Core**

Declaration

([Genesis.Core.html](#))

+ **Genesis.Core.Behaviors**

FinishCanvasRendering(Scene scene, Canvas canvas)

([Genesis.Core.Behaviors.html](#))

Parameters

+ **Genesis.Core.Behaviors.Physics**

Type **Genesis.Core.Behaviors.Physics**

Scene ([Genesis.Core.Scene.html](#))

+ **Genesis.Core.Behaviors.Physics**

Canvas ([Genesis.UI.Canvas.html](#))

+ **Genesis.Core.GameElements**

([Genesis.Core.GameElements.html](#))

FinishSceneRendering(Scene)

+ **Genesis.Graphics**

Declaration

([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

public void FinishSceneRendering(Scene scene)

([Genesis.Graphics.Physics.html](#))

Parameters

+ **Genesis.Graphics.RenderDevice**

Type **Genesis.Graphics.RenderDevice**

ClassicGL

Scene ([Genesis.Core.Scene.html](#))

([Genesis.Graphics.RenderDevice.ClassicGL.html](#))

GLRenderer

([Genesis.Graphics.RenderDevice.GL.html](#))

GenerateTexture(OpenGL, Texture)

+ **Genesis.Graphics.Shaders.OpenGL**

([Genesis.Graphics.Shaders.OpenGL.html](#))

Generates a texture

Declaration

([Genesis.Graphics.Shapes.html](#))

public int GenerateTexture(OpenGL gl, Texture texture)

+ **Genesis.Math**

([Genesis.Math.html](#))

Parameters

+ **Genesis.Physics**

Type **Genesis.Physics.html**

OpenGL

+ **Genesis.UI** ([Genesis.UI.html](#))

Texture ([Genesis.Graphics.Texture.html](#))

Type	Name	Description
Rect (Genesis.Math.Rect.html)	rect	
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	color	

Returns

Type	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	

GenerateTexture(OpenGL, Bitmap)

Genesis.Core

[\(Genesis.Core.html\)](#)

Declaration

+ Genesis.Core.Behaviors

[\(Genesis.Core.Behaviors.html\)](#)

+ Genesis.Core.Behaviors.Physics

Parameters

[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ Genesis.Core.Behaviors.Physics

Type

[\(Genesis.Core.Behaviors.Physics.html\)](#)

OpenGL

[\(Genesis.Core.Behaviors.Physics.html\)](#)

Bitmap (<https://learn.microsoft.com/dotnet/api/system.drawing.bitmap>)

[\(Genesis.Core.GameElements.html\)](#)

[\(Genesis.Core.GameElements.h\)](#)

Returns

+ Genesis.Graphics

Type [\(Genesis.Graphics.html\)](#)

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

+ Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

Declaration

ClassicGL

[\(Genesis.Graphics.RenderDevice.ClassicGL.html\)](#)

GLRenderer

[\(Genesis.Graphics.RenderDevice.GLRenderer.html\)](#)

Returns

+ Genesis.Graphics.Shaders.Operations

Type [\(Genesis.Graphics.Shaders.Operations.html\)](#)

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

+ Genesis.Graphics.Shapes

[\(Genesis.Graphics.Shapes.html\)](#)

+ Genesis.Math

[GetHandle\(\)](#) [\(Genesis.Math.html\)](#)

[\(Genesis.Math.html\)](#)

Declaration

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

[public IntPtr GetHandle\(\)](#)

+ Genesis.UI (Genesis.UI.html)

Returns

Type	Description
IntPtr (https://learn.microsoft.com/dotnet/api/system.intptr)	

Init()

Declaration

+ **Genesis.Core**

([Genesis.Core.html](#))

+ **Genesis.Core.Behaviors**

([Genesis.Core.Behaviors.html](#))

InitElement3D(Element3D)

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

+ **Genesis.Core.Behaviors.Physics**

public void InitElement3D(Element3D element)

([Genesis.Core.Behaviors.Physics.html](#))

+ **Genesis.Core.GameElements**

Parameters

([Genesis.Core.GameElements.html](#))

Type

Name

Description

+ **Genesis.Graphics**

Element3D ([Genesis.Core.GameElements.Element3D.html](#))

([Genesis.Graphics.html](#))

element

+ **Genesis.Graphics.Physics**

InitGameElement(GameElement)

Declaration

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

public void InitGameElement(GameElement element)

ClassicGL ([Genesis.Graphics.RenderDevice.ClassicGL.html](#))

GI Renderer ([Genesis.Graphics.RenderDevice.GI.html](#))

Parameters

([Genesis.Graphics.RenderDevice.GL.html](#))

Type

Name

Description

+ **Genesis.Graphics.Shaders.Operator**

GameElement ([Genesis.Core.GameElement.html](#))

([Genesis.Graphics.Shaders.Operator.html](#))

element

+ **Genesis.Graphics.Shapes**

([Genesis.Graphics.Shapes.html](#))

InitSprite(Sprite)

Declaration

+ **Genesis.Math**

([Genesis.Math.html](#))

+ **Genesis.Physics**

([Genesis.Physics.html](#))

Parameters

+ **Genesis.UI** ([Genesis.UI.html](#))

Type

Name

Description

Sprite ([Genesis.Core.GameElements.Sprite.html](#))

sprite

LoadFont(Font)

Declaration

```
public void LoadFont(Font font)
```



Parameters

Type	Name	Description
+ Genesis.Core (Genesis.Core.html)	<i>font</i>	

+ Genesis.Core.Behaviors

[\(Genesis.Core.Behaviors.html\)](#)

LoadTexture(Texture)

+ Genesis.Core.Behaviors.Physics

Declaration

[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ Genesis.Core.Behaviors.Physics

[\(Genesis.Core.Behaviors.Physics.html\)](#)

Parameters

+ Genesis.Core.GameElements

Type

[Genesis.Core.GameElements.h](#)

+ [Textures](#) ([Genesis.Graphics.Texture.html](#))

[\(Genesis.Graphics.html\)](#)

+ Genesis.Graphics.Physics

ModelViewMatrix()

[\(Genesis.Graphics.Physics.html\)](#)

Declaration

[\(Genesis.Graphics.RenderDevice.html\)](#)

[\(Genesis.Graphics.RenderDevice.html\)](#)

```
public void ModelViewMatrix()  
    ClassicGL
```

(Genesis.Graphics.RenderDevice.ClassicGL)
GLRenderer

(Genesis.Graphics.RenderDevice.GLRenderer)

PopMatrix()

+ Genesis.Graphics.Shaders.Operations

Declaration

[\(Genesis.Graphics.Shaders.Operations.html\)](#)

[\(Genesis.Graphics.Shaders.Operations.html\)](#)

+ [public void PopMatrix\(\)](#)

[\(Genesis.Graphics.Shapes.html\)](#)

[\(Genesis.Graphics.Shapes.html\)](#)

+ Genesis.Math

PrepareCanvasRendering(Scene, Canvas)

[\(Genesis.Math.html\)](#)

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

```
public void PrepareCanvasRendering(Scene scene, Canvas canvas)
```

+ Genesis.UI ([Genesis.UI.html](#))

Parameters

Type	Name	Description
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
Canvas (Genesis.UI.Canvas.html)	<i>canvas</i>	

▼

PrepareSceneRendering(Scene)

+ **Genesis.Core**
Declaration
(Genesis.Core.html)

+ **Genesis.Core.Behaviors**
PrepareSceneRendering(Scene scene)
(Genesis.Core.Behaviors.html)

Parameters

+ **Genesis.Core.Behaviors.Physics**

Type **Genesis.Core.Behaviors.Physics**

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics)

+ **Genesis.Core.GameElements**
ProjectionMatrix()
(Genesis.Core.GameElements.h)

Declaration

+ **Genesis.Graphics**

(Genesis.Graphics.html)
public void ProjectionMatrix()

+ **Genesis.Graphics.Physics**
(Genesis.Graphics.Physics.html)

PushMatrix(Graphics.RenderDevice)

(Genesis.Graphics.RenderDevice)

Declaration

ClassicGL

(Genesis.Graphics.RenderDevice.ClassicGL)

GLRenderer

(Genesis.Graphics.RenderDevice.GL)

+ **Genesis.Graphics.Shaders.Operations**
Rotate(float, Vec3)
(Genesis.Graphics.Shaders.Operations.html)

Declaration

+ **Genesis.Graphics.Shapes**

(Genesis.Graphics.Shapes.html)
public void Rotate(float angle, Vec3 vector)

+ **Genesis.Math**

(Genesis.Math.html)

Parameters

+ **Genesis.Physics**

(Genesis.Physics.html)

float (https://learn.microsoft.com/dotnet/api/system.single)

Name

Description

angle

+ **Genesis.UI** (Genesis.UI.html)

vector

TextureClampS()

Declaration

```
public void TextureClampS()
```

▼

TextureClampT()

+ [Genesis.Core](#)

([Genesis.Core.html](#))

+ [Genesis.Core.Behaviors](#)

```
public void TextureClampT()
```

([Genesis.Core.Behaviors.html](#))

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

TextureRepeatS()

- [Genesis.Core.Behaviors.Physics](#)

Declaration

([Genesis.Core.Behaviors.Physics.html](#))

+ [Genesis.Core.GameElements](#)

([Genesis.Core.GameElements.html](#))

+ [Genesis.Graphics](#)

TextureRepeatT()

([TextureRepeatT.html](#))

Declaration

[Genesis.Graphics.Physics](#)

([Genesis.Graphics.Physics.html](#))

```
public void TextureRepeatT()
```

- [Genesis.Graphics.RenderDevice](#)

([Genesis.Graphics.RenderDevice.html](#))

ClassicGL

Translate(Vec3)

([Genesis.Graphics.RenderDevice.ClassicGL.html](#))

GL Renderer

([Genesis.Graphics.RenderDevice.GL.html](#))

+ [Genesis.Graphics.Shaders.Operator](#)

([Genesis.Graphics.Shaders.Operator.html](#))

Parameters

+ [Genesis.Graphics.Shapes](#)

Type ([Genesis.Graphics.Shapes.html](#))

Name

Description

+ [Genesis.Math](#)

([Genesis.Math.html](#))

vector

+ [Genesis.Physics](#)

Translate(float, float, float)

([Genesis.Physics.html](#))

Declaration

+ [Genesis.UI](#) ([Genesis.UI.html](#))

```
public void Translate(float x, float y, float z)
```

Parameters

Type	Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	x	
float (https://learn.microsoft.com/dotnet/api/system.single)	y	
float (https://learn.microsoft.com/dotnet/api/system.single)	z	

+ Genesis.Core

([Genesis.Core.html](#)) **UpdateFrameBufferSize(Framebuffer, int, int)**

+ Genesis.Core.Behaviors

Declaration ([Genesis.Core.Behaviors.html](#))

+ [public void UpdateFrameBufferSize\(Framebuffer framebuffer, int width, int height\)](#)

+ Genesis.Core.Behaviors.Physics

+ Genesis.Core.Behaviors.Physics

Parameters

+ Genesis.Core.Behaviors.Physics

+ Genesis.Core.Behaviors.Physics

Type	Name	Description
Framebuffer (Genesis.Graphics.Framebuffer.html)	framebuffer	
int (https://learn.microsoft.com/dotnet/api/system.int32)	width	
int (https://learn.microsoft.com/dotnet/api/system.int32)	height	

([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

Viewport(float, float, float, float)

([Genesis.Graphics.Physics.html](#))

- Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

Declaration [public void Viewport\(float x, float y, float width, float height\)](#)

Parameters

GL Renderer

Type	Name	Description
(Genesis.Graphics.RenderDevice.GL)	x	
+ float (https://learn.microsoft.com/dotnet/api/system.single)	y	
+ float (https://learn.microsoft.com/dotnet/api/system.single)	width	
+ float (https://learn.microsoft.com/dotnet/api/system.single)	height	

+ Genesis.Math

([Genesis.Math.html](#))

Implements

+ Genesis.Physics

([Genesis.Physics.html](#))

IRenderDevice ([Genesis.Graphics.IRenderDevice.html](#))

+ Genesis.UI (Genesis.UI.html)

▼

- + **Genesis.Core**
[\(Genesis.Core.html\)](#)
- + **Genesis.Core.Behaviors**
[\(Genesis.Core.Behaviors.html\)](#)
- + **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)
- + **Genesis.Core.Behaviors.Physic**
[\(Genesis.Core.Behaviors.Physic.html\)](#)
- + **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)
- + **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)
- + **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)
- **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)
 - ClassicGL
[\(Genesis.Graphics.RenderDevice.ClassicGL.html\)](#)
 - GLRenderer
[\(Genesis.Graphics.RenderDevice.GLRenderer.html\)](#)
- + **Genesis.Graphics.Shaders.Oper**
[\(Genesis.Graphics.Shaders.Operations.html\)](#)
- + **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)
- + **Genesis.Math**
[\(Genesis.Math.html\)](#)
- + **Genesis.Physics**
[\(Genesis.Physics.html\)](#)
- + **Genesis.UI** [\(Genesis.UI.html\)](#)

Class GLRenderer

Inheritance

↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [GLRenderer](#)

+ Genesis.Core

Implements
[IRenderDevice](#) ([Genesis.Graphics.IRenderDevice.html](https://genesis.graphics.IRenderDevice.html))

In Genesis.CoreBehaviors

([Genesis.Core.Behaviors.html](#))

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))
+ Genesis.Core.Behaviors.Physics
[\(Genesis.Core.Behaviors.Physics\)](#)
[object.Equals\(object, object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))
+ Genesis.Core.Behaviors.Physics
[\(Genesis.Core.Behaviors.Physics\)](#)
[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Namespace: [Genesis](#) ([Genesis.html](https://genesis.html)).[Graphics](#) ([Genesis.Graphics.html](https://genesis.graphics.html)).[RenderDevice](#) ([Genesis.Graphics.RenderDevice.html](https://genesis.graphics.RenderDevice.html))

+ Genesis.Graphics

Assembly: [Genesis.dll](#)

([Genesis.Graphics.html](#))

Syntax

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

- Genesis.Graphics.RenderDevice

([Genesis.Graphics.RenderDevice.html](#))

Constructors

Classical

([Genesis.Graphics.RenderDevice.Classical](#))

GLRenderer

([Genesis.Graphics.RenderDevice.GLRenderer](#))

Declaration

+ Genesis.Graphics.Shaders.Operations

([Genesis.Graphics.Shaders.Operations.html](#))

public GLRenderer(IntPtr hwnd)

+ Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

Parameters

+ Genesis.Math

([Genesis.Math.html](#))

IntPtr (<https://learn.microsoft.com/dotnet/api/system.intptr>)

+ Genesis.Physics

([Genesis.Physics.html](#))

+ Genesis.UI ([Genesis.UI.html](#))

Type	Name	Description
IntPtr (https://learn.microsoft.com/dotnet/api/system.intptr)	hwnd	

Fields

sceneBuffer

Declaration



```
public Framebuffer sceneBuffer
```

+ Genesis.Core

(Genesis.Core.html)

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

Framebuffer (Genesis.Graphics.Framebuffer.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.GameElements

Begin()

(Genesis.Core.GameElements.h)

Beginn to draw

+ Genesis.Graphics

Declaration

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

public void Begin()

(Genesis.Graphics.Physics.html)

- Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

BuildFramebuffer(int, int)

ClassicGL

Creates a new framebuffer

(Genesis.Graphics.RenderDevice.ClassicGL.html)

GL Renderer

(Genesis.Graphics.RenderDevice.GL.html)

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL.html)

Parameters

+ Genesis.Graphics.Shapes

Type

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

(Genesis.Math.html)

int (<https://docs.microsoft.com/dotnet/api/system.int32>)

+ Genesis.Physics

Returns

(Genesis.Physics.html)

Type

+ Genesis.UI (Genesis.UI.html)

Framebuffer (Genesis.Graphics.Framebuffer.html)

Description

BuildFramebuffer(int, int, Texture)

Declaration

```
public Framebuffer BuildFramebuffer(int width, int height, Texture texture)
```



Parameters

Type	Name	Description
+ Genesis.Core		
int (Genesis.Core.html)	width	
+ Genesis.Core.Behaviors	height	
(Genesis.Core.Behaviors.html)	texture	

+ Genesis.Core.Behaviors.Physics

Returns [Genesis.Core.Behaviors.Physics](#)

Type	Description
+ Genesis.Core.Behaviors.Physics	

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.html](#))

BuildFramebuffer(int, int, int)

+ Genesis.Graphics

Declaration

([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

Framebuffer BuildFramebuffer(int width, int height, int texture)

([Genesis.Graphics.Physics.html](#))

Parameters

[Genesis.Graphics.RenderDevice](#)

Type	Name	Description
ClassicalGL		
int (https://learn.microsoft.com/dotnet/api/system.int32)	width	
(Genesis.Graphics.RenderDevice.ClassicalGL.html)		
int (https://learn.microsoft.com/dotnet/api/system.int32)	height	
(Genesis.Graphics.RenderDevice.GL.html)		
int (https://learn.microsoft.com/dotnet/api/system.int32)	texture	

+ Genesis.Graphics.Shaders.Operator

([Genesis.Graphics.Shaders.Operator.html](#))

+ Genesis.Graphics.Shapes

Framebuffer BuildFramebuffer([Genesis.Graphics.Shapes.html](#))

+ Genesis.Math

([Genesis.Math.html](#))

BuildShape(Shape)

+ Genesis.Physics

Create an buffer for the shape

([Genesis.Physics.html](#))

Declaration

+ [Genesis.UI](#) ([Genesis.UI.html](#))

```
public void BuildShape(Shape shape)
```

Parameters

Type		Name	Description
Shape (Genesis.Graphics.Shapes.Shape.html)		shape	

+ Genesis.Core

(Genesis.Core.html)

CreateDynamicVertexBuffer(float[])

+ Genesis.Core.Behaviors

Creates a dynamic vertex buffer in OpenGL and initializes it with the specified vertices. Dynamic buffers are suitable for frequently changing data, like dynamic vertex updates.

+ Genesis.Core.Behaviors.Physics

Declaration

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.Behaviors.Physics

```
public int CreateDynamicVertexBuffer(float[] verticies)
```

(Genesis.Core.Behaviors.Physics.html)

Parameters

Genesis.Core.GameElements

Type		Name	Description
float[] (Genesis.Graphics.html) (https://learn.microsoft.com/dotnet/api/system.single)		verticies	The array of vertices to be stored in the buffer.

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Returns

Type	Description
int (Genesis.Graphics.RenderDevice.html) (https://learn.microsoft.com/dotnet/api/system.int32)	The OpenGL handle (ID) of the created dynamic vertex buffer.

(Genesis.Graphics.RenderDevice.GL)

CreateStaticVertexBuffer(float[])

(Genesis.Graphics.Shaders.OpenGL.html)

Creates a static vertex buffer in OpenGL and initializes it with the specified vertices. Static buffers are suitable for infrequently changing data, like static geometry.

(Genesis.Graphics.Shapes.html)

Declaration

+ Genesis.Math

(Genesis.Math.html)

+ Genesis.Physics

Parameters

(Genesis.Physics.html)

+ Genesis.UI (Genesis.UI.html)

Type	Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single) []	<i>verticies</i>	The array of vertices to be stored in the buffer.

>Returns

Type	Description
+ Genesis.Core int (Genesis.Core.html) (https://learn.microsoft.com/dotnet/api/system.int32)	The OpenGL handle (ID) of the created static vertex buffer.

+ **Genesis.Core.Behaviors**

(Genesis.Core.Behaviors.html)

DisposeShader(ShaderProgram)

(Genesis.Core.Behaviors.Physics)

Deletes the shader program

+ **Genesis.Core.Behaviors.Physics**

Declaration

(Genesis.Core.Behaviors.Physics)

+ **Genesis.Core.GameElements**

(Genesis.Core.GameElements.h)

Parameters

+ **Genesis.Graphics**

Type
([Genesis.Graphics.html](#))

Name

Description

+ **Genesis.Graphics.Physics**

(Genesis.Graphics.Physics.html)

- **Genesis.Graphics.RenderDevice**

Dispose()

(Genesis.Graphics.RenderDevice)

Disposes the render device

Class

Declaration

GLRenderer

(Genesis.Graphics.RenderDevice.GL)
public void Dispose()

+ **Genesis.Graphics.Shaders.Operations**

(Genesis.Graphics.Shaders.Operations.h)

DisposeElement3D(Element3D)

(Genesis.Graphics.Shapes.html)

Dispose the 3D element

+ **Genesis.Math**

Declaration

(Genesis.Math.html)

+ **Genesis.Physics**
poseElement3D(Element3D element)

(Genesis.Physics.html)

Parameters

+ **Genesis.UI** ([Genesis.UI.html](#))

Type	Name	Description
Element3D (Genesis.Core.GameElements.Element3D.html)	<i>element</i>	

DisposeFont(Font)

Disposes the font

+ **Genesis.Core**

Declaration
(Genesis.Core.html)

+ **Genesis.Core.Behaviors**(Font font)
(Genesis.Core.Behaviors.html)

Parameters

+ **Genesis.Core.Behaviors.Physics**

Type
Genesis.Core.Behaviors.Physics

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics)

+ **Genesis.Core.GameElements**
DisposeTexture(Texture)
(Genesis.Core.GameElements.h)

Disposes the texture

+ **Genesis.Graphics**

Declaration
(Genesis.Graphics.html)

+ **Genesis.Graphics.Physics**

public void DisposeTexture(Texture texture)
(Genesis.Graphics.Physics.html)

- **Genesis.Graphics.RenderDevice**

Parameters

Type
Genesis.Graphics.RenderDevice

ClassicGL

Texture (Genesis.Graphics.RenderDevice.html)

GLRenderer

(Genesis.Graphics.RenderDevice.GL)

DrawBufferedSprite(BufferedSprite)

(Genesis.Graphics.Shaders.Opengl.html)

Declaration

+ **Genesis.Graphics.Shapes**

public void DrawBufferedSprite(BufferedSprite bufferedSprite)
(Genesis.Graphics.Shapes.html)

+ **Genesis.Math**

Parameters
(Genesis.Math.html)

Type

+ **Genesis.Physics**

BufferedSprite (Genesis.Core.GameElements.BufferedSprite.html)

(Genesis.Physics.html)

+ **Genesis.UI** (Genesis.UI.html)

DrawElement3D(Element3D)

Draws an 3D element within the scene

Declaration

```
public void DrawElement3D(Element3D element)
```



Parameters

Type	Name	Description
+ Genesis.Core (Genesis.Core.html)	<i>element</i>	

+ [Genesis.Core.Behaviors](#)

[\(Genesis.Core.Behaviors.html\)](#)
DrawGameElement(GameElement)

+ [Genesis.Core.Behaviors.Physics](#)

Registers the GameElement

+ [Genesis.Core.Behaviors.Physics](#)

[\(Genesis.Core.Behaviors.Physics.html\)](#)

```
public void DrawGameElement(GameElement element)
```

+ [Genesis.Core.GameElements](#)

[\(Genesis.Core.GameElements.html\)](#)

Parameters

Type	Name	Description
+ Genesis.Graphics (Genesis.Graphics.html)	<i>element</i>	

+ [Genesis.Graphics.Physics](#)

[\(Genesis.Graphics.Physics.html\)](#)

DrawLine(Vec3, Vec3, Color)

[\(Genesis.Graphics.RenderDevice.html\)](#)

Draws a fine

ClassicGL

[Declaration](#)
[\(Genesis.Graphics.RenderDevice.ClassicGL.html\)](#)

GLRenderer

```
public void DrawLine(Vec3 from, Vec3 to, Color color)
```

+ [Genesis.Graphics.Shaders.Operator](#)

[\(Genesis.Graphics.Shaders.Operator.html\)](#)

Parameters

+ [Genesis.Graphics.Shapes](#)

[\(Genesis.Graphics.Shapes.html\)](#)

[Vec3 \(Genesis.Math.Vec3.html\)](#)

[Vec3 \(Genesis.Math.Vec3.html\)](#)

[Color \(https://learn.microsoft.com/dotnet/api/system.drawing.color\)](#)

+ [Genesis.Physics](#)

[\(Genesis.Physics.html\)](#)

DrawMesh(Mesh, Color)

+ [Genesis.UI](#) ([Genesis.UI.html](#))

Draws a mesh

Declaration

```
public void DrawMesh(Mesh mesh, Color color)
```

Parameters

Type		Name	Description
Mesh (Genesis.Graphics.Mesh.html)		<i>mesh</i>	
+Color (https://learn.microsoft.com/dotnet/api/system.drawing.color) (Genesis.Core.html)		<i>color</i>	

+ Genesis.Core.Behaviors

DrawRect(Rect, Color)

Draws a rect with no fill

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.Behaviors.Physics

```
public void DrawRect(Rect rect, Color color)
```

+ Genesis.Core.GameElements

Parameters

(Genesis.Core.GameElements.html)

Type

+ Genesis.Graphics

Rect (Genesis.Math.Rect.html)

(Genesis.Graphics.html)

Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Genesis.Graphics.RenderDevice

DrawRect(Rect, Color, float)

(Genesis.Graphics.RenderDevice.html)

Draws a rect with no fill

ClassicGL

Declaration

Genesis.Graphics.RenderDevice.ClassicGL

GLRenderer

```
public void DrawRect(Rect rect, Color color, float borderWidth)
```

+ Genesis.Graphics.Shaders.Operator

Parameters

(Genesis.Graphics.Shaders.Operator.html)

+ Type

Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

Rect (Genesis.Math.Rect.html)

+ Color

(https://learn.microsoft.com/dotnet/api/system.drawing.color)

(Genesis.Math.html)

float (https://learn.microsoft.com/dotnet/api/system.single)

+ Genesis.Physics

(Genesis.Physics.html)

DrawSkyBox(Skybox)

Parameters

Declaration

```
public void DrawSkyBox(Skybox skybox)
```

Parameters

Type	Name	Description
Skybox (Genesis.Core.GameElements.Skybox.html)	skybox	

+ Genesis.Core

(Genesis.Core.html)

DrawSprite(Sprite)

+ Genesis.Core.Behaviors

Registers a sprite with modern behaviors

(Genesis.Core.Behaviors.html)

Declaration

Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

```
public void DrawSprite(Sprite sprite)
```

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Parameters

Type	Name	Description
Sprite (Genesis.Core.GameElements.Sprite.html)	sprite	

+ Genesis.Graphics

(Genesis.Graphics.html)

DrawSprite(Vec3, Vec3, Texture)

(Genesis.Graphics.Physics.html)

Draws a sprite

- Genesis.Graphics.RenderDevice

Declaration

(Genesis.Graphics.RenderDevice)

```
public void DrawSprite(Vec3 location, Vec3 size, Texture texture)
```

(Genesis.Graphics.RenderDevice.Class)

GLRenderer

Parameters

(Genesis.Graphics.RenderDevice.GL)

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	location	
Vec3 (Genesis.Math.Vec3.html)	size	
Texture (Genesis.Graphics.Texture.html)	texture	

+ Genesis.Math

(Genesis.Math.html)

DrawSprite(Vec3, Vec3, Texture, TexCoords)

+ Genesis.Physics

(Genesis.Physics.html)

Declaration

(Genesis.UI (Genesis.UI.html))

```
public void DrawSprite(Vec3 location, Vec3 size, Texture texture, TexCoords texCoords)
```

Parameters

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	<i>location</i>	
+ Genesis.Core (Genesis.Core.html)	<i>size</i>	
Texture (Genesis.Graphics.Texture.html)	<i>texture</i>	
+ Genesis.Core Behaviors TexCoords (Genesis.Graphics.TexCoords.html) (Genesis.Core.Behaviors.html)	<i>texCoords</i>	

+ Genesis.Core.Behaviors.Physics

DrawSprite(Vec3, Vec3, Color, Texture)

Parameters

(Genesis.Core.Behaviors.Physics
Declaration)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

+ Genesis.Graphics

Parameters
(Genesis.Graphics.html)

Type	Name	Description
+ Genesis.Graphics.Physics Vec3 (Genesis.Math.Vec3.html)	<i>location</i>	
- Genesis.Graphics.RenderDevice Color (System.Drawing.Color.html)	<i>size</i>	
Texture (Genesis.Graphics.Texture.html) (Genesis.Graphics.RenderDevice.ClassicGL)	<i>color</i>	
GLRenderer (Genesis.Graphics.RenderDevice.GL)	<i>texture</i>	

DrawSprite(Vec3, Vec3, Color, Texture, TexCoords)

+ Genesis.Graphics.Shaders.Oper

DrawSprite(Vec3, Vec3, Color, Texture, TexCoords)

Declaration

(Genesis.Graphics.Shapes.html)

```
public void DrawSprite(Vec3 location, Vec3 size, Color color, Texture texture, TexCoords tex
```

+ Genesis.Math

(Genesis.Math.html)

Parameters

(Genesis.Math.html)

+ Genesis.Math
(Genesis.Math.html)

Vec3 (Genesis.Math.Vec3.html)

Type	Name	Description
+ Genesis.Math (Genesis.Math.html)	<i>location</i>	
Vec3 (Genesis.Math.Vec3.html)	<i>size</i>	

Type	Name	Description
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	<i>color</i>	
Texture (Genesis.Graphics.Texture.html)	<i>texture</i>	
TexCoords (Genesis.Graphics.TexCoords.html)	<i>texCoords</i>	

+ **Genesis.Core**
DrawString(string, Vec3, float, Font, Color)
([Genesis.Core.html](#))

Renders a String

+ **Genesis.Core.Behaviors**

Declaration ([Genesis.Core.Behaviors.html](#))

+ **Genesis.Core Behaviors.Physics**

public void DrawString(string text, Vec3 location, float fontSize, Font font, Color color)
([Genesis.Core.Behaviors.Physics.html](#))

* Parameters ([Genesis.Core.Behaviors.Physics.html](#))

Type ([Genesis.Core.Behaviors.Physics.html](#))

Name	Description
------	-------------

+ **Genesis.Core GameElements**

string (<https://learn.microsoft.com/dotnet/api/system.string>)
([Genesis.Core.GameElements.html](#))

Vec3 ([Genesis.Math.Vec3.html](#))

text

location

+ **Genesis.Graphics**

float (<https://learn.microsoft.com/dotnet/api/system.single>)
([Genesis.Graphics.html](#))

fontSize

Font ([Genesis.Graphics.Font.html](#))

font

+ **Genesis.Graphics.Physics**

Color (<https://learn.microsoft.com/dotnet/api/system.drawing.color>)
([Genesis.Graphics.Physics.html](#))

color

- **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

DrawString(string, Vec3, float, float, Font, Color)

ClassicGL

Render ([Genesis.Graphics.RenderDevice.ClassicGL.html](#))

GLRenderer

Declaration ([Genesis.Graphics.RenderDevice.GL.html](#))

+ **Genesis.Graphics.Shaders.Operator**

operator string(string text, Vec3 location, float fontSize, float spacing, Font font, Color color)
([Genesis.Graphics.Shaders.Operator.html](#))

+ **Genesis.Graphics.Shapes**

Parameters ([Genesis.Graphics.Shapes.html](#))

Type ([Genesis.Math.html](#))

string (<https://learn.microsoft.com/dotnet/api/system.string>)

text

Vec3 ([Genesis.Math.Vec3.html](#))

location

float (<https://learn.microsoft.com/dotnet/api/system.single>)

fontSize

+ **Genesis.UI** ([Genesis.UI.html](#))

float (<https://learn.microsoft.com/dotnet/api/system.single>)

spacing

Font ([Genesis.Graphics.Font.html](#))

font

Type	Name	Description
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	color	

DrawTexture(Vec3, Vec3, float, float, Texture)

Draws a texture

+ Genesis.Core

Declaration
([Genesis.Core.html](#))

+ [Genesis.Core.Behaviors](#)(Vec3 location, Vec3 size, float repeatX, float repeatY, Texture texture)
([Genesis.Core.Behaviors.html](#))

+ Genesis.Core.Behaviors.Physics

Parameters
([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.Behaviors.Physics

Type
([Genesis.Math.Vec3.html](#))

+ Genesis.Core.Behaviors.Physics

Vec3 ([Genesis.Math.Vec3.html](#))

+ Genesis.Core.GameElements

float ([Genesis.Core.GameElements.html](#))

+ Genesis.Core.GameElements

float (<https://learn.microsoft.com/dotnet/api/system.single>)

+ Genesis.Graphics

Texture ([Genesis.Graphics.Texture.html](#))

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

DrawVectors(Vec3[], Color)
([Genesis.Graphics.RenderDevice.html](#))

+ Genesis.Graphics.RenderDevice

DrawVectors(Vec3[], Color)
([Genesis.Graphics.RenderDevice.html](#))

+ Genesis.Graphics.RenderDevice

ClassicGL
([Genesis.Graphics.RenderDevice.ClassicGL.html](#))

+ Genesis.Graphics.RenderDevice

GLRenderer
([Genesis.Graphics.RenderDevice.GL.html](#))

+ Genesis.Graphics.Shapes

Vec3 ([Genesis.Math.Vec3.html](#))[]
([Genesis.Graphics.Shapes.html](#))

+ Genesis.Math

Color (<https://learn.microsoft.com/dotnet/api/system.drawing.color>)
([Genesis.Math.html](#))

+ Genesis.Physics

End()
([Genesis.Physics.html](#))

Ends the rendering

+ Genesis.UI

([Genesis.UI.html](#))

Declaration

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	location	
Vec3 (Genesis.Math.Vec3.html)	size	
float (https://learn.microsoft.com/dotnet/api/system.single)	repeatX	
float (https://learn.microsoft.com/dotnet/api/system.single)	repeatY	
Texture (Genesis.Graphics.Texture.html)	texture	

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)[]	vecs	
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	color	

Type	Name	Description
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	color	
(Genesis.Math.html)		

Type	Name	Description
(Genesis.Physics.html)		
End() (Genesis.Physics.html)		

```
public void End()
```

FillRect(Rect, Color)

Fills a rectangle with the given color. LegacyGL

+ Genesis.Core

Declaration
[\(Genesis.Core.html\)](#)

```
public void FillRect(Rect rect, Color color)
```

+ Genesis.Core.Behaviors

[\(Genesis.Core.Behaviors.html\)](#)

Parameters

+ Genesis.Core.Behaviors.Physics

Type
[\(Genesis.Core.Behaviors.Physics\)](#)

Rect ([Genesis.Math.Rect.html](#))

+ Genesis.Core.Behaviors.Physics

Color ([Genesis.Core.Behaviors.Physics](#)) ([System.Drawing.Color](#))

+ Genesis.Core.GameElements

[\(Genesis.Core.GameElements.h\)](#)

FinishCanvasRendering(Scene, Canvas)

+ Genesis.Graphics

Declaration
[\(Genesis.Graphics.html\)](#)

+ Genesis.Graphics.Physics

FinishSceneRendering(Scene scene, Canvas canvas)

[\(Genesis.Graphics.Physics.html\)](#)

Parameters

Genesis.Graphics.RenderDevice

Type
[\(Genesis.Graphics.RenderDevice\)](#)

Scene ([Genesis.Core.Scene.html](#))

([Genesis.Graphics.RenderDevice.ClassicGL](#))

Canvas ([Genesis.UI.Canvas.html](#))

([Genesis.Graphics.RenderDevice.GL](#))

+ Genesis.Graphics.Shaders.OpenGL

[\(Genesis.Graphics.Shaders.OpenGL.html\)](#)

FinishSceneRendering(Scene)

[\(Genesis.Graphics.Shaders.OpenGL.FinishSceneRendering\)](#)

Declaration
[\(Genesis.Graphics.Shapes.html\)](#)

[\(Genesis.Graphics.Shapes.html\)](#)

```
public void FinishSceneRendering(Scene scene)
```

+ Genesis.Math

[\(Genesis.Math.html\)](#)

Parameters

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

Scene ([Genesis.Core.Scene.html](#))

+ Genesis.UI ([Genesis.UI.html](#))

GenerateTexture(OpenGL, Texture)

Generates a texture

Declaration

```
public int GenerateTexture(OpenGL gl, Texture texture)
```



Parameters

Type	Name	Description
+ Genesis.Core (Genesis.Core.html)		
+ Genesis.Core.Behaviors (Genesis.Core.Behaviors.html)	<i>texture</i>	

Returns

+ [Genesis.Core.Behaviors.Physics](#)

Type	Description
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)	

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

Type	Description
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)	

+ [Genesis.Core.GameElements](#)

Type	Description
+ GenerateTexture(OpenGL, Bitmap) (Genesis.Core.GameElements.h)	

Generates a texture

+ [Genesis.Graphics](#)

Declaration
[\(Genesis.Graphics.html\)](#)

+ [Genesis.Graphics.Physics](#)

public int GenerateTexture(OpenGL gl, Bitmap texture)

[\(Genesis.Graphics.Physics.html\)](#)

+ [Genesis.Graphics.RenderDevice](#)

Type	Name	Description
+ Genesis.Graphics.RenderDevice (Genesis.Graphics.RenderDevice.html)		
OpenGL	<i>gl</i>	

OpenGL (<https://learn.microsoft.com/dotnet/api/system.drawing.bitmap>)

Bitmap (<https://learn.microsoft.com/dotnet/api/system.drawing.bitmap>)

(Genesis.Graphics.RenderDevice.GL)

Returns

+ [Genesis.Graphics.Shaders.Operator](#)

Type
[\(Genesis.Graphics.Shaders.Operator.html\)](#)

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

[\(Genesis.Graphics.Shapes.html\)](#)

+ [Genesis.Graphics.Shapes](#)

Declaration
[\(Genesis.Graphics.Shapes.html\)](#)

+ [Genesis.Math](#)

[GetError\(\)](#)

[\(Genesis.Math.html\)](#)

Returns an error code from the render device

+ [Genesis.Physics](#)

Declaration
[\(Genesis.Physics.html\)](#)

+ [Genesis.UI](#) ([Genesis.UI.html](#))

public int GetError()

Returns

Type	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	

GetHandle() ▼

Retrieves handle of the render target

[\(Genesis.Core.html\)](#)

Declaration

+ Genesis.Core.Behaviors

[\(Genesis.Core.Behaviors.html\)](#)

+ Genesis.Core.Behaviors.Physics

Returns

[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ Genesis.Core.Behaviors.Physics

Int (<https://learn.microsoft.com/dotnet/api/system.IntPtr>)

+ Genesis.Core.GameElements

[\(Genesis.Core.GameElements.html\)](#)

GetRenderer()

Declaration

[\(Genesis.Graphics.html\)](#)

+ Genesis.Graphics.Physics()

[\(Genesis.Graphics.Physics.html\)](#)

Returns

[\(Genesis.Graphics.RenderDevice.html\)](#)

Type	Description
(Genesis.Graphics.RenderDevice.html)	

OpenGL

[\(Genesis.Graphics.RenderDevice.OpenGL.html\)](#)

GLRenderer

[\(Genesis.Graphics.RenderDevice.GL.html\)](#)

GetShaderProgram(ShaderProgram)

+ Genesis.Graphics.Shaders.Oper

Returns the shader program with the type of the refProgram. Returns null if no program found

[\(Genesis.Graphics.Shaders.OpenGL.html\)](#)

▼ Genesis.Graphics.Shapes

[\(Genesis.Graphics.Shapes.html\)](#)

public ShaderProgram GetShaderProgram(ShaderProgram refProgram)

+ Genesis.Math

[\(Genesis.Math.html\)](#)

Parameters

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

ShaderProgram ([\(Genesis.Graphics.ShaderProgram.html\)](#))

+ Genesis.UI ([\(Genesis.UI.html\)](#))

Returns

Type	Name	Description
(Genesis.Physics.html)	<i>refProgram</i>	

Type	Description
ShaderProgram (Genesis.Graphics.ShaderProgram.html)	

Init()

Initial the moderngl render device

+ **Genesis.Core**

Declaration
(Genesis.Core.html)

+ **Genesis.Core.Behaviors**

(Genesis.Core.Behaviors.html)

+ **Genesis.Core.Behaviors.Physics**

Implementation
Inherits Element3D

Implementation
(Genesis.Core.GameElements.h)

+ **Genesis.Graphics**

Parameters
(Genesis.Graphics.html)

Type

+ **Genesis.Graphics.Physics**

Element3D (Genesis.Core.GameElements.Element3D.html)

Name

Description

element

- **Genesis.Graphics.RenderDevice**

(Genesis.Graphics.RenderDevice.html)

InitElement3DNormalMap(string)

ClassicGL

Initializes the render device if the normal map file isn't existing an empty 1x1 normal map get created

GLRenderer

Declaration
(Genesis.Graphics.RenderDevice.GL)

+ **Genesis.Graphics.Shaders.Opener**

public int InitElement3DNormalMap(string path)

(Genesis.Graphics.Shaders.Opener.html)

Parameters

(Genesis.Graphics.Shapes.html)

Type

Name

Description

+ **Genesis.Math**

string (<https://learn.microsoft.com/dotnet/api/system.string>)

(Genesis.Math.html)

Returns

+ **Genesis.Physics**

Type
(Genesis.Physics.html)

Description

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

InitElement3DTexture(string)

Initial the diffuse texture for the 3D model If the texture file isn't existing an empty 1x1 texture get created

Declaration

```
    public int InitElement3DTexture(string path)
```

Type	Name	Description
+ String (System.String)	<code>path</code>	

Returns

Returns	
+ Genesis.CoreBehaviors.Physics	
Type	Genesis.CoreBehaviors.Physics
int (https://learn.microsoft.com/dotnet/api/system.int32)	
+ Genesis.CoreBehaviors.Physics	

+ Genesis.Core.GameElements

InitGameElement(GameElement) (Genesis.Core.GameElements.h)

Inits the game element
+ **Genesis.Graphics**

Declaration ([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

(Genesis Graphics Physics.html)

Genesis.Graphics.RenderDevice

Type	Name	Description
ClassicGL		
GameElement (Genesis.Core.GameElement.html)	<i>element</i>	

GLRenderer

(Genesis.Graphics.RenderDevice.GL

InitSprite(Sprite) Constructor

Superior
Tenesis.Gra

Genesis.Graphics.Shaders.Open

• Genesis Graphics

Declaration: Graphics.Shapes

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

(Genesis.Math.html)

Parameters

Genesis.Physics

Type Genesis

Sprite (Genesis.Core.GameElements.Sprite.html)
+ **Genesis.UI** ([Genesis.UI.html](#)) *sprite*

LoadFont(Font)

Loads the font

Declaration

```
public void LoadFont(Font font)
```

Parameters

Type
[\(Genesis.Core.html\)](#)

Name

Description

+ [Genesis.Core.Behaviors](#)
[\(Genesis.Core.Behaviors.html\)](#)

font

+ [Genesis.Core.Behaviors.Physics](#)

[LoadShader\(string, ShaderProgram\)](#)

Loads a shader program

+ [Genesis.Core.Behaviors.Physics](#)

[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ [Genesis.Core.GameElements](#)

public void LoadShader(string name, ShaderProgram program)

[\(Genesis.Core.GameElements.html\)](#)

+ [Genesis.Graphics](#)

Parameters
[\(Genesis.Graphics.html\)](#)

Type

+ [Genesis.Graphics.Physics](#)

string (<https://learn.microsoft.com/dotnet/api/system.string>)

[\(Genesis.Graphics.Physics.html\)](#)

ShaderProgram ([Genesis.Graphics.ShaderProgram.html](#))

- [Genesis.Graphics.RenderDevice](#)

[\(Genesis.Graphics.RenderDevice.html\)](#)

ClassicGL

[LoadTexture\(Texture\)](#)

([Genesis.Graphics.RenderDevice.ClassicGL.html](#))

GLRenderer

Loads a texture into the vram

([Genesis.Graphics.RenderDevice.GL.html](#))

Declaration

+ [Genesis.Graphics.Shaders.Operations](#)

[\(Genesis.Graphics.Shaders.Operations.html\)](#)

public void LoadTexture(Texture texture)

+ [Genesis.Graphics.Shapes](#)

[\(Genesis.Graphics.Shapes.html\)](#)

Parameters

+ Type
[\(Genesis.Math.html\)](#)

Texture ([Genesis.Graphics.Texture.html](#))

Name

Description

+ [Genesis.Physics](#)

[\(Genesis.Physics.html\)](#)

[ModelViewMatrix\(\)](#)

+ [Genesis.UI](#) ([Genesis.UI.html](#))

This function will not be used within this render device

Declaration

```
public void ModelViewMatrix()
```

PopMatrix()

This function will not be used within this render device

+ Genesis.Core

Declaration
[\(Genesis.Core.html\)](#)

+ Genesis.Core.Behaviors

[\(Genesis.Core.Behaviors.html\)](#)

+ Genesis.Core.Behaviors.Physics

[PrepareCanvasRendering\(Scene, Canvas\)](#)

Declaration
[\(Genesis.Core.Behaviors.Physics.html\)](#)

[+ Genesis.Core.Behaviors.Physics](#)

[\(Genesis.Core.Behaviors.Physics.html\)](#)

```
public void PrepareCanvasRendering(Scene scene, Canvas canvas)
```

+ Genesis.Core.GameElements

[\(Genesis.Core.GameElements.html\)](#)

Parameters

+ Genesis.Graphics

[\(Genesis.Graphics.html\)](#)

Scene ([Genesis.Core.Scene.html](#))

Name

Description

scene

+ Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

canvas

- Genesis.Graphics.RenderDevice

[PrepareSceneRendering\(Scene\)](#)

Declaration
[ClassicGL](#)

[\(Genesis.Graphics.RenderDevice.ClassicGL.html\)](#)

GLRenderer

```
public void PrepareSceneRendering(Scene scene)
```

[\(Genesis.Graphics.RenderDevice.GL.html\)](#)

+ Genesis.Graphics.Shaders.Operations

[\(Genesis.Graphics.Shaders.Operations.html\)](#)

Type

+ Genesis.Graphics.Shapes

[Scene \(\[Genesis.Core.Scene.html\]\(#\)\)](#)

[\(Genesis.Graphics.Shapes.html\)](#)

Name

Description

scene

+ Genesis.Math

[\(Genesis.Math.html\)](#)

[ProjectionMatrix\(\)](#)

+ Genesis.Physics

This function will not be used within this render device

[\(Genesis.Physics.html\)](#)

Declaration

[+ Genesis.UI \(\[Genesis.UI.html\]\(#\)\)](#)

```
public void ProjectionMatrix()
```

PushMatrix()

This function will not be used within this render device

Declaration

```
public void PushMatrix()
```

+ Genesis.Core

Rotate(float, Vec3)

+ Genesis.Core.Behaviors

This function will not be used within this render device

[\(Genesis.Core.Behaviors.html\)](#)

Declaration

+ Genesis.Core.Behaviors.Physics

[\(Genesis.Core.Behaviors.Physics\)](#) Vec3 vector)

+ Genesis.Core.Behaviors.Physics

Parameters

[Genesis.Core.Behaviors.Physics](#)

Type

+ [Genesis.Core.GameElements](#)

float (Genesis.Core.GameElements.html) [net/api/system/single](#))

Name

angle

Type

+ [Genesis.Graphics](#)

(Genesis.Graphics.html)

Name

vector

+ Genesis.Graphics.Physics

SetCamera(Camera)

[\(Genesis.Graphics.Physics.html\)](#)

Set the Projection and view matrices

- Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice.html\)](#)

Parameters

ClassicGL

[p\(Genesis.Graphics.RenderDevice.Camera\)](#)

GLRenderer

(Genesis.Graphics.RenderDevice.GL)

Type

+ [Genesis.Graphics.Shaders.Operator](#)

(Genesis.Graphics.Shaders.Operator.html)

Camera (Genesis.Graphics.Camera.html)

Name

camera

Description

+ Genesis.Graphics.Shapes

[\(Genesis.Graphics.Shapes.html\)](#)

SetFramebuffer(Framebuffer)

[\(Genesis.Math.html\)](#)

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

+ Genesis.UI (Genesis.UI.html)

Parameters

Type	Name	Description
Framebuffer (Genesis.Graphics.Framebuffer.html)	<i>framebuffer</i>	

SetFramebuffer(int)

Declaration

+ Genesis.Core

(Genesis.Core.html) framebuffer(int framebuffer)

+ Genesis.Core.Behaviors

Parameters
(Genesis.Core.Behaviors.html)

Type	Name	Description
+ Genesis.Core.Behaviors.Physics int (Genesis.Core.Behaviors.Physics.html)	<i>framebuffer</i>	

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

SetLightSource(Light)

+ Genesis.Core.GameElements

Declaration

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

(Genesis.Graphics.html)

Parameters
+ Genesis.Graphics.Physics

Type	Name	Description
+ Genesis.Graphics.Physics.html		

- Light (Genesis.Graphics.RenderDevice.html)

(Genesis.Graphics.RenderDevice)

ClassicGL

TextureClamps()

Genesis.Graphics.RenderDevice.ClassicGL

Sets the texture clamps

Genesis.Graphics.RenderDevice.GL

Declaration
+ Genesis.Graphics.Shaders.Operations

(Genesis.Graphics.Shaders.Operations.html)

public void TextureClampS()

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

TextureClampT()

(Genesis.Math.html)

Sets the texture clampT

+ Genesis.Physics

Declaration

(Genesis.Physics.html)

+ Genesis.UI (Genesis.UI.html)

public void TextureClampT()

TextureRepeatS()

Sets the texture repeatS

Declaration

```
public void TextureRepeatS()
```

+ Genesis.Core

([Genesis.Core.html](#))

+ Genesis.Core.Behaviors

([Genesis.Core.Behaviors.html](#))

Declaration

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

Translate(Vec3)

+ Genesis.Core.GameElements

This function will not be used within this render device

Declaration

([Genesis.Graphics.html](#))

```
public void Translate(Vec3 vector)
```

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

Parameters

- Genesis.Graphics.RenderDevice

Type ([Genesis.Graphics.RenderDevice.html](#))

Vec3 ([Genesis.Math.Vec3.html](#))

Class CGL

Name

Description

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	vector	

([Genesis.Graphics.RenderDevice.Class.CGL.html](#))

GLRenderer

([Genesis.Graphics.RenderDevice.GL.html](#))

Translate(float, float, float)

+ Genesis.Graphics.Shaders.Operations

This function will not be used within this render device

([Genesis.Graphics.Shaders.Operations.html](#))

Declaration

+ Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

```
public void Translate(float x, float y, float z)
```

+ Genesis.Math

Parameters ([Genesis.Math.html](#))

Type

+ Genesis.Physics

([Genesis.Physics.html](#))

float (<https://learn.microsoft.com/dotnet/api/system.single>)

Name

Description

+ Genesis.UI

([Genesis.UI.html](#))

float (<https://learn.microsoft.com/dotnet/api/system.single>)

x

float (<https://learn.microsoft.com/dotnet/api/system.single>)

y

float (<https://learn.microsoft.com/dotnet/api/system.single>)

z

UpdateFrameBufferSize(Framebuffer, int, int)

Declaration

```
public void UpdateFrameBufferSize(Framebuffer framebuffer, int width, int height)
```



Parameters

Type	Name	Description
+ Genesis.Core		
Framebuffer (Genesis.Core.html)	framebuffer	
+ Genesis.Core.Behaviors		
int (https://learn.microsoft.com/dotnet/api/system.int32)	width	
(Genesis.Core.Behaviors.html)	height	

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

+ [Genesis.Core.Behaviors.Physics](#)

Viewport(float, float, float, float)

+ [Genesis.Core.Behaviors.Physics](#)

Set([Genesis.Core.Behaviors.Physics.html](#))

De [Genesis.Core.GameElements](#)

([Genesis.Core.GameElements.html](#))

```
public void Viewport(float x, float y, float width, float height)
```

+ [Genesis.Graphics](#)

([Genesis.Graphics.html](#))

Parameters

Type	Name	Description
+ Genesis.Graphics.Physics		
Type (Genesis.Graphics.Physics.html)		
float (https://learn.microsoft.com/dotnet/api/system.single)	x	
- Genesis.Graphics.RenderDevice		
float (https://learn.microsoft.com/dotnet/api/system.single)	y	
float (https://learn.microsoft.com/dotnet/api/system.single)	width	
float (https://learn.microsoft.com/dotnet/api/system.single)	height	

(Genesis.Graphics.RenderDevice.GL

Implements

([Genesis.Graphics.Shaders.Operations.html](#))

IRenderDevice ([Genesis.Graphics.IRenderDevice.html](#))

+ [Genesis.Graphics.Shapes](#)

([Genesis.Graphics.Shapes.html](#))

+ [Genesis.Math](#)

([Genesis.Math.html](#))

+ [Genesis.Physics](#)

([Genesis.Physics.html](#))

+ [Genesis.UI](#) ([Genesis.UI.html](#))

Namespace Genesis.Graphics.Shaders.OpenGL

▼ Enter here to filter...

Classes

([Genesis.Core.Behaviors.Physics](#))

+ [Genesis.Core.Behaviors.Physics.BasicShader](#) ([Genesis.Graphics.Shaders.OpenGL.BasicShader.html](#))
([Genesis.Core.Behaviors.Physics](#))

+ [Genesis.Core.GameElements.DiffuseLightning](#) ([Genesis.Graphics.Shaders.OpenGL.DiffuseLightning.html](#))
([Genesis.Core.GameElements.h](#))

+ [Genesis.Graphics.DiffuseNormalLightning](#)
([Genesis.Graphics.html](#))
([Genesis.Graphics.Shaders.OpenGL.DiffuseNormalLightning.html](#))

+ [Genesis.Graphics.Physics](#)
([Genesis.Graphics.Physics.html](#))
[DiffuseNormalShader](#)
([Genesis.Graphics.Shaders.OpenGL.DiffuseNormalShader.html](#))
+ [Genesis.Graphics.RenderDevice](#)
([Genesis.Graphics.RenderDevice](#))

[DiffuseShader](#) ([Genesis.Graphics.Shaders.OpenGL.DiffuseShader.html](#))
([Genesis.Graphics.Shaders.OpenGL](#)).
([Genesis.Graphics.Shaders.Ope](#))

[DiffuseSolidShader](#) ([Genesis.Graphics.Shaders.OpenGL.DiffuseSolidShader.html](#))
([Genesis.Graphics.Shaders.OpenGL](#).
DiffuseLightning
MVPRectShader

([Genesis.Graphics.Shaders.OpenGL.MVPRectShader.html](#))
DiffuseNormalLightning

([Genesis.Graphics.Shaders.OpenGL.MVPRectShader.html](#)).
DiffuseNormalShader
([Genesis.Graphics.Shaders.OpenGL](#).
DiffuseShader)

MVPSolidShader

([Genesis.Graphics.Shaders.OpenGL.MVPSolidShader.html](#))
([Genesis.Graphics.Shaders.OpenGL](#).
DiffuseSolidShader)

ScreenShader

([Genesis.Graphics.Shaders.OpenGL.ScreenShader.html](#))
MVPRectShader
([Genesis.Graphics.Shaders.OpenGL](#).
ScreenShader)

SkyboxShader

([Genesis.Graphics.Shaders.OpenGL.SkyboxShader.html](#))
([Genesis.Graphics.Shaders.OpenGL](#).
MVPRectShader)

SpriteShader

([Genesis.Graphics.Shaders.OpenGL.SpriteShader.html](#))
([Genesis.Graphics.Shaders.OpenGL](#).
ScreenShader)

TerrainShader

([Genesis.Graphics.Shaders.OpenGL.TerrainShader.html](#))
([Genesis.Graphics.Shaders.OpenGL](#).
SkyboxShader)

WireframeShader

([Genesis.Graphics.Shaders.OpenGL.WireframeShader.html](#))
([Genesis.Graphics.Shaders.OpenGL](#).
SpriteShader)

▼

(Genesis.Core.Behaviors.Physics)

+ **Genesis.Core.Behaviors.Physics**
(Genesis.Core.Behaviors.Physics)

+ **Genesis.Core.GameElements**
(Genesis.Core.GameElements.h)

+ **Genesis.Graphics**
(Genesis.Graphics.html)

+ **Genesis.Graphics.Physics**
(Genesis.Graphics.Physics.html)

+ **Genesis.Graphics.RenderDevice**
(Genesis.Graphics.RenderDevice)

- **Genesis.Graphics.Shaders.Operations**
(Genesis.Graphics.Shaders.Operations)

BasicShader
(Genesis.Graphics.Shaders.OpenGL.BasicShader)

DiffuseLightning
(Genesis.Graphics.Shaders.OpenGL.DiffuseLightning)

DiffuseNormalLightning
(Genesis.Graphics.Shaders.OpenGL.DiffuseNormalLightning)

DiffuseNormalShader
(Genesis.Graphics.Shaders.OpenGL.DiffuseNormalShader)

DiffuseShader
(Genesis.Graphics.Shaders.OpenGL.DiffuseShader)

DiffuseSolidShader
(Genesis.Graphics.Shaders.OpenGL.DiffuseSolidShader)

MVPRectShader
(Genesis.Graphics.Shaders.OpenGL.MVPRectShader)

MVPShader
(Genesis.Graphics.Shaders.OpenGL.MVPShader)

MVPSolidShader
(Genesis.Graphics.Shaders.OpenGL.MVPSolidShader)

ScreenShader
(Genesis.Graphics.Shaders.OpenGL.ScreenShader)

SkyboxShader
(Genesis.Graphics.Shaders.OpenGL.SkyboxShader)

SpriteShader
(Genesis.Graphics.Shaders.OpenGL.SpriteShader)

Class BasicShader

Inheritance

↳ [Enter here to filter](#)
↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [ShaderProgram](#) ([Genesis.Graphics.ShaderProgram.html](#))
(Genesis.Core.Behaviors.Physics)
↳ [BasicShader](#)

Inheritance Hierarchy

(Genesis.Core.Behaviors.Physics)

[ShaderProgram.ProgramID](#) ([Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_ProgramID](#))

[ShaderProgram.VertexShader](#)

+ Genesis.Core.GameElements

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_VertexShader\)](#)

(Genesis.Core.GameElements.h)

[ShaderProgram.FragmentShader](#)

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_FragmentShader\)](#)

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))

+ Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)))

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice.html\)](#)

[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

- Genesis.Graphics.Shaders.OpenGL
[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Graphics.Shaders.OpenGL)

Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#)).[Shaders](#) ([Genesis.Graphics.Shaders.html](#)).[OpenGL](#)

[\(Genesis.Graphics.Shaders.OpenGL.html\)](#)

Assembly: [Genesis.dll](#)

[DiffuseLightning](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseNormalLightning](#)

```
public class BasicShader : ShaderProgram  
(Genesis.Graphics.Shaders.OpenGL)
```

[DiffuseNormalShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

Constructors

BasicShader()

[MVPRectShader](#)

Declaration: ([Genesis.Graphics.Shaders.OpenGL](#))

[MVPShader](#)

```
public BasicShader()  
(Genesis.Graphics.Shaders.OpenGL)
```

[MVPSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[ScreenShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[SkyboxShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[SpriteShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

Class DiffuseLightning

Inheritance

↳ Enter here to filter
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ ShaderProgram (Genesis.Graphics.ShaderProgram.html)
(Genesis.Core.Behaviors.Physics)
↳ DiffuseLightning

In Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

ShaderProgram.ProgramID (Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_ProgramID)

ShaderProgram.VertexShader

+ Genesis.Core.GameElements

(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_VertexShader)

(Genesis.Core.GameElements.h)

ShaderProgram.FragmentShader

(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_FragmentShader)

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)))

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

- **Genesis.Graphics.Shaders.OpenGL**

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Graphics.Shaders.OpenGL)

Namespace: Genesis (Genesis.html).Graphics (Genesis.Graphics.html).Shaders (Genesis.Graphics.Shaders.html).OpenGL

(Genesis.Graphics.Shaders.OpenGL.html)

(Genesis.Graphics.Shaders.OpenGL)

Assembly: Genesis.dll

DiffuseLightning

(Genesis.Graphics.Shaders.OpenGL)

DiffuseNormalLightning

public class DiffuseLightning : ShaderProgram

(Genesis.Graphics.Shaders.OpenGL)

DiffuseNormalShader

(Genesis.Graphics.Shaders.OpenGL)

DiffuseShader

(Genesis.Graphics.Shaders.OpenGL)

DiffuseSolidShader

(Genesis.Graphics.Shaders.OpenGL)

DiffuseLightning()

(Genesis.Graphics.Shaders.OpenGL)

MVPRectShader

(Genesis.Graphics.Shaders.OpenGL)

Declaration

(Genesis.Graphics.Shaders.OpenGL)

MVPShader

public class DiffuseLightning : ShaderProgram

(Genesis.Graphics.Shaders.OpenGL)

MVPSolidShader

(Genesis.Graphics.Shaders.OpenGL)

ScreenShader

(Genesis.Graphics.Shaders.OpenGL)

SkyboxShader

(Genesis.Graphics.Shaders.OpenGL)

SpriteShader

(Genesis.Graphics.Shaders.OpenGL)

Class DiffuseNormalLightning

Inheritance

↳ [Enter here to filter](#)
↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [ShaderProgram](#) ([Genesis.Graphics.ShaderProgram.html](https://genesis.graphics.shaderprogram.html))
(Genesis.Core.Behaviors.Phyic
↳ [DiffuseNormalLightning](#)

In [Genesis.Core.Behaviors.Physics](#)

(Genesis.Core.Behaviors.Physics

[ShaderProgram.ProgramID](#) ([Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_ProgramID](https://genesis.graphics.shaderprogram.html#Genesis_Graphics_ShaderProgram_ProgramID))

[ShaderProgram.VertexShader](#)

+ Genesis.Core.GameElements

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_VertexShader\)](#)

(Genesis.Core.GameElements.h

[ShaderProgram.FragmentShader](#)

(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_FragmentShader)

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))

- Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)))

[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Graphics.Shaders.OpenGL.html

Namespace: Genesis ([Genesis.html](https://genesis.html)).Graphics ([Genesis.Graphics.html](https://genesis.graphics.html)).Shaders ([Genesis.Shaders.html](https://genesis.shaders.html)).OpenGL

[\(Genesis.Graphics.Shaders.OpenGL.html\)](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

Assembly: Genesis.dll

[DiffuseLightning](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseNormalLightning](#)

```
public class DiffuseNormalLightning : ShaderProgram  
(Genesis.Graphics.Shaders.OpenGL.
```

[DiffuseNormalShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

Constructors

DiffuseNormalLightning()

[MVPRectShader](#)

Declaration: ([Genesis.Graphics.Shaders.OpenGL](#).

[MVPShader](#)

```
public DiffuseNormalLightning()  
(Genesis.Graphics.Shaders.OpenGL.
```

[MVPSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[ScreenShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[SkyboxShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[SpriteShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

Class DiffuseNormalShader

Inheritance

↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)

↳ [ShaderProgram](#) ([Genesis.Graphics.ShaderProgram.html](https://genesis.graphics.shaderprogram.html))

(Genesis.Core.Behaviors.Phyic)

↳ [DiffuseNormalShader](#)

Inheritance

(Genesis.Core.Behaviors.Physics)

[ShaderProgram.ProgramID](#) ([Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_ProgramID](https://genesis.graphics.shaderprogram.html#Genesis_Graphics_ShaderProgram_ProgramID))

[ShaderProgram.VertexShader](#)

+ Genesis.Core.GameElements

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_VertexShader\)](#)

(Genesis.Core.GameElements.h)

[ShaderProgram.FragmentShader](#)

(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_FragmentShader)

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)))

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

- Genesis.Graphics.Shaders.OpenGL

[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Graphics.Shaders.OpenGL.html)

Namespace: Genesis ([Genesis.html](https://genesis.graphics.html)).Graphics ([Genesis.Graphics.html](https://genesis.graphics.html)).Shaders ([Genesis.Graphics.Shaders.html](https://genesis.graphics.shaders.html)).OpenGL

(Genesis.Graphics.Shaders.OpenGL.html)

Assembly: Genesis.dll

DiffuseLightning

([Genesis.Graphics.Shaders.OpenGL](#).

DiffuseNormalLightning

public class DiffuseNormalShader : ShaderProgram

([Genesis.Graphics.Shaders.OpenGL](#).

DiffuseNormalShader

([Genesis.Graphics.Shaders.OpenGL](#).

DiffuseShader

([Genesis.Graphics.Shaders.OpenGL](#).

Constructors

DiffuseNormalShader()

MVPRectShader

Declaration: ([Genesis.Graphics.Shaders.OpenGL](#).

MVPShader

public DiffuseNormalShader()

MVPSolidShader

([Genesis.Graphics.Shaders.OpenGL](#).

ScreenShader

([Genesis.Graphics.Shaders.OpenGL](#).

SkyboxShader

([Genesis.Graphics.Shaders.OpenGL](#).

SpriteShader

([Genesis.Graphics.Shaders.OpenGL](#).

Class DiffuseShader

Inheritance

↳ [Enter here to filter](#)
↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [ShaderProgram](#) ([Genesis.Graphics.ShaderProgram.html](#))
(Genesis.Core.Behaviors.Physics)
↳ [DiffuseShader](#)

Inheritance Hierarchy

(Genesis.Core.Behaviors.Physics)

[ShaderProgram.ProgramID](#) ([Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_ProgramID](#))

[ShaderProgram.VertexShader](#)

+ Genesis.Core.GameElements

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_VertexShader\)](#)

(Genesis.Core.GameElements.h)

[ShaderProgram.FragmentShader](#)

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_FragmentShader\)](#)

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)))

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice.html\)](#)

[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

- Genesis.Graphics.Shaders.OpenGL

[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Graphics.Shaders.OpenGL.html)

Namespace: Genesis ([Genesis.html](#)).Graphics ([Genesis.Graphics.html](#)).Shaders ([Genesis.Graphics.Shaders.html](#)).OpenGL

[\(Genesis.Graphics.Shaders.OpenGL.html\)](#)

Assembly: Genesis.dll

[DiffuseLightning](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseNormalLightning](#)

```
public class DiffuseShader : ShaderProgram  
(Genesis.Graphics.Shaders.OpenGL.
```

[DiffuseNormalShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

Constructors

DiffuseShader()

[MVPRectShader](#)

Declaration: ([Genesis.Graphics.Shaders.OpenGL.](#)

[MVPShader](#)

```
public class DiffuseShader : ShaderProgram  
(Genesis.Graphics.Shaders.OpenGL.
```

[MVPSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[ScreenShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[SkyboxShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[SpriteShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

Class DiffuseSolidShader

Inheritance

↳ [Enter here to filter](#)
↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [ShaderProgram](#) ([Genesis.Graphics.ShaderProgram.html](#))
(Genesis.Core.Behaviors.Physics)
↳ [DiffuseSolidShader](#)

Inheritance Hierarchy

(Genesis.Core.Behaviors.Physics)

[ShaderProgram.ProgramID](#) ([Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_ProgramID](#))

[ShaderProgram.VertexShader](#)

+ Genesis.Core.GameElements

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_VertexShader\)](#)

(Genesis.Core.GameElements.h)

[ShaderProgram.FragmentShader](#)

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_FragmentShader\)](#)

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))

+ Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)))

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice.html\)](#)

[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

- Genesis.Graphics.Shaders.OpenGL
[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Graphics.Shaders.OpenGL)

Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#)).[Shaders](#) ([Genesis.Graphics.Shaders.html](#)).[OpenGL](#)

[\(Genesis.Graphics.Shaders.OpenGL.html\)](#)

Assembly: [Genesis.dll](#)

[DiffuseLightning](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseNormalLightning](#)

```
public class DiffuseSolidShader : ShaderProgram  
(Genesis.Graphics.Shaders.OpenGL)
```

[DiffuseNormalShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

DiffuseSolidShader()

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[MVPRectShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[MVPSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[ScreenShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[SkyboxShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[SpriteShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

Class MVPRectShader

Inheritance

↳ [Enter here to filter](#)
↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [ShaderProgram](#) ([Genesis.Graphics.ShaderProgram.html](#))
(Genesis.Core.Behaviors.Physics)
↳ [MVPRectShader](#)

Inheritance Hierarchy

(Genesis.Core.Behaviors.Physics)

[ShaderProgram.ProgramID](#) ([Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_ProgramID](#))

[ShaderProgram.VertexShader](#)

+ Genesis.Core.GameElements

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_VertexShader\)](#)

(Genesis.Core.GameElements.h)

[ShaderProgram.FragmentShader](#)

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_FragmentShader\)](#)

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)))

[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

- Genesis.Graphics.Shaders.OpenGL
[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Graphics.Shaders.OpenGL)

Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#)).[Shaders](#) ([Genesis.Graphics.Shaders.html](#)).[OpenGL](#)

[\(Genesis.Graphics.Shaders.OpenGL.html\)](#)

Assembly: [Genesis.dll](#)

[DiffuseLightning](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseNormalLightning](#)

```
public class MVPRectShader : ShaderProgram  
(Genesis.Graphics.Shaders.OpenGL.
```

[DiffuseNormalShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

MVPRectShader()

[MVPRectShader](#)

Declaration: ([Genesis.Graphics.Shaders.OpenGL](#).

[MVPShader](#)

```
public MVPRectShader()  
(Genesis.Graphics.Shaders.OpenGL.
```

[MVPSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[ScreenShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[SkyboxShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[SpriteShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

Class MVPShader

Inheritance

↳ [Enter here to filter](#)
↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [ShaderProgram](#) ([Genesis.Graphics.ShaderProgram.html](https://genesis.graphics.shaderprogram.html))
(Genesis.Core.Behaviors.Physics)
↳ [MVPShader](#)

Inheritance Hierarchy

(Genesis.Core.Behaviors.Physics)

[ShaderProgram.ProgramID](#) ([Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_ProgramID](https://genesis.graphics.shaderprogram.html#Genesis_Graphics_ShaderProgram_ProgramID))

[ShaderProgram.VertexShader](#)

+ Genesis.Core.GameElements

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_VertexShader\)](#)

(Genesis.Core.GameElements.h)

[ShaderProgram.FragmentShader](#)

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_FragmentShader\)](#)

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))

+ Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)))

[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

- Genesis.Graphics.Shaders.OpenGL
[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Graphics.Shaders.OpenGL)

Namespace: Genesis (Genesis.html).Graphics (Genesis.Graphics.html).Shaders (Genesis.Graphics.Shaders.html).OpenGL

[\(Genesis.Graphics.Shaders.OpenGL.html\)](#)

Assembly: Genesis.dll

[DiffuseLightning](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseNormalLightning](#)

```
public class MVPShader : ShaderProgram  
(Genesis.Graphics.Shaders.OpenGL.
```

[DiffuseNormalShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

MVPShader()

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[MVPRectShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

Declaration:

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[MVPShader](#)

```
public MVPShader()  
(Genesis.Graphics.Shaders.OpenGL.
```

[MVPSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[ScreenShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[SkyboxShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[SpriteShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

Class MVPSolidShader

Inheritance

↳ [Enter here to filter](#)
↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [ShaderProgram](#) ([Genesis.Graphics.ShaderProgram.html](#))
(Genesis.Core.Behaviors.Physics)
↳ [MVPSolidShader](#)

Inheritance Hierarchy

(Genesis.Core.Behaviors.Physics)

[ShaderProgram.ProgramID](#) ([Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_ProgramID](#))

[ShaderProgram.VertexShader](#)

+ Genesis.Core.GameElements

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_VertexShader\)](#)

(Genesis.Core.GameElements.h)

[ShaderProgram.FragmentShader](#)

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_FragmentShader\)](#)

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)))

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice.html\)](#)

[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

- Genesis.Graphics.Shaders.OpenGL
[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Graphics.Shaders.OpenGL.html)

Namespace: Genesis ([Genesis.html](#)).Graphics ([Genesis.Graphics.html](#)).Shaders ([Genesis.Graphics.Shaders.html](#)).OpenGL

[\(Genesis.Graphics.Shaders.OpenGL.html\)](#)

Assembly: Genesis.dll

[DiffuseLightning](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseNormalLightning](#)

public class MVPSolidShader : ShaderProgram
[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseNormalShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[MVPRectShader](#)

Declaration: [\(Genesis.Graphics.Shaders.OpenGL.](#)

[MVPShader](#)

public class MVPSolidShader : ShaderProgram
[\(Genesis.Graphics.Shaders.OpenGL.](#)

[MVPSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[ScreenShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[SkyboxShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[SpriteShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

Class ScreenShader

Inheritance

↳ [Enter here to filter](#)
↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [ShaderProgram](#) ([Genesis.Graphics.ShaderProgram.html](https://genesis.graphics.shaderprogram.html))
(Genesis.Core.Behaviors.Physics)
↳ [ScreenShader](#)

Inheritance Hierarchy

(Genesis.Core.Behaviors.Physics)

[ShaderProgram.ProgramID](#) ([Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_ProgramID](https://genesis.graphics.shaderprogram.html#Genesis_Graphics_ShaderProgram_ProgramID))

[ShaderProgram.VertexShader](#)

+ Genesis.Core.GameElements

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_VertexShader\)](#)

(Genesis.Core.GameElements.h)

[ShaderProgram.FragmentShader](#)

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_FragmentShader\)](#)

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))

+ Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)))

[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

- Genesis.Graphics.Shaders.OpenGL

[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Graphics.Shaders.OpenGL)

Namespace: Genesis ([Genesis.html](https://genesis.html)).Graphics ([Genesis.Graphics.html](https://genesis.graphics.html)).Shaders ([Genesis.Graphics.Shaders.html](https://genesis.graphics.shaders.html)).OpenGL

[\(Genesis.Graphics.Shaders.OpenGL.html\)](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[Assembly: Genesis.dll](#)

[DiffuseLightning](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseNormalLightning](#)

[public class ScreenShader : ShaderProgram](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseNormalShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[ScreenShader\(\)](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[MVPRectShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[MVPSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[ScreenShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[SkyboxShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[SpriteShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

Class SkyboxShader

Inheritance

↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)

↳ [ShaderProgram](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html) ([Genesis.Graphics.ShaderProgram.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html))

(Genesis.Core.Behaviors.Physics)

↳ [SkyboxShader](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics.skyboxshader)

Inheritance Hierarchy

(Genesis.Core.Behaviors.Physics)

[ShaderProgram.ProgramID](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html#genesis_graphics_shaderprogram_programid) ([Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_ProgramID](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html#genesis_graphics_shaderprogram_programid))

[ShaderProgram.VertexShader](https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.vertexshader)

+ Genesis.Core.GameElements

[\(\[Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_VertexShader\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html#genesis_graphics_shaderprogram_vertexshader\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html#genesis_graphics_shaderprogram_vertexshader)

(Genesis.Core.GameElements.h)

[ShaderProgram.FragmentShader](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html#genesis_graphics_shaderprogram_fragmentshader)

(Genesis.Graphics)

[\(\[Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_FragmentShader\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html#genesis_graphics_shaderprogram_fragmentshader\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html#genesis_graphics_shaderprogram_fragmentshader)

[object.ToString\(\)](https://learn.microsoft.com/dotnet/api/system.object.tostring) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

[object.Equals\(object\)](https://learn.microsoft.com/dotnet/api/system.object.equals) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))

- Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

[object.Equals\(Object, Object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)))

[object.ReferenceEquals\(object, object\)](https://learn.microsoft.com/dotnet/api/system.object.referenceequals) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

[object.GetHashCode\(\)](https://learn.microsoft.com/dotnet/api/system.object.gethashcode) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

[object.GetType\(\)](https://learn.microsoft.com/dotnet/api/system.object.gettype) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

- Genesis.Graphics.Shaders.OpenGL

[object.MemberwiseClone\(\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Graphics.Shaders.OpenGL)

Namespace: Genesis ([Genesis.html](https://genesis.html)).Graphics ([Genesis.Graphics.html](https://genesis.html)).Shaders ([Genesis.Graphics.html](https://genesis.html)).OpenGL

(Genesis.Graphics.Shaders.OpenGL.html)

Assembly: Genesis.dll

Syntax

[Genesis.Graphics.Shaders.OpenGL.](https://genesis.html)

DiffuseLightning

```
public class SkyboxShader : ShaderProgram  
{  
    // Implementation details...  
}
```

DiffuseNormalShader

([Genesis.Graphics.Shaders.OpenGL.](https://genesis.html)

DiffuseShader

([Genesis.Graphics.Shaders.OpenGL.](https://genesis.html)

Constructors

SkyboxShader()

MVPRectShader

Declaration

([Genesis.Graphics.Shaders.OpenGL.](https://genesis.html)

MVPSolidShader

([Genesis.Graphics.Shaders.OpenGL.](https://genesis.html)

ScreenShader

([Genesis.Graphics.Shaders.OpenGL.](https://genesis.html)

SkyboxShader

([Genesis.Graphics.Shaders.OpenGL.](https://genesis.html)

SpriteShader

([Genesis.Graphics.Shaders.OpenGL.](https://genesis.html)

Class SpriteShader

Inheritance

↳ [Enter here to filter](https://learn.microsoft.com/dotnet/api/system.object)
↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [ShaderProgram](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html) ([Genesis.Graphics.ShaderProgram.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html))
(Genesis.Core.Behaviors.Physics)
↳ [SpriteShader](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics.spriteshader)

Inheritance

(Genesis.Core.Behaviors.Physics)

[ShaderProgram.ProgramID](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.programid) ([Genesis_Graphics_ShaderProgram_ProgramID](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html#genesis_graphics_shaderprogram_ProgramID))

[ShaderProgram.VertexShader](https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.vertexshader)

+ Genesis.Core.GameElements

[\(\[Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_VertexShader\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html#genesis_graphics_shaderprogram_VertexShader\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.vertexshader)

(Genesis.Core.GameElements.h)

[ShaderProgram.FragmentShader](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.fragmentshader)

[\(\[Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_FragmentShader\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html#genesis_graphics_shaderprogram_FragmentShader\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.fragmentshader)

[object.ToString\(\)](https://learn.microsoft.com/dotnet/api/system.object.tostring) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

[object.Equals\(object\)](https://learn.microsoft.com/dotnet/api/system.object.equals) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

[object.Equals\(object\)](https://learn.microsoft.com/dotnet/api/system.object.equals) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)))

[object.ReferenceEquals\(object, object\)](https://learn.microsoft.com/dotnet/api/system.object.referenceequals) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

[object.GetHashCode\(\)](https://learn.microsoft.com/dotnet/api/system.object.gethashcode) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

[object.GetType\(\)](https://learn.microsoft.com/dotnet/api/system.object.gettype) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

- Genesis.Graphics.Shaders.OpenGL
[object.MemberwiseClone\(\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Graphics.Shaders.OpenGL)

Namespace: Genesis ([Genesis.html](https://learn.microsoft.com/html/genesis.html)).Graphics ([Genesis.Graphics.html](https://learn.microsoft.com/html/genesis.graphics.html)).Shaders ([Genesis.Graphics.Shaders.html](https://learn.microsoft.com/html/genesis.graphics.shaders.html)).OpenGL

[\(\[Genesis.Graphics.Shaders.OpenGL.html\]\(https://learn.microsoft.com/html/genesis.graphics.shaders.opengl.html\)\)](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl.html)

Assembly: Genesis.dll

[DiffuseLightning](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/html/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[DiffuseNormalLightning](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[public class SpriteShader : ShaderProgram](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)
[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/html/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[DiffuseNormalShader](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/html/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[DiffuseShader](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/html/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[DiffuseSolidShader](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/html/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

Constructors

SpriteShader()

[MVPRectShader](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

Declaration: ([Genesis.Graphics.Shaders.OpenGL](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl).

[MVPShader](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[public SpriteShader\(\)](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)
[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/html/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[MVPSolidShader](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/html/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[ScreenShader](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/html/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[SkyboxShader](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/html/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[SpriteShader](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/html/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/html/genesis.graphics.shaders.opengl)

Class TerrainShader

Inheritance

↳ [Enter here to filter](#)
↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [ShaderProgram](#) ([Genesis.Graphics.ShaderProgram.html](#))
(Genesis.Core.Behaviors.Physics)
↳ [TerrainShader](#)

Inheritance Hierarchy

(Genesis.Core.Behaviors.Physics)

[ShaderProgram.ProgramID](#) ([Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_ProgramID](#))

[ShaderProgram.VertexShader](#)

+ Genesis.Core.GameElements

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_VertexShader\)](#)

(Genesis.Core.GameElements.h)

[ShaderProgram.FragmentShader](#)

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_FragmentShader\)](#)

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))

+ Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)))

[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

- Genesis.Graphics.Shaders.OpenGL
[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Graphics.Shaders.OpenGL)

Namespace: Genesis ([Genesis.html](#)).Graphics ([Genesis.Graphics.html](#)).Shaders ([Genesis.Graphics.Shaders.html](#)).OpenGL

[\(Genesis.Graphics.Shaders.OpenGL.html\)](#)

Assembly: Genesis.dll

[DiffuseLightning](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseNormalLightning](#)

```
public class TerrainShader : ShaderProgram  
(Genesis.Graphics.Shaders.OpenGL.
```

[DiffuseNormalShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[MVPRectShader](#)

Declaration: ([Genesis.Graphics.Shaders.OpenGL.](#)

[MVPShader](#)

```
public TerrainShader  
(Genesis.Graphics.Shaders.OpenGL.
```

[MVPSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[ScreenShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[SkyboxShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[SpriteShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[\)](#)

Constructors

TerrainShader()

[MVPRectShader](#)

Declaration: ([Genesis.Graphics.Shaders.OpenGL.](#)

[MVPShader](#)

```
public TerrainShader  
(Genesis.Graphics.Shaders.OpenGL.
```

[MVPSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[ScreenShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[SkyboxShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[SpriteShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[\)](#)

Class WireframeShader

Inheritance

↳ [Enter here to filter](#)
↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [ShaderProgram](#) ([Genesis.Graphics.ShaderProgram.html](https://genesis.graphics.shaderprogram.html))
(Genesis.Core.Behaviors.Physics)
↳ [WireframeShader](#)

In Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

[ShaderProgram.ProgramID](#) ([Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_ProgramID](https://genesis.graphics.shaderprogram.html#Genesis_Graphics_ShaderProgram_ProgramID))

[ShaderProgram.VertexShader](#)

+ Genesis.Core.GameElements

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_VertexShader\)](#)

(Genesis.Core.GameElements.h)

[ShaderProgram.FragmentShader](#)

[\(Genesis.Graphics.ShaderProgram.html#Genesis_Graphics_ShaderProgram_FragmentShader\)](#)

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object)))

+ Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

[object.Equals\(object\)](#) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-object-system-object-object)))

[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

[object.GetHashCode\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

[object.GetType\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

- Genesis.Graphics.Shaders.OpenGL
[object.MemberwiseClone\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

(Genesis.Graphics.Shaders.OpenGL)

Namespace: Genesis ([Genesis.html](https://genesis.html)).Graphics ([Genesis.html](https://genesis.html)).Shaders ([Genesis.html](https://genesis.html)).Shaders.OpenGL
([Genesis.html](https://genesis.html).Shaders.OpenGL.html)

Assembly: Genesis.dll

[DiffuseLightning](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseNormalLightning](#)

public class WireframeShader : [ShaderProgram](#)
([Genesis.html](https://genesis.html).Shaders.OpenGL)

[DiffuseNormalShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[MVPRectShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[Declaration](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[MVPShader](#)

public **class** WireframeShader : [OpenGL](#)

[MVPSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[ScreenShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[SkyboxShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[SpriteShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

Namespace Genesis.Graphics.Shapes

Classes

▼ Enter here to filter...

(Genesis.Core.ntm)
BufferedSpriteShape (Genesis.Graphics.Shapes.BufferedSpriteShape.html)

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)
FrameShape (Genesis.Graphics.Shapes.FrameShape.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)
GlypheShape (Genesis.Graphics.Shapes.GlypheShape.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)
LineShape (Genesis.Graphics.Shapes.LineShape.html)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)
PlaneShape (Genesis.Graphics.Shapes.PlaneShape.html)

+ Genesis.Graphics

(Genesis.Graphics.html)
QubeShape (Genesis.Graphics.Shapes.QubeShape.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)
RectShape (Genesis.Graphics.Shapes.RectShape.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)
Shape (Genesis.Graphics.Shapes.Shape.html)

+ Genesis.Graphics.Shaders.Oper

(Genesis.Graphics.Shaders.Ope
SpriteShape (Genesis.Graphics.Shapes.SpriteShape.html)

- Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

 BufferedSpriteShape

 (Genesis.Graphics.Shapes.BufferedS

 FrameShape

 (Genesis.Graphics.Shapes.FrameSha

 GlypheShape

 (Genesis.Graphics.Shapes.GlypheSh

 LineShape

 (Genesis.Graphics.Shapes.LineSha

 PlaneShape

 (Genesis.Graphics.Shapes.PlanSha

 QubeShape

 (Genesis.Graphics.Shapes.QubeSha

 RectShape

 (Genesis.Graphics.Shapes.RectSha

 Shape

 (Genesis.Graphics.Shapes.Shape.htm

Class BufferedSpriteShape

Inheritance

↳ Enter here to filter
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ Shape (<https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.shape.html>)
↳ BufferedSpriteShape
+ **Genesis.Core.Behaviors**
Inherited Members
([Genesis.Core.Behaviors.html](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.html))
Shape.vbo ([Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_vbo](https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.shape.html#genesis_graphics_shapes_shape_vbo))
+ **Genesis.Core.Behaviors.Physics**
object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))
+ **Genesis.Core.Behaviors.Physics**
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
Name (<https://learn.microsoft.com/dotnet/api/genesis.graphics.html>).Graphics (<https://learn.microsoft.com/dotnet/api/genesis.graphics.html>).Shapes (<https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.html>)
Assembly: Genesis.dll
+ **Genesis.Graphics.Physics**
Syntax
([Genesis.Graphics.Physics.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.physics.html))
+ **Genesis.Graphics.RenderDevice**
public class BufferedSpriteShape : Shape
([Genesis.Graphics.RenderDevice.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.renderdevice.html))
+ **Genesis.Graphics.Shaders.Operator**
Contract (<https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.operator.html>)
- **Genesis.Graphics.Shapes**
BufferedSpriteShape ([Genesis.Graphics.Shapes.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.html))
Declaration
BufferedSpriteShape
(<https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.bufferedspriteshape>)
FrameShape
public BufferedSpriteShape()
(<https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.frameshape>)
GlyphShape
(<https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.glyphshape>)
LineShape
(<https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.lineshape>)
PlaneShape
(<https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.planeshape>)
Methods
GetShape()
(<https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.qubeshape>)
Declaration
RectShape
(<https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.rectshape>)
public override float[] GetShape()
(<https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.shape>)

Returns

Type	Description
float (https://learn.microsoft.com/dotnet/api/system.single)[]	

Overrides

Shape.GetShape() ([Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_GetShape](#))
([Genesis.Core.ntml](#))

+ **Genesis.Core.Behaviors**

([Genesis.Core.Behaviors.html](#))

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

+ **Genesis.Core.GameElements**

([Genesis.Core.GameElements.html](#))

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

+ **Genesis.Graphics.Shaders.Oper**

([Genesis.Graphics.Shaders.Oper.html](#))

- **Genesis.Graphics.Shapes**

([Genesis.Graphics.Shapes.html](#))

 BufferedSpriteShape

 ([Genesis.Graphics.Shapes.BufferedSpriteShape.html](#))

 FrameShape

 ([Genesis.Graphics.Shapes.FrameShape.html](#))

 GlypheShape

 ([Genesis.Graphics.Shapes.GlypheShape.html](#))

 LineShape

 ([Genesis.Graphics.Shapes.LineShape.html](#))

 PlaneShape

 ([Genesis.Graphics.Shapes.PlaneShape.html](#))

 QubeShape

 ([Genesis.Graphics.Shapes.QubeShape.html](#))

 RectShape

 ([Genesis.Graphics.Shapes.RectShape.html](#))

 Shape

 ([Genesis.Graphics.Shapes.Shape.html](#))

Class FrameShape

Inheritance

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

↳ **Genesis.Core.html**

↳ FrameShape

+ Genesis.Core.Behaviors

Inherited Members

([Genesis.Core.Behaviors.html](#))

Shape.vbo (Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_vbo)

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Name ([Genesis.Graphics.html](#)).Graphics (Genesis.Graphics.html).Shapes (Genesis.Graphics.Shapes.html)

Assembly: Genesis.dll

+ Genesis.Graphics.Physics

Syntax

([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

public class FrameShape : Shape

([Genesis.Graphics.RenderDevice.html](#))

+ Genesis.Graphics.Shaders.Operations

([Genesis.Graphics.Shaders.Operations.html](#))

- Genesis.Graphics.Shapes

([FrameShape.html](#)).Shapes (Genesis.Graphics.Shapes.html)

Declaration

(Genesis.Graphics.Shapes.BufferedSpriteShape)

FrameShape

public FrameShape()

(Genesis.Graphics.Shapes.FrameShape)

GlypheShape

(Genesis.Graphics.Shapes.GlypheShape)

LineShape

(Genesis.Graphics.Shapes.LineShape)

Methods

PlaneShape

(Genesis.Graphics.Shapes.PlaneShape)

GetShape()

(Genesis.Graphics.Shapes.QubeShape)

Declaration

RectShape

(Genesis.Graphics.Shapes.RectShape)

public override float[] GetShape()

(Genesis.Graphics.Shapes.Shape.htm

Returns

Type	Description
float (https://learn.microsoft.com/dotnet/api/system.single)[]	

Overrides

Shape.GetShape() ([Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_GetShape](#))
([Genesis.Core.ntml](#))

+ **Genesis.Core.Behaviors**

([Genesis.Core.Behaviors.html](#))

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

+ **Genesis.Core.GameElements**

([Genesis.Core.GameElements.html](#))

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

+ **Genesis.Graphics.Shaders.Oper**

([Genesis.Graphics.Shaders.Oper.html](#))

- **Genesis.Graphics.Shapes**

([Genesis.Graphics.Shapes.html](#))

 BufferedSpriteShape

 ([Genesis.Graphics.Shapes.BufferedS](#)

 FrameShape

 ([Genesis.Graphics.Shapes.FrameSh](#)

 GlypheShape

 ([Genesis.Graphics.Shapes.GlypheSh](#)

 LineShape

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 PlaneShape

 ([Genesis.Graphics.Shapes.Planesh](#)

 QubeShape

 ([Genesis.Graphics.Shapes.QubeSh](#)

 RectShape

 ([Genesis.Graphics.Shapes.RectSh](#)

 Shape

 ([Genesis.Graphics.Shapes.Shape.h](#)

Class GlyphShape

Inheritance

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

↳ **Genesis.Core.html**

↳ GlyphShape

+ Genesis.Core.Behaviors

Inherited Members

([Genesis.Core.Behaviors.html](#))

Shape.vbo (Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_vbo)

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Name ([Genesis.Graphics.html](#)).Graphics (Genesis.Graphics.html).Shapes (Genesis.Graphics.Shapes.html)

Assembly: Genesis.dll

+ Genesis.Graphics.Physics

Syntax

([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

public class GlyphShape : Shape

([Genesis.Graphics.RenderDevice.html](#))

+ Genesis.Graphics.Shaders.Operations

([Genesis.Graphics.Shaders.Operations.html](#))

- Genesis.Graphics.Shapes

([GlyphShape.html](#))

Declaration

(Genesis.Graphics.Shapes.BufferedSpriteShape)

FrameShape

public GlyphShape()

(Genesis.Graphics.Shapes.FrameShape)

GlyphShape

(Genesis.Graphics.Shapes.GlyphShape)

LineShape

(Genesis.Graphics.Shapes.LineShape)

Methods

PlaneShape

(Genesis.Graphics.Shapes.PlaneShape)

GetShape()

(Genesis.Graphics.Shapes.QubeShape)

Declaration

RectShape

(Genesis.Graphics.Shapes.RectShape)

public override float[] GetShape()

(Genesis.Graphics.Shapes.Shape.htm

Returns

Type	Description
float (https://learn.microsoft.com/dotnet/api/system.single)[]	

Overrides

Shape.GetShape() ([Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_GetShape](#))
([Genesis.Core.ntml](#))

+ Genesis.Core.Behaviors

([Genesis.Core.Behaviors.html](#))

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.html](#))

+ Genesis.Graphics

([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

([Genesis.Graphics.RenderDevice.html](#))

+ Genesis.Graphics.Shaders.Oper

([Genesis.Graphics.Shaders.Oper.html](#))

- Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

BufferedSpriteShape

([Genesis.Graphics.Shapes.BufferedSpriteShape.html](#))

FrameShape

([Genesis.Graphics.Shapes.FrameShape.html](#))

GlypheShape

([Genesis.Graphics.Shapes.GlypheShape.html](#))

LineShape

([Genesis.Graphics.Shapes.LineShape.html](#))

PlaneShape

([Genesis.Graphics.Shapes.Planeshape.html](#))

QubeShape

([Genesis.Graphics.Shapes.QubeShape.html](#))

RectShape

([Genesis.Graphics.Shapes.RectShape.html](#))

Shape

([Genesis.Graphics.Shapes.Shape.html](#))

Class LineShape

Inheritance

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

↳ **Genesis.Core.html**

↳ LineShape

+ Genesis.Core.Behaviors

Inherited Members

([Genesis.Core.Behaviors.html](#))

Shape.vbo (Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_vbo)

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

+ Genesis.Core.GameElements

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Name ([Genesis.Graphics.html](#)).Graphics (Genesis.Graphics.html).Shapes (Genesis.Graphics.Shapes.html)

Assembly: Genesis.dll

+ Genesis.Graphics.Physics

Syntax

([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

public class LineShape : Shape

([Genesis.Graphics.RenderDevice.html](#))

+ Genesis.Graphics.Shaders.Operations

([Genesis.Graphics.Shaders.Operations.html](#))

- Genesis.Graphics.Shapes

↳ ([Genesis.Graphics.Shapes.html](#))

Declaration

(Genesis.Graphics.Shapes.BufferedSpriteShape)

(Genesis.Graphics.Shapes.FrameShape)

public LineShape()

(Genesis.Graphics.Shapes.FrameShape)

GlypheShape

(Genesis.Graphics.Shapes.GlypheShape)

LineShape

(Genesis.Graphics.Shapes.LineShape)

PlaneShape

(Genesis.Graphics.Shapes.PlanarShape)

Methods

GetShape()

(Genesis.Graphics.Shapes.QubeShape)

Declaration

RectShape

(Genesis.Graphics.Shapes.RectShape)

public override float[] GetShape()

(Genesis.Graphics.Shapes.Shape.htm

Returns

Type	Description
float (https://learn.microsoft.com/dotnet/api/system.single)[]	

Overrides

Shape.GetShape() ([Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_GetShape](#))
([Genesis.Core.ntml](#))

+ **Genesis.Core.Behaviors**

([Genesis.Core.Behaviors.html](#))

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

+ **Genesis.Core.GameElements**

([Genesis.Core.GameElements.html](#))

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

+ **Genesis.Graphics.Shaders.Oper**

([Genesis.Graphics.Shaders.Oper.html](#))

- **Genesis.Graphics.Shapes**

([Genesis.Graphics.Shapes.html](#))

 BufferedSpriteShape

 ([Genesis.Graphics.Shapes.BufferedSpriteShape.html](#))

 FrameShape

 ([Genesis.Graphics.Shapes.FrameShape.html](#))

 GlypheShape

 ([Genesis.Graphics.Shapes.GlypheShape.html](#))

 LineShape

 ([Genesis.Graphics.Shapes.LineShape.html](#))

 PlaneShape

 ([Genesis.Graphics.Shapes.PlaneShape.html](#))

 QubeShape

 ([Genesis.Graphics.Shapes.QubeShape.html](#))

 RectShape

 ([Genesis.Graphics.Shapes.RectShape.html](#))

 Shape

 ([Genesis.Graphics.Shapes.Shape.html](#))

Class PlaneShape

Inheritance

↳ Enter here to filter
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ Shape (<https://genesis-core.readthedocs.io/en/latest/Genesis.Graphics.Shapes.Shape.html>)
↳ PlaneShape

+ **Genesis.Core.Behaviors**
Inherited Members
[\(Genesis.Core.Behaviors.html\)](#)
Shape.vbo (Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_vbo)
+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)
object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))
+ **Genesis.Core.Behaviors.Physics**
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

↳ **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#).Graphics (Genesis.Graphics.html).Shapes (Genesis.Graphics.Shapes.html)

Assembly: Genesis.dll
+ **Genesis.Graphics.Physics**
Syntax
[\(Genesis.Graphics.Physics.html\)](#)

+ **Genesis.Graphics.RenderDevice**
↳ [\(Genesis.Graphics.RenderDevice.html\)](#)

+ **Genesis.Graphics.Shaders.Operator**
↳ [\(Genesis.Graphics.Shaders.Operator.html\)](#)

- **Genesis.Graphics.Shapes**
PlaneShape ([\(Genesis.Graphics.Shapes.html\)](#))

Declaration
↳ [\(Genesis.Graphics.Shapes.BufferedSpriteShape.html\)](#)
↳ [\(Genesis.Graphics.Shapes.FrameShape.html\)](#)
↳ [\(Genesis.Graphics.Shapes.GlyphShape.html\)](#)
↳ [\(Genesis.Graphics.Shapes.LineShape.html\)](#)
↳ [\(Genesis.Graphics.Shapes.PolygonShape.html\)](#)
↳ [\(Genesis.Graphics.Shapes.QubeShape.html\)](#)
↳ [\(Genesis.Graphics.Shapes.RectShape.html\)](#)

Methods

GetShape()
Declaration
PlaneShape
↳ [\(Genesis.Graphics.Shapes.PlaneShape.html\)](#)

GetShape()
Declaration
RectShape
↳ [\(Genesis.Graphics.Shapes.RectShape.html\)](#)

public override float[] GetShape()
↳ [\(Genesis.Graphics.Shapes.Shape.html\)](#)

Returns

Type	Description
float (https://learn.microsoft.com/dotnet/api/system.single)[]	

Overrides

Shape.GetShape() ([Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_GetShape](#))
([Genesis.Core.ntml](#))

+ Genesis.Core.Behaviors

([Genesis.Core.Behaviors.html](#))

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.html](#))

+ Genesis.Graphics

([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

([Genesis.Graphics.RenderDevice.html](#))

+ Genesis.Graphics.Shaders.Oper

([Genesis.Graphics.Shaders.Oper.html](#))

- Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

BufferedSpriteShape

([Genesis.Graphics.Shapes.BufferedSpriteShape.html](#))

FrameShape

([Genesis.Graphics.Shapes.FrameShape.html](#))

GlypheShape

([Genesis.Graphics.Shapes.GlypheShape.html](#))

LineShape

([Genesis.Graphics.Shapes.LineShape.html](#))

PlaneShape

([Genesis.Graphics.Shapes.PlaneShape.html](#))

QubeShape

([Genesis.Graphics.Shapes.QubeShape.html](#))

RectShape

([Genesis.Graphics.Shapes.RectShape.html](#))

Shape

([Genesis.Graphics.Shapes.Shape.html](#))

Class QubeShape

Inheritance

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

↳ Shape (<https://genesis.graphics.Shapes.Shape.html>)

↳ QubeShape

+ Genesis.Core.Behaviors

Inherited Members

([Genesis.Core.Behaviors.html](https://genesis.core.Behaviors.html))

Shape.vbo (Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_vbo)

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

+ Genesis.Core.Behaviors.Physics
([Genesis.Core.Behaviors.Physics.html](https://genesis.core.Behaviors.Physics.html))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-equals(system-object-system-object)))

+ Genesis.Core.GameElements
([Genesis.Core.GameElements.html](https://genesis.core.GameElements.html))

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Name (<https://genesis.graphics.html>).Graphics (Genesis.Graphics.html).Shapes (Genesis.Graphics.Shapes.html)

Assembly: Genesis.dll

+ Genesis.Graphics.Physics

Syntax

([Genesis.Graphics.Physics.html](https://genesis.graphics.Physics.html))

+ Genesis.Graphics.RenderDevice

public class QubeShape : Shape

([Genesis.Graphics.RenderDevice.html](https://genesis.graphics.RenderDevice.html))

+ Genesis.Graphics.Shaders.Operations

([Genesis.Graphics.Shaders.Operations.html](https://genesis.graphics.Shaders.Operations.html))

- Genesis.Graphics.Shapes

QubeShape (<https://genesis.graphics.Shapes.html>)

Declaration

(Genesis.Graphics.Shapes.BufferedSpriteShape)

FrameShape

public QubeShape()

(Genesis.Graphics.Shapes.FrameShape)

GlypheShape

(Genesis.Graphics.Shapes.GlypheShape)

LineShape

(Genesis.Graphics.Shapes.LineShape)

PlaneShape

(Genesis.Graphics.Shapes.PlaneShape)

Methods

GetNormals()

(Genesis.Graphics.Shapes.QubeShape)

Declaration

RectShape

(Genesis.Graphics.Shapes.RectShape)

public float[] GetNormals()

(Genesis.Graphics.Shapes.Shape.htm

Returns

Type	Description
float (https://learn.microsoft.com/dotnet/api/system.single)[]	

▼
GetShape()
([Genesis.Core.html](#))

Declaration

+ **Genesis.Core.Behaviors**

([Genesis.Core.Behaviors.html](#))
public override float[] GetShape()

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

+ **Genesis.Core.Behaviors.Physics**

([Genesis.Core.Behaviors.Physics.html](#))

+ **Genesis.Core.GameElements**

Overrides
([Genesis.Core.GameElements.html](#))

Shape.GetShape() ([Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_GetShape](#))

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

+ **Genesis.Graphics.Shaders.Operations**

([Genesis.Graphics.Shaders.Operations.html](#))

- **Genesis.Graphics.Shapes**

([Genesis.Graphics.Shapes.html](#))

 BufferedSpriteShape

([Genesis.Graphics.Shapes.BufferedSpriteShape.html](#))

 FrameShape

([Genesis.Graphics.Shapes.FrameShape.html](#))

 GlyphShape

([Genesis.Graphics.Shapes.GlyphShape.html](#))

 LineShape

([Genesis.Graphics.Shapes.LineShape.html](#))

 PlaneShape

([Genesis.Graphics.Shapes.PlanarShape.html](#))

 QubeShape

([Genesis.Graphics.Shapes.QubeShape.html](#))

 RectShape

([Genesis.Graphics.Shapes.RectShape.html](#))

 Shape

([Genesis.Graphics.Shapes.Shape.html](#))

 TriangleShape

([Genesis.Graphics.Shapes.TriangleShape.html](#))

Description

float (<https://learn.microsoft.com/dotnet/api/system.single>)[]

Class RectShape

Inheritance

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

↳ **Genesis.Core.html**

↳ RectShape

+ Genesis.Core.Behaviors

Inherited Members

([Genesis.Core.Behaviors.html](#))

Shape.vbo (Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_vbo)

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Name ([Genesis.Graphics.html](#)).Graphics (Genesis.Graphics.html).Shapes (Genesis.Graphics.Shapes.html)

Assembly: Genesis.dll

+ Genesis.Graphics.Physics

Syntax

([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

public class RectShape : Shape

([Genesis.Graphics.RenderDevice.html](#))

+ Genesis.Graphics.Shaders.Operations

([Genesis.Graphics.Shaders.Operations.html](#))

- Genesis.Graphics.Shapes

RectShape ([Genesis.Graphics.Shapes.html](#))

Declaration

(Genesis.Graphics.Shapes.BufferedSpriteShape)

(Genesis.Graphics.Shapes.FrameShape)

public RectShape()

(Genesis.Graphics.Shapes.FrameShape)

GlypheShape

(Genesis.Graphics.Shapes.GlypheShape)

LineShape

(Genesis.Graphics.Shapes.LineShape)

Methods

PlaneShape

(Genesis.Graphics.Shapes.PlaneShape)

GetShape()

(Genesis.Graphics.Shapes.QubeShape)

Declaration

RectShape

(Genesis.Graphics.Shapes.RectShape)

public override float[] GetShape()

(Genesis.Graphics.Shapes.Shape.htm

Returns

Type	Description
float (https://learn.microsoft.com/dotnet/api/system.single)[]	

Overrides

Shape.GetShape() ([Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_GetShape](#))
([Genesis.Core.ntml](#))

+ Genesis.Core.Behaviors

([Genesis.Core.Behaviors.html](#))

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.html](#))

+ Genesis.Graphics

([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

([Genesis.Graphics.RenderDevice.html](#))

+ Genesis.Graphics.Shaders.Oper

([Genesis.Graphics.Shaders.Oper.html](#))

- Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

BufferedSpriteShape

([Genesis.Graphics.Shapes.BufferedSpriteShape.html](#))

FrameShape

([Genesis.Graphics.Shapes.FrameShape.html](#))

GlypheShape

([Genesis.Graphics.Shapes.GlypheShape.html](#))

LineShape

([Genesis.Graphics.Shapes.LineShape.html](#))

PlaneShape

([Genesis.Graphics.Shapes.PlaneShape.html](#))

QubeShape

([Genesis.Graphics.Shapes.QubeShape.html](#))

RectShape

([Genesis.Graphics.Shapes.RectShape.html](#))

Shape

([Genesis.Graphics.Shapes.Shape.html](#))

Class Shape

Inheritance

↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)

↳ [Shape](#)

↳ [\(Genesis.Core.ntm1\)](#)

↳ [BufferedSpriteShape](#) ([Genesis.Graphics.Shapes.BufferedSpriteShape.html](https://genesis.graphics/html/BufferedSpriteShape.html))

+ [Genesis.Core.Behaviors](#)

↳ [FrameShape](#) ([Genesis.Graphics.Shapes.FrameShape.html](https://genesis.graphics/html/FrameShape.html))

↳ [\(Genesis.Core.Behaviors.html\)](#)

↳ [GlypheShape](#) ([Genesis.Graphics.Shapes.GlypheShape.html](https://genesis.graphics/html/GlypheShape.html))

+ [Genesis.Core.Behaviors.Physics](#)

↳ [LineShape](#) ([Genesis.Graphics.Shapes.LineShape.html](https://genesis.graphics/html/LineShape.html))

+ [Genesis.Core.Behaviors.Physics](#)

↳ [PlaneShape](#) ([Genesis.Graphics.Shapes.PlaneShape.html](https://genesis.graphics/html/PlaneShape.html))

↳ [\(Genesis.Core.Behaviors.Physics.html\)](#)

↳ [QubeShape](#) ([Genesis.Graphics.Shapes.QubeShape.html](https://genesis.graphics/html/QubeShape.html))

+ [Genesis.Core.Behaviors.Physics](#)

↳ [RectShape](#) ([Genesis.Graphics.Shapes.RectShape.html](https://genesis.graphics/html/RectShape.html))

↳ [SpriteShape](#) ([Genesis.Graphics.Shapes.SpriteShape.html](https://genesis.graphics/html/SpriteShape.html))

↳ [\(Genesis.Core.Behaviors.Physics.html\)](#)

Inherited Members

+ [Genesis.Core.GameElements](#)

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

↳ [\(Genesis.Core.GameElements.html\)](#)

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))

↳ [Genesis.Graphics](#)

object.Equals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-object-object>)

object.Equals(object, System.Object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

+ [Genesis.Graphics.RenderDevice](#)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

↳ [\(Genesis.Graphics.RenderDevice.html\)](#)

Namespace: [Genesis](#) ([Genesis.html](https://genesis.graphics/html)).[Graphics](#) ([Genesis.Graphics.html](https://genesis.graphics/html)).[Shapes](#) ([Genesis.Graphics.Shapes.html](https://genesis.graphics/html))

↳ [AsGenesis.Graphics.Shaders.Oper](#)

↳ [\(Genesis.Graphics.Shaders.Ope](#)

- [Genesis.Graphics.Shapes](#)

public abstract class Shape

↳ [\(Genesis.Graphics.Shapes.html\)](#)

↳ [BufferedSpriteShape](#)

↳ [\(Genesis.Graphics.Shapes.BufferedS](#)

↳ [Constructors](#)

↳ [\(Genesis.Graphics.Shapes.FrameSha](#)

↳ [GlypheShape](#)

↳ [\(Genesis.Graphics.Shapes.GlypheSh](#)

↳ [LineShape](#)

↳ [\(Genesis.Graphics.Shapes.LineSha](#)

↳ [PlaneShape](#)

protected Shape()

↳ [\(Genesis.Graphics.Shapes.Plan](#)

↳ [QubeShape](#)

↳ [\(Genesis.Graphics.Shapes.QubeSha](#)

↳ [RectShape](#)

↳ [\(Genesis.Graphics.Shapes.RectSha](#)

↳ [Shape](#)

↳ [\(Genesis.Graphics.Shapes.Shape.htm](#)

↳ [Properties](#)

↳ [Shape](#)

↳ [\(Genesis.Graphics.Shapes.Shape.htm](#)

vbo

Declaration

```
public int vbo { get; set; }
```



Property Value

([Genesis.Core.ntml](#))
Type

+ [Genesis.Core.Behaviors](#)

int (<https://learn.microsoft.com/dotnet/api/system.int32>)
([Genesis.Core.Behaviors.html](#))

Description

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

Methods

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

[GetShape\(\)](#)

+ [Genesis.Core.GameElements](#)

Declaration:

([Genesis.Core.GameElements.h](#))

+ [Genesis.Graphics](#)

public abstract float[] GetShape()

([Genesis.Graphics.html](#))

Genesis.Graphics.Physics

Return Type
([Genesis.Graphics.Physics.html](#))

Description

+ [Genesis.Graphics.RenderDevice](#)

float (<https://learn.microsoft.com/dotnet/api/system.single>)[]

([Genesis.Graphics.RenderDevice.html](#))

+ [Genesis.Graphics.Shaders.Oper](#)

([Genesis.Graphics.Shaders.Oper.html](#))

- [Genesis.Graphics.Shapes](#)

([Genesis.Graphics.Shapes.html](#))

BufferedSpriteShape

([Genesis.Graphics.Shapes.BufferedS](#)

FrameShape

([Genesis.Graphics.Shapes.FrameSh](#)

GlypheShape

([Genesis.Graphics.Shapes.GlypheSh](#)

LineShape

([Genesis.Graphics.Shapes.LineShap](#)

PlaneShape

([Genesis.Graphics.Shapes.Planesh](#)

QubeShape

([Genesis.Graphics.Shapes.QubeSh](#)

RectShape

([Genesis.Graphics.Shapes.RectShap](#)

Shape

([Genesis.Graphics.Shapes.Shape.htr](#)

Class SpriteShape

Inheritance

↳ Enter here to filter
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ Shape (<https://genesis-content.html>)
↳ SpriteShape
+ **Genesis.Core.Behaviors**
Inherited Members
(Genesis.Core.Behaviors.html)
Shape.vbo (Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_vbo)
+ **Genesis.Core.Behaviors.Physics**
object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))
+ **Genesis.Core.Behaviors.Physics**
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
Name (<https://genesis-content.html>).Graphics (Genesis.Graphics.html).Shapes (Genesis.Graphics.Shapes.html)
Assembly: Genesis.dll
+ **Genesis.Graphics.Physics**
Syntax
(Genesis.Graphics.Physics.html)
+ **Genesis.Graphics.RenderDevice**
public class SpriteShape : Shape
(Genesis.Graphics.RenderDevice.html)
+ **Genesis.Graphics.Shaders.Operation**
(Genesis.Graphics.Shaders.Operation.html)
- **Genesis.Graphics.Shapes**
(Genesis.Graphics.Shapes.html)
Declaration
 ↳ BufferedSpriteShape
 ↳ (Genesis.Graphics.Shapes.BufferedSpriteShape.html)
 ↳ FrameShape
 ↳ public SpriteShape()
 ↳ (Genesis.Graphics.Shapes.FrameShape.html)
 ↳ GlyphShape
 ↳ (Genesis.Graphics.Shapes.GlyphShape.html)
 ↳ LineShape
 ↳ (Genesis.Graphics.Shapes.LineShape.html)
 ↳ PlaneShape
 ↳ (Genesis.Graphics.Shapes.PlanarShape.html)
GetShape()
 ↳ (Genesis.Graphics.Shapes.QubeShape.html)
Declaration
 ↳ RectShape
 ↳ (Genesis.Graphics.Shapes.RectShape.html)
 ↳ protected override float[] GetShape()
 ↳ (Genesis.Graphics.Shapes.Shape.html)

Returns

Type	Description
float (https://learn.microsoft.com/dotnet/api/system.single)[]	

Overrides

Shape.GetShape() ([Genesis.Graphics.Shapes.Shape.html#Genesis_Graphics_Shapes_Shape_GetShape](#))
([Genesis.Core.ntml](#))

+ Genesis.Core.Behaviors

([Genesis.Core.Behaviors.html](#))

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.html](#))

+ Genesis.Graphics

([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

([Genesis.Graphics.RenderDevice.html](#))

+ Genesis.Graphics.Shaders.Oper

([Genesis.Graphics.Shaders.Oper.html](#))

- Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

BufferedSpriteShape

([Genesis.Graphics.Shapes.BufferedSpriteShape.html](#))

FrameShape

([Genesis.Graphics.Shapes.FrameShape.html](#))

GlypheShape

([Genesis.Graphics.Shapes.GlypheShape.html](#))

LineShape

([Genesis.Graphics.Shapes.LineShape.html](#))

PlaneShape

([Genesis.Graphics.Shapes.Planeshape.html](#))

QubeShape

([Genesis.Graphics.Shapes.QubeShape.html](#))

RectShape

([Genesis.Graphics.Shapes.RectShape.html](#))

Shape

([Genesis.Graphics.Shapes.Shape.html](#))

Namespace Genesis.Math

Classes

▼ Enter here to filter...

+ [Matrix4x4 \(Genesis.Math.Matrix4x4.html\)](#)

+ [Genesis.Core.Behaviors](#)

+ [PerlinNoise \(Genesis.Math.PerlinNoise.html\)](#)

+ [Genesis.Core.Behaviors.Physics](#)

+ [Rect \(Genesis.Math.Rect.html\)](#)

+ [Genesis.Core.Behaviors.Physics](#)

+ [Vec3 \(Genesis.Math.Vec3.html\)](#)

+ [Vector for coordinates](#)

+ [Genesis.Core.GameElements](#)

([Genesis.Core.GameElements.h](#))

Structs

+ [Genesis.Graphics](#)

([Genesis.Graphics.html](#))

+ [NoisePoint \(Genesis.Math.NoisePoint.html\)](#)

+ [Genesis.Graphics.Physics](#)

([Genesis.Graphics.Physics.html](#))

+ [Genesis.Graphics.RenderDevice](#)

([Genesis.Graphics.RenderDevice.html](#))

+ [Genesis.Graphics.Shaders.Operation](#)

([Genesis.Graphics.Shaders.Operation.html](#))

+ [Genesis.Graphics.Shapes](#)

([Genesis.Graphics.Shapes.html](#))

- [Genesis.Math](#)

([Genesis.Math.html](#))

Matrix4x4

([Genesis.Math.Matrix4x4.html](#))

NoisePoint

([Genesis.Math.NoisePoint.html](#))

PerlinNoise

([Genesis.Math.PerlinNoise.html](#))

Rect ([Genesis.Math.Rect.html](#))

Vec3 ([Genesis.Math.Vec3.html](#))

+ [Genesis.Physics](#)

Class Matrix4x4

Inheritance

↳ [object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [Matrix4x4](#)

+ Genesis.Core

Inherited Members

[\(Genesis.Core.html\)](#)

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))

[\(Genesis.Core.Behaviors.html\)](#)

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))

[\(Genesis.Core.Behaviors.Physics.html\)](#)

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Namespace: [Genesis.Core](#) ([Index](#)) [Math](#) ([Genesis.Math.html](#))

+ Genesis.Core.GameElements

As [GameElement](#)

[\(Genesis.Core.GameElements.h\)](#)

Syntax

[+ Genesis.Graphics](#)

[\(Genesis.Graphics.html\)](#)

public class Matrix4x4

[+ Genesis.Graphics.Physics](#)

[\(Genesis.Graphics.Physics.html\)](#)

Constructors

[+ Genesis.Graphics.RenderDevice](#)

[\(Genesis.Graphics.RenderDevice\)](#)

[Matrix4x4\(\)](#)

[+ Genesis.Graphics.Shaders.Operator](#)

[\(Genesis.Graphics.Shaders.Operator\)](#)

Declaration

[+ Genesis.Graphics.Shapes](#)

public Matrix4x4()

[\(Genesis.Graphics.Shapes.html\)](#)

[- Genesis.Math](#)

[\(Genesis.Math.html\)](#)

Matrix4x4

([Genesis.Math.Matrix4x4.html](#))

NoisePoint

[this\[int, int\]](#)

([Genesis.Math.NoisePoint.html](#))

PerlinNoise

Declaration

([Genesis.Math.PerlinNoise.html](#))

Rect ([Genesis.Math.Rect.html](#))

Vector3d ([Genesis.Math.Vector3d.html](#))

int col] { get; set; }

[+ Genesis.Physics](#)

Parameters

[\(Genesis.Physics.html\)](#)

Type	Name	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	row	
int (https://learn.microsoft.com/dotnet/api/system.int32)	col	

Property Value

Type	Description
+ Genesis.Core float (https://learn.microsoft.com/dotnet/api/system.single) (Genesis.Core.html)	

+ Genesis.Core.Behaviors

[\(Genesis.Core.Behaviors.html\)](#)

Methods

+ Genesis.Core.Behaviors.Physics

[\(Genesis.Core.Behaviors.Physics.html\)](#)

Identity()

+ Genesis.Core.Behaviors.Physics

[\(Genesis.Core.Behaviors.Physics.html\)](#)

Delegates

[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ Genesis.Core.GameElements

public static Matrix4x4 Identity()
([Genesis.Core.GameElements.html](#))

* Genesis.Graphics

Returns

[\(Genesis.Graphics.html\)](#)

Type

Description

+ Genesis.Graphics.Physics

Matrix4x4 ([Genesis.Math.Matrix4x4.html](#))
([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice.html\)](#)

Delegates

[\(Genesis.Graphics.Shaders.Operations.html\)](#)

[\(Genesis.Graphics.Shaders.Operations.html\)](#)

public static Matrix4x4 LookAt(Vec3 eye, Vec3 target, Vec3 up)

+ Genesis.Graphics.Shapes

[\(Genesis.Graphics.Shapes.html\)](#)

Parameters

- Genesis.Math

Type
[\(Genesis.Math.html\)](#)

Name

Description

Vec3 ([Genesis.Math.Vec3.html](#))

eye

Matrix4x4 ([Genesis.Math.Matrix4x4.html](#))

target

NoisePoint

Vec3 ([Genesis.Math.Vec3.html](#))

up

PerlinNoise

Returns

[\(Genesis.Math.PerlinNoise.html\)](#)

Type
[Rect \(Genesis.Math.Rect.html\)](#)

Description

Vec3 ([Genesis.Math.Vec3.html](#))

Matrix4x4 ([Genesis.Math.Matrix4x4.html](#))

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

Multiply(Matrix4x4)

Declaration

```
public Matrix4x4 Multiply(Matrix4x4 right)
```



Parameters

Type	Name	Description
+ Genesis.Core Matrix4x4.html	right	

+ Genesis.Core.Behaviors

Returns
[\(Genesis.Core.Behaviors.html\)](#)

Type	Description
+ Genesis.Core.Behaviors.Physics Matrix4x4.html	

+ Genesis.Core.Behaviors.Physics

[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ Genesis.Core.Behaviors.Physics

[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ Genesis.Core.GameElements

Declaration
[\(Genesis.Core.GameElements.h\)](#)

+ Genesis.Graphics

[\(Genesis.Graphics.html\)](#)

Parameters

+ Genesis.Graphics.Physics

Type	Name	Description
+ Genesis.Graphics.Physics.html		

[Vec3.html](#)

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice.html\)](#)

Returns

+ Genesis.Graphics.Shaders.Operator

[\(Genesis.Graphics.Shaders.Operator.html\)](#)

[Vec3.html](#)

+ Genesis.Graphics.Shapes

[\(Genesis.Graphics.Shapes.html\)](#)

Normalize()

[\(Genesis.Math.html\)](#)

Declaration

Matrix4x4

[\(Genesis.Math.Matrix4x4.html\)](#)

Normalize()

NoisePoint

[\(Genesis.Math.NoisePoint.html\)](#)

PerlinNoise

[\(Genesis.Math.PerlinNoise.html\)](#)

Ortho(float, float, float, float, float, float)

[Rect.html](#)

Declaration

[Vec3.html](#)

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

```
public static Matrix4x4 Ortho(float left, float right, float bottom, float top, float near, float far)
```

Parameters

Type	Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	<i>left</i>	
+ Genesis.Core (Genesis.Core.html)	<i>right</i>	
float (https://learn.microsoft.com/dotnet/api/system.single)	<i>bottom</i>	
+ Genesis.Core.Behaviors (Genesis.Core.Behaviors.html)	<i>top</i>	
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)	<i>near</i>	
+ Genesis.Core.Behaviors.Physics float (https://learn.microsoft.com/dotnet/api/system.single)	<i>far</i>	

+ Genesis.Core.Behaviors.Physics

Returns [Genesis.Core.Behaviors.Physics](#)

Type	Description
+ Genesis.Core.GameElements (Genesis.Core.GameElements.html)	

+ Genesis.Graphics

[\(Genesis.Graphics.html\)](#)

RotateX(float)

+ Genesis.Graphics.Physics

Declaration

[\(Genesis.Graphics.Physics.html\)](#)

+ Genesis.Graphics.RenderDevice

public static Matrix4x4 RotateX(float angleInRadians)

[\(Genesis.Graphics.RenderDevice.html\)](#)

Parameters

Genesis.Graphics.Operators

Type

Genesis.Graphics.Operators

Type	Name	Description
+ Genesis.Graphics.Shapes float (https://learn.microsoft.com/dotnet/api/system.single)	<i>angleInRadians</i>	

[\(Genesis.Graphics.Shapes.html\)](#)

Returns

- Genesis.Math

Type

Genesis.Math

Matrix4x4

[\(Genesis.Math.Matrix4x4.html\)](#)

NoisePoint

[\(Genesis.Math.NoisePoint.html\)](#)

RotateY(float)

PerlinNoise

[\(Genesis.Math.PerlinNoise.html\)](#)

Rect ([Genesis.Math.Rect.html](#))

[Vec3 \(\[Genesis.Math.Vec3.html\]\(#\)\)](#)

public static Matrix4x4 RotateY(float angleInRadians)

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

Parameters

Type	Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	<i>angleInRadians</i>	

Returns

Type	Description
Matrix4x4 (Genesis.Math.Matrix4x4.html)	

+ Genesis.Core

[\(Genesis.Core.html\)](#)

RotateZ(float)

+ [Genesis.Core.Behaviors](#)

[\(Genesis.Core.Behaviors.html\)](#)

+ Genesis.Core.Behaviors.Physics

public static Matrix4x4 RotateZ(float angleInRadians)

+ Genesis.Core.Behaviors.Physics

Parameters

[\(Genesis.Core.Behaviors.Physics.html\)](#)

Type

+ [Genesis.Core.GameElements](#)

float (<https://learn.microsoft.com/dotnet/api/system.single>)

[\(Genesis.Core.GameElements.html\)](#)

Type	Name	Description
	<i>angleInRadians</i>	

Genesis.Graphics

Type	Description
(Genesis.Graphics.html)	

+ Genesis.Graphics.Physics

Matrix4x4 ([Genesis.Math.Matrix4x4.html](#))

[\(Genesis.Graphics.Physics.html\)](#)

+ Genesis.Graphics.RenderDevice

[Scale\(Vec3\)](#)

Declaration

[Genesis.Graphics.Shaders.Operations](#)

[\(Genesis.Graphics.Shaders.Operations.html\)](#)

public static Matrix4x4 Scale(Vec3 scale)

+ Genesis.Graphics.Shapes

[\(Genesis.Graphics.Shapes.html\)](#)

Parameters

- Genesis.Math

Type

[\(Genesis.Math.html\)](#)

Vec3 ([Genesis.Math.Vec3.html](#))

Matrix4x4

([Genesis.Math.Matrix4x4.html](#))

Returns

NoisePoint

Type	Description
(Genesis.Math.NoisePoint.html)	

PerlinNoise

Matrix4x4 ([Genesis.Math.Matrix4x4.html](#))

[\(Genesis.Math.PerlinNoise.html\)](#)

Rect ([Genesis.Math.Rect.html](#))

Vec3 ([Genesis.Math.Vec3.html](#))

ToArray()

+ [Genesis.Physics](#)

[\(Genesis.Physics.html\)](#)

Declaration

```
public float[] ToArray()
```

Returns

Type	Description
float (https://learn.microsoft.com/dotnet/api/system.single)[]	

+ Genesis.Core

(Genesis.Core.html)

Translate(Vec3)

+ Genesis.Core.Behaviors

Declaration

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

public static Matrix4x4 Translate(Vec3 translation)

(Genesis.Core.Behaviors.Physics.html)

Pa Genesis.Core.Behaviors.Physics

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	translation	

Returns

+ Genesis.Graphics

Type (Genesis.Graphics.html)

Description

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

F Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Operator

(Matrix4x4, Matrix4x4)

(Genesis.Graphics.Shaders.Operator.html)

Declaration

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

public static Matrix4x4 operator *(Matrix4x4 left, Matrix4x4 right)

- Genesis.Math

Pa (Genesis.Math.html)

Type	Name	Description
Matrix4x4		
(Genesis.Math.Matrix4x4.html)		
Matrix4x4 (Genesis.Math.Matrix4x4.html)	left	
NoisePoint		
(Genesis.Math.NoisePoint.html)		
Matrix4x4 (Genesis.Math.Matrix4x4.html)	right	
PerlinNoise		
(Genesis.Math.PerlinNoise.html)		

Returns

Rect (Genesis.Math.Rect.html)

Description

Type

Vec3 (Genesis.Math.Vec3.html)

+ Genesis.Physics

(Genesis.Physics.html)

Type	Description
Matrix4x4 (Genesis.Math.Matrix4x4.html)	

▼

- + **Genesis.Core**
[\(Genesis.Core.html\)](#)
- + **Genesis.Core.Behaviors**
[\(Genesis.Core.Behaviors.html\)](#)
- + **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)
- + **Genesis.Core.Behaviors.Physic**
[\(Genesis.Core.Behaviors.Physic.html\)](#)
- + **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)
- + **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)
- + **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)
- + **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)
- + **Genesis.Graphics.Shaders.Oper**
[\(Genesis.Graphics.Shaders.Oper.html\)](#)
- + **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)
- **Genesis.Math**
[\(Genesis.Math.html\)](#)
 - Matrix4x4
[\(Genesis.Math.Matrix4x4.html\)](#)
 - NoisePoint
[\(Genesis.Math.NoisePoint.html\)](#)
 - PerlinNoise
[\(Genesis.Math.PerlinNoise.html\)](#)
 - Rect ([Genesis.Math.Rect.html](#))
 - Vec3 ([Genesis.Math.Vec3.html](#))
- + **Genesis.Physics**
[\(Genesis.Physics.html\)](#)


```
public float value
```

Field Value

Type	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	

+ Genesis.Core

([Genesis.Core.html](#))

X

+ Genesis.Core.Behaviors

Declaration ([Genesis.Core.Behaviors.html](#))

+ Genesis.Core.Behaviors.Physics

public float x

([Genesis.Core.Behaviors.Physics.html](#))

Field Value

Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.GameElements

float (<https://learn.microsoft.com/dotnet/api/system.single>)

([Genesis.Core.GameElements.html](#))

+ Genesis.Graphics

y ([Genesis.Graphics.html](#))

Declaration ([Genesis.Graphics.html](#))

([Genesis.Graphics.Physic.html](#))

public float y

+ Genesis.Graphics.RenderDevice

([Genesis.Graphics.RenderDevice.html](#))

Field Value

+ Genesis.Graphics.Shaders.Operator

([Genesis.Graphics.Shaders.Operator.html](#))

float (<https://learn.microsoft.com/dotnet/api/system.single>)

+ Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

- Genesis.Math

([Genesis.Math.html](#))

Matrix4x4

([Genesis.Math.Matrix4x4.html](#))

NoisePoint

([Genesis.Math.NoisePoint.html](#))

PerlinNoise

([Genesis.Math.PerlinNoise.html](#))

Rect ([Genesis.Math.Rect.html](#))

Vec3 ([Genesis.Math.Vec3.html](#))

+ Genesis.Physics

([Genesis.Physics.html](#))

Type	Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	x	
float (https://learn.microsoft.com/dotnet/api/system.single)	y	
float (https://learn.microsoft.com/dotnet/api/system.single) ▼	persistence	
int (https://learn.microsoft.com/dotnet/api/system.int32)	octaves	
+ Genesis.Core (https://learn.microsoft.com/dotnet/api/system.int32)	seed	

([Genesis.Core.html](#))

Returns

+ [Genesis.Core.Behaviors](#)

Type ([Genesis.Core.Behaviors.html](#))

float (<https://learn.microsoft.com/dotnet/api/system.single>)

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

+ [Genesis.Core.Behaviors.Physics](#)

([GenerateNoiseMap\(int, int, int\)](#))

([Genesis.Core.Behaviors.Physics.html](#))

Declaration

+ [Genesis.Core.GameElements](#)

([Genesis.Core.GameElements.html](#))

public static NoisePoint GenerateNoiseMap(int width, int height, int seed)

+ [Genesis.Graphics](#)

([Genesis.Graphics.html](#))

+ Type [Genesis.Graphics.Physics](#)

([Genesis.Graphics.Physics.html](#))

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

+ [Genesis.Graphics.RenderDevice](#)

([Genesis.Graphics.RenderDevice.html](#))

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

+ [Genesis.Graphics.Shaders.Operator](#)

([Genesis.Graphics.Shaders.Operator.html](#))

+ Type [Genesis.Graphics.Shapes](#)

([Genesis.Graphics.Shapes.html](#))

List<NoisePoint> (<https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1>) <

NoisePoint ([Genesis.Math.NoisePoint.html](#))>

- [Genesis.Math](#)

([Genesis.Math.html](#))

Matrix4x4

([Genesis.Math.Matrix4x4.html](#))

NoisePoint

([Genesis.Math.NoisePoint.html](#))

PerlinNoise

([Genesis.Math.PerlinNoise.html](#))

Rect ([Genesis.Math.Rect.html](#))

Vec3 ([Genesis.Math.Vec3.html](#))

+ [Genesis.Physics](#)

([Genesis.Physics.html](#))

Class Rect

Inheritance

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ Rect

+ Genesis.Core

Inherited Members

(Genesis.Core.html)
`object.Equals(object)` ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

+ Genesis.Core.Behaviors

`object.Equals(object, object)` ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object-system-object)))

+ Genesis.Core.Behaviors.Physics

`object.ReferenceEquals(object, object)` (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

`object.GetHashCode()` (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

`object.GetType()` (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

`object.MemberwiseClone()` (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

+ Genesis.Core.Behaviors.Physics

Namespace: Genesis (Genesis.html).Math (Genesis.Math.html)

+ Genesis.Core.GameElements

Syntax

`Rect` (<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.rect>)

+ Genesis.Graphics

`public class Rect`

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Constructors

+ Genesis.Graphics.RenderDevice

`Rect(RenderDevice)` (<https://learn.microsoft.com/dotnet/api/genesis.graphics.renderdevice.rect>)

+ Genesis.Graphics.Shaders.Operator

`Rect(Shader)` (<https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.operator.rect>)

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

- Genesis.Math

`Rect(float, float, float, float)` (<https://learn.microsoft.com/dotnet/api/genesis.math.rect>)

Declaration

`Matrix4x4` (<https://learn.microsoft.com/dotnet/api/genesis.math.matrix4x4>)

`Rect` (<https://learn.microsoft.com/dotnet/api/genesis.math.rect>)

`NoisePoint` (<https://learn.microsoft.com/dotnet/api/genesis.math.noisepoint>)

`PerlinNoise` (<https://learn.microsoft.com/dotnet/api/genesis.math.perlinnoise>)

`Parameters` (<https://learn.microsoft.com/dotnet/api/genesis.math.perlinnoise>)

Type	Name	Description
<code>Rect</code> (https://learn.microsoft.com/dotnet/api/genesis.math.rect)	<code>x</code>	
<code>Vec3</code> (https://learn.microsoft.com/dotnet/api/genesis.math.vec3)	<code>y</code>	
<code>float</code> (https://learn.microsoft.com/dotnet/api/system.single)		

+ Genesis.Physics

`float` (<https://learn.microsoft.com/dotnet/api/system.single>)

(Genesis.Physics.html)

Type	Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	width	
float (https://learn.microsoft.com/dotnet/api/system.single)	height	

▼

Properties

([Genesis.Core.html](#))

Height

([Genesis.Core.Behaviors.html](#))

Declaration

+ **Genesis.Core.Behaviors.Physics**
 public float Height { get; set; }

+ **Genesis.Core.Behaviors.Physics**
Property Value

([Genesis.Core.Behaviors.Physics.html](#))

Type

+ **Genesis.Core.GameElements**

float (<https://learn.microsoft.com/dotnet/api/system.single>)

([Genesis.Core.GameElements.html](#))

Description

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

Width

+ **Genesis.Graphics.Physics**

Declaration

([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

Property Value

+ **Genesis.Graphics.Shaders.Operation**

Type

+ **Genesis.Graphics.Shapes**

([Genesis.Graphics.Shapes.html](#))

Description

- **Genesis.Math**

([Genesis.Math.html](#))

Declaration

Matrix4x4

([Genesis.Math.Matrix4x4.html](#))

public float X { get; set; }

([Genesis.Math.NoisePoint.html](#))

PerlinNoise

Property Value

([Genesis.Math.PerlinNoise.html](#))

Type

Rect ([Genesis.Math.Rect.html](#))

Vec3 ([Genesis.Math.Vec3.html](#))

float (<https://learn.microsoft.com/dotnet/api/system.single>)

Description

+ **Genesis.Physics**

([Genesis.Physics.html](#))

Y

Declaration

```
public float Y { get; set; }
```

Property Value

Type	Description
+ Genesis.Core	

float ([Genesis.Core.html](#)) soft.com/dotnet/api/system.single)

+ Genesis.Core.Behaviors

([Genesis.Core.Behaviors.html](#))

Method

([Genesis.Core.Behaviors.Physics.html](#))

Contains

([Genesis.Core.Behaviors.Physics.html](#))

Declaration

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.html](#)) float y)

+ Genesis.Graphics

Parameters

([Genesis.Graphics.html](#))

Type

+ Genesis.Graphics.Physics

float ([Genesis.Graphics.Physics.html](#)) soft.com/dotnet/api/system.single)

+ Genesis.Graphics.RenderDevice

([Genesis.Graphics.RenderDevice.html](#))

Returns

+ Genesis.Graphics.Shaders.Operator

([Genesis.Graphics.Shaders.Operator.html](#))

bool ([https://learn.microsoft.com/dotnet/api/system.boolean](#))

+ Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

Intersects

([Genesis.Math.html](#))

Declaration

Matrix4x4

([Genesis.Math.Matrix4x4.html](#))

public bool Intersects(Rect rect)

NoisePoint

([Genesis.Math.NoisePoint.html](#))

Parameters

Type

Rect ([Genesis.Math.Rect.html](#))

Rect ([https://learn.microsoft.com/html](#))

Name	Description
x	
y	

+ Genesis.Physics

Returns

([Genesis.Physics.html](#))

Name	Description
rect	

Type	Description
bool (https://learn.microsoft.com/dotnet/api/system.boolean)	

To**String()**

Declaration

+ **Genesis.Core**

([Genesis.Core.html](#)) `ToString()`

+ **Genesis.Core.Behaviors**

Returns ([Genesis.Core.Behaviors.html](#))

Type

+ **Genesis.Core.Behaviors.Physics**

string (<https://learn.microsoft.com/dotnet/api/system.string>)

Description

+ **Genesis.Core.Behaviors.Physics**

Overrides

([Genesis.Core.Behaviors.Physics.html](#)) `object.ToString()` (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

+ **Genesis.Core.GameElements**

([Genesis.Core.GameElements.html](#))

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice.html](#))

+ **Genesis.Graphics.Shaders.Operator**

([Genesis.Graphics.Shaders.Operator.html](#))

+ **Genesis.Graphics.Shapes**

([Genesis.Graphics.Shapes.html](#))

- **Genesis.Math**

([Genesis.Math.html](#))

Matrix4x4

([Genesis.Math.Matrix4x4.html](#))

NoisePoint

([Genesis.Math.NoisePoint.html](#))

PerlinNoise

([Genesis.Math.PerlinNoise.html](#))

Rect ([Genesis.Math.Rect.html](#))

Vec3 ([Genesis.Math.Vec3.html](#))

+ **Genesis.Physics**

([Genesis.Physics.html](#))

Class Vec3

Vector for coordinates

▼ Enter here to filter...

Inheritance

+ Genesis.Core

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)

([Genesis.Core.html](#))

Inherited Members

+ Genesis.Core.Behaviors

object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))

+ Genesis.Core.Behaviors.Physics

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.Behaviors.Physics

object.ReferenceEqual(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

+ Genesis.Core.GameElements

Name ([Genesis.Core.GameElements.html](#))

+ Genesis.Graphics

Syntax

([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

public class Vec3

([Genesis.Graphics.Physics.html](#))

+ Genesis.Graphics.RenderDevice

Console.Graphics.RenderDevice

+ Genesis.Graphics.Shaders.Operations

Vec3 ([Genesis.Graphics.Shaders.Operations.html](#))

genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

public Vec3(vec3 vec3)

- Genesis.Math

([Genesis.Math.html](#))

Parameters

Matrix4x4

Type	Name	Description
Genesis.Math.Matrix4x4		

NoisePoint

([Genesis.Math.NoisePoint.html](#))

PerlinNoise

([Genesis.Math.PerlinNoise.html](#))

Vec3(NoisePoint)

Vec3 ([Genesis.Math.Vec3.html](#))

Declaration

+ Genesis.Physics

([Genesis.Physics.html](#))

```
public Vec3(Point point)
```

Parameters

Type	Name	Description
Point (https://learn.microsoft.com/dotnet/api/system.drawing.point)	point	

+ Genesis.Core

[\(Genesis.Core.html\)](#)

Vec3(PointF)

+ Genesis.Core.Behaviors

Declaration [\(Genesis.Core.Behaviors.html\)](#)

+ Genesis.Core.Behaviors.Physics

public Vec3(PointF point)

[\(Genesis.Core.Behaviors.Physics.html\)](#)

Genesis.Core.Behaviors.Physics

Genesis.Core.Behaviors.Physics

Type	Name	Description
POINTF (https://learn.microsoft.com/dotnet/api/system.drawing.pointf)	point	

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

Vec3(Size)

[\(Genesis.Graphics.html\)](#)

Declaration [\(Genesis.Graphics.html\)](#)

Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

public Vec3(Size size)

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice.html\)](#)

Parameters

Type	Name	Description
Size (https://learn.microsoft.com/dotnet/api/system.drawing.size)	size	

+ Genesis.Graphics.Shapes

[\(Genesis.Graphics.Shapes.html\)](#)

Vec3(SizeF)

[\(Genesis.Math.html\)](#)

Declaration [\(Genesis.Math.html\)](#)

Matrix4x4

[\(Genesis.Math.Matrix4x4.html\)](#)

NoisePoint

[\(Genesis.Math.NoisePoint.html\)](#)

Parameters

Type	Name	Description
PerlinNoise ((Genesis.Math.PerlinNoise.html))		

Rect ([\(Genesis.Math.Rect.html\)](#))

SizeF (<https://learn.microsoft.com/dotnet/api/system.drawing.sizef>)

Vec3 ([\(Genesis.Math.Vec3.html\)](#))

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

Vec3(float)

Creates a new Vector

Declaration

```
public Vec3(float value)
```

Parameters

Type [\(Genesis.Core.html\)](#)

Name

Description

+ Genesis.Core.Behaviors

float (<https://learn.microsoft.com/dotnet/api/system.single>)

value

[\(Genesis.Core.Behaviors.html\)](#)

+ Genesis.Core.Behaviors.Physics

Vec3(float, float) [\(Genesis.Core.Behaviors.Physics.html\)](#)

Creates a new Vector

[\(Genesis.Core.Behaviors.Physics.html\)](#)

Declaration [\(Genesis.Core.Behaviors.Physics.html\)](#)

+ Genesis.Core.GameElements

public Vec3(float x, float y) [\(Genesis.Core.GameElements.html\)](#)

+ Genesis.Graphics

Parameters

Type [\(Genesis.Graphics.html\)](#)

Name

Description

+ Genesis.Graphics.Physics

float (<https://learn.microsoft.com/dotnet/api/system.single>)

x

[\(Genesis.Graphics.Physics.html\)](#)

float (<https://learn.microsoft.com/dotnet/api/system.single>)

y

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice.html\)](#)

+ Genesis.Graphics.Shaders.Operations

Vec3(float, float, float) [\(Genesis.Graphics.Shaders.Operations.html\)](#)

Creates a new Vector

+ Genesis.Graphics.Shapes

Declaration [\(Genesis.Graphics.Shapes.html\)](#)

- Genesis.Math

public Vec3(float x, float y, float z) [\(Genesis.Math.html\)](#)

Parameters

Type [\(Genesis.Math.Matrix4x4.html\)](#)

Name

Description

NoisePoint

float (<https://learn.microsoft.com/dotnet/api/system.single>)

x

PerlinNoise

float (<https://learn.microsoft.com/dotnet/api/system.single>)

y

Rect ([\(Genesis.Math.Rect.html\)](#))

float (<https://learn.microsoft.com/dotnet/api/system.single>)

z

Vec3 ([\(Genesis.Math.Vec3.html\)](#))

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

Properties

X

Declaration



```
public float X { get; set; }
```

+ Genesis.Core

([Genesis.Core.html](#))

+ [Genesis.Core.Behaviors](#)

([Genesis.Core.Behaviors.html](#))

float (<https://learn.microsoft.com/dotnet/api/system.single>)

Description

+ [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

Y [Genesis.Core.Behaviors.Physics](#)

([Genesis.Core.Behaviors.Physics.html](#))

+ [Genesis.Core.GameElements](#)

```
public float Y { get; set; }
```

([Genesis.Core.GameElements.html](#))

+ [Genesis.Graphics](#)

([Genesis.Graphics.html](#))

Type

Description

+ [Genesis.Graphics.Physics](#)

float (<https://learn.microsoft.com/dotnet/api/system.single>)

([Genesis.Graphics.Physics.html](#))

+ [Genesis.Graphics.RenderDevice](#)

Z ([Genesis.Graphics.RenderDevice.html](#))

- [Genesis.Graphics.Shaders.Operations](#)

([Genesis.Graphics.Shaders.Operations.html](#))

public float Z { get; set; }

+ [Genesis.Graphics.Shapes](#)

([Genesis.Graphics.Shapes.html](#))

Property Value

- [Genesis.Math](#)

Type ([Genesis.Math.html](#))

Description

float (<https://learn.microsoft.com/dotnet/api/system.single>)

([Genesis.Math.Matrix4x4.html](#))

NoisePoint

([Genesis.Math.NoisePoint.html](#))

Methods

([Genesis.Math.PerlinNoise.html](#))

Rect ([Genesis.Math.Rect.html](#))

AddVec3 ([Genesis.Math.Vec3.html](#))

* [Genesis.Physics](#)

Adds the value v to a vector

([Genesis.Physics.html](#))

Declaration

```
public void Add(Vec3 vec)
```

Parameters

Type		Name	Description
Vec3 (Genesis.Math.Vec3.html)		vec	

+ Genesis.Core

(Genesis.Core.html)

Add(float, float)

+ Genesis.Core.Behaviors

Add the values to the vector

(Genesis.Core.Behaviors.html)

Declaration

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

```
public void Add(float x, float y)
```

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Parameters

Type		Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)		x	
float (https://learn.microsoft.com/dotnet/api/system.single)		y	

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Add(float, float, float)

+ Genesis.Graphics.RenderDevice

Adds the values to the vector

(Genesis.Graphics.RenderDevice)

Declaration

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL)

```
public void Add(float x, float y, float z)
```

+ Genesis.Graphics.Shapes

Parameters

Type		Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)		x	
float (https://learn.microsoft.com/dotnet/api/system.single)		y	
float (https://learn.microsoft.com/dotnet/api/system.single)		z	

PerlinNoise (Genesis.Math.NoisePoint.html)

PerlinNoise

(Genesis.Math.PerlinNoise.html)

AddX(float)

Rect (Genesis.Math.Rect.html)

Vec3 (Genesis.Math.Vec3.html)

Add the value to the X param

+ Genesis.Physics

(Genesis.Physics.html)

```
public void AddX(float x)
```

Parameters

Type		Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)		x	

+ Genesis.Core

[\(Genesis.Core.html\)](#)

AddY(float)

+ Genesis.Core.Behaviors

Add the value to the y parameter ([Genesis.Core.Behaviors.html](#))

Declaration

[Genesis.Core.Behaviors.Physics](#)

[\(Genesis.Core.Behaviors.Physics.html\)](#)

public void AddY(float y)

+ Genesis.Core.Behaviors.Physics

[\(Genesis.Core.Behaviors.Physics.html\)](#)

Parameters

Type		Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)		y	

+ Genesis.Graphics

[\(Genesis.Graphics.html\)](#)

AddZ(float) Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

Add the value to the z parameter

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice.html\)](#)

public void AddZ(float z)

+ Genesis.Graphics.Shaders.Operator

[\(Genesis.Graphics.Shaders.Operator.html\)](#)

Parameters

Type		Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)		z	

[\(Genesis.Math.html\)](#)

Matrix4x4

Cross(Vec3, Vec3)

[\(Genesis.Math.Matrix4x4.html\)](#)

Declaration

[\(Genesis.Math.NoisePoint.html\)](#)

PerlinNoise

public static Vec3 Cross(Vec3 vec1, Vec3 vec2)

[\(Genesis.Math.PerlinNoise.html\)](#)

Rect ([Genesis.Math.Rect.html](#))

Parameters

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	vec1	
Vec3 (Genesis.Math.Vec3.html)	vec2	

Returns

Type	Description
+ Genesis.Core Vec3 (Genesis.Math.Vec3.html) (Genesis.Core.html)	

+ Genesis.Core.Behaviors
[Degrees\(Vec3\).html](#)

+ Genesis.Core.Behaviors.Physics
Returns the offset angle to the vector
[\(Genesis.Core.Behaviors.Physics.html\)](#)
Declaration

+ Genesis.Core.Behaviors.Physics
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ Genesis.Core.GameElements
Parameters
[Genesis.Core.GameElements.html](#)

Type	Name	Description
+ Genesis.Graphics Vec3 (Genesis.Graphics.html)	vec3	

+ Genesis.Graphics.Physics
Returns
[\(Genesis.Graphics.Physics.html\)](#)
Type

+ Genesis.Graphics.RenderDevice
float (<https://learn.microsoft.com/dotnet/api/system.single>)
[\(Genesis.Graphics.RenderDevice.html\)](#)

+ Genesis.Graphics.Shaders.Operations
[\(Genesis.Graphics.Shaders.Operations.html\)](#)
Degrees(float, float)

+ Genesis.Graphics.Shapes
Returns the offset angle to the vector
[\(Genesis.Graphics.Shapes.html\)](#)
Declaration

- Genesis.Math

[\(Genesis.Math.html\)](#)
public float Degrees(float x, float y)

Matrix4x4
[\(Genesis.Math.Matrix4x4.html\)](#)
Parameters

Type	Name	Description
Genesis.Math.NoisePoint.html	x	
PerlinNoise float (https://learn.microsoft.com/dotnet/api/system.single) (Genesis.Math.PerlinNoise.html)	y	

float (<https://learn.microsoft.com/dotnet/api/system.single>)

Vec3 (Genesis.Math.Vec3.html)

Returns

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

Type	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	

Distance(Vec3)

Returns the distance between two vectors

+ **Genesis.Core**

Declaration
([Genesis.Core.html](#))

+ **Genesis.Core.Behaviors**
Distance([Vec3 vec3](#))
([Genesis.Core.Behaviors.html](#))

Parameters

+ **Genesis.Core.Behaviors.Physics**
Type:
[Genesis.Core.Behaviors.Physics](#)

+/**Genesis.Core.Behaviors.Physics**
([Genesis.Core.Behaviors.Physics](#))

Returns

+ **Genesis.Core.GameElements**

Type:
([Genesis.Core.GameElements.h](#))

float (<https://learn.microsoft.com/dotnet/api/system.single>)

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**

Dot([Vec3, Vec3](#))
([Genesis.Graphics.Physics.html](#))

Declaration

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice](#), [float](#) RenderDevice, [Vec3 vec1](#), [Vec3 vec2](#))

+ **Genesis.Graphics.Shaders.Operator**

PerlinNoise([Matrix4x4 mat](#))
([Genesis.Graphics.Shaders.Operator.html](#))

+ Type:
Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

-/**Genesis.Math**

([Genesis.Math.html](#))

Returns

[Matrix4x4](#)

Type:
([Genesis.Math.Matrix4x4.html](#))

NoisePoint

float (<https://learn.microsoft.com/dotnet/api/system.single>)

PerlinNoise

([Genesis.Math.PerlinNoise.html](#))

Rect ([Genesis.Math.Rect.html](#))

Vec3 ([Genesis.Math.Vec3.html](#))

Returns the forward vector

+ **Genesis.Physics**

([Genesis.Physics.html](#))

```
public Vec3 Forward(Vec3 rotation, float dist)
```

Parameters

Type		Name	Description
Vec3 (Genesis.Math.Vec3.html)		<i>rotation</i>	
+ Genesis.Core (https://docs.microsoft.com/dotnet/api/system.single) (Genesis.Core.html)		<i>dist</i>	

Returns

+ Genesis.Core.Behaviors

Type	Description
(Genesis.Core.Behaviors.html)	

Vec3 (Genesis.Math.Vec3.html)

+ Genesis.Core.Behaviors.Physics

Type	Description
(Genesis.Core.Behaviors.Physics.html)	

Vec3 (Genesis.Math.Vec3.html)

+ Genesis.Core.Behaviors.Physics.Normalize()

(Genesis.Core.Behaviors.Physics.html)

Declaration

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Vec3 (Genesis.Math.Vec3.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

Normalized(Vec3)

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator.html)

+ Genesis.Graphics.Shapes

public static Vec3 Normalized(Vec3 vec)

(Genesis.Graphics.Shapes.html)

Genesis.Math

+ Genesis.Math

(Genesis.Math.html)

Type

Matrix4x4
Vec3 (Genesis.Math.Vec3.html)
(Genesis.Math.Matrix4x4.html)

NoisePoint

Return

(Genesis.Math.NoisePoint.html)

Type

PerlinNoise
(Genesis.Math.PerlinNoise.html)

Vec3 (Genesis.Math.Vec3.html)

Rect (Genesis.Math.Rect.html)

Vec3 (Genesis.Math.Vec3.html)

+ Genesis.Physics

Set(Vec3)

(Genesis.Physics.html)

Sets the value for the vector

Declaration

```
public void Set(Vec3 vec)
```



Parameters

Type	Name	Description
+ Genesis.Core (Genesis.Core.html)	vec	

+ [Genesis.Core.Behaviors](#)

[\(Genesis.Core.Behaviors.html\)](#)

[Set\(float, float, float\)](#)

+ [Genesis.Core.Behaviors.Physics](#)

Set the value for the vector

[\(Genesis.Core.Behaviors.Physics.html\)](#)

Declaration

+ [Genesis.Core.Behaviors.Physics](#)

[\(Genesis.Core.Behaviors.Physics.html\)](#)

```
public void Set(float x, float y, float z)
```

+ [Genesis.Core.GameElements](#)

[\(Genesis.Core.GameElements.html\)](#)

Parameters

Type	Name	Description
+ Genesis.Graphics (Genesis.Graphics.html)	x	
float (https://learn.microsoft.com/dotnet/api/system.single)	y	
+ Genesis.Graphics.Physics float (https://learn.microsoft.com/dotnet/api/system.single)	z	

+ [Genesis.Graphics.RenderDevice](#)

[\(Genesis.Graphics.RenderDevice.html\)](#)

[Sub\(Vec3\)](#)

[\(Genesis.Graphics.Shaders.Operations.html\)](#)

Subtract the vector

+ [Genesis.Graphics.Shapes](#)

Declaration

[\(Genesis.Graphics.Shapes.html\)](#)

- [Genesis.Math.Sub](#)(Vec3 v)

[\(Genesis.Math.html\)](#)

Parameters

Type	Name	Description
Matrix4x4 ((Genesis.Math.Matrix4x4.html))	v	

[\(Genesis.Math.NoisePoint.html\)](#)

NoisePoint

Vec3 ([\(Genesis.Math.NoisePoint.html\)](#))

PerlinNoise

[\(Genesis.Math.PerlinNoise.html\)](#)

Rect ([\(Genesis.Math.Rect.html\)](#))

ToBulletVec3()

Vec3 ([\(Genesis.Math.Vec3.html\)](#))

Declaration

+ [Genesis.Physics](#)

[\(Genesis.Physics.html\)](#)

```
public Vector3 ToBulletVec3()
```

Returns

Type	Description
Vector3	

+ Genesis.Core

[\(Genesis.Core.html\)](#)

ToGlmVec3()

+ Genesis.Core.Behaviors

Declaration [\(Genesis.Core.Behaviors.html\)](#)

+ Genesis.Core.Behaviors.Physics

[public Vec3 ToGlmVec3\(\)](#)

[\(Genesis.Core.Behaviors.Physics.html\)](#)

ReGenesis.Core.Behaviors.Physics

Type	Description
Vec3	

+ Genesis.Core.GameElements

[\(Genesis.Core.GameElements.html\)](#)

+ Genesis.Graphics

[ToString\(\)](#)[\(Graphics.html\)](#)

Declaration [\(Genesis.Graphics.html\)](#)

Genesis.Graphics.Physics

[\(Genesis.Graphics.Physics.html\)](#)

[public override string ToString\(\)](#)

+ Genesis.Graphics.RenderDevice

[\(Genesis.Graphics.RenderDevice.html\)](#)

Returns

Type	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	

+ Genesis.Graphics.Shapes

[\(Genesis.Graphics.Shapes.html\)](#)

Overloads

[object.ToString\(\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

- Genesis.Math

[\(Genesis.Math.html\)](#)

Towards(float, float)

[\(Genesis.Math.Matrix4x4.html\)](#)

Returns a new vector with the offset coordinates towards the given vector.

NoisePoint

Declaration [\(Genesis.Math.NoisePoint.html\)](#)

PerlinNoise

[\(Genesis.Math.PerlinNoise.html\)](#)

[public Vec3 Towards\(float degrees, float dist\)](#)

Rect ([\(Genesis.Math.Rect.html\)](#))

Vec3 ([\(Genesis.Math.Vec3.html\)](#))

Parameters

+ Genesis.Physics

[\(Genesis.Physics.html\)](#)

Type	Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	<i>degrees</i>	
float (https://learn.microsoft.com/dotnet/api/system.single)	<i>dist</i>	

Returns

Type	Description
+ Genesis.Core Vec3 (Genesis.Math.Vec3.html) (Genesis.Core.html)	

+ Genesis.Core.Behaviors

Towards2D(float, Vec3, float)

+ Genesis.Core.Behaviors.Physics

Returns a new vector towards the given direction.

(Genesis.Core.Behaviors.Physics)

Declaration

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics](#), float degrees, Vec3 start, float dist)

+ Genesis.Core.GameElements

Parameters

Genesis.Core.GameElements.h

Type	Name	Description
+ Genesis.Graphics		
float (Genesis.Graphics.html)	<i>degrees</i>	
+ Genesis.Graphics.Physics		

([Genesis.Graphics.Physics.html](#), float)

float (<https://learn.microsoft.com/dotnet/api/system.single>)

+ Genesis.Graphics.RenderDevice

Returns

(Genesis.Graphics.RenderDevice)

Type	Description
+ Genesis.Graphics.Shaders.Operations	

([Genesis.Graphics.Shaders.Operations.html](#))

+ Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

Towards3D(Vec3, Vec3, float)

- Genesis.Math

Calculates the Vector towards in 3D

([Genesis.Math.html](#))

Declaration

Matrix4x4

([Genesis.Math.Matrix4x4.html](#))

public static Vec3 Towards3D(Vec3 rotation, Vec3 start, float dist)

([Genesis.Math.NoisePoint.html](#))

PerlinNoise

Parameters

([Genesis.Math.PerlinNoise.html](#))

Type	Name	Description
Rect (Genesis.Math.Rect.html)		
Vec3 (Genesis.Math.Vec3.html)	<i>rotation</i>	

Vec3 ([Genesis.Math.Vec3.html](#))

Vec3 ([Genesis.Math.Vec3.html](#))

+ Genesis.Physics

Vec3 ([Genesis.Math.Vec3.html](#))

([Genesis.Physics.html](#))

Type	Name	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	<i>dist</i>	

Returns

Type	Description
Vec3 (Genesis.Math.Vec3.html)	

+ **Genesis.Core**

[\(Genesis.Core.html\)](#)

Towards3D(float, float, float, Vec3, float)

[\(Genesis.Core.Behaviors.html\)](#)

Calculates the towards vector

+ **Genesis.Core.Behaviors.Physics**

Declaration

[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.Behaviors.Physics**

[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.GameElements**

Type [\(Genesis.Core.GameElements.h\)](#)

float (<https://learn.microsoft.com/dotnet/api/system.single>)

rotX

+ **Genesis.Graphics**

Type [\(Genesis.Graphics.html\)](#)

float (<https://learn.microsoft.com/dotnet/api/system.single>)

rotY

+ **Genesis.Graphics.Physics**

Type [\(Genesis.Graphics.Physics.html\)](#)

Vec3 ([Genesis.Math.Vec3.html](#))

start

+ **Genesis.Graphics.RenderDevice**

Type [\(Genesis.Graphics.RenderDevice.html\)](#)

dist

Returns

+ **Genesis.Graphics.Shaders.Operator**

Type [\(Genesis.Graphics.Shaders.Operator.html\)](#)

+ **Genesis.Graphics.Shapes**

Type [\(Genesis.Graphics.Shapes.html\)](#)

- **Genesis.Math**

Zero() [\(Genesis.Math.html\)](#)

Create a new vector with X = 0, Y = 0, Z = 0

Matrix4x4 [\(Genesis.Math.Matrix4x4.html\)](#)

Declaration

NoisePoint

[\(Genesis.Math.NoisePoint.html\)](#)

public static Vec3 Zero()

PerlinNoise [\(Genesis.Math.PerlinNoise.html\)](#)

Rect ([Genesis.Math.Rect.html](#))

Type [\(Genesis.Math.Rect.html\)](#)

+ **Genesis.Physics**

Type [\(Genesis.Math.Vec3.html\)](#)

[\(Genesis.Physics.html\)](#)

Type	Description
Vec3 (Genesis.Math.Vec3.html)	

Operators

operator +(Vec3, Vec3)

Add operator



Declaration

+ Genesis.Core

public static Vec3 operator +(Vec3 vec1, Vec3 vec2)
(Genesis.Core.html)

+ Genesis.Core.Behaviors

Parameters
Type
(Genesis.Core.Behaviors.html)

Name

Description

+ Genesis.Core.Behaviors.Physics

Vec3 (Genesis.Math.Vec3.html)

vec1

(Genesis.Core.Behaviors.Physics.html)

Vec3 (Genesis.Math.Vec3.html)

vec2

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

Vec3 (Genesis.Math.Vec3.html)

Description

+ Genesis.Graphics

(Genesis.Graphics.html)

operator /(Vec3, Vec3)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

public static Vec3 operator /(Vec3 vec1, Vec3 vec2)
(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Operator

Parameters
Type
(Genesis.Graphics.Shaders.Operator.html)

Name

Description

+ Genesis.Graphics.Shapes

Vec3 (Genesis.Math.Vec3.html)

vec1

(Genesis.Graphics.Shapes.html)

Vec3 (Genesis.Math.Vec3.html)

vec2

- Genesis.Math

(Genesis.Math.html)

Returns
Matrix4x4

Type
(Genesis.Math.Matrix4x4.html)

Description

Vec3 (Genesis.Math.Vec3.html)

(Genesis.Math.NoisePoint.html)

PerlinNoise

(Genesis.Math.PerlinNoise.html)

operator *(Vec3, Vec3)

Rect (Genesis.Math.Rect.html)

Vec3 (Genesis.Math.Vec3.html)

Declaration

+ Genesis.Physics

(Genesis.Physics.html)

```
public static Vec3 operator *(Vec3 vec1, Vec3 vec2)
```

Parameters

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	vec1	
+ Genesis.Core + Genesis.Core.Math.Vec3.html (Genesis.Core.html)	vec2	

Returns

+ **Genesis.Core.Behaviors**

Type
(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.Behaviors.Physics
operator *(Vec3, float)
(Genesis.Core.Behaviors.Physics)

Multiply with float

+ **Genesis.Core.GameElements**

Declaration
(Genesis.Core.GameElements.h)

+ **Genesis.Graphics**

public static Vec3 operator *(Vec3 vec, float value)
(Genesis.Graphics.html)

Genesis.Graphics.Physics

Type
(Genesis.Graphics.Physics.html)

+ **Genesis.Graphics.RenderDevice**

Vec3 (Genesis.Math.Vec3.html)

(Genesis.Graphics.RenderDevice)

float (<https://learn.microsoft.com/dotnet/api/system.single>)

+ **Genesis.Graphics.Shaders.Operator**

(Genesis.Graphics.Shaders.Operator)

+ **Genesis.Graphics.Shapes**

(Genesis.Graphics.Shapes.html)

Vec3 (Genesis.Math.Vec3.html)

- **Genesis.Math**

(Genesis.Math.html)

operator -(Vec3, Vec3)

Matrix4x4
(Genesis.Math.Matrix4x4.html)

Sub operator

NoisePoint

Declaration
(Genesis.Math.NoisePoint.html)

PerlinNoise

(Genesis.Math.PerlinNoise.html)

Rect (Genesis.Math.Rect.html)

Vec3 (Genesis.Math.Vec3.html)

Parameters

+ **Genesis.Physics**

(Genesis.Physics.html)

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	vec1	
Vec3 (Genesis.Math.Vec3.html)	vec2	

Returns

Type	Description
+ Genesis.Core Vec3 (Genesis.Math.Vec3.html) (Genesis.Core.html)	
+ Genesis.Core.Behaviors (Genesis.Core.Behaviors.html)	
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)	
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)	
+ Genesis.Core.GameElements (Genesis.Core.GameElements.html)	
+ Genesis.Graphics (Genesis.Graphics.html)	
+ Genesis.Graphics.Physics (Genesis.Graphics.Physics.html)	
+ Genesis.Graphics.RenderDevice (Genesis.Graphics.RenderDevice.html)	
+ Genesis.Graphics.Shaders.Operator (Genesis.Graphics.Shaders.Operator.html)	
+ Genesis.Graphics.Shapes (Genesis.Graphics.Shapes.html)	
- Genesis.Math (Genesis.Math.html)	
Matrix4x4 (Genesis.Math.Matrix4x4.html)	
NoisePoint (Genesis.Math.NoisePoint.html)	
PerlinNoise (Genesis.Math.PerlinNoise.html)	
Rect (Genesis.Math.Rect.html)	
Vec3 (Genesis.Math.Vec3.html)	
+ Genesis.Physics (Genesis.Physics.html)	

Namespace Genesis.Physics

Classes

▼ Enter here to filter...

(Genesis.Core.Behaviors.Physic)
Aabb ([Genesis.Physics.Aabb.html](#))
+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physic)
MouseRay2 ([Genesis.Physics.MouseRay2.html](#))
+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physic)
PhysicHandler ([Genesis.Physics.PhysicHandler.html](#))
+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)
PhysicsBehavior ([Genesis.Physics.PhysicsBehavior.html](#))
+ Genesis.Graphics

(Genesis.Graphics.html)
PhysicsHandler2D ([Genesis.Physics.PhysicsHandler2D.html](#))
+ Genesis.Graphics.Physics

Represents a 2D physics handler responsible for managing physics simulation in a game.

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice
PhysicsHandler3D ([Genesis.Physics.PhysicsHandler3D.html](#))

(Genesis.Graphics.RenderDevice)
Represents a 3D physics handler responsible for managing physics simulation in a game.

+ Genesis.Graphics.Shaders.Oper

(Genesis.Graphics.Shaders.Oper)
Raycast ([Genesis.Physics.Raycast.html](#))

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

Structs

+ Genesis.Math

(Genesis.Math.html)
HitResult ([Genesis.Physics.HitResult.html](#))

- Genesis.Physics

(Genesis.Physics.html)
MatrixSet ([Genesis.Physics.MatrixSet.html](#))

Aabb

(Genesis.Physics.Aabb.html)

PhysicPropetrys ([Genesis.Physics.PhysicPropetrys.html](#))

(Genesis.Physics.HitResult.html)

Delegates

(Genesis.Physics.MatrixSet.html)

MouseRay2

(Genesis.Physics.MouseRay2.html)

PhysicHandlerEvent ([Genesis.Physics.PhysicHandlerEvent.html](#))

PhysicHandler

(Genesis.Physics.PhysicHandler.html)

PhysicsBehaviorEvent ([Genesis.Physics.PhysicsBehaviorEvent.html](#))

(Genesis.Physics.PhysicHandlerEvent.html)

PhysicPropetrys

(Genesis.Physics.PhysicPropetrys.html)

▼

[\(Genesis.Core.Behaviors.html\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)

+ **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)

+ **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)

+ **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)

+ **Genesis.Graphics.Shaders.Operations**
[\(Genesis.Graphics.Shaders.Operations.html\)](#)

+ **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)

+ **Genesis.Math**
[\(Genesis.Math.html\)](#)

- **Genesis.Physics**
[\(Genesis.Physics.html\)](#)

Aabb
[\(Genesis.Physics.Aabb.html\)](#)

HitResult
[\(Genesis.Physics.HitResult.html\)](#)

MatrixSet
[\(Genesis.Physics.MatrixSet.html\)](#)

MouseRay2
[\(Genesis.Physics.MouseRay2.html\)](#)

PhysicHandler
[\(Genesis.Physics.PhysicHandler.html\)](#)

PhysicHandlerEvent
[\(Genesis.Physics.PhysicHandlerEvent.html\)](#)

PhysicPropeterys
[\(Genesis.Physics.PhysicPropeterys.html\)](#)

Class Aabb

Inheritance

↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [Aabb](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.aabb) (<https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.aabb>)

Inherited Members

[Genesis.Core.Behaviors.Physics](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics)

[object](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics) (<https://learn.microsoft.com/dotnet/api/system.object>.tostring)
[object.Equals\(object\)](https://learn.microsoft.com/dotnet/api/system.object.equals) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))
+ [Genesis.Core.Behaviors.Physics](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics)
[object.Equals\(object, object\)](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object>equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object>equals(system-object-system-object)))
+ [Genesis.Core.GameElements](https://learn.microsoft.com/dotnet/api/genesis.core.gameelements)
[object.ReferenceEquals\(object, object\)](https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.h) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
[object.GetHashCode\(\)](https://learn.microsoft.com/dotnet/api/system.object.gethashcode) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
+ [Genesis.Graphics](https://learn.microsoft.com/dotnet/api/genesis.graphics)
[\(Genesis.Graphics.html\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.html)

Namespace: [Genesis](https://learn.microsoft.com/dotnet/api/genesis.html) ([Genesis.html](https://learn.microsoft.com/dotnet/api/genesis.html)).[Physics](https://learn.microsoft.com/dotnet/api/genesis.physics) ([Genesis.Physics.html](https://learn.microsoft.com/dotnet/api/genesis.physics))
+ [Genesis.Graphics.Physics](https://learn.microsoft.com/dotnet/api/genesis.graphics.physics)

Assembly: [Genesis.dll](https://learn.microsoft.com/dotnet/api/genesis.dll)

[Genesis.Graphics.Physics.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.physics.html)

Syntax

+ [Genesis.Graphics.RenderDevice](https://learn.microsoft.com/dotnet/api/genesis.graphics.renderdevice)

[\(Genesis.Graphics.RenderDevice\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.renderdevice)

+ [Genesis.Graphics.Shaders.Operator](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.operator)

[\(Genesis.Graphics.Shaders.Operator\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.operator)

Constructors

+ [Genesis.Graphics.Shapes](https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes)

[\(Genesis.Graphics.Shapes.html\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.html)

[Aabb\(\)](https://learn.microsoft.com/dotnet/api/aabb)

+ [Genesis.Math](https://learn.microsoft.com/dotnet/api/genesis.math)

Create a new [Aabb](https://learn.microsoft.com/dotnet/api/genesis.math)

[\(Genesis.Math.html\)](https://learn.microsoft.com/dotnet/api/genesis.math)

Declaration

[Genesis.Physics](https://learn.microsoft.com/dotnet/api/genesis.physics)

[\(Genesis.Physics.html\)](https://learn.microsoft.com/dotnet/api/genesis.physics.html)

public [Aabb\(\)](https://learn.microsoft.com/dotnet/api/aabb)

[\(Genesis.Physics.Aabb.html\)](https://learn.microsoft.com/dotnet/api/genesis.physics.aabb.html)

HitResult

[\(Genesis.Physics.HitResult.html\)](https://learn.microsoft.com/dotnet/api/genesis.physics.hitresult.html)

[Aabb\(\[Vector3\]\(https://learn.microsoft.com/dotnet/api/vector3\), \[Vector3\]\(https://learn.microsoft.com/dotnet/api/vector3\)\)](https://learn.microsoft.com/dotnet/api/aabb)

MatrixSet

[\(Genesis.Physics.MatrixSet.html\)](https://learn.microsoft.com/dotnet/api/genesis.physics.matrixset.html)

Creates a new [Aabb](https://learn.microsoft.com/dotnet/api/genesis.physics.matrixset)

[MouseRay2](https://learn.microsoft.com/dotnet/api/genesis.physics.mouseray2)

Declaration

[\(Genesis.Physics.MouseRay2.html\)](https://learn.microsoft.com/dotnet/api/genesis.physics.mouseray2.html)

PhysicHandler

[PhysicHandler](https://learn.microsoft.com/dotnet/api/genesis.physics.physichandler)([Vector3](https://learn.microsoft.com/dotnet/api/vector3) max)

PhysicHandlerEvent

[\(Genesis.Physics.PhysicHandlerEvent\)](https://learn.microsoft.com/dotnet/api/genesis.physics.physichandlerevent)

Parameters

PhysicPropertys

[PhysicPropertys h](https://learn.microsoft.com/dotnet/api/genesis.physics.physicpropertys)

Type	Name	Description
Vector3	<i>min</i>	
Vector3	<i>max</i>	

▼

(genesis.core.behaviors.html)
Properties
+ Genesis.Core.Behaviors.Physics
 (Genesis.Core.Behaviors.Physics)
Max
+ Genesis.Core.Behaviors.Physics
Declaration
 (Genesis.Core.Behaviors.Physics)
+ Genesis.Core.GameElements
 public Vec3 Max { get; set; }
 (Genesis.Core.GameElements.h)

Genesis.Graphics

Properties Value
(Genesis.Graphics.html)
Type
+ Genesis.Graphics.Physics
 Vec3 (Genesis.Math.Vec3.html)
 (Genesis.Graphics.Physics.html)
+ Genesis.Graphics.RenderDevice
Min
(Genesis.Graphics.RenderDevice)
Declaration
 (Genesis.Graphics.Shaders.Operation)
 (Genesis.Graphics.Shaders.Operation)
 public Vec3 Min { get; set; }
+ Genesis.Graphics.Shapes
 (Genesis.Graphics.Shapes.html)
Property Value

+ Genesis.Math
Type
(Genesis.Math.html)
Vec3 (Genesis.Math.Vec3.html)
- Genesis.Physics
 (Genesis.Physics.html)

Aabb
(Genesis.Physics.Aabb.html)
Methods
HitResult
(Genesis.Physics.HitResult.html)
MatrixSet
(Genesis.Physics.MatrixSet.html)
Checks if the aabb contains a point
MouseRay2
(Genesis.Physics.MouseRay2.html)
Declaration
 PhysicHandler

 (Genesis.Physics.PhysicHandler.html)
 public bool Contains(Vec3 v)
 PhysicHandlerEvent
 (Genesis.Physics.PhysicHandlerEvent)
PhysicsProperties
Parameters
 (Genesis.Physics.PhysicsProperties.h)

Description

Type	Description
(Genesis.Math.html)	

Type	Description
(Genesis.Physics.html)	

Type	Description
(Genesis.Physics.PhysicsProperties.h)	

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html)	v	

Returns

Type	Description
bool (https://learn.microsoft.com/dotnet/api/system.boolean)	

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

FromBulletRigidBody(RigidBody)

+ Genesis.Core.Behaviors.Physics

Returns the aabb from a bullet rigidbody.

(Genesis.Core.Behaviors.Physics)

Declaration

Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

```
public static Aabb FromBulletRigidBody(RigidBody rigidBody)
```

+ Genesis.Graphics

(Genesis.Graphics.html)

Parameters

Type	Name	Description
(Genesis.Graphics.Physics.html)	rigidBody	

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

Returns

Type	Description
(Genesis.Graphics.Shaders.Operator.html)	

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

IntersectRay(Vec3, Vec3, Vec3, Vec3)

+ Genesis.Math

Declaration

(Genesis.Math.html)

- Genesis.Physics

```
public static bool IntersectRay(Vec3 rayOrigin, Vec3 rayDirection, Vec3 aabbMin, Vec3 aabbMax)
```

(Genesis.Physics.html)

Aabb

(Genesis.Physics.Aabb.html)

Parameters

HitResult

Type	Name	Description
Genesis.Physics.HitResult.html		
MatrixSet		
Vec3 (Genesis.Math.Vec3.html)	rayOrigin	
(Genesis.Physics.MatrixSet.html)		
Vec3 (Genesis.Math.Vec3.html)	rayDirection	
(Genesis.Physics.MouseRay2.html)		
Vec3 (Genesis.Math.Vec3.html)	aabbMin	
PhysicHandler		
Vec3 (Genesis.Math.Vec3.html)	aabbMax	
PhysicHandlerEvent		

Returns

PhysicPropertys

(Genesis.Physics.PhysicPropertys.h)

Type	Description
bool (https://learn.microsoft.com/dotnet/api/system.boolean)	

▼

[\(Genesis.Core.Behaviors.html\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)

+ **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)

+ **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)

+ **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)

+ **Genesis.Graphics.Shaders.Operations**
[\(Genesis.Graphics.Shaders.Operations.html\)](#)

+ **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)

+ **Genesis.Math**
[\(Genesis.Math.html\)](#)

- **Genesis.Physics**
[\(Genesis.Physics.html\)](#)

Aabb
[\(Genesis.Physics.Aabb.html\)](#)

HitResult
[\(Genesis.Physics.HitResult.html\)](#)

MatrixSet
[\(Genesis.Physics.MatrixSet.html\)](#)

MouseRay2
[\(Genesis.Physics.MouseRay2.html\)](#)

PhysicHandler
[\(Genesis.Physics.PhysicHandler.html\)](#)

PhysicHandlerEvent
[\(Genesis.Physics.PhysicHandlerEvent.html\)](#)

PhysicPropeterys
[\(Genesis.Physics.PhysicPropeterys.html\)](#)

Struct HitResult

Inherited Members

Enter here to filter.

ValueType.Equals(object) (<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

ValueType.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.valuetype.gethashcode>)

ValueType.ToString() (<https://learn.microsoft.com/dotnet/api/system.valuetype.tostring>)

+ **Genesis.Core.Behaviors.Physics**
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

+ **Genesis.Core.Behaviors.Physics**
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

(**Genesis.Core.Behaviors.Physics**)

Namespace: Genesis (Genesis.html).Physics (Genesis.Physics.html)

Assembly: Genesis.dll

Syntax

Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Fields

(Genesis.Graphics.RenderDevice)

hitLocation

(Genesis.Graphics.Shaders.OpenGL.html)

Declaration

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

Field Value

(Genesis.Math.html)

Type

- Genesis.Physics

(Genesis.Physics.html)

Aabb

(Genesis.Physics.Aabb.html)

rayEnd

(Genesis.Physics.HitResult.html)

Declaration

MatrixSet

(Genesis.Physics.MatrixSet.html)

mouseRay

(Genesis.Physics.MouseRay2.html)

PhysicalHandler

Field Value

(Genesis.Physics.PhysicHandler.html)

Type

physicHandlerEvent

(Genesis.Physics.PhysicHandlerEvent.html)

Vec3

(Genesis.Math.Vec3.html)

PhysicalProperties

(Genesis.Physics.PhysicProperties.h)

Description

Type		Description
- Genesis.Physics		

Type		Description
Aabb		

Type		Description
HitResult		

Type		Description
MatrixSet		

Type		Description
MouseRay2		

Type		Description
PhysicalHandler		

Type		Description
PhysicHandlerEvent		

Type		Description
Vec3		

Type		Description
PhysicalProperties		

rayStart

Declaration

```
public Vec3 rayStart
```



Field Value

([Genesis.Core.Behaviors.html](#))
Type
+ **Genesis.Core.Behaviors.Physics**
Vec3 ([Genesis.Math.Vec3.html](#))
([Genesis.Core.Behaviors.Physics.html](#))

Description

+ **Genesis.Core.Behaviors.Physics**
([Genesis.Core.Behaviors.Physics.html](#))
rigidBody
+ **Genesis.Core.GameElements**
Declaration
([Genesis.Core.GameElements.h](#))

+ **Genesis.Graphics**
([Genesis.Graphics.html](#))

Field Value
+ **Genesis.Graphics.Physics**
Type
RigidBody
([Genesis.Graphics.Physics.html](#))
+ **Genesis.Graphics.RenderDevice**
([Genesis.Graphics.RenderDevice.html](#))

Description

+ **Genesis.Graphics.Shaders.Operations**
([Genesis.Graphics.Shaders.Operations.html](#))

+ **Genesis.Graphics.Shapes**
([Genesis.Graphics.Shapes.html](#))

+ **Genesis.Math**
([Genesis.Math.html](#))

- **Genesis.Physics**
([Genesis.Physics.html](#))

Aabb
([Genesis.Physics.Aabb.html](#))
HitResult
([Genesis.Physics.HitResult.html](#))
MatrixSet
([Genesis.Physics.MatrixSet.html](#))
MouseRay2
([Genesis.Physics.MouseRay2.html](#))
PhysicHandler
([Genesis.Physics.PhysicHandler.html](#))
PhysicHandlerEvent
([Genesis.Physics.PhysicHandlerEvent.html](#))
PhysicPropeterys
([Genesis.Physics.PhysicPropeterys.html](#))

Struct MatrixSet

Inherited Members

Enter here to filter.

ValueType.Equals(object) (<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

ValueType.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.valuetype.gethashcode>)

ValueType.ToString() (<https://learn.microsoft.com/dotnet/api/system.valuetype.tostring>)

+ **Genesis.Core.Behaviors.Physics**
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

+ **Genesis.Core.Behaviors.Physics**
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

(**Genesis.Core.Behaviors.Physics**)

Namespace: Genesis (Genesis.html).Physics (Genesis.Physics.html)

Assembly: Genesis.dll

Syntax

+ Genesis.Graphics (**Genesis.Graphics.html**)

+ Genesis.Graphics.Physics (**Genesis.Graphics.Physics.html**)

Fields

Genesis.Graphics.RenderDevice
(**Genesis.Graphics.RenderDevice**)

projectionMatrix

Genesis.Graphics.Shaders.OpenGL
(**Genesis.Graphics.Shaders.OpenGL**)

Declaration

+ Genesis.Graphics.Shapes
(**Genesis.Graphics.Shapes.html**)

+ Genesis.Math (**Genesis.Math.html**)

Type	Description
- Genesis.Physics (Genesis.Physics.html)	

Aabb
([Genesis.Physics.Aabb.html](#))

HitResult
([Genesis.Physics.HitResult.html](#))

Declaration

MatrixSet
([Genesis.Physics.MatrixSet.html](#))

MouseRay2 viewMatrix
([Genesis.Physics.MouseRay2.html](#))

PhysicHandler
Field Value
([Genesis.Physics.PhysicHandler.html](#))

Type	Description
- PhysicHandlerEvent (Genesis.Physics.PhysicHandlerEvent.html)	

mat4
PhysicPropeterys
([Genesis_Physics_PhysicPropeterys.h](#))

▼

[\(Genesis.Core.Behaviors.html\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)

+ **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)

+ **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)

+ **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)

+ **Genesis.Graphics.Shaders.Operations**
[\(Genesis.Graphics.Shaders.Operations.html\)](#)

+ **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)

+ **Genesis.Math**
[\(Genesis.Math.html\)](#)

- **Genesis.Physics**
[\(Genesis.Physics.html\)](#)

Aabb
[\(Genesis.Physics.Aabb.html\)](#)

HitResult
[\(Genesis.Physics.HitResult.html\)](#)

MatrixSet
[\(Genesis.Physics.MatrixSet.html\)](#)

MouseRay2
[\(Genesis.Physics.MouseRay2.html\)](#)

PhysicHandler
[\(Genesis.Physics.PhysicHandler.html\)](#)

PhysicHandlerEvent
[\(Genesis.Physics.PhysicHandlerEvent.html\)](#)

PhysicPropeterys
[\(Genesis.Physics.PhysicPropeterys.html\)](#)

Class MouseRay2

Inheritance

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ MouseRay2 ([MouseRay2.html](#))

Inherited Members

Genesis.Core.Behaviors.Physics

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object)))
+ Genesis.Core.Behaviors.Physics
 (Genesis.Core.Behaviors.Physics)
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))
+ Genesis.Core.GameElements
 (Genesis.Core.GameElements.h)
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Namespace: Genesis ([Genesis.html](#)).Physics ([Genesis.Physics.html](#))
+ Genesis.Graphics.Physics

Assembly: Genesis.dll
 (Genesis.Graphics.Physics.html)

Syntax

+ Genesis.Graphics.RenderDevice

 (Genesis.Graphics.RenderDevice)

+ Genesis.Graphics.Shaders.Operator

 (Genesis.Graphics.Shaders.Operator)

Constructors

+ Genesis.Graphics.Shapes

 (Genesis.Graphics.Shapes.html)

MouseRay2()

+ Genesis.Math

Declaration
 (Genesis.Math.html)

- Genesis.Physics

 public MouseRay2()

 (Genesis.Physics.html)

Aabb

 (Genesis.Physics.Aabb.html)

HitResult

 (Genesis.Physics.HitResult.html)

MatrixSet

 (Genesis.Physics.MatrixSet.html)

GetRayTo(Point, PerspectiveCamera, Viewport)

MouseRay2

Declaration
 (Genesis.Physics.MouseRay2.html)

PhysicHandler

 public Vector3 GetRayTo(Point point, PerspectiveCamera camera, Viewport viewport)

PhysicHandlerEvent

 (Genesis.Physics.PhysicHandlerEvent)

Parameters

Point Properties

 (Genesis.Physics.PhysicProperties.h)

Type	Name	Description
Point (https://learn.microsoft.com/dotnet/api/system.drawing.point)	<i>point</i>	
PerspectiveCamera (Genesis.Graphics.PerspectiveCamera.html)	<i>camera</i>	
Viewport (Genesis.Graphics.Viewport.html)	<i>viewport</i>	

Returns [Genesis.Core.Behaviors.html](#)

+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)	Description
- Genesis.Core.Behaviors.Physics.Vectors3 (Genesis.Core.Behaviors.Physics.Vectors3.html)	
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)	
+ Genesis.Core.GameElements (Genesis.Core.GameElements.html)	
+ Genesis.Graphics (Genesis.Graphics.html)	
+ Genesis.Graphics.Physics (Genesis.Graphics.Physics.html)	
+ Genesis.Graphics.RenderDevice (Genesis.Graphics.RenderDevice.html)	
+ Genesis.Graphics.Shaders.Operations (Genesis.Graphics.Shaders.Operations.html)	
+ Genesis.Graphics.Shapes (Genesis.Graphics.Shapes.html)	
+ Genesis.Math (Genesis.Math.html)	
- Genesis.Physics (Genesis.Physics.html)	
Aabb (Genesis.Physics.Aabb.html)	
HitResult (Genesis.Physics.HitResult.html)	
MatrixSet (Genesis.Physics.MatrixSet.html)	
MouseRay2 (Genesis.Physics.MouseRay2.html)	
PhysicHandler (Genesis.Physics.PhysicHandler.html)	
PhysicHandlerEvent (Genesis.Physics.PhysicHandlerEvent.html)	
PhysicPropeterys (Genesis_Physics_PhysicPropeterys.h)	

Class PhysicHandler

Inheritance

↳ Enter here to filter
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ PhysicsHandlerBehavior.cs.html
↳ PhysicsHandler2D ([Genesis.Physics.PhysicsHandler2D.html](#))
↳ PhysicsHandler3D ([Genesis.Physics.PhysicsHandler3D.html](#))
+ **Genesis.Core.Behaviors.Physics**
+ **(Genesis.Core.Behaviors.Physics)**
Inherited Members
+ **Genesis.Core.Behaviors.Physics**
object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))
+ **Genesis.Core.GameElements**
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object))
+ **Genesis.Graphics**
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
+ **Genesis.Graphics.Physics**
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
Namespace: [Genesis](#) ([Genesis.Fuml](#)).Physics ([Genesis.Physics.html](#))
Assembly: [Genesis.dll](#)
+ **Genesis.Graphics.RenderDevice**
System.Object ([Genesis.Graphics.RenderDevice.html](#))
+ **Genesis.Graphics.Shaders.Operations**
public abstract class PhysicHandler
([Genesis.Graphics.Shaders.Operations.html](#))
+ **Genesis.Graphics.Shapes**
System.Object ([Genesis.Graphics.Shapes.html](#))
+ **Genesis.Math**
System.Object ([Genesis.Math.html](#))
+ **Genesis.Physics**
System.Object ([Genesis.Physics.html](#))
public PhysicHandler()
([Genesis.Physics.Aabb.html](#))
HitResult
([Genesis.Physics.HitResult.html](#))
MatrixSet
([Genesis.Physics.MatrixSet.html](#))
MouseRay2
([Genesis.Physics.MouseRay2.html](#))
+ **Callbacks**
PhysicHandler
([Genesis.Physics.PhysicHandler.html](#))
Declaration
PhysicHandlerEvent
([Genesis.Physics.PhysicHandlerEvent.html](#))
public Dictionary<Object, PhysicHandlerEvent> Callbacks { get; set; }
PhysicPropertys
([Genesis.Physics.PhysicPropertys.html](#))

Property Value

Type	Description
Dictionary (https://learn.microsoft.com/dotnet/api/system.collections.generic.dictionary-2)< object (https://learn.microsoft.com/dotnet/api/system.object), PhysicHandlerEvent (Genesis.Physics.PhysicHandlerEvent.html)>	

(genesis.core.behaviors.html)

+ Genesis.Core.Behaviors.Physics Methods

(Genesis.Core.Behaviors.Physics ManageElement(PhysicsBehavior))

Declaration

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

public virtual void ManageElement(PhysicsBehavior physicsBehavior)

+ Genesis.Graphics

(Genesis.Graphics.html)

Parameters

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

PhysicsBehavior (Genesis.Physics.PhysicsBehavior.html)

Name

physicsBehavior

Description

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

Process(Scene, Game)

(Genesis.Graphics.Shaders.OpenGL.html)

Declaration

+ Genesis.Graphics.Shapes

public abstract void Process(Scene scene, Game game)

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

Parameters

(Genesis.Math.html)

Type

- Genesis.Physics

Scene (Genesis.Core.Scene.html)

(Genesis.Physics.html)

Game (Genesis.Core.Game.html)

Aabb (Genesis.Physics.Aabb.html)

HitResult (Genesis.Physics.HitResult.html)

MatrixSet (Genesis.Physics.MatrixSet.html)

MouseRay2 (Genesis.Physics.MouseRay2.html)

PhysicHandler (Genesis.Physics.PhysicHandler.html)

PhysicHandlerEvent (Genesis.Physics.PhysicHandlerEvent.html)

PhysicPropeterys (Genesis.Physics.PhysicPropeterys.html)

PhysicPropeterys (Genesis.Physics.PhysicPropeterys.html)

Name

scene

Description

game

Delegate PhysicHandlerEvent

Namespace: Genesis (Genesis.html).Physics (Genesis.Physics.html)

Assembly: Genesis.dll filter...

Syntax

```
System.Delegate
```

+ **Genesis.CoreBehaviors.Physics**
public delegate void PhysicHandlerEvent(Scene scene, Game game, object element)
(**Genesis.CoreBehaviors.Physics**)

+ **Genesis.CoreBehaviors.Physics**

Parameters

Type	Name	Description
Scene (Genesis.Core.Scene.html) (Genesis.Core.GameElements.h)	scene	
Game (Genesis.Core.Game.html)	game	
object (https://learn.microsoft.com/dotnet/api/system.object) (Genesis.Graphics.html)	element	

+ **Genesis.Graphics.Physics**

(**Genesis.Graphics.Physics.html**)

+ **Genesis.Graphics.RenderDevice**

PhysicHandlerEvent(object, IntPtr)

+ **Genesis.Graphics.Shaders.Operation**

(**Genesis.Graphics.Shaders.Operation.html**)

public PhysicHandlerEvent(object @object, IntPtr method)

+ **Genesis.Graphics.Shapes**

(**Genesis.Graphics.Shapes.html**)

Parameters

+ **Genesis.Math**

Type
(**Genesis.Math.html**)

object (<https://learn.microsoft.com/dotnet/api/system.object>)

- **Genesis.Physics**

IntPtr (<https://learn.microsoft.com/dotnet/api/system.IntPtr>)

Aabb

(**Genesis.Physics.Aabb.html**)

HitResult

(**Genesis.Physics.HitResult.html**)

MatrixSet

(**Genesis.Physics.MatrixSet.html**)

BeginInvoke(Scene, Game, object, AsyncCallback, object)

(**Genesis.Physics.MouseRay2.html**)

Declaration

PhysicHandler

(**Genesis.Physics.PhysicHandler.html**)

public virtual IAsyncResult BeginInvoke(Scene scene, Game game, object element, AsyncCallback callback, object @object)
(**Genesis.Physics.PhysicHandlerEvent**)

PhysicPropeterys

(**Genesis.Physics.PhysicPropeterys.html**)

Parameters

Type	Name	Description
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
Game (Genesis.Core.Game.html)	<i>game</i>	
object (https://learn.microsoft.com/dotnet/api/system.object)	<i>element</i>	
AsyncCallback (https://learn.microsoft.com/dotnet/api/system.asynccallback)	<i>callback</i>	
+ Genesis.Core.Behaviors.Physics object (https://learn.microsoft.com/dotnet/api/system.object) (Genesis.Core.Behaviors.Physics)	<i>object</i>	

Return Value

Genesis.Core.Behaviors.Physics

Type	Description
+ Genesis.Core.GameElements IAsyncResult (https://learn.microsoft.com/dotnet/api/system.iasyncresult) (Genesis.Core.GameElements.h)	

+ Genesis.Graphics

EndInvoke(IAsyncResult)

Declaration

Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)
public virtual void EndInvoke(IAsyncResult result)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)
Parameters

Type	Name	Description
(Genesis.Graphics.Shaders.OpenGL.html) IAsyncResult (https://learn.microsoft.com/dotnet/api/system.iasyncresult)	<i>result</i>	

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

Invoke(Scene, Game, object)

(Genesis.Math.html)

- Genesis.Physics

(Genesis.Physics.html)
Parameters

(Genesis.Physics.Aabb.html)

Type	Name	Description
HitResult (Genesis.Physics.HitResult.html)		
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
Game (Genesis.Core.Game.html)	<i>game</i>	
MouseRay2 object (https://learn.microsoft.com/dotnet/api/system.object)	<i>element</i>	

Aabb

(Genesis.Physics.Aabb.html)

MatrixSet
(Genesis.Physics.MatrixSet.html)

MatrixSet
(Genesis.Physics.MatrixSet.html)

MouseRay2

object (<https://learn.microsoft.com/dotnet/api/system.object>)

PhysicHandler

(Genesis.Physics.PhysicHandler.html)

PhysicHandlerEvent

(Genesis.Physics.PhysicHandlerEvent.html)

PhysicPropeterys

(Genesis_Physics_PhysicPropeterys.h)

▼

[\(Genesis.Core.Behaviors.html\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)

+ **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)

+ **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)

+ **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)

+ **Genesis.Graphics.Shaders.Operations**
[\(Genesis.Graphics.Shaders.Operations.html\)](#)

+ **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)

+ **Genesis.Math**
[\(Genesis.Math.html\)](#)

- **Genesis.Physics**
[\(Genesis.Physics.html\)](#)

Aabb
[\(Genesis.Physics.Aabb.html\)](#)

HitResult
[\(Genesis.Physics.HitResult.html\)](#)

MatrixSet
[\(Genesis.Physics.MatrixSet.html\)](#)

MouseRay2
[\(Genesis.Physics.MouseRay2.html\)](#)

PhysicHandler
[\(Genesis.Physics.PhysicHandler.html\)](#)

PhysicHandlerEvent
[\(Genesis.Physics.PhysicHandlerEvent.html\)](#)

PhysicPropeterys
[\(Genesis.Physics.PhysicPropeterys.html\)](#)

Struct PhysicPropeterys

Inherited Members

Enter here to filter.

ValueType.Equals(object) (<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

ValueType.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.valuetype.gethashcode>)

ValueType.ToString() (<https://learn.microsoft.com/dotnet/api/system.valuetype.tostring>)

+ **Genesis.Core.Behaviors.Physics**
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))

+ **Genesis.Core.Behaviors.Physics**
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

(**Genesis.Core.Behaviors.Physics**)

Namespace: Genesis (Genesis.html).Physics (Genesis.Physics.html)

Assembly: Genesis.dll

Genesis.Core.GameElements
(**Genesis.Core.GameElements.h**)

+ Genesis.Graphics

(<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

+ Genesis.Graphics.Physics

(<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

Fields

(<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

gravity

(<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

Declaration

+ Genesis.Graphics.Shapes

(<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

+ Genesis.Math

Field Value
(<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

Type Genesis.Physics

float (<https://learn.microsoft.com/dotnet/api/system.single>)

Description

Aabb

(<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

HitResult

(<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

Declaration

MatrixSet (<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

MouseRay2

gravity (<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

PhysicHandler

Value (<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

Type PhysicHandlerEvent

float (<https://learn.microsoft.com/dotnet/api/system.single>)

Description

(<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

(<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

(<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

(<https://learn.microsoft.com/dotnet/api/system.valuetype.equals>)

gravityZ

Declaration

```
public float gravityZ
```



Field Value

Type	Description
+ Genesis.CoreBehaviors.Physics <code>float (https://learn.microsoft.com/dotnet/api/system.single)</code> (Genesis.CoreBehaviors.Physics)	

- + **Genesis.CoreBehaviors.Physics**
[\(Genesis.CoreBehaviors.Physics\)](#)
- + **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.h\)](#)
- + **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)
- + **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)
- + **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice\)](#)
- + **Genesis.Graphics.Shaders.Operations**
[\(Genesis.Graphics.Shaders.Operations\)](#)
- + **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)
- + **Genesis.Math**
[\(Genesis.Math.html\)](#)
- **Genesis.Physics**
[\(Genesis.Physics.html\)](#)

Aabb

[\(Genesis.Physics.Aabb.html\)](#)

HitResult

[\(Genesis.Physics.HitResult.html\)](#)

MatrixSet

[\(Genesis.Physics.MatrixSet.html\)](#)

MouseRay2

[\(Genesis.Physics.MouseRay2.html\)](#)

PhysicHandler

[\(Genesis.Physics.PhysicHandler.html\)](#)

PhysicHandlerEvent

[\(Genesis.Physics.PhysicHandlerEvent.html\)](#)

PhysicPropeterys

[\(Genesis_Physics_PhysicPropeterys.h\)](#)

Declaration

```
protected PhysicsBehavior()
```

▼

Fields

([Genesis.Core.Behaviors.html](#))

+ **Genesis.Core.Behaviors.Physics**
Of [Genesis.Core.Behaviors.html](#)

Declaration: [Genesis.Core.Behaviors.html](#)

(**Genesis.Core.Behaviors.Physics**

public PhysicsBehaviorEvent OnCollide

+ **Genesis.Core.GameElements**

([Genesis.Core.GameElements.html](#))

Field Value

+ **Genesis.Graphics**

Type ([Genesis.Graphics.html](#))

PhysicsBehaviorEvent ([Genesis.Physics.PhysicsBehaviorEvent.html](#))

+ **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

Methods ([Genesis.Graphics.RenderDevice.html](#))

+ **Genesis.Graphics.Shaders.Oper**

Collide(Scene scene, Game game, RigidBody collisionObject)

Declaration: [Genesis.Graphics.Shapes.html](#)

([Genesis.Graphics.Shapes.html](#))

public virtual void Collide(Scene scene, Game game, RigidBody collisionObject)

+ **Genesis.Math**

([Genesis.Math.html](#))

Parameters

- **Genesis.Physics**

Type ([Genesis.Physics.html](#))

Scene ([Genesis.Core.Scene.html](#))

Aabb

Game ([Genesis.Core.Game.html](#))

HitResult

RigidBody ([Genesis.Physics.HitResult.html](#))

MatrixSet

([Genesis.Physics.MatrixSet.html](#))

GetPhysicsObject()

([Genesis.Physics.MouseRay2.html](#))

Declaration

PhysicHandler

([Genesis.Physics.PhysicHandler.html](#))

PhysicsHandlerEvent Object GetPhysicsObject()

([Genesis.Physics.PhysicHandlerEvent.html](#))

PhysicPropertys

Returns ([Genesis.Physics.PhysicPropertys.html](#))

Description

Type	Description
object (https://learn.microsoft.com/dotnet/api/system.object)	

GetPhysicsObject<T>()

Declaration: [Core.Behaviors.html](#)

+ **Genesis.Core.Behaviors.Physics**

public abstract T GetPhysicsObject<T>()
(Genesis.Core.Behaviors.Physics)

+ **Genesis.Core.Behaviors.Physics**

Returns
(Genesis.Core.Behaviors.Physics)

Type	Description
+ Genesis.Core.GameElements	
T	
(Genesis.Core.GameElements.h)	

Type Genesis.Graphics

Name	Description
+ Genesis.Graphics.Physics	

(Genesis.Graphics.Physics.html)

+ **Genesis.Graphics.RenderDevice**

(Genesis.Graphics.RenderDevice.html)

+ **Genesis.Graphics.Shaders.Operations**

(Genesis.Graphics.Shaders.Operations.html)

+ **Genesis.Graphics.Shapes**

(Genesis.Graphics.Shapes.html)

+ **Genesis.Math**

(Genesis.Math.html)

- **Genesis.Physics**

(Genesis.Physics.html)

Aabb

(Genesis.Physics.Aabb.html)

HitResult

(Genesis.Physics.HitResult.html)

MatrixSet

(Genesis.Physics.MatrixSet.html)

MouseRay2

(Genesis.Physics.MouseRay2.html)

PhysicHandler

(Genesis.Physics.PhysicHandler.html)

PhysicHandlerEvent

(Genesis.Physics.PhysicHandlerEvent.html)

PhysicPropeterys

(Genesis.Physics.PhysicPropeterys.html)

Delegate PhysicsBehaviorEvent

Namespace: Genesis (Genesis.html).Physics (Genesis.Physics.html)

Assembly: Genesis.dll filter...

Syntax

`genesis.core.behaviors.h`

+ **Genesis.Core.Behaviors.Physics**
public delegate void PhysicsBehaviorEvent(Scene scene, Game game, object collision)
(**Genesis.Core.Behaviors.Physics**)

+ **Genesis.Core.Behaviors.Physics**

Parameters

Type	Name	Description
Scene (Genesis.Core.Scene.html) (Genesis.Core.GameElements.h)	scene	
Game (Genesis.Core.Game.html)	game	
object (https://learn.microsoft.com/dotnet/api/system.object) (Genesis.Graphics.html)	collision	

+ **Genesis.Graphics.Physics**

(**Genesis.Graphics.Physics.html**)

+ **Genesis.Graphics.RenderDevice**

PhysicsBehaviorEvent(object, IntPtr)

+ **Genesis.Graphics.Shaders.Operation**

(**Genesis.Graphics.Shaders.Operation.html**)

public PhysicsBehaviorEvent(object @object, IntPtr method)

+ **Genesis.Graphics.Shapes**

(**Genesis.Graphics.Shapes.html**)

Parameters

+ **Genesis.Math**

Type
(**Genesis.Math.html**)

object (<https://learn.microsoft.com/dotnet/api/system.object>)

- **Genesis.Physics**

IntPtr (<https://learn.microsoft.com/dotnet/api/system.IntPtr>)

Aabb

(**Genesis.Physics.Aabb.html**)

HitResult

(**Genesis.Physics.HitResult.html**)

MatrixSet

(**Genesis.Physics.MatrixSet.html**)

BeginInvoke(Scene, Game, object, AsyncCallback, object)

(**Genesis.Physics.MouseRay2.html**)

Declaration

PhysicHandler

(**Genesis.Physics.PhysicHandler.html**)

public virtual IAsyncResult BeginInvoke(Scene scene, Game game, object collision, AsyncCallback callback, object @object)
(**Genesis.Physics.PhysicHandlerEvent**)

PhysicPropeterys

(**Genesis.Physics.PhysicPropeterys.html**)

Parameters

Type	Name	Description
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
Game (Genesis.Core.Game.html)	<i>game</i>	
object (https://learn.microsoft.com/dotnet/api/system.object)	<i>collision</i>	
AsyncCallback (https://learn.microsoft.com/dotnet/api/system.asynccallback)	<i>callback</i>	
+ Genesis.Core.Behaviors.Physics object (https://learn.microsoft.com/dotnet/api/system.object) (Genesis.Core.Behaviors.Physics)	<i>object</i>	

Return Value

Genesis.Core.Behaviors.Physics

Type	Description
+ Genesis.Core.GameElements IAsyncResult (https://learn.microsoft.com/dotnet/api/system.iasyncresult) (Genesis.Core.GameElements.h)	

+ Genesis.Graphics

EndInvoke(IAsyncResult)

Declaration

Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)
public virtual void EndInvoke(IAsyncResult result)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

Parameters

Type	Name	Description
IAsyncResult (https://learn.microsoft.com/dotnet/api/system.iasyncresult)	<i>result</i>	

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

Invoke(Scene, Game, object)

(Genesis.Math.html)

- Genesis.Physics

(Genesis.Physics.html)
public virtual void Invoke(Scene scene, Game game, object collision)

Aabb

(Genesis.Physics.Aabb.html)

Type	Name	Description
HitResult (Genesis.Physics.HitResult.html)		
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
Game (Genesis.Core.Game.html)	<i>game</i>	
MouseRay2 (Genesis.Physics.MouseRay2.html)	<i>collision</i>	

PhysicHandler

(Genesis.Physics.PhysicHandler.html)

PhysicHandlerEvent

(Genesis.Physics.PhysicHandlerEvent.html)

PhysicPropeterys

(Genesis.Physics.PhysicPropeterys.html)

▼

[\(Genesis.Core.Behaviors.html\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)

+ **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)

+ **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)

+ **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)

+ **Genesis.Graphics.Shaders.Operations**
[\(Genesis.Graphics.Shaders.Operations.html\)](#)

+ **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)

+ **Genesis.Math**
[\(Genesis.Math.html\)](#)

- **Genesis.Physics**
[\(Genesis.Physics.html\)](#)

Aabb
[\(Genesis.Physics.Aabb.html\)](#)

HitResult
[\(Genesis.Physics.HitResult.html\)](#)

MatrixSet
[\(Genesis.Physics.MatrixSet.html\)](#)

MouseRay2
[\(Genesis.Physics.MouseRay2.html\)](#)

PhysicHandler
[\(Genesis.Physics.PhysicHandler.html\)](#)

PhysicHandlerEvent
[\(Genesis.Physics.PhysicHandlerEvent.html\)](#)

PhysicPropeterys
[\(Genesis_Physics_PhysicPropeterys.html\)](#)

Class PhysicsHandler2D

Represents a 2D physics handler responsible for managing physics simulation in a game.

Enter here to filter...

Inheritance: Genesis.Core.Behaviors.Physics

+ [Object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)

↳ [PhysicHandler](#) ([Genesis.Physics.PhysicHandler.html](#))
↳ [PhysicsHandler2D](#)

+ Genesis.Core.Behaviors.Physics Inherited Members

(Genesis.Core.Behaviors.Physics)

[PhysicHandler.Callbacks](#) ([Genesis.Physics.PhysicHandler.html#Genesis_Physics_PhysicHandler_Callbacks](#))

+ [Genesis.Core.GameElements.Object](#) (<https://learn.microsoft.com/dotnet/api/system.object.ToString>)

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.Equals#system-object-Equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.Equals#system-object-Equals(system-object-object)))

+ [Genesis.Graphics.Object](#) ([https://learn.microsoft.com/dotnet/api/system.object.Equals#system-object-Equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.Equals#system-object-Equals(system-object-object)))

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.Equals#system-object-Equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.Equals#system-object-Equals(system-object-object)))

+ [Genesis.Graphics.Physics.Object](#) (<https://learn.microsoft.com/dotnet/api/system.object.ReferenceEquals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.GetHashCode>)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.GetType>)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.MemberwiseClone>)

+ Genesis.Graphics.RenderDevice Namespace: Genesis.Graphics.Physics

Name: [PhysicsHandler2D](#) ([PhysicsHandler2D.html](#)) ([Physics](#) ([Genesis.Physics.html](#)))

Assembly: Genesis.dll

+ Genesis.Graphics.Shaders.Operator Syntax: [\(Genesis.Graphics.Shaders.Operator\)](#)

+ Genesis.Graphics.Shapes Name: [PhysicsHandler2D](#) ([PhysicsHandler2D.html](#)) : PhysicHandler

([Genesis.Graphics.Shapes.html](#))

+ Genesis.Math Constructors Name: [PhysicsHandler2D](#) ([PhysicsHandler2D.html](#))

- Genesis.Physics

PhysicsHandler2D(float, float)

Aabb

Initializes a new instance of the PhysicsHandler2D class with specified gravity values.

([Genesis.Physics.Aabb.html](#))

Declaration

INetResult

([Genesis.Physics.HitResult.html](#))

MatrixSet PhysicsHandler2D(float gravityX, float gravityY)

([Genesis.Physics.MatrixSet.html](#))

Parameters

([Genesis.Physics.MouseRay2.html](#))

Type

physicHandler

([Genesis.Physics.PhysicHandler.html](#))

float (<https://learn.microsoft.com/dotnet/api/system.single>)

PhysicHandlerEvent

float (<https://learn.microsoft.com/dotnet/api/system.single>)

PhysicHandlerEvent

PhysicPropertys

([Genesis.Physics.PhysicProperties.html](#))

Type	Name	Description
physicHandler	gravityX	The X component of gravity.
float	gravityY	The Y component of gravity.

Declaration

```
public float TickRate { get; set; }
```

Property Value

Type	Description	
(Genesis.Core.Behaviors.html) float (https://learn.microsoft.com/dotnet/api/system.single)		
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)		
+ Genesis.Core.Behaviors.Physics Methods (Genesis.Core.Behaviors.Physics.html)		
+ Genesis.Core.GameElements ManageElement(PhysicsBehavior) (Genesis.Core.GameElements.html)	Manages a physics behavior element by adding its RigidBody to the physics world.	
+ Genesis.Graphics (Genesis.Graphics.html)	Declaration	
+ Genesis.Graphics.Physics (Genesis.Graphics.Physics.html)	<pre>public override void ManageElement(PhysicsBehavior rigidBody)</pre>	
+ Genesis.Graphics.RenderDevice (Genesis.Graphics.RenderDevice.html)	Parameters	
Type	Name	Description
+ Genesis.Graphics.Shaders.Operation (Genesis.Graphics.Shaders.Operation.html)	<i>rigidBody</i>	The PhysicsBehavior representing the rigid body element.
+ Genesis.Graphics.Shapes (Genesis.Graphics.Shapes.html)	Overrides	
PhysicHandler.ManageElement(PhysicsBehavior)		
+ Genesis.Math (Genesis.Math.html)	(Genesis.Math.html)# Genesis_Physics_PhysicHandler_ManageElement_Genesis_Physics_PhysicsBehavior	
- Genesis.Physics (Genesis.Physics.html)		
Process(Scene, Game) (Genesis.Physics.html)	Aabb Processes the physics simulation for the given scene and game. (Genesis.Physics.Aabb.html)	
Declaration	HitResult (Genesis.Physics.HitResult.html)	
MatrixSet	<pre>public override void Process(Scene scene, Game game)</pre> (Genesis.Physics.MatrixSet.html)	
MouseRay2	MouseRay2 (Genesis.Physics.MouseRay2.html)	
Parameters		
Type	Name	Description
PhysicHandler (Genesis.Physics.PhysicHandler.html)		
Scene (Genesis.Core.Scene.html)	<i>scene</i>	The current game scene.
Game (Genesis.Physics.PhysicHandlerEvent.html)	<i>game</i>	The current game instance.
Properties	PhysicProperties (Genesis_Physics_PhysicProperties.html)	

Overrides

PhysicHandler.Process(Scene, Game)

(Genesis.Physics.PsicHandler.html#Genesis_Physics_PsicHandler_Process_Genesis_Core_Scene_Genesis_Core_Game_)

▼

(Genesis.Core.Behaviors.html)

+ **Genesis.Core.Behaviors.Physics**
([Genesis.Core.Behaviors.Physics](#))

+ **Genesis.Core.Behaviors.Physics**
([Genesis.Core.Behaviors.Physics](#))

+ **Genesis.Core.GameElements**
([Genesis.Core.GameElements.h](#))

+ **Genesis.Graphics**
([Genesis.Graphics.html](#))

+ **Genesis.Graphics.Physics**
([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**
([Genesis.Graphics.RenderDevice](#))

+ **Genesis.Graphics.Shaders.Operator**
([Genesis.Graphics.Shaders.Operator](#))

+ **Genesis.Graphics.Shapes**
([Genesis.Graphics.Shapes.html](#))

+ **Genesis.Math**
([Genesis.Math.html](#))

- **Genesis.Physics**
([Genesis.Physics.html](#))

Aabb

([Genesis.Physics.Aabb.html](#))

HitResult

([Genesis.Physics.HitResult.html](#))

MatrixSet

([Genesis.Physics.MatrixSet.html](#))

MouseRay2

([Genesis.Physics.MouseRay2.html](#))

PsicHandler

([Genesis.Physics.PsicHandler.html](#))

PsicHandlerEvent

([Genesis.Physics.PsicHandlerEvent.html](#))

PsicPropeterys

([Genesis_Physics_PsicPropeterys.h](#))

Class PhysicsHandler3D

Represents a 3D physics handler responsible for managing physics simulation in a game.

Enter here to filter...

Inheritance: Core.Behaviors.Physics

+ [Object](#) (<https://learn.microsoft.com/dotnet/api/system.object>)

↳ [PhysicHandler](#) ([Genesis.Physics.PhysicHandler.html](#))
↳ [PhysicsHandler3D](#)

+ Genesis.Core.Behaviors.Physics Inherited Members

(Genesis.Core.Behaviors.Physics)

[PhysicHandler.Callbacks](#) ([Genesis.Physics.PhysicHandler.html#Genesis_Physics_PhysicHandler_Callbacks](#))

+ [Genesis.Core.GameElements](#)

(Genesis.Core.GameElements)

[object.Equals](#) ()

[object.Equals](#) (

[object.ReferenceEquals](#) ()

+ [Genesis.Graphics.Physics](#)

(Genesis.Graphics.Physics)

[object.GetHashCode](#) () ()

[object.GetType](#) () ()

[object.MemberwiseClone](#) () ()

+ Genesis.Graphics.RenderDevice

NameSpace: [Genesis](#) ([Genesis.html](#)) Project: [Physics](#) ([Genesis.Physics.html](#))

Assembly: [Genesis.dll](#)

+ Genesis.Graphics.Shaders.Operation

Syntax: [\(Genesis.Graphics.Shaders.Operation\)](#)

+ Genesis.Graphics.Shapes

↳ [PhysicsHandler3D](#) : [PhysicHandler](#)

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

Constructors

(Genesis.Math.html)

- Genesis.Physics

PhysicsHandler3D(PhysicPropeterys)

Aabb

Initializes a new instance of the PhysicsHandler3D class with specified PhysicPropeterys.

([Genesis.Physics.Aabb.html](#))

Declaration

INodeResult

([Genesis.Physics.HitResult.html](#))

MatrixSet PhysicsHandler3D(PhysicPropeterys propeterys)

([Genesis.Physics.MatrixSet.html](#))

Parameters

([Genesis.Physics.MouseRay2.html](#))

Type

PhysicHandler

([Genesis.Physics.PhysicHandler.html](#))

PhysicPropeterys

PhysicHandlerEvent

([Genesis.Physics.PhysicPropeterys.html](#))

([Genesis.Physics.PhysicHandlerEvent.html](#))

PhysicPropeterys

([Genesis.Physics.PhysicPropeterys.html](#))

Type	Name	Description
PhysicHandler	propeterys	The physics properties containing gravity values.

PhysicsHandler3D(float, float, float)

Initializes a new instance of the PhysicsHandler3D class with specified gravity values.

Declaration

```
public PhysicsHandler3D(float gravityX, float gravityY, float gravityZ)
```

```
(Genesis.Core.Behaviors.html)
```

Parameters

+ Genesis.Core.Behaviors.Physics

Type
Genesis.Core.Behaviors.Physics

float (<https://learn.microsoft.com/dotnet/api/system.single>)

float (<https://learn.microsoft.com/dotnet/api/system.single>)

float (<https://learn.microsoft.com/dotnet/api/system.single>)

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

```
(Genesis.Graphics.html)
```

Properties

+ Genesis.Graphics.Physics

```
(Genesis.Graphics.Physics.html)
```

PhysicsWorld

+ Genesis.Graphics.RenderDevice

Gets or sets the 3D physics world used for simulation.

```
(Genesis.Graphics.RenderDevice)
```

Declaration

+ Genesis.Graphics.Shaders.Operations

```
(Genesis.Graphics.Shaders.Operations.html)
```

```
public DiscreteDynamicsWorld PhysicsWorld { get; set; }
```

+ Genesis.Graphics.Shapes

```
(Genesis.Graphics.Shapes.html)
```

+ Genesis.Math

```
(Genesis.Math.html)
```

DiscreteDynamicsWorld

- Genesis.Physics

```
(Genesis.Physics.html)
```

ProcessPhysics

```
(Genesis.Physics.Aabb.html)
```

Gets or sets a flag indicating whether physics simulation should be processed.

HitResult

```
(Genesis.Physics.HitResult.html)
```

MatrixSet

```
(Genesis.Physics.MatrixSet.html)
```

ProcessPhysics

```
{ get; set; }
```

MouseRay2

```
(Genesis.Physics.MouseRay2.html)
```

Property Value

Type
PhysicsHandler

```
(Genesis.Physics.PhysicsHandler.html)
```

PhysicHandlerEvent

```
bool (https://learn.microsoft.com/dotnet/api/system.boolean)
```

PhysicPropertys

```
(Genesis.Physics.PhysicsPropertys.html)
```

Description

PhysicHandler

PhysicHandlerEvent

bool

PhysicPropertys

(Genesis.Physics.PhysicsPropertys.html)

Methods

ManageElement(PhysicsBehavior)

Manages a physics behavior element by adding its RigidBody to the physics world.

Declaration

[\(Genesis.Core.Behaviors.html\)](#)

+ **Genesis.Core.Behaviors.Physics** ManageElement(PhysicsBehavior rigidBody)

([Genesis.Core.Behaviors.Physics.html](#))

Parameters

+ **Genesis.Core.Behaviors.Physics**

Type **Genesis.Core.Behaviors.Physics**

Name

Description

+ **Genesis.Core.GameElements**

([Genesis.Core.GameElements.html](#))

rigidBody

The PhysicsBehavior representing the rigid body element.

+ **Genesis.Graphics**

Overrides

([Genesis.Graphics.html](#))

PhysicHandler.ManageElement(PhysicsBehavior)

([Genesis_Physics_PhysicHandler.html](#)#Genesis_Physics_PhysicHandler_ManageElement_Genesis_Physics_PhysicsBehavior_)

([Genesis.Graphics.Physics.html](#))

+ **Genesis.Graphics.RenderDevice**

Process(Scene, Game)

([Genesis.Graphics.RenderDevice.html](#))

Processes the physics simulation for the given scene and game.

+ **Genesis.Graphics.Shaders**

Open(Shader, Scene, Game)

([Genesis.Graphics.Shaders.html](#))

+ **Genesis.Graphics.Shapes**

public override void Process(Scene scene, Game game)

([Genesis.Graphics.Shapes.html](#))

+ **Genesis.Math**

Parameters

([Genesis.Math.html](#))

Type

- **Genesis.Physics**

Scene ([Genesis.Core.Scene.html](#))

([Genesis.Physics.html](#))

Game ([Genesis.Core.Game.html](#))

Aabb ([Genesis.Physics.Aabb.html](#))

([Genesis.Physics.Aabb.html](#))

Overrides

Result PhysicHandler.Process(Scene, Game)

([Genesis_Physics_PhysicHandler.html](#)#Genesis_Physics_PhysicHandler_Process_Genesis_Core_Scene_Genesis_Core_

Game_Genesis_Physics_MatrixSet.html)

MouseRay2

([Genesis.Physics.MouseRay2.html](#))

PhysicHandler

([Genesis.Physics.PhysicHandler.html](#))

PhysicHandlerEvent

([Genesis.Physics.PhysicHandlerEvent.html](#))

PhysicPropeterys

([Genesis_Physics_PhysicPropeterys.html](#))

Class Raycast

Inheritance

↳ [object](https://learn.microsoft.com/dotnet/api/system.object) (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [Raycast](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.raycast) (<https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.raycast>)

Inherited Members

[Genesis.Core.Behaviors.Physics](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics)

[object](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics) (<https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics>)
[object.Equals\(object\)](https://learn.microsoft.com/dotnet/api/system.object.equals) (<https://learn.microsoft.com/dotnet/api/system.object.equals>)#[system-object>equals\(system-object\)](https://learn.microsoft.com/dotnet/api/system-object-equals(system-object-object))
+ [Genesis.Core.Behaviors.Physics](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics)
[object.Equals\(object, object\)](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics) (<https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics>)#[system-object>equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system-object>equals(system-object-object))
+ [Genesis.Core.GameElements](https://learn.microsoft.com/dotnet/api/genesis.core.gameelements)
[object.ReferenceEquals\(object, object\)](https://learn.microsoft.com/dotnet/api/genesis.core.gameelements) (<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements>)
[object.GetHashCode\(\)](https://learn.microsoft.com/dotnet/api/system.object.gethashcode) (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
+ [Genesis.Graphics](https://learn.microsoft.com/dotnet/api/genesis.graphics)
[object.MemberwiseClone\(\)](https://learn.microsoft.com/dotnet/api/genesis.graphics) (<https://learn.microsoft.com/dotnet/api/genesis.graphics>)
[\(\[Genesis.Graphics.html\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.html)

Namespace: [Genesis](https://learn.microsoft.com/dotnet/api/genesis.html) (<https://learn.microsoft.com/dotnet/api/genesis.html>)

+ [Genesis.Graphics.Physics](https://learn.microsoft.com/dotnet/api/genesis.graphics.physics)

Assembly: [Genesis.dll](https://learn.microsoft.com/dotnet/api/genesis.dll)

[\(\[Genesis.Graphics.Physics.html\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.physics.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.physics.html)

Syntax

+ [Genesis.Graphics.RenderDevice](https://learn.microsoft.com/dotnet/api/genesis.graphics.renderdevice)

[\(\[Genesis.Graphics.RenderDevice\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.renderdevice\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.renderdevice)

+ [Genesis.Graphics.Shaders.Operation](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.operation)

[\(\[Genesis.Graphics.Shaders.Operation\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.operation\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.operation)

Constructors

+ [Genesis.Graphics.Shapes](https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes)

[\(\[Genesis.Graphics.Shapes.html\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.html)

[Raycast\(Camera, Viewport\)](https://learn.microsoft.com/dotnet/api/genesis.raycast)

+ [Genesis.Math](https://learn.microsoft.com/dotnet/api/genesis.math)

Declaration: [\(\[Genesis.Math.html\]\(https://learn.microsoft.com/dotnet/api/genesis.math.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.math.html)

- [Genesis.Physics](https://learn.microsoft.com/dotnet/api/genesis.physics)

 public Raycast(Camera camera, Viewport viewport)

[\(\[Genesis.Physics.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.html)

Parameters

[Aabb](https://learn.microsoft.com/dotnet/api/genesis.physics.aabb)

[\(\[Genesis.Physics.Aabb.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.aabb.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.aabb.html)

Type: [HitResult](https://learn.microsoft.com/dotnet/api/genesis.physics.hitresult)

[\(\[Genesis.Physics.HitResult.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.hitresult.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.hitresult.html)

Camera

[\(\[Genesis.Graphics.Camera.html\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.camera.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.camera.html)

MatrixSet

[ViewPort](https://learn.microsoft.com/dotnet/api/genesis.math.matrixset) ([\(\[Genesis.Math.MatrixSet.html\]\(https://learn.microsoft.com/dotnet/api/genesis.math.matrixset.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.math.matrixset.html))

MouseRay2

[\(\[Genesis.Physics.MouseRay2.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.mouseray2\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.mouseray2)

PhysicHandler

[\(\[Genesis.Physics.PhysicHandler.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.physichandler\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.physichandler)

PhysicHandlerEvent

[\(\[Genesis.Physics.PhysicHandlerEvent.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.physichandlerevent\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.physichandlerevent)

PhysicPropertys

[\(\[Genesis.Physics.PhysicPropertys.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.physicpropertys\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.physicpropertys)

Properties

[Camera](https://learn.microsoft.com/dotnet/api/genesis.camera)

[\(\[Genesis.Physics.PhysicPropertys.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.physicpropertys\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.physicpropertys)

[PhysicPropertys](https://learn.microsoft.com/dotnet/api/genesis.physics.physicpropertys)

[\(\[Genesis.Physics.PhysicPropertys.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.physicpropertys\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.physicpropertys)

Type	Name	Description
HitResult	<i>camera</i>	
ViewPort	<i>viewport</i>	

Declaration

```
public Camera Camera { get; set; }
```

Property Value

Type	Description
(Genesis.Core.Behaviors.html) Camera (Genesis.Graphics.Camera.html)	

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

Viewport
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)

+ **Genesis.Graphics**
Property Value
[\(Genesis.Graphics.html\)](#)

Type
+ **Genesis.Graphics.Physics**
Viewport (Genesis.Graphics.Viewport.html)
[\(Genesis.Graphics.Physics.html\)](#)

+ **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)

Methods

+ **Genesis.Graphics.Shaders.Operation**
[\(Genesis.Graphics.Shaders.Operation.html\)](#)

GetEndVec(Camera, Viewport, int, int)
[\(Genesis.Graphics.Shapes.html\)](#)

+ **Genesis.Math**
public static vec4 GetEndVec(Camera camera, Viewport vp, int posX, int posY)
[\(Genesis.Math.html\)](#)

- **Genesis.Physics**
Parameters
[\(Genesis.Physics.html\)](#)

Type	Name	Description
Aabb		
Camera (Genesis.Graphics.Camera.html)	camera	
HitResult Viewport (Genesis.Graphics.Viewport.html) (Genesis.Physics.HitResult.html)	vp	
int (MatrixSet.learn.microsoft.com/dotnet/api/system.int32) (Genesis.Physics.MatrixSet.html)	posX	
int (MouseRay2) (Genesis.Physics.MouseRay2.html)	posY	

Returns [PhysicHandler](#)

Type	Description
PhysicHandlerEvent	
vec4 (Genesis.Physics.PhysicHandlerEvent.html)	

PhysicPropertys

[\(Genesis_Physics_PhysicPropertys.h\)](#)

GetMouseWorldPosition(Camera, Viewport, int, int)

Declaration

```
public static Vec3 GetMouseWorldPosition(Camera camera, Viewport viewport, int mouseX, int mouseY)
```

▼

Parameters

Type	Name	Description
(Genesis.Core.Behaviors.Physics) Camera (Genesis.Graphics.Camera.html)	<i>camera</i>	
(Genesis.Core.Behaviors.Physics) Viewport (Genesis.Graphics.Viewport.html)	<i>viewport</i>	
(Genesis.Core.Behaviors.Physics) int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>mouseX</i>	
(Genesis.Core.GameElements) int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>mouseY</i>	

Returns

Type	Description
(Genesis.Graphics.html) (Genesis.Graphics.Phys.html)	

+ Genesis.Graphics.RenderDevice

GetMouseWorldPosition(int, int)

Declaration

Genesis.Graphics.Shaders.Opener

(Genesis.Graphics.Shaders.Opener)

```
public Vec3 GetMouseWorldPosition(int mouseX, int mouseY)
```

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

Parameters

Type	Name	Description
(Genesis.Math.html) int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>mouseX</i>	
(Genesis.Physics.html) int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>mouseY</i>	

Aabb

Returns

([Genesis.Physics.Aabb.html](#))

Type	Result	Description
(Genesis.Physics.HitResult.html) Vec3 (Genesis.Math.Vec3.html)		

([Genesis.Physics.MatrixSet.html](#))

MouseRay2

GetRayDir(vec4, vec4)

PhysicHandler

([Genesis.Physics.PhysicHandler.html](#))

PhysicHandlerEvent

```
public static Vec3 GetRayDir(vec4 start, vec4 end)
```

PhysicPropertys

([Genesis.Physics.PhysicPropertys.html](#))

Parameters

Type	Name	Description
vec4	<i>start</i>	
vec4	<i>end</i>	

▼

Returns

([Genesis.Core.Behaviors.html](#))

Type	Description
+ Genesis.Core.Behaviors.Physics	(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics](#))

GetStartVec(Camera, Viewport, int, int)

+ Genesis.Core.GameElements

Declaration

([Genesis.Core.GameElements.h](#))

+ Genesis.Graphics

vec4 GetStartVec(Camera camera, Viewport vp, int posX, int posY)

([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](#))

+ [Genesis.Graphics.RenderDevice](#)

([Genesis.Graphics.RenderDevice](#))

Viewport ([Genesis.Graphics.Viewport.html](#))

+ Genesis.Graphics.Shaders.Oper

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

([Genesis.Graphics.Shaders.Oper](#))

int (<https://learn.microsoft.com/dotnet/api/system.int32>)

+ Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

- Genesis.Physics

([Genesis.Physics.html](#))

GetViewProjectionMatrix(Camera)

Aabb

([Genesis.Physics.Aabb.html](#))

Declaration

HitResult

([Genesis.Physics.HitResult.html](#))

public static MatrixSet GetViewProjectionMatrix(Camera camera)

MatrixSet

([Genesis.Physics.MatrixSet.html](#))

Parameters

([Genesis.Physics.MouseRay2.html](#))

Type

PhysicHandler

([Genesis.Physics.PhysicHandler.html](#))

PhysicHandlerEvent

([Genesis.Physics.PhysicHandlerEvent](#))

PhysicPropertys

([Genesis.Physics.PhysicPropertys.html](#))

Returns

([Genesis.Physics.PhysicPropertys.html](#))

Type	Name	Description
Camera	<i>camera</i>	

Type	Description
MatrixSet (Genesis.Physics.MatrixSet.html)	

PerformCast(Camera, Viewport, PhysicHandler, int, int)

Declaration: [CORE.BEHAVIORS.HTML](#)

+ Genesis.Core.Behaviors.Physics

```
public static HitResult PerformCast(Camera camera, Viewport viewport, PhysicHandler physicHandler, int posX, int posY)
```

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics](#))

Parameters

Type	Name	Description
Genesis.Core.GameElements		
(Genesis.Core.GameElements.html)		
Camera (Genesis.Graphics.Camera.html)	camera	
+ Genesis.Graphics		
Viewport (Genesis.Graphics.Viewport.html)	viewport	
(Genesis.Graphics.html)		
PhysicHandler (Genesis.Physics.PhysicHandler.html)	physicHandler	
+ Genesis.Graphics.Physics		
int (https://learn.microsoft.com/dotnet/api/system.int32)	posX	
(Genesis.Graphics.Physics.html)		
int (https://learn.microsoft.com/dotnet/api/system.int32)	posY	
+ Genesis.Graphics.RenderDevice		
(Genesis.Graphics.RenderDevice.html)		
Returns		

+ Genesis.Graphics.Shaders.Operator

```
(Genesis.Graphics.Shaders.Operator.html)
HitResult (Genesis.Physics.HitResult.html)
```

Description

+ Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](#))

PerformCast(PhysicHandler, int, int)

Declaration: [GENESIS.MATH.HTML](#)

([Genesis.Math.html](#))

- Genesis.Physics

```
public HitResult PerformCast(PhysicHandler physicHandler, int posX, int posY)
```

Aabb

Parameters

([Genesis.Physics.Aabb.html](#))

Type	Name	Description
HitResult		
(Genesis.Physics.HitResult.html)		
PhysicHandler	physicHandler	
MatrixSet		
(Genesis.Physics.MatrixSet.html)		
int (https://learn.microsoft.com/dotnet/api/system.int32)	posX	
MouseRay2		
int (https://learn.microsoft.com/dotnet/api/system.int32)	posY	
PhysicHandler		
Returns		
PhysicHandlerEvent		
(Genesis.Physics.PhysicHandlerEvent.html)		
HitResult		
(Genesis.Physics.HitResult.html)		
PhysicHandlerEvent		
(Genesis.Physics.PhysicHandlerEvent.html)		

▼

[\(Genesis.Core.Behaviors.html\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)

+ **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)

+ **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)

+ **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)

+ **Genesis.Graphics.Shaders.Operations**
[\(Genesis.Graphics.Shaders.Operations.html\)](#)

+ **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)

+ **Genesis.Math**
[\(Genesis.Math.html\)](#)

- **Genesis.Physics**
[\(Genesis.Physics.html\)](#)

Aabb
[\(Genesis.Physics.Aabb.html\)](#)

HitResult
[\(Genesis.Physics.HitResult.html\)](#)

MatrixSet
[\(Genesis.Physics.MatrixSet.html\)](#)

MouseRay2
[\(Genesis.Physics.MouseRay2.html\)](#)

PhysicHandler
[\(Genesis.Physics.PhysicHandler.html\)](#)

PhysicHandlerEvent
[\(Genesis.Physics.PhysicHandlerEvent.html\)](#)

PhysicPropeterys
[\(Genesis.Physics.PhysicPropeterys.html\)](#)

Namespace Genesis.UI

Classes

▼ Enter here to filter...

Canvas ([Genesis.Core.Behaviors.Physics.Canvas.html](#))
([Genesis.Core.Behaviors.Physics](#))

ImageButton ([Genesis.UI.ImageButton.html](#))
([Genesis.Core.Behaviors.Physics](#))

Label ([Genesis.UI.Label.html](#))
([Genesis.Core.GameElements](#))

ListItem ([Genesis.UI.ListItem.html](#))
([Genesis.Graphics](#))

ListSelector ([Genesis.UI.ListSelector.html](#))
([Genesis.Graphics.Physics](#))

Panel ([Genesis.UI.Panel.html](#))
([Genesis.Graphics.RenderDevice](#))

ProgressBar ([Genesis.UI.ProgressBar.html](#))
([Genesis.Graphics.Shaders.OpenGL](#))
Progressbar Class

+ **Genesis.Graphics.Shapes**

UIParser ([Genesis.UI.UIParser.html](#))

+ **Genesis.Math** Has funtions to parse an json object as an widget.
([Genesis.Math.html](#))

Widget ([Genesis.UI.Widget.html](#))
([Genesis.Physics](#))

Delegates ([Genesis.UI.Delegate.html](#))

Canvas ([Genesis.UI.Canvas.html](#))

ListItemBehavior ([Genesis.UI.ListItemBehavior.html](#))
([Genesis.UI.ImageButton.html](#))

Label ([Genesis.UI.Label.html](#))

ListSelectorBehavior ([Genesis.UI.ListSelectorBehavior.html](#))
([Genesis.UI.ListItem.html](#))

UIEvent ([Genesis.UI.UIEvent.html](#))
([Genesis.UI.ListBehavior.html](#))

ListSelector

UIParseHandler ([Genesis.UI.UIParseHandler.html](#))
([ListSelectorBehavior](#))

([Genesis.UI.ListSelectorBehavior.html](#))

Panel ([Genesis.UI.Panel.html](#))

▼

- + **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)
- + **Genesis.Core.Behaviors.Physics2D**
[\(Genesis.Core.Behaviors.Physics2D.html\)](#)
- + **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)
- + **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)
- + **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)
- + **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)
- + **Genesis.Graphics.Shaders.Operator**
[\(Genesis.Graphics.Shaders.Operator.html\)](#)
- + **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)
- + **Genesis.Math**
[\(Genesis.Math.html\)](#)
- + **Genesis.Physics**
[\(Genesis.Physics.html\)](#)
- **Genesis.UI (Genesis.UI.html)**
 - Canvas ([Genesis.UI.Canvas.html](#))
 - ImageButton
([Genesis.UI.ImageButton.html](#))
 - Label ([Genesis.UI.Label.html](#))
 - ListItem
([Genesis.UI.ListItem.html](#))
 - ListItemBehavior
([Genesis.UI.ListItemBehavior.html](#))
 - ListSelector
([Genesis.UI.ListSelector.html](#))
 - ListSelectorBehavior
([Genesis.UI.ListSelectorBehavior.html](#))
 - Panel ([Genesis.UI.Panel.html](#))

Class Canvas

Inheritance

	Name	Description
name		
location		
size		

Properties

Enabled

Declaration



```
public bool Enabled { get; set; }
```

+ **Genesis.Core.Behaviors.Physics**

(**Genesis.Core.Behaviors.Physics**)

Property Value

+ **Genesis.Core.Behaviors.Physics**

Type (**Genesis.Core.Behaviors.Physics**)

bool (<https://learn.microsoft.com/dotnet/api/system.boolean>)

+ **Genesis.Core.GameElements**

(**Genesis.Core.GameElements.h**)

Location

(**Genesis.Graphics.html**)

Declaration

+ **Genesis.Graphics.Physics**

(**Genesis.Graphics.Physics.html**)

+ **Genesis.Graphics.RenderDevice**

Property Value

(**Genesis.Graphics.RenderDevice**)

Type

+ **Genesis.Graphics.Shaders.Operation**

Value (<https://learn.microsoft.com/dotnet/api/system.math.vector3>)

(**Genesis.Graphics.Shaders.Operation**)

+ **Genesis.Graphics.Shapes**

(**Genesis.Graphics.Shapes.html**)

Name

+ **Genesis.Math**

Declaration

(**Genesis.Math.html**)

+ **Genesis.Physics**

Name { get; set; }

(**Genesis.Physics.html**)

Property Value

Genesis.UI (<https://learn.microsoft.com/dotnet/api/genesis.ui>)

Type **Canvas** (<https://learn.microsoft.com/dotnet/api/genesis.ui.canvas>)

ImageButton

string (<https://learn.microsoft.com/dotnet/api/system.string>)

(<https://learn.microsoft.com/dotnet/api/genesis.ui.imagebutton>)

Label (<https://learn.microsoft.com/dotnet/api/genesis.ui.label>)

ListItem

Size (<https://learn.microsoft.com/dotnet/api/genesis.ui.listitem>)

ListItemBehavior

Declaration (<https://learn.microsoft.com/dotnet/api/genesis.ui.listitembehavior>)

ListSelector

public **Vec3** Size { get; set; }

(<https://learn.microsoft.com/dotnet/api/genesis.ui.listselector>)

ListSelectorBehavior

(<https://learn.microsoft.com/dotnet/api/genesis.ui.listselectorbehavior>)

Property Value Panel (<https://learn.microsoft.com/dotnet/api/genesis.ui.panel>)

Description

Type	Description
Vec3 (Genesis.Math.Vec3.html)	

Widgets

Declaration

+ **Genesis.Core.Behaviors.Physics**

(**Genesis.Core.Behaviors.Physics**
public List<Widget> Widgets { get; set; })

+ **Genesis.Core.Behaviors.Physics**

(**Genesis.Core.Behaviors.Physics**
Property Value)

+ **Genesis.Core.GameElements**

(**Genesis.Core.GameElements**
List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1) <

+ **Genesis.Graphics**

(**Genesis.Graphics.html**)

+ **Genesis.Graphics.Physics**

(**Genesis.Graphics.Physics.html**)

Methods

+ **Genesis.Graphics.RenderDevice**

(**Genesis.Graphics.RenderDevice**
AddWidget(Widget))

+ **Genesis.Graphics.Shaders.Operator**

Adds a entity to the canvas
(**Genesis.Graphics.Shaders.Operator**)

Declaration

+ **Genesis.Graphics.Shapes**

(**Genesis.Graphics.Shapes.html**)

public void AddWidget(Widget entity)

+ **Genesis.Math**

(**Genesis.Math.html**)

+ **Genesis.Physics**

(**Genesis.Physics.html**)

Widget (Genesis.UI.Widget.html)

- **Genesis.UI (Genesis.UI.html)**

Canvas (Genesis.UI.Canvas.html)

CenterWidget(Canvas, Widget)

(Genesis.UI.ImageButton.html)

Centers the widget in the middle of the canvas

Label (Genesis.UI.Label.html)

Declaration

(Genesis.UI.ListItem.html)

ListItemBehavior

public static void CenterWidget(Canvas canvas, Widget widget)

(Genesis.UI.ListItemBehavior.html)

ListSelector

Parameters

(Genesis.UI.ListSelector.html)

ListSelectorBehavior

(Genesis.UI.ListSelectorBehavior.html)

Panel (Genesis.UI.Panel.html)

Type	Name	Description
Canvas (Genesis.UI.Canvas.html)	canvas	
Widget (Genesis.UI.Widget.html)	widget	

▼

GetBounds()

+ Genesis.Core.Behaviors.Physics

Re (Genesis.Core.Behaviors.Physics)

Declaration (Genesis.Core.Behaviors.Physics)

(Genesis.Core.Behaviors.Physics)

public Rect GetBounds()

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

Returns

+ Genesis.Graphics

Type (Genesis.Graphics.html)

Rect (Genesis.Math.Rect.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

GetScreenBounds(RenderDevice)

(Genesis.Graphics.RenderDevice)

Returns the screen bounds from the canvas

+ Genesis.Graphics.Shaders.Oper

Declaration (Genesis.Graphics.Shaders.Ope

+ Genesis.Graphics.Shapes

GetScreenBounds()

(Genesis.Graphics.Shapes.html)

Returns

+ Genesis.Math

Type (Genesis.Math.html)

+ Genesis.Physics

(Genesis.Physics.html)

- Genesis.UI (Genesis.UI.html)

GetWidget(string)

Canvas (Genesis.UI.Canvas.html)

Return ImageButton with the specified name, searching within entities and their children.

(Genesis.UI.ImageButton.html)

Declaration Label (Genesis.UI.Label.html)

ListItem

Parameters Widget (Genesis.UI.Widget.html)

ListItemBehavior

(Genesis.UI.ListItemBehavior.html)

Parameters

ListSelector

Type (Genesis.UI.ListSelector.html)

ListSelectorBehavior

string (<https://learn.microsoft.com/dotnet/api/system.string>)

(Genesis.UI.ListSelectorBehavior.htr)

Panel (Genesis.UI.Panel.html)

Description

Type	Description
Rect (Genesis.Math.Rect.html)	

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	name	The name to search for.

Returns

Type	Description
Widget (Genesis.UI.Widget.html)	The widget with the specified name, or null if not found.



LoadCanvas(string, AssetManager, UIParser)

+ **Genesis.Core.Behaviors.Physics**

Loads a canvas from a specified JSON file using a UI parser and asset manager.
(Genesis.Core.Behaviors.Physics)

Declaration

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics)

public static Canvas LoadCanvas(string File, AssetManager assets, UIParser parser)

+ **Genesis.Core.GameElements**

(Genesis.Core.GameElements.h)

+ **Genesis.Graphics**

(Genesis.Graphics.html)

string (https://learn.microsoft.com/dotnet/api/system.string)

+ **Genesis.Graphics.Physics**

(Genesis.Graphics.Physics.html)

AssetManager

+ **Genesis.Graphics.RenderDevice**

(Genesis.Core.AssetManager.html)

(Genesis.Graphics.RenderDevice)

UIParser (Genesis.UI.UIParser.html)

+ **Genesis.Graphics.Shaders.Operator**

(Genesis.Graphics.Shaders.Operator.html)

Returns

+ **Genesis.Graphics.Shapes**

(Genesis.Graphics.Shapes.html)

+ **Genesis.Math**

(Genesis.Math.html)

+ **Genesis.Physics**

LoadWidget(JObject, AssetManager, UIParser)

(Genesis.Physics.html)

Loads a widget from provided JSON data using a UI parser and asset manager.

- **Genesis.UI (Genesis.UI.html)**

Declaration

Canvas (Genesis.UI.Canvas.html)

ImageButton

p(Genesis.UILib.ImageButton.html) Widget(JObject data, AssetManager assets, UIParser parser)

Label (Genesis.UI.Label.html)

ListItem

Parameters

(Genesis.UI.ListItem.html)

Type ListItemBehavior

(Genesis.UI.ListItemBehavior.html)

JObject

ListSelector

(Genesis.UI.ListSelector.html)

AssetManager

(Genesis.UILib.AssetManager.html)

Panel (Genesis.UI.Panel.html)

Name

Description

File

Path to the JSON file containing canvas configuration.

assets

Asset manager for managing resources such as images, fonts, etc.

parser

UI parser that contains the logic for parsing the JSON data.

+ **Genesis.Graphics.Shapes**

(Genesis.Graphics.Shapes.html)

+ **Genesis.Math**

(Genesis.Math.html)

+ **Genesis.Physics**

LoadWidget(JObject, AssetManager, UIParser)

(Genesis.Physics.html)

Loads a widget from provided JSON data using a UI parser and asset manager.

- **Genesis.UI (Genesis.UI.html)**

Declaration

Canvas (Genesis.UI.Canvas.html)

ImageButton

p(Genesis.UILib.ImageButton.html) Widget(JObject data, AssetManager assets, UIParser parser)

Label (Genesis.UI.Label.html)

ListItem

Parameters

(Genesis.UI.ListItem.html)

Type ListItemBehavior

(Genesis.UI.ListItemBehavior.html)

JObject

ListSelector

(Genesis.UI.ListSelector.html)

AssetManager

(Genesis.UILib.AssetManager.html)

Name

Description

data

JSON data containing the configuration of the widget to be created.

assets

Asset manager for managing resources such as images, fonts, etc.

Type	Name	Description
UIParser (Genesis.UI.UIParser.html)	<i>parser</i>	UI parser that contains the logic for parsing the JSON data.

Returns

Type	Description
Widget (Genesis.UI.Widget.html) + Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)	The created widget based on the JSON data.

Dispose (Game, Scene)
(Genesis.Core.Behaviors.Physics)
Dispose the canvas
+ Genesis.Core.GameElements
Declaration
(Genesis.Core.GameElements.h)

+ Genesis.Graphics
public void Dispose (Game game, Scene scene)
(Genesis.Graphics.html)

Parameters

Type	Name	Description
+ Genesis.Graphics.RenderDevice (Genesis.Graphics.RenderDevice)	<i>game</i>	
Scene (Genesis.Core.Scene.html)	<i>scene</i>	

+ Genesis.Graphics.Shaders.Operator
(Genesis.Graphics.Shaders.Operator)

OnInit (Game, Scene)
(Genesis.Graphics.Shapes)
(Genesis.Graphics.Shapes.html)
Initializes the canvas

Parameters

- Genesis.Math
Declaration
(Genesis.Math.html)
+ Genesis.Physics
public void OnInit (Game game, Scene scene)
(Genesis.Physics.html)

Parameters

- Genesis.UI (Genesis.UI.html)
Type
Canvas (Genesis.UI.Canvas.html)
Game (Genesis.Core.Game.html)
(Genesis.UI.ImageButton.html)
Scene (Genesis.Core.Scene.html)
Label (Genesis.UI.Label.html)

ListItem
(Genesis.UI.ListItem.html)

OnRender (Game, IRenderDevice, Scene)

Declaration
(Genesis.UI.ListItemBehavior.html)

Renders the canvas

ListSelector
(Genesis.UI.ListSelector.html)
Declaration
ListSelectorBehavior
(Genesis.UI.ListSelectorBehavior.html)
Panel (Genesis.UI.Panel.html)

```
public void OnRender(Game game, IRenderDevice renderDevice, Scene scene)
```

Parameters

Type	Name	Description
Game (Genesis.Core.Game.html)	game	
+ Genesis.Core.Behaviors.Physics IRenderDevice (Genesis.Graphics.IRenderDevice.html) (Genesis.Core.Behaviors.Physics)	renderDevice	
Scene (Genesis.Core.Scene.html)	scene	
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)		

OnUpdate(Game, Scene)

(Genesis.Core.GameElements.h)
Update the canvas

+ Genesis.Graphics
Declaration
(Genesis.Graphics.html)

+ Genesis.Graphics.Physics
game, Scene scene)
(Genesis.Graphics.Physics.html)

Parameters

+ Genesis.Graphics.RenderDevice

Type	Name	Description
Genesis.Graphics.RenderDevice	game	
+ Genesis.Graphics.Shaders.Operator (Genesis.Graphics.Shaders.Operator)	scene	

+ Genesis.Graphics.Shapes
(Genesis.Graphics.Shapes.html)

+ Genesis.Math
(Genesis.Math.html)

+ Genesis.Physics
(Genesis.Physics.html)

- Genesis.UI (Genesis.UI.html)

Canvas (Genesis.UI.Canvas.html)

ImageButton

(Genesis.UI.ImageButton.html)

Label (Genesis.UI.Label.html)

ListItem

(Genesis.UI.ListItem.html)

ListItemBehavior

(Genesis.UI.ListItemBehavior.html)

ListSelector

(Genesis.UI.ListSelector.html)

ListSelectorBehavior

(Genesis.UI.ListSelectorBehavior.html)

Panel (Genesis.UI.Panel.html)

Class ImageButton

Inheritance

↳ Enter here to filter
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ Widget ([Genesis.Core.Behaviors.html](https://genesis.corebehaviors.html)).
+ **Genesis.Core.Behaviors.Physics**
 ↳ ImageButton
 (Genesis.Core.Behaviors.Physics)
Inherited Members
+ **Genesis.Core.Behaviors.Physics**
Widget.AddChildren(Widget) ([Genesis.Core.Behaviors.html](https://genesis.corebehaviors.html)#Genesis_UI_Widget_AddChildren_Genesis_UI_Widget_)
Widget.OnInit(Game, Scene, Canvas)
([Genesis.Core.Behaviors.html](https://genesis.corebehaviors.html)#Genesis_UI_Widget_OnInit_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canvas_)
+ **Genesis.Core.GameElements**
)
 (Genesis.Core.GameElements.h)
Widget.OnUpdate(Game, Scene, Canvas)
([Genesis.Core.Elements.html](https://genesis.coreelements.html)#Genesis_UI_Widget_OnUpdate_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canvas_)
+ **Genesis.Graphics**
Widget.OnDispose(Game, Scene, Canvas)
([Genesis.Graphics.html](https://genesis.graphics.html)#Genesis_UI_Widget_OnDispose_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canvas_)
+ **Genesis.Graphics.Physics**
Widget.GetRelativePos(Canvas) ([Genesis.Graphics.html](https://genesis.graphics.html)#Genesis_UI_Widget_GetRelativePos_Genesis_UI_Canvas_)
+ **Genesis.Graphics.RenderDevice**
Widget.GetChildren(string) ([Genesis.Graphics.html](https://genesis.graphics.html)#Genesis_UI_Widget_GetChildren_System_String_)
Widget.GetRelativeBounds2D(Canvas)
+ **Genesis.Graphics.Shaders.OpenGL**
Widget.IsHover(Game, Scene, Canvas)
+ **Genesis.Graphics.Shapes**
Widget.FindChildren(string) ([Genesis.Shapes.html](https://genesis.shapes.html)#Genesis_UI_Widget_FindChildren_System_String_)
Widget.Name ([Genesis.Shapes.html](https://genesis.shapes.html)#Genesis_UI_Widget_Name)
Widget.Location ([Genesis.Math.html](https://genesis.math.html)#Genesis_UI_Widget_Location)
Widget.Size ([Genesis.Math.html](https://genesis.math.html)#Genesis_UI_Widget_Size)
Widget.Parent ([Genesis.Math.html](https://genesis.math.html)#Genesis_UI_Widget_Parent)
Widget.Children ([Genesis.Physics.html](https://genesis.physics.html)#Genesis_UI_Widget_Children)
Widget.Enabled ([Genesis.Physics.html](https://genesis.physics.html)#Genesis_UI_Widget_Enabled)
Widget.Debug ([Genesis.UI.html](https://genesis.ui.html)#Genesis_UI_Widget_Debug)
Widget.MouseEnter ([Genesis.UI.html](https://genesis.ui.html)#Genesis_UI_Widget_MouseEnter)
Widget.MouseLeave ([Genesis.UI.html](https://genesis.ui.html)#Genesis_UI_Widget_MouseLeave)
Widget.Click ([Genesis.UI.html](https://genesis.ui.html)#Genesis_UI_Widget_Click)
object.Equals([System.Object](https://learn.microsoft.com/dotnet/api/system.object)) ([Genesis.UI.html](https://genesis.ui.html))
object.Equals([System.Object](https://learn.microsoft.com/dotnet/api/system.object)) ([Genesis.UI.html](https://genesis.ui.html))
object.GetHashCode() ([Genesis.UI.html](https://genesis.ui.html))
object.GetType() ([Genesis.UI.html](https://genesis.ui.html))
object.MemberwiseClone() ([Genesis.UI.html](https://genesis.ui.html))
object.SelectorBehavior() ([Genesis.UI.html](https://genesis.ui.html))
 (Genesis.UI.SelectorBehavior.h)
Namespace: **Genesis** ([Genesis.html](https://genesis.html)).UI ([Genesis.UI.html](https://genesis.ui.html))
 Panel ([Genesis.Panel.html](https://genesis.panel.html))

Syntax

```
public class ImageButton : Widget
```

▼

Constructors

+ [Genesis.Core.Behaviors.Physics](#) ([Genesis.Core.Behaviors.Physics](#))**ImageButton(string, Vec3, Vec3, Texture, Texture)**+ [Genesis.Core.Behaviors.Physics](#) Declaration ([Genesis.Core.Behaviors.Physics](#))+ [Genesis.Core.GameElements](#)

public ImageButton(string name, Vec3 location, Vec3 size, Texture normalTexture, Texture hoverTexture);

+ [Genesis.Graphics](#) Parent ([Genesis.Graphics.html](#))

Type

+ [Genesis.Graphics.Physics](#) ([Genesis.Graphics.Physics.html](#))string ([System.String.html](#)) ([System.String.html](#)) ([System.String.html](#))

Name

Description

name

location

size

normalTexture

hoverTexture

+ [Genesis.Graphics.RenderDevice](#) ([Genesis.Graphics.RenderDevice](#))Vec3 ([Genesis.Math.Vec3.html](#))+ [Genesis.Graphics.Shaders.OpenGL](#) ([Genesis.Graphics.Shaders.OpenGL](#))Texture ([Genesis.Graphics.Texture.html](#))+ [Genesis.Graphics.Shapes](#) ([Genesis.Graphics.Shapes.html](#))+ [Genesis.Math](#)**Properties** ([Genesis.Math.html](#))+ [Genesis.Physics](#)**HoverTexture** ([Genesis.Physics.html](#))Declaration - [Genesis.UI \(Genesis.UI.html\)](#)

```
Canvас (Genesis.UI.Canvas.html)
public Texture HoverTexture { get; set; }
```

ImageButton

 ([Genesis.UI.ImageButton.html](#))Properties ([Genesis.UI.Label.html](#))

Type

 ListItem ([Genesis.UI.ListItem.html](#))TextList ([Genesis.Graphics.Texture.html](#)) ([Genesis.UI.ListItemBehavior.html](#))

ListSelector

 ([Genesis.UI.ListSelector.html](#))**NormalTexture**

ListSelectorBehavior

Declaration ([Genesis.UI.ListSelectorBehavior.html](#))Panel ([Genesis.UI.Panel.html](#))

```
public Texture NormalTexture { get; set; }
```

Property Value

Type	Description
Texture (Genesis.Graphics.Texture.html)	
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)	
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)	
+ Genesis.Core.GameElements OnRender(Game, IRenderDevice, Scene, Canvas) (Genesis.Core.GameElements.html)	Renders the entity.
+ Genesis.Graphics (Genesis.Graphics.html)	Declaration
+ Genesis.Graphics.Physics public override void OnRender(Game game, IRenderDevice renderDevice, Scene scene, Canvas canvas) (Genesis.Graphics.Physics.html)	
+ Genesis.Graphics.RenderDevice (Genesis.Graphics.RenderDevice.html)	Parameters
+ Type Genesis.Graphics.Shaders.Operation (Genesis.Graphics.Shaders.Operation.html)	Name
Game (Genesis.Core.Game.html)	game
+ Genesis.Graphics.Shapes IRenderDevice (Genesis.Graphics.IRenderDevice.html) (Genesis.Graphics.Shapes.html)	renderDevice
Scene (Genesis.Core.Scene.html)	scene
+ Genesis.Math Canvas (Genesis.UI.Canvas.html) (Genesis.Math.html)	canvas
④ Genesis.Physics (Genesis.Physics.html)	
Widget (Genesis.UI.Widget.html)	IRenderDevice, Scene, Canvas
- Genesis.UI (Genesis.UI.html)	Genesis.UI.Widget.html#Genesis_UI_Widget_OnRender_Genesis_Core_Game_Genesis_Graphics_I
Canvas (Genesis.UI.Canvas.html)	genesis_Core_Scene_Genesis_UI_Canvas_
ImageButton	
(Genesis.UI.ImageButton.html)	
Label (Genesis.UI.Label.html)	
ListItem	
(Genesis.UI.ListItem.html)	
ListItemBehavior	
(Genesis.UI.ListItemBehavior.html)	
ListSelector	
(Genesis.UI.ListSelector.html)	
ListSelectorBehavior	
(Genesis.UI.ListSelectorBehavior.html)	
Panel (Genesis.UI.Panel.html)	

Class Label

Inheritance

↳ Enter here to filter
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ Widget ([Genesis.Core.Behaviors.Physics.html](https://genesis.corebehaviorsphysics.html))
↳ Label
+ **Genesis.Core.Behaviors.Physics**
 (Genesis.Core.Behaviors.Physics)
Inherited Members
+ **Genesis.Core.Behaviors.Physics**
Widget.AddChildren(Widget) ([Genesis.UI.Widget.html#Genesis_UI_Widget_AddChildren_Genesis_UI_Widget_](https://genesis.corebehaviorsphysics.html#Genesis_UI_Widget_AddChildren_Genesis_UI_Widget_))
Widget.OnInit(Game, Scene, Canvas)
([Genesis.UI.Widget.html#Genesis_UI_Widget_OnInit_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canvas_](https://genesis.corebehaviorsphysics.html#Genesis_UI_Widget_OnInit_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canvas_))
+ **Genesis.Core.GameElements**
 (Genesis.Core.GameElements.h)
Widget.OnUpdate(Game, Scene, Canvas)
([Genesis.UI.Widget.html#Genesis_UI_Widget_OnUpdate_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Can](https://genesis.coregameelements.html#Genesis_UI_Widget_OnUpdate_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canva)
va_")
+ **Genesis.Graphics**
Widget.OnDispose(Game, Scene, Canvas)
+ **Genesis.Graphics.Physics**
Widget.OnDispose(Widget, Game, Scene, Canvas)
+ **Genesis.Graphics.Physics.html**
Widget.GetRelativePos(Canvas) ([Genesis.UI.Widget.html#Genesis_UI_Widget_GetRelativePos_Genesis_UI_Canvas_](https://genesis.coregraphicsphysics.html#Genesis_UI_Widget_GetRelativePos_Genesis_UI_Canvas_))
+ **Genesis.Graphics.RenderDevice**
Widget.GetChildren(string) ([Genesis.UI.Widget.html#Genesis_UI_Widget_GetChildren_System_String_](https://genesis.coregraphicsrenderdevice.html#Genesis_UI_Widget_GetChildren_System_String_))
Widget.GetRelativeBounds(Canvas) ([Genesis.UI.Widget.html#Genesis_UI_Widget_GetRelativeBounds_Genesis_UI_Canvas_](https://genesis.coregraphicsrenderdevice.html#Genesis_UI_Widget_GetRelativeBounds_Genesis_UI_Canvas_))
+ **Genesis.Graphics.Shaders.OpenGL**
Widget.IsHover(Game, Scene, Canvas)
+ **Genesis.Graphics.Shaders.OpenGL**
Widget.IsHover(Widget, Game, Scene, Canvas)
+ **Genesis.Graphics.Shapes**
Widget.FindChildren(string) ([Genesis.UI.Widget.html#Genesis_UI_Widget_FindChildren_System_String_](https://genesis.coregraphicsshapes.html#Genesis_UI_Widget_FindChildren_System_String_))
Widget.Name ([Genesis.UI.Widget.html#Genesis_UI_Widget_Name](https://genesis.coregraphicsshapes.html#Genesis_UI_Widget_Name))
Widget.Location ([Genesis.UI.Widget.html#Genesis_UI_Widget_Location](https://genesis.coregraphicsshapes.html#Genesis_UI_Widget_Location))
Widget.Size ([Genesis.UI.Widget.html#Genesis_UI_Widget_Size](https://genesis.coregraphicsshapes.html#Genesis_UI_Widget_Size))
Widget.Parent ([Genesis.UI.Widget.html#Genesis_UI_Widget_Parent](https://genesis.coregraphicsshapes.html#Genesis_UI_Widget_Parent))
Widget.Children ([Genesis.UI.Widget.html#Genesis_UI_Widget_Children](https://genesis.coregraphicsshapes.html#Genesis_UI_Widget_Children))
Widget.Enabled ([Genesis.UI.Widget.html#Genesis_UI_Widget_Enabled](https://genesis.coregraphicsshapes.html#Genesis_UI_Widget_Enabled))
Widget.Debug ([Genesis.UI.Widget.html#Genesis_UI_Widget_Debug](https://genesis.coregraphicsshapes.html#Genesis_UI_Widget_Debug))
Widget.MouseEnter ([Genesis.UI.Widget.html#Genesis_UI_Widget_MouseEnter](https://genesis.coreui.html#Genesis_UI_Widget_MouseEnter))
Widget.MouseLeave ([Genesis.UI.Widget.html#Genesis_UI_Widget_MouseLeave](https://genesis.coreui.html#Genesis_UI_Widget_MouseLeave))
Widget.Click ([Genesis.UI.Widget.html#Genesis_UI_Widget_Click](https://genesis.coreui.html#Genesis_UI_Widget_Click))
object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))
object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object-system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-system-object-object)))
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
Namespaces:
 Genesis ([Genesis.html](https://genesis.html)) **UI** ([Genesis.UI.html](https://genesis.ui.html))
 Panel ([Genesis.UI.Panel.html](https://genesis.ui.panel.html))

Syntax

```
public class Label : Widget
```



Constructors

+ [Genesis.Core.Behaviors.Physics](#)

[\(Genesis.Core.Behaviors.Physics\)](#)

[Label\(string, Vec3, string, Font, Color\)](#)

+ [Genesis.Core.Behaviors.Physics](#)

[Create a new physics object.](#)

[\(Genesis.Core.Behaviors.Physics\)](#)

Declaration

[Genesis.Core.GameElements](#)

[\(Genesis.Core.GameElements.h\)](#)

```
public Label(string name, Vec3 location, string text, Font font, Color color)
```

+ [Genesis.Graphics](#)

[\(Genesis.Graphics.html\)](#)

Parameters

+ [Genesis.Graphics.Physics](#)

Type

[\(Genesis.Graphics.Physics.html\)](#)

string (<https://learn.microsoft.com/dotnet/api/system.string>)

Name

Description

name

+ [Genesis.Graphics.RenderDevice](#)

Vec3 ([Genesis.Math.Vec3.html](#))

location

+ [Genesis.Graphics.Shaders.OpenGL](#)

string (<https://learn.microsoft.com/dotnet/api/system.string>)

text

+ [Genesis.Graphics.Shapes](#)

[\(Genesis.Graphics.Shapes.html\)](#)

+ [Genesis.Math](#)

[\(Genesis.Math.html\)](#)

+ [Genesis.Physics](#)

[\(Genesis.Physics.html\)](#)

Font

- [Genesis.UI \(Genesis.UI.html\)](#)

Declaration

Canvas ([Genesis.UI.Canvas.html](#))

ImageButton

public Font { get; set; }

([Genesis.UI.ImageButton.html](#))

Label ([Genesis.UI.Label.html](#))

Property Value

ListItem

[\(Genesis.UI.ListItem.html\)](#)

Description

ListItemBehavior

Font ([Genesis.Graphics.Font.html](#))

([Genesis.UI.ListItemBehavior.html](#))

ListSelector

([Genesis.UI.ListSelector.html](#))

ListSelectorBehavior

([Genesis.UI.ListSelectorBehavior.html](#))

Declaration

([Genesis.UI.Panel.html](#))

```
public float FontSize { get; set; }
```

Property Value

Type	Description
float (https://learn.microsoft.com/dotnet/api/system.single)	

+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)

Text Text (Genesis.Core.Behaviors.Physics)

Declaration

+ Genesis.Core.GameElements (Genesis.Core.GameElements.h)

+ Genesis.Graphics Property Value (Genesis.Graphics.html)

Type	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	

+ Genesis.Graphics.RenderDevice (Genesis.Graphics.RenderDevice)

TextColor TextColor (Genesis.Graphics.RenderDevice)

Declaration

+ Genesis.Graphics.Shaders.Operator (Genesis.Graphics.Shaders.Operator)

+ Genesis.Graphics.Shapes (Genesis.Graphics.Shapes.html)

Property Value + Genesis.Math

Type	Description
(Genesis.Math.html)	

+ Genesis.Physics (Genesis.Physics.html)

- Genesis.UI (Genesis.UI.html)

Methods

OnRender (Game, IRenderDevice, Scene, Canvas)

ImageButton (Genesis.UI.ImageButton.html)

ListSelector ListSelector (Genesis.UI.ListSelector.html)

ListSelectorBehavior (Genesis.UI.ListSelectorBehavior.html)

ListSelectorBehavior ListSelectorBehavior (Genesis.UI.ListSelectorBehavior.html)

Panel Panel (Genesis.UI.Panel.html)

Type	Name	Description
Game (Genesis.Core.Game.html)	<i>game</i>	
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	<i>renderDevice</i>	
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
Canvas (Genesis.UI.Canvas.html)	<i>canvas</i>	
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics) Widget.OnRender(Game, IRenderDevice, Scene, Canvas) + Genesis.Core.Behaviors.Physics (Genesis.UI.Widget.html#Genesis_UI_Widget_OnRender_Genesis_Core_Game_Genesis_Graphics_IRenderDevice_Genesis_Core_Scene_Genesis_UI_Canvas_)		
+ Genesis.Core.GameElements (Genesis.Core.GameElements.h)		
+ Genesis.Graphics (Genesis.Graphics.html)		
+ Genesis.Graphics.Physics (Genesis.Graphics.Physics.html)		
+ Genesis.Graphics.RenderDevice (Genesis.Graphics.RenderDevice)		
+ Genesis.Graphics.Shaders.Operator (Genesis.Graphics.Shaders.Operator)		
+ Genesis.Graphics.Shapes (Genesis.Graphics.Shapes.html)		
+ Genesis.Math (Genesis.Math.html)		
+ Genesis.Physics (Genesis.Physics.html)		
- Genesis.UI (Genesis.UI.html)		
Canvas (Genesis.UI.Canvas.html)		
ImageButton (Genesis.UI.ImageButton.html)		
Label (Genesis.UI.Label.html)		
ListItem (Genesis.UI.ListItem.html)		
ListItemBehavior (Genesis.UI.ListItemBehavior.html)		
ListSelector (Genesis.UI.ListSelector.html)		
ListSelectorBehavior (Genesis.UI.ListSelectorBehavior.html)		
Panel (Genesis.UI.Panel.html)		

Class ListItem

Inheritance

<p>↳ Enter here to filter</p> <p>↳ object (https://learn.microsoft.com/dotnet/api/system.object)</p> <p>↳ ListItem</p> <p>+ Genesis.Core.Behaviors.Physics</p> <p>Inherited Members</p> <p>(Genesis.Core.Behaviors.Physics)</p> <p>object.ToString() (https://learn.microsoft.com/dotnet/api/system.object.tostring)</p> <p>+ Genesis.Core.Behaviors.Physics</p> <p>object.Equals(object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))</p> <p>(Genesis.Core.Behaviors.Physics)</p> <p>object.Equals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object))</p> <p>(Genesis.Core.GameElements.h)</p> <p>object.ReferenceEquals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.referenceequals)</p> <p>object.GetHashCode() (https://learn.microsoft.com/dotnet/api/system.object.gethashcode)</p> <p>object.GetType() (https://learn.microsoft.com/dotnet/api/system.object.gettype)</p> <p>object.MemberwiseClone() (https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)</p> <p>+ Genesis.Graphics.Physics</p> <p>Namespace: Genesis (Genesis.html).UI (Genesis.UI.html)</p> <p>(Genesis.Graphics.Physics.html)</p> <p>Assembly: Genesis.dll</p> <p>Genesis.Graphics.RenderDevice</p> <p>(Genesis.Graphics.RenderDevice)</p> <p>public class ListItem</p> <p>+ Genesis.Graphics.Shaders.Operator</p> <p>(Genesis.Graphics.Shaders.Operator)</p> <p>+ Genesis.Graphics.Shapes</p> <p>(Genesis.Graphics.Shapes.html)</p> <p>CONSTRUCTORS</p> <p>ListItem(string, string, ListItemBehavior)</p> <p>(Genesis.Math.html)</p> <p>Declaration</p> <p>+ Genesis.Physics</p> <p>(Genesis.Physics.html)</p> <p>public ListItem(string name, string text, ListItemBehavior func)</p> <p>- Genesis.UI (Genesis.UI.html)</p> <p>Parameters</p> <p>Canvas (Genesis.UI.Canvas.html)</p> <tr><td>Type</td><td>ImageButton (Genesis.UI.ImageButton.html)</td><td>Name</td><td>Description</td></tr> <tr><td></td><td>string (https://learn.microsoft.com/dotnet/api/system.string)</td><td>name</td><td></td></tr> <tr><td>Label</td><td>(Genesis.UI.Label.html)</td><td></td><td></td></tr> <tr><td>List</td><td>Item (https://learn.microsoft.com/dotnet/api/system.string)</td><td>text</td><td></td></tr> <tr><td>List</td><td>ItemBehavior (Genesis.UI.ListItemBehavior.html)</td><td>func</td><td></td></tr> <tr><td></td><td>ListSelector (Genesis.UI.ListSelector.html)</td><td></td><td></td></tr> <tr><td></td><td>ListSelectorBehavior (Genesis.UI.ListSelectorBehavior.html)</td><td></td><td></td></tr> <tr><td>Properties</td><td>Panel (Genesis.UI.Panel.html)</td><td></td><td></td></tr>	Type	ImageButton (Genesis.UI.ImageButton.html)	Name	Description		string (https://learn.microsoft.com/dotnet/api/system.string)	name		Label	(Genesis.UI.Label.html)			List	Item (https://learn.microsoft.com/dotnet/api/system.string)	text		List	ItemBehavior (Genesis.UI.ListItemBehavior.html)	func			ListSelector (Genesis.UI.ListSelector.html)				ListSelectorBehavior (Genesis.UI.ListSelectorBehavior.html)			Properties	Panel (Genesis.UI.Panel.html)		
Type	ImageButton (Genesis.UI.ImageButton.html)	Name	Description																													
	string (https://learn.microsoft.com/dotnet/api/system.string)	name																														
Label	(Genesis.UI.Label.html)																															
List	Item (https://learn.microsoft.com/dotnet/api/system.string)	text																														
List	ItemBehavior (Genesis.UI.ListItemBehavior.html)	func																														
	ListSelector (Genesis.UI.ListSelector.html)																															
	ListSelectorBehavior (Genesis.UI.ListSelectorBehavior.html)																															
Properties	Panel (Genesis.UI.Panel.html)																															

Name _____

Declaration

```
public string Name { get; set; }
```

Property Value

Type	Description
(Genesis.CoreBehaviors.Physic) string (https://learn.microsoft.com/dotnet/api/system.string)	

+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)

OnSelect Genesis.Core.GameElements (Genesis.Core.GameElements.h)

+ **Genesis.Graphics**
public ListItemBehavior OnSelect { get; set; }
(Genesis.Graphics.html)

+ **Genesis.Graphics.Physics**
Property Value
[\(Genesis.Graphics.Physics.html\)](#)

Type
+ **Genesis.Graphics.RenderDevice**
ListItemBehavior (Genesis.UI.ListItemBehavior.html)
(Genesis.Graphics.RenderDevice)

+ **Genesis.Graphics.Shaders.OpenText** (*Genesis.Graphics.Shaders.OpenText*)

genesis.Graphics.Shapes

+ **Genesis.Math**
(Genesis.Math.html)

Property Value
+ **Genesis.Physics**
Type [genesis.Physics.html](#)

- [string \(https://learn.microsoft.com/dotnet/api/system.string\)](#)
- [Genesis.UI \(Genesis.UI.html\)](#)

Canvas (Genesis.UI.Canvas.html)
ImageButton
(Genesis.UI.ImageButton.html)
Label (Genesis.UI.Label.html)
ListItem
(Genesis.UI.ListItem.html)
ListItemBehavior
(Genesis.UI.ListItemBehavior.html)
ListSelector
(Genesis.UI.ListSelector.html)
ListSelectorBehavior
(Genesis.UI.ListSelectorBehavior.htm
Panel (Genesis.UI.Panel.html)

Description

Description

Description

Delegate ListItemBehavior

Namespace: Genesis (Genesis.html).UI (Genesis.UI.html)

Assembly: Genesis.dll

Syntax

+ **Genesis.Core.Behaviors.Physics**

(**Genesis.Core.Behaviors.Physics**)

```
public delegate void ListItemBehavior(Game game, Scene scene, ListItem item)
```

+ **Genesis.Core.Behaviors.Physics**

(**Genesis.Core.Behaviors.Physics**)

+ **Type**

Genesis.Core.GameElements

(**Genesis.Core.GameElements.h**)

Game (Genesis.Core.Game.html)

Name

Description

game

+ **Genesis.Graphics**

(**Genesis.Graphics.h**)

Scene (Genesis.Core.Scene.html)

scene

(**Genesis.Graphics.html**)

ListItem (Genesis.UI.ListItem.html)

item

+ **Genesis.Graphics.Physics**

(**Genesis.Graphics.Physics.html**)

Constructors

+ **Genesis.Graphics.RenderDevice**

(**Genesis.Graphics.RenderDevice**)

ListItemBehavior(object, IntPtr)

+ **Genesis.Graphics.Shaders.Operator**

(**Genesis.Graphics.Shaders.Operator**)

+ **Genesis.Graphics.Shapes**

public ListItemBehavior(object @object, IntPtr method)

(**Genesis.Graphics.Shapes.html**)

+ **Genesis.Math**

Parameters

(**Genesis.Math.html**)

Type

Name

Description

+ **Genesis.Physics**

object (<https://learn.microsoft.com/dotnet/api/system.object>)

(**Genesis.Physics.html**)

object

IntPtr (<https://learn.microsoft.com/dotnet/api/system.intptr>)

method

- **Genesis.UI (Genesis.UI.html)**

Canvas (Genesis.UI.Canvas.html)

ImageButton

(Genesis.UI.ImageButton.html)

Label (Genesis.UI.Label.html)

ListItem

(Genesis.UI.ListItem.html)

BeginInvoke(Game, Scene, ListItem, AsyncCallback, object)

ListItemBehavior

Declaration

(**Genesis.UI.ListItemBehavior.html**)

ListSelector

protected virtual void BeginInvoke(Game game, Scene scene, ListItem item, AsyncCallback callback, object state)

ListSelectorBehavior

(**Genesis.UI.ListSelectorBehavior.html**)

Panel (Genesis.UI.Panel.html)

Parameters

Type	Name	Description
Game (Genesis.Core.Game.html)	<i>game</i>	
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
ListItem (Genesis.UI.ListItem.html)	<i>item</i>	
+ Genesis.Core.Behaviors.Physics (https://learn.microsoft.com/dotnet/api/system.asynccallback)	<i>callback</i>	
object (https://learn.microsoft.com/dotnet/api/system.object)	<i>object</i>	

+ **Genesis.Core.Behaviors.Physics**
Returns
 (Genesis.Core.Behaviors.Physics)

Type	Description
+ Genesis.Core.GameElements (https://learn.microsoft.com/dotnet/api/system.iasyncresult)	

+ **Genesis.Graphics**

(Genesis.Graphics.html)

EndInvoke(IAsyncResult)

+ **Genesis.Graphics.Physics**

Declaration
 (Genesis.Graphics.Physics.html)

+ **Genesis.Graphics.RenderDevice**
 (https://learn.microsoft.com/dotnet/api/system.iasyncresult result)

(Genesis.Graphics.RenderDevice)

Parameters
 (Genesis.Graphics.Shaders.Oper

(Genesis.Graphics.Shaders.Ope

+ **Genesis.Graphics.Shapes**
 (https://learn.microsoft.com/dotnet/api/system.iasyncresult)

(Genesis.Graphics.Shapes.html)

+ **Genesis.Math**

Invoke(Game, Scene, ListItem)

Declaration
 + Genesis.Physics

(Genesis.Physics.html)

 public virtual void Invoke(Game game, Scene scene, ListItem item)

- **Genesis.UI (Genesis.UI.html)**

Parameters
 Canvas (Genesis.UI.Canvas.html)

 ImageButton

Type (Genesis.UI.ImageButton.html)

 Label (Genesis.UI.Label.html)

 Game (Genesis.Core.Game.html)

 ListItem

 Scene (Genesis.Core.Scene.html)

 ListItemBehavior

 ListItem (Genesis.UI.ListItem.html)

 (https://learn.microsoft.com/dotnet/api/system.listitembehavior)

 ListSelector

 (https://learn.microsoft.com/dotnet/api/system.windows.controls.listselector)

 ListSelectorBehavior

 (https://learn.microsoft.com/dotnet/api/system.windows.controls.listselectorbehavior)

 Panel (Genesis.UI.Panel.html)

Type	Name	Description
Image (Genesis.UI.Image.html)	<i>game</i>	
Label (Genesis.UI.Label.html)	<i>scene</i>	
ListItem (Genesis.UI.ListItem.html)	<i>item</i>	
ListSelector (Genesis.UI.ListSelector.html)		
ListSelectorBehavior (Genesis.UI.ListSelectorBehavior.html)		
Panel (Genesis.UI.Panel.html)		

▼

- + **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)
- + **Genesis.Core.Behaviors.Physics2D**
[\(Genesis.Core.Behaviors.Physics2D.html\)](#)
- + **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)
- + **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)
- + **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)
- + **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)
- + **Genesis.Graphics.Shaders.Operator**
[\(Genesis.Graphics.Shaders.Operator.html\)](#)
- + **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)
- + **Genesis.Math**
[\(Genesis.Math.html\)](#)
- + **Genesis.Physics**
[\(Genesis.Physics.html\)](#)
- **Genesis.UI (Genesis.UI.html)**
 - Canvas ([Genesis.UI.Canvas.html](#))
 - ImageButton
([Genesis.UI.ImageButton.html](#))
 - Label ([Genesis.UI.Label.html](#))
 - ListItem
([Genesis.UI.ListItem.html](#))
 - ListItemBehavior
([Genesis.UI.ListItemBehavior.html](#))
 - ListSelector
([Genesis.UI.ListSelector.html](#))
 - ListSelectorBehavior
([Genesis.UI.ListSelectorBehavior.html](#))
 - Panel ([Genesis.UI.Panel.html](#))

Class ListSelector

Inheritance

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ Widget (Genesis.UI.Widget.html)
+ **Genesis.Core.Behaviors.Physics**
↳ ListSelector
 (Genesis.Core.Behaviors.Physics)
Inherited Members

+ **Genesis.Core.Behaviors.Physics**
Widget.AddChildren(Widget) (Genesis.UI.Widget.html#Genesis_UI_Widget_AddChildren_Genesis_UI_Widget_)
Widget.OnInit(Game, Scene, Canvas)
(Genesis.UI.Widget.html#Genesis_UI_Widget_OnInit_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canvas_()
+ **Genesis.Core.GameElements**
 (Genesis.Core.GameElements.h)
Widget.OnDispose(Game, Scene, Canvas)
(Genesis.UI.Widget.html#Genesis_UI_Widget_OnDispose_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canvas_()
+ **Genesis.Graphics**
 (Genesis.Graphics.html)
Widget.GetRelativePos(Canvas) (Genesis.UI.Widget.html#Genesis_UI_Widget_GetRelativePos_Genesis_UI_Canvas_()
+ **Genesis.Graphics.Physics**
 (Genesis.Graphics.Physics.html)
Widget.GetRelativeBounds2D(Canvas) (Genesis.UI.Widget.html#Genesis_UI_Widget_GetRelativeBounds2D_Genesis_UI_Canvas_()
+ **Genesis.Graphics.RenderDevice**
 (Genesis.Graphics.RenderDevice.html)
Widget.IsNullOrHovered(Canvas) (Genesis.UI.Widget.html#Genesis_UI_Widget_IsHover_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canvas_()
+ **Genesis.Graphics.Shaders.OpenGL**
 (Genesis.Graphics.Shaders.OpenGL.html)
Widget.FindChildren(string) (Genesis.UI.Widget.html#Genesis_UI_Widget_FindChildren_System_String_())
Widget.Name (Genesis.UI.Widget.html#Genesis_UI_Widget_Name)
Widget.Location (Genesis.UI.Widget.html#Genesis_UI_Widget_Location)
Widget.Size (Genesis.UI.Widget.html#Genesis_UI_Widget_Size)
Widget.Parent (Genesis.UI.Widget.html#Genesis_UI_Widget_Parent)
Widget.Children (Genesis.UI.Widget.html#Genesis_UI_Widget_Children)
Widget.Enabled (Genesis.UI.Widget.html#Genesis_UI_Widget_Enabled)
Widget.Debug (Genesis.UI.Widget.html#Genesis_UI_Widget_Debug)
+ **Genesis.Math**
 (Genesis.Math.html)
Widget.MouseEnter (Genesis.UI.Widget.html#Genesis_UI_Widget_MouseEnter)
Widget.MouseLeave (Genesis.UI.Widget.html#Genesis_UI_Widget_MouseLeave)
Widget.Click (Genesis.UI.Widget.html#Genesis_UI_Widget_Click)
- **Genesis.UI** (**Genesis.UI.html**)
object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)
object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))
ImageButton
object.Equals(ImageButton) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))
object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)
object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)
object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)
ListSelector
Namespace: Genesis (Genesis.html).UI (Genesis.UI.html)
 (Genesis.UI.ListSelector.html)
Assembly: Genesis.dll
 ListSelectorBehavior
Syntax
 (Genesis.UI.ListSelectorBehavior.htm)
 Panel (Genesis.UI.Panel.html)

```
public class ListSelector : Widget
```

Constructors

ListSelector(string name, Vec3 location, Font font)

(Genesis.Core.Behaviors.Physics
Declaration)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics
ListSelector(string name, Vec3 location, Font font))

+ Genesis.Core.GameElements

Parameters
(Genesis.Core.GameElements.h)

Type

+ Genesis.Graphics

string (<https://learn.microsoft.com/dotnet/api/system.string>)

(Genesis.Graphics.html)

Type

+ Genesis.Graphics.Physics

Font (<https://learn.microsoft.com/dotnet/api/system.font>)

(Genesis.Graphics.Physics.html)

Name	Description
<i>name</i>	
<i>location</i>	
<i>font</i>	

Type	Description
Font (Genesis.Graphics.Font.html)	

FontSize

Declaration

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics
public float FontSize { get; set; })

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics
Property Value

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h
float (<https://learn.microsoft.com/dotnet/api/system.single>))

+ Genesis.Graphics

(Genesis.Graphics.html)

FontSpacing

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice
public float FontSpacing { get; set; })

+ Genesis.Graphics.Shaders.Oper

(Genesis.Graphics.Shaders.Ope
Property Value

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes
float (<https://learn.microsoft.com/dotnet/api/system.single>))

+ Genesis.Math

(Genesis.Math.html)

IndexChangedBehavior

Declaration

Genesis.Physics

(Genesis.Physics.html)

- public ListSelectorBehavior IndexChangedBehavior { get; set; }

Canvas (Genesis.UI.Canvas.html)

Property Value

ImageButton

Type (Genesis.UI.ImageButton.html)

Label (Genesis.UI.Label.html)

ListSelectorBehavior (Genesis.UI.ListSelectorBehavior.html)

ListItem

(Genesis.UI.ListItem.html)

ListItemBehavior

(Genesis.UI.ListItemBehavior.html)

Items

ListSelector

Declaration

(Genesis.UI.ListSelector.html)

ListSelectorBehavior

(Genesis.UI.ListSelectorBehavior.htm

Panel (Genesis.UI.Panel.html)

Description

Description

Description

```
public List<ListItem> Items { get; set; }
```

Property Value

Type	Description
List (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1)	
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)	
+ Genesis.Core.Behaviors.Physics LineHeight (Genesis.Core.Behaviors.Physics)	
Declaration + Genesis.Core.GameElements (Genesis.Core.GameElements.h public float LineHeight { get; set; } + Genesis.Graphics (Genesis.Graphics.html)	
Property Value	
+ Genesis.Graphics.Physics (Genesis.Graphics.Physics.html float (https://learn.microsoft.com/dotnet/api/system.single) + Genesis.Graphics.RenderDevice (Genesis.Graphics.RenderDevice)	
+ SelectedIndex Declaration + Genesis.Graphics.Shaders.Operator (Genesis.Graphics.Shaders.Operator)	
+ Genesis.Graphics.Shapes public int SelectedIndex { get; set; } (Genesis.Graphics.Shapes.html)	
+ Genesis.Math Property Value (Genesis.Math.html)	
Type	
+ Genesis.Physics int (https://learn.microsoft.com/dotnet/api/system.int32) (Genesis.Physics.html)	
- Genesis.UI (Genesis.UI.html)	
Canvas (Genesis.UI.Canvas.html)	
Methods	
(Genesis.UI.ImageButton.html)	
Label (Genesis.UI.Label.html)	
AddItem(ListItem)	
(Genesis.UI.ListItem.html)	
Declaration ListItemBehavior	
(Genesis.UI.ListItemBehavior.html)	
public void AddItem(ListItem item) ListSelector	
(Genesis.UI.ListSelector.html)	
ListSelectorBehavior	
(Genesis.UI.ListSelectorBehavior.html)	
Panel (Genesis.UI.Panel.html)	

Type	Name	Description
ListItem (Genesis.UI.ListItem.html)	<i>item</i>	

OnRender(Game, IRenderDevice, Scene, Canvas)

Renders the entity.

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics.html)

- Declaration:

+ **Genesis.Core.Behaviors.Physics**

```
public override void OnRender(Game game, IRenderDevice renderDevice, Scene scene, Canvas canvas)
```

+ **Genesis.Core.GameElements**

(Genesis.Core.GameElements.html)

+ **Genesis.Graphics**

(Genesis.Graphics.html)

Game (Genesis.Core.Game.html)

Name

game

Description

+ **Genesis.Graphics.Physics**

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

Name

renderDevice

(Genesis.Graphics.Physics.html)

Scene (Genesis.Core.Scene.html)

Name

scene

+ **Genesis.Graphics.RenderDevice**

Canvas (Genesis.UI.Canvas.html)

Name

canvas

(Genesis.Graphics.RenderDevice.html)

With Overrides: Game, IRenderDevice, Scene, Canvas)

(Genesis.UI.Widget.html#Genesis_UI_Widget_OnRender_Genesis_Core_Game_Genesis_Graphics_IRenderDevice_Ge
nesis_Core_Scene_Genesis_UI_Canvas_)

(Genesis.Graphics.Shapes.html)

Genesis.Math

OnUpdate(Game, Scene, Canvas)

(Genesis.Math.html)

Update the entity

+ **Genesis.Physics**

Declaration:

(Genesis.Physics.html)

- **Genesis.UI (Genesis.UI.html)**

```
public override void OnUpdate(Game game, Scene scene, Canvas canvas)
```

Canvas (Genesis.UI.Canvas.html)

ImageButton

Parameters

(Genesis.UI.ImageButton.html)

TypeLabel (Genesis.UI.Label.html)

ListItem

Game (Genesis.Core.Game.html)

(Genesis.UI.ListItem.html)

Scene

(Genesis.Core.Scene.html)

(Genesis.UI.ListItemBehavior.html)

Canvas (Genesis.UI.Canvas.html)

ListSelector

(Genesis.UI.ListSelector.html)

Overrides:

ListSelectorBehavior

Widget.OnUpdate(Game, Scene, Canvas)

(Genesis.UI.Widget.html#Genesis_UI_Widget_OnUpdate_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Can
va

Panel (Genesis.UI.Panel.html)

Type	Name	Description
Game (Genesis.Core.Game.html)	<i>game</i>	
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
Canvas (Genesis.UI.Canvas.html)	<i>canvas</i>	

With Overrides: ListSelectorBehavior

(Genesis.UI.Widget.html#Genesis_UI_Widget_OnUpdate_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Can
va

Panel (Genesis.UI.Panel.html)

▼

- + **Genesis.Core.Behaviors.Physics**
([Genesis.Core.Behaviors.Physics.html](#))
- + **Genesis.Core.Behaviors.Physics2D**
([Genesis.Core.Behaviors.Physics2D.html](#))
- + **Genesis.Core.GameElements**
([Genesis.Core.GameElements.html](#))
- + **Genesis.Graphics**
([Genesis.Graphics.html](#))
- + **Genesis.Graphics.Physics**
([Genesis.Graphics.Physics.html](#))
- + **Genesis.Graphics.RenderDevice**
([Genesis.Graphics.RenderDevice.html](#))
- + **Genesis.Graphics.Shaders.Operator**
([Genesis.Graphics.Shaders.Operator.html](#))
- + **Genesis.Graphics.Shapes**
([Genesis.Graphics.Shapes.html](#))
- + **Genesis.Math**
([Genesis.Math.html](#))
- + **Genesis.Physics**
([Genesis.Physics.html](#))
- **Genesis.UI ([Genesis.UI.html](#))**
 - Canvas ([Genesis.UI.Canvas.html](#))
 - ImageButton
([Genesis.UI.ImageButton.html](#))
 - Label ([Genesis.UI.Label.html](#))
 - ListItem
([Genesis.UI.ListItem.html](#))
 - ListItemBehavior
([Genesis.UI.ListItemBehavior.html](#))
 - ListSelector
([Genesis.UI.ListSelector.html](#))
 - ListSelectorBehavior
([Genesis.UI.ListSelectorBehavior.html](#))
 - Panel ([Genesis.UI.Panel.html](#))

Delegate ListSelectorBehavior

Namespace: Genesis (Genesis.html).UI (Genesis.UI.html)

Assembly: Genesis.dll

Syntax

+ **Genesis.Core.Behaviors.Physics**

(**Genesis.Core.Behaviors.Physics**)

```
public delegate void ListSelectorBehavior(Game game, Scene scene, ListSelector selector)
```

+ **Genesis.Core.Behaviors.Physics**

(**Genesis.Core.Behaviors.Physics**)

+ **Type**

+ **Genesis.Core.GameElements**

(**Genesis.Core.GameElements**)

Game (Genesis.Core.Game.html)

Name

Description

game

scene

selector

+ **Genesis.Graphics**

(**Genesis.Graphics**)

ListSelector (Genesis.UI.ListSelector.html)

+ **Genesis.Graphics.Physics**

(**Genesis.Graphics.Physics**)

(**Genesis.Graphics.Physics.html**)

Constructors

+ **Genesis.Graphics.RenderDevice**

(**Genesis.Graphics.RenderDevice**)

ListSelectorBehavior(object, IntPtr)

+ **Genesis.Graphics.Shaders.OpenGL**

(**Genesis.Graphics.Shaders.OpenGL**)

+ **Genesis.Graphics.Shapes**

(**Genesis.Graphics.Shapes**)

```
public ListSelectorBehavior(object @object, IntPtr method)
```

+ **Genesis.Math**

Parameters

(**Genesis.Math.html**)

Type

Name

Description

+ **Genesis.Physics**

object (<https://learn.microsoft.com/dotnet/api/system.object>)

(**Genesis.Physics.html**)

object

IntPtr (<https://learn.microsoft.com/dotnet/api/system.intptr>)

method

- **Genesis.UI (Genesis.UI.html)**

Canvas (Genesis.UI.Canvas.html)

ImageButton

(Genesis.UI.ImageButton.html)

Label (Genesis.UI.Label.html)

ListItem

(Genesis.UI.ListItem.html)

BeginInvoke(Game, Scene, ListSelector, AsyncCallback, object)

ListItemBehavior

Declaration

(Genesis.UI.ListItemBehavior.html)

ListSelector

```
public delegate void BeginInvoke(Game game, Scene scene, ListSelector selector, AsyncCallback callback, object @object)
```

(**Genesis.UI.ListSelectorBehavior.htr**)

Panel (Genesis.UI.Panel.html)

Parameters

Type	Name	Description
Game (Genesis.Core.Game.html)	<i>game</i>	
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
ListSelector (Genesis.UI.ListSelector.html)	<i>selector</i>	
+ Genesis.Core.Behaviors.Physics object (https://learn.microsoft.com/dotnet/api/system.object)	<i>callback</i>	

+ Genesis.Core.Behaviors.Physics

Returns
(Genesis.Core.Behaviors.Physics)

Type	Description
+ Genesis.Core.GameElements IAsyncResult (https://learn.microsoft.com/dotnet/api/system.iasyncresult)	

+ Genesis.Graphics

(Genesis.Graphics.html)

EndInvoke(IAsyncResult)

+ Genesis.Graphics.Physics

Declaration

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

Parameters

Genesis.Graphics.Shaders.Oper

(Genesis.Graphics.Shaders.Ope

Type	Name	Description
+ Genesis.Graphics.Shapes IAsyncResult (https://learn.microsoft.com/dotnet/api/system.iasyncresult)	<i>result</i>	

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

Invoke(Game, Scene, ListSelector)

(Genesis.Math.html)

Declaration
+ **Genesis.Physics**

(Genesis.Physics.html)

public virtual void Invoke(Game game, Scene scene, ListSelector selector)

- Genesis.UI (Genesis.UI.html)

Parameters

Canvas (Genesis.UI.Canvas.html)

ImageButton

Type (Genesis.UI.ImageButton.html)

Label (Genesis.UI.Label.html)

Game (Genesis.Core.Game.html)

ListItem

Scene (Genesis.Core.Scene.html)

ListItemBehavior

ListSelector (Genesis.UI.ListSelector.html)

(Genesis.UI.ListItemBehavior.html)

ListSelector

(Genesis.UI.ListSelector.html)

ListSelectorBehavior

(Genesis.UI.ListSelectorBehavior.html)

Panel (Genesis.UI.Panel.html)

Type	Name	Description
Game (Genesis.Core.Game.html)	<i>game</i>	
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
ListSelector (Genesis.UI.ListSelector.html)	<i>selector</i>	

▼

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)

+ **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)

+ **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)

+ **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)

+ **Genesis.Graphics.Shaders.Operations**
[\(Genesis.Graphics.Shaders.Operations.html\)](#)

+ **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)

+ **Genesis.Math**
[\(Genesis.Math.html\)](#)

+ **Genesis.Physics**
[\(Genesis.Physics.html\)](#)

- **Genesis.UI (Genesis.UI.html)**

 Canvas ([Genesis.UI.Canvas.html](#))

 ImageButton

 ([Genesis.UI.ImageButton.html](#))

 Label ([Genesis.UI.Label.html](#))

 ListItem

 ([Genesis.UI.ListItem.html](#))

 ListItemBehavior

 ([Genesis.UI.ListItemBehavior.html](#))

 ListSelector

 ([Genesis.UI.ListSelector.html](#))

 ListSelectorBehavior

 ([Genesis.UI.ListSelectorBehavior.html](#))

 Panel ([Genesis.UI.Panel.html](#))

Class Panel

Inheritance

Enter here to filter
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ Widget ([Genesis.Core.Behaviors.Physics.html](https://genesis.corebehaviors.phys.html))
↳ Panel
+ **Genesis.Core.Behaviors.Physics**
 (Genesis.Core.Behaviors.Physics)
Inherited Members
+ **Genesis.Core.Behaviors.Physics**
Widget.AddChildren(Widget) ([Genesis.UI.Widget.html#Genesis_UI_Widget_AddChildren_Genesis_UI_Widget_](https://genesis.corebehaviors.phys.html#Genesis_UI_Widget_AddChildren_Genesis_UI_Widget_))
Widget.OnInit(Game, Scene, Canvas)
([Genesis.UI.Widget.html#Genesis_UI_Widget_OnInit_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canvas_](https://genesis.corebehaviors.phys.html#Genesis_UI_Widget_OnInit_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canvas_))
+ **Genesis.Core.GameElements**
 (Genesis.Core.GameElements.h)
Widget.OnUpdate(Game, Scene, Canvas)
([Genesis.CoreGameElements.h.html#Genesis_UI_Widget_OnUpdate_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Can](https://genesis.coregameelements.h.html#Genesis_UI_Widget_OnUpdate_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canva)va)
+ **Genesis.Graphics**
 (Genesis.Graphics.html)
Widget.OnDispose(Game, Scene, Canvas)
([Genesis.Graphics.html.html#Genesis_UI_Widget_OnDispose_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Ca](https://genesis.graphics.html.html#Genesis_UI_Widget_OnDispose_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Ca)nva)
+ **Genesis.Graphics.Physics**
 (Genesis.Graphics.Physics.html)
Widget.GetRelativePos(Canvas) ([Genesis.UI.Widget.html#Genesis_UI_Widget_GetRelativePos_Genesis_UI_Canvas_](https://genesis.graphics.physics.html.html#Genesis_UI_Widget_GetRelativePos_Genesis_UI_Canvas_))
+ **Genesis.Graphics.RenderDevice**
 (Genesis.Graphics.RenderDevice)
Widget.GetRelativeBounds2D(Canvas) ([Genesis.UI.Widget.html#Genesis_UI_Widget_GetRelativeBounds2D_Genesis_UI_Canvas_](https://genesis.graphics.renderdevice.html.html#Genesis_UI_Widget_GetRelativeBounds2D_Genesis_UI_Canvas_))
+ **Genesis.Graphics.Shaders.OpenGL**
 (Genesis.Graphics.Shaders.OpenGL)
Widget.IsHover(Game, Scene, Canvas)
([Genesis.UI.Widget.html#Genesis_UI_Widget_IsHover_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Can](https://genesis.graphics.shaders.opengl.html.html#Genesis_UI_Widget_IsHover_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Can)va)
+ **Genesis.Graphics.Shapes**
 (Genesis.Graphics.Shapes.html)
Widget.FindChildren(string) ([Genesis.UI.Widget.html#Genesis_UI_Widget_FindChildren_System_String_](https://genesis.graphics.shapes.html.html#Genesis_UI_Widget_FindChildren_System_String_))
Widget.Name ([Genesis.UI.Widget.html#Genesis_UI_Widget_Name](https://genesis.graphics.shapes.html.html#Genesis_UI_Widget_Name))
Widget.Location ([Genesis.UI.Widget.html#Genesis_UI_Widget_Location](https://genesis.graphics.shapes.html.html#Genesis_UI_Widget_Location))
Widget.Size ([Genesis.UI.Widget.html#Genesis_UI_Widget_Size](https://genesis.graphics.shapes.html.html#Genesis_UI_Widget_Size))
Widget.Parent ([Genesis.UI.Widget.html#Genesis_UI_Widget_Parent](https://genesis.graphics.shapes.html.html#Genesis_UI_Widget_Parent))
Widget.Children ([Genesis.UI.Widget.html#Genesis_UI_Widget_Children](https://genesis.graphics.shapes.html.html#Genesis_UI_Widget_Children))
Widget.Enabled ([Genesis.UI.Widget.html#Genesis_UI_Widget_Enabled](https://genesis.graphics.shapes.html.html#Genesis_UI_Widget_Enabled))
Widget.Debug ([Genesis.UI.Widget.html#Genesis_UI_Widget_Debug](https://genesis.graphics.shapes.html.html#Genesis_UI_Widget_Debug))
Widget.MouseEnter ([Genesis.UI.Widget.html#Genesis_UI_Widget_MouseEnter](https://genesis.graphics.shapes.html.html#Genesis_UI_Widget_MouseEnter))
Widget.MouseLeave ([Genesis.UI.Widget.html#Genesis_UI_Widget_MouseLeave](https://genesis.graphics.shapes.html.html#Genesis_UI_Widget_MouseLeave))
Widget.Click ([Genesis.UI.Widget.html#Genesis_UI_Widget_Click](https://genesis.graphics.shapes.html.html#Genesis_UI_Widget_Click))
object.ToString() ([Genesis.CoreBehaviors.Physics.html#Genesis_UI_Widget_tostring](https://genesis.corebehaviors.phys.html#Genesis_UI_Widget_tostring))
object.Equals(object) (https://genesis.corebehaviors.phys.html#Genesis_UI_Widget_Equals_System_Object)
object.GetHashCode() (https://genesis.corebehaviors.phys.html#Genesis_UI_Widget_gethashcode)
object.GetType() (https://genesis.corebehaviors.phys.html#Genesis_UI_Widget_gettype)
object.MemberwiseClone() (https://genesis.corebehaviors.phys.html#Genesis_UI_Widget_memberwiseclone)
Namespaces:
 Genesis ([Genesis.html.html](https://genesis.html.html))
 UI ([Genesis.UI.html](https://genesis.ui.html))
 Panel ([Genesis.UI.Panel.html](https://genesis.ui.panel.html))

Syntax

```
public class Panel : Widget
```

▼

Constructors

+ [Genesis.Core.Behaviors.Physics](#)
 (Genesis.Core.Behaviors.Physics)
Panel(string, Vec3, Vec3)
 + [Genesis.Core.Behaviors.Physics](#)
 Declaration (Genesis.Core.Behaviors.Physics)

+ [Genesis.Core.GameElements](#)
 public Panel(string name, Vec3 location, Vec3 size)
 (Genesis.Core.GameElements.h)

Properties

Type (Genesis.Graphics.html)

+ [Genesis.Graphics.Physics](#)
 string (<https://learn.microsoft.com/dotnet/api/system.string>)
 (Genesis.Graphics.Physics.html)
 Vec3 (Genesis.Math.Vec3.html)

+ [Genesis.Graphics.RenderDevice](#)
 Vec3 (<https://learn.microsoft.com/dotnet/api/system.math.vecc3>)
 (Genesis.Graphics.RenderDevice.html)

+ [Genesis.Graphics.Shaders.Operator](#)
 (Genesis.Graphics.Shaders.Operator.html)

Properties

+ [Genesis.Graphics.Shapes](#)

Type (Genesis.Graphics.Shapes.html)

BackgroundColor

+ [Genesis.Math](#)
 (Genesis.Math.html)

Declaration (Genesis.Math.html)

+ [Genesis.Physics](#)
 public Color BackgroundColor { get; set; }
 (Genesis.Physics.html)

Genesis.UI (Genesis.UI.html)

Property Value (Genesis.UI.html)

Type	Description
Canvas (Genesis.UI.Canvas.html) ImageButton Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	

Label (Genesis.UI.Label.html)

ListItem

(Genesis.UI.ListItem.html)

BackgroundImage

ListItemBehavior

Declaration (Genesis.UI.ListItemBehavior.html)

ListSelector

(Genesis.UI.ListSelector.html)
 public Texture BackgroundImage { get; set; }

ListSelectorBehavior

(Genesis.UI.ListSelectorBehavior.html)

Property Value

Image (Genesis.UI.Panel.html)

Type	Description
Texture (Genesis.Graphics.Texture.html)	

HasBackgroundColor

Declaration

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

```
public bool HasBackgroundColor { get; set; }
```

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Property Value

+ Genesis.Core.GameElements

(Genesis.Core.GameElements)

bool (<https://learn.microsoft.com/dotnet/api/system.boolean>)

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

OnRender(Game, IRenderDevice, Scene, Canvas)

(Genesis.Graphics.RenderDevice)

Renders the entity

+ Genesis.Graphics.Shaders.Oper

(Genesis.Graphics.Shaders.Ope

+ Genesis.Graphics.Shapes

```
public override void OnRender(Game game, IRenderDevice renderDevice, Scene scene, Canvas canvas)
```

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

Param (Genesis.Math.html)

Type

+ Genesis.Physics

(Genesis.Physics.html)

Game (Genesis.Core.Game.html)

Name

Description

game

- Genesis.UI (Genesis.UI.html)

Widget (Genesis.UI.Widget.html)

renderDevice

Canvas (Genesis.UI.Canvas.html)

scene

ImageButton (Genesis.UI.ImageButton.html)

canvas

Label (Genesis.UI.Label.html)

Overrides

Widget.OnRender(Game, RenderDevice, Scene, Canvas)

(Genesis.UI.Widget.html#Genesis_UI_Widget_OnRender_Genesis_Core_Game_Genesis_Graphics_IRenderDevice_Ge

nesis_Co_Scene_Genesis_UI_Canvas_)

ListSelector

(Genesis.UI.ListSelector.html)

ListSelectorBehavior

(Genesis.UI.ListSelectorBehavior.html)

Panel (Genesis.UI.Panel.html)

▼

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.Behaviors.Physics**
[\(Genesis.Core.Behaviors.Physics.html\)](#)

+ **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)

+ **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)

+ **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)

+ **Genesis.Graphics.RenderDevice**
[\(Genesis.Graphics.RenderDevice.html\)](#)

+ **Genesis.Graphics.Shaders.Operations**
[\(Genesis.Graphics.Shaders.Operations.html\)](#)

+ **Genesis.Graphics.Shapes**
[\(Genesis.Graphics.Shapes.html\)](#)

+ **Genesis.Math**
[\(Genesis.Math.html\)](#)

+ **Genesis.Physics**
[\(Genesis.Physics.html\)](#)

- **Genesis.UI (Genesis.UI.html)**

 Canvas ([Genesis.UI.Canvas.html](#))

 ImageButton

 ([Genesis.UI.ImageButton.html](#))

 Label ([Genesis.UI.Label.html](#))

 ListItem

 ([Genesis.UI.ListItem.html](#))

 ListItemBehavior

 ([Genesis.UI.ListItemBehavior.html](#))

 ListSelector

 ([Genesis.UI.ListSelector.html](#))

 ListSelectorBehavior

 ([Genesis.UI.ListSelectorBehavior.html](#))

 Panel ([Genesis.UI.Panel.html](#))

Class ProgressBar

ProgressBar Class

Enter here to filter...

Inheritance

+ **Genesis.Core.Behaviors.Physics**

↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ **(Genesis.Core.Behaviors.Physics)**
↳ Widget ([Genesis.UI.Widget.html](#))

+ **Genesis.Core.Behaviors.Physics**

(Genesis.Core.Behaviors.Physics)

Inherited Members

↳ **Genesis.Core.GameElements** ([Genesis.UI.Widget.html#Genesis_UI_Widget_AddChildren_Genesis_UI_Widget_](#))

Widget ([Genesis.Core.Scene.html](#))

(Genesis.Core.GameElements.h)

([Genesis.UI.Widget.html#Genesis_UI_Widget_OnInit_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canvas_](#))
+ **Genesis.Graphics**

(Genesis.Graphics.html)

Widget ([Genesis.UI.Widget.html](#))

([Genesis.UI.Widget.html#Genesis_UI_Widget_OnUpdate_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Can_](#))
vas)

+ **Genesis.Graphics.Physics**

(Genesis.Graphics.Physics.html)

Widget.OnDispose([Game](#), [Scene](#), [Canvas](#))

([Genesis.UI.Widget.html#Genesis_UI_Widget_OnDispose_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Can_](#))
vas)

+ **Genesis.Graphics.RenderDevice**

(Genesis.Graphics.RenderDevice.html)

Widget.GetRelativePos([Canvas](#)) ([Genesis.UI.Widget.html#Genesis_UI_Widget_GetRelativePos_Genesis_UI_Canvas_](#))

Widget.GetChildCount([String](#)) ([Genesis.UI.Widget.html#Genesis_UI_Widget_GetChildren_System_String_](#))

Widget.GetRelativeBounds2D([Canvas](#))

(Genesis.Graphics.Shaders.OpenGL.html)

([Genesis.UI.Widget.html#Genesis_UI_Widget_GetRelativeBounds2D_Genesis_UI_Canvas_](#))

Widget.GetColor([Panel](#), [Scene](#), [Canvas](#))

([Genesis.UI.Widget.html#Genesis_UI_Widget_GetColor_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Can_](#))
s)

+ **Genesis.Math**

(Genesis.Math.html)

Widget.FindChildren([string](#)) ([Genesis.UI.Widget.html#Genesis_UI_Widget_FindChildren_System_String_](#))

Widget.Name ([Genesis.UI.Widget.html#Genesis_UI_Widget_Name](#))

Widget.Location ([Genesis.UI.Widget.html#Genesis_UI_Widget_Location](#))

+ **Genesis.Physics**

(Genesis.Physics.html)

Widget.Parent ([Genesis.UI.Widget.html#Genesis_UI_Widget_Parent](#))

Widget.Children ([Genesis.UI.Widget.html#Genesis_UI_Widget_Children](#))

Widget.Enabled ([Genesis.UI.Widget.html#Genesis_UI_Widget_Enabled](#))

↳ **Canvas** ([Genesis.UI.Canvas.html](#))

Widget.Debug ([Genesis.UI.Widget.html#Genesis_UI_Widget_Debug](#))

↳ **ImageButton**

Widget.MouseEnter ([Genesis.UI.Widget.html#Genesis_UI_Widget_MouseEnter](#))

↳ [\(Genesis.UI.ImageButton.html\)](#)

Widget.MouseLeave ([Genesis.UI.Widget.html#Genesis_UI_Widget_MouseLeave](#))

↳ **Label** ([Genesis.UI.Label.html](#))

Widget.Click ([Genesis.UI.Widget.html#Genesis_UI_Widget_Click](#))

↳ **ListItem**

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

↳ [\(Genesis.UI.ListItem.html\)](#)

object.Equals([object](#)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))

↳ [\(Genesis.UI.ListItemBehavior.html\)](#)

object.Equals([object](#), [object](#)) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object)))

↳ [\(Genesis.UI.ListSelector.html\)](#)

object.ReferenceEquals([object](#), [object](#)) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

↳ [\(Genesis.UI.ListSelectorBehavior.html\)](#)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

↳ [\(Genesis.UI.ListSelectorBehavior.html\)](#)

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

↳ **Panel** ([Genesis.UI.Panel.html](#))


```
public Color BarColor { get; set; }
```

Property Value

Type	Description
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)	
BorderColor Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)	Declaration
+ Genesis.Core.GameElements public Color BorderColor { get; set; } (Genesis.Core.GameElements.h)	
+ Genesis.Graphics Property Value (Genesis.Graphics.html)	
Type	
+ Genesis.Graphics.Physics Color (https://learn.microsoft.com/dotnet/api/system.drawing.color) (Genesis.Graphics.Physics.html)	
+ Genesis.Graphics.RenderDevice (Genesis.Graphics.RenderDevice)	
MaxValue Declaration	
+ Genesis.Graphics.Shaders.Operator (Genesis.Graphics.Shaders.Operator)	
+ Genesis.Graphics.Shapes (Genesis.Graphics.Shapes.html)	
Property Value	
+ Genesis.Math Type (Genesis.Math.html)	
float (https://learn.microsoft.com/dotnet/api/system.single) + Genesis.Physics (Genesis.Physics.html)	
Genesis.UI (Genesis.UI.html)	
Value Canvas (Genesis.UI.Canvas.html) Declaration	
ImageButton (Genesis.UI.ImageButton.html) public float Value { get; set; } ListItem (Genesis.UI.ListItem.html)	
Property Value ListItemBehavior Type (Genesis.UI.ListItemBehavior.html)	
ListSelector float (https://learn.microsoft.com/dotnet/api/system.single) (Genesis.UI.ListSelector.html) ListSelectorBehavior (Genesis.UI.ListSelectorBehavior.html) Panel (Genesis.UI.Panel.html)	

Methods

OnRender(Game, IRenderDevice, Scene, Canvas)

Renders the progress bar



Declaration

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics (Game game, IRenderDevice renderDevice, Scene scene, Canvas canvas))

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Parameters

+ Genesis.Core.GameElements

Type (Genesis.Core.GameElements.h)

Game (Genesis.Core.Game.html)

+ Genesis.Graphics

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

(Genesis.Graphics.html)

Scene (Genesis.Core.Scene.html)

+ Genesis.Graphics.Physics

Canvas (Genesis.UI.Canvas.html)

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

Overrides

(Genesis.Graphics.RenderDevice)

Widget.OnRender(Game, RenderDevice, Scene, Canvas)

(Genesis.UI.Widget.html#Genesis.UI.Widget_OnRender_Genesis_Core_Game_Genesis_Graphics_IRenderDevice_Game)

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL)

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

+ Genesis.Math

(Genesis.Math.html)

+ Genesis.Physics

(Genesis.Physics.html)

- Genesis.UI (Genesis.UI.html)

Canvas (Genesis.UI.Canvas.html)

ImageButton

(Genesis.UI.ImageButton.html)

Label (Genesis.UI.Label.html)

ListItem

(Genesis.UI.ListItem.html)

ListItemBehavior

(Genesis.UI.ListItemBehavior.html)

ListSelector

(Genesis.UI.ListSelector.html)

ListSelectorBehavior

(Genesis.UI.ListSelectorBehavior.html)

Panel (Genesis.UI.Panel.html)

Type	Name	Description
Game (Genesis.Core.Game.html)	game	
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	renderDevice	
Scene (Genesis.Core.Scene.html)	scene	
Canvas (Genesis.UI.Canvas.html)	canvas	

Delegate UIEvent

Namespace: Genesis (Genesis.html).UI (Genesis.UI.html)

Assembly: Genesis.dll

Syntax

+ **Genesis.Core.Behaviors.Physics**

(**Genesis.Core.Behaviors.Physics**)

```
public delegate void UIEvent(Widget entity, Game game, Scene scene, Canvas canvas)
```

+ **Genesis.Core.Behaviors.Physics**

(**Genesis.Core.Behaviors.Physics**)

+ **Type**

+ **Genesis.Core.GameElements**

(**Genesis.Core.GameElements**)

Widget (Genesis.UI.Widget.html)

+ **Genesis.Graphics**

(**Genesis.Graphics**)

Game (Genesis.Core.Game.html)

(**Genesis.Graphics.html**)

Scene (Genesis.Core.Scene.html)

+ **Genesis.Graphics.Physics**

(**Genesis.Graphics.Physics**)

Canvas (Genesis.UI.Canvas.html)

(**Genesis.Graphics.Physics.html**)

+ **Genesis.Graphics.RenderDevice**

(**Genesis.Graphics.RenderDevice**)

RenderDevice (Genesis.Graphics.RenderDevice.html)

+ **Genesis.Graphics.Shaders.Operator**

(**Genesis.Graphics.Shaders.Operator**)

Delegate UIEvent

(**UIEvent**)

(**UIEvent(object, IntPtr)**)

UIEvent (UIEvent.html)

object (Object.html)

+ **Genesis.Math**

(**Genesis.Math**)

Parameters

+ **Genesis.Physics**

(**Genesis.Physics**)

Type (Genesis.Physics.html)

object (System.Object.html)

- **Genesis.UI (Genesis.UI.html)**

IntPtr (System.IntPtr.html)

Canvas (Genesis.UI.Canvas.html)

ImageButton (Genesis.UI.ImageButton.html)

Label (Genesis.UI.Label.html)

Methods

(**Genesis.UI.ListItem.html**)

ListItemBehavior (Genesis.UI.ListItemBehavior.html)

BeginInvoke(Widget, Game, Scene, Canvas, AsyncCallback, object)

Declaration (Genesis.UI.ListItemBehavior.html)

ListSelector (Genesis.UI.ListSelector.html)

ListSelectorBehavior (Genesis.UI.ListSelectorBehavior.html)

Panel (Genesis.UI.Panel.html)

```
public virtual IAsyncResult BeginInvoke(Widget entity, Game game, Scene scene, Canvas canvas, AsyncCallback callback, object @object)
```

Parameters

Type	Name	Description
+ Widget (Genesis.Core.Behaviors.Physics)	<i>entity</i>	
(Genesis.Core.Behaviors.Physics) Game (Genesis.Core.Game.html)	<i>game</i>	
+ Scene (Genesis.Core.Scene.html)	<i>scene</i>	
(Genesis.Core.Behaviors.Physics) Canvas (Genesis.UI.Canvas.html)	<i>canvas</i>	
+ Genesis.Core.GameElements AsyncCallback (https://learn.microsoft.com/dotnet/api/system.asynccallback)	<i>callback</i>	
(Genesis.Core.GameElements.h) object (https://learn.microsoft.com/dotnet/api/system.object)	<i>object</i>	
+ Genesis.Graphics		

([Genesis.Graphics.html](#))
Returns

Type	Description
+ Genesis.Graphics.Physics	
(Genesis.Graphics.Physics.html) IAsyncResult (https://learn.microsoft.com/dotnet/api/system.iasyncresult)	

+ **Genesis.Graphics.RenderDevice**

([Genesis.Graphics.RenderDevice](#))

EndInvoke(IAsyncResult)

([Genesis.Graphics.Shaders.OpenGL.html](#))

([Genesis.Graphics.Shaders.OpenGL.html](#))

+ **Genesis.Graphics.Shapes**

```
public virtual void EndInvoke(IAsyncResult result)
```

([Genesis.Graphics.Shapes.html](#))

+ **Genesis.Math**

Parameters

([Genesis.Math.html](#))

Type

+ **Genesis.Physics**

```
IAsyncResult (https://learn.microsoft.com/dotnet/api/system.iasyncresult)
```

([Genesis.Physics.html](#))

- **Genesis.UI** ([Genesis.UI.html](#))

([Genesis.UI.Canvas.html](#))

ImageButton

Declaration

([Genesis.UI.ImageButton.html](#))

Label

([Genesis.UI.Label.html](#))

List

```
public virtual void Invoke(Widget entity, Game game, Scene scene, Canvas canvas)
```

([Genesis.UI.ListItem.html](#))

ListItemBehavior

([Genesis.UI.ListItemBehavior.html](#))

Type

ListSelector

([Genesis.UI.ListSelector.html](#))

Widget

([Genesis.UI.Widget.html](#))

ListSelectorBehavior

([Genesis.Core.GameBehavior.html](#))

Game

([Genesis.Core.GameBehavior.html](#))

Panel

([Genesis.UI.Panel.html](#))

Type	Name	Description
(Genesis.UI.ListSelector.html)	<i>entity</i>	
(Genesis.UI.Widget.html)	<i>game</i>	

Type	Name	Description
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
Canvas (Genesis.UI.Canvas.html)	<i>canvas</i>	

▼

- + **Genesis.Core.Behaviors.Physics**
(Genesis.Core.Behaviors.Physics.html)
- + **Genesis.Core.Behaviors.Physics**
(Genesis.Core.Behaviors.Physics.html)
- + **Genesis.Core.GameElements**
(Genesis.Core.GameElements.html)
- + **Genesis.Graphics**
(Genesis.Graphics.html)
- + **Genesis.Graphics.Physics**
(Genesis.Graphics.Physics.html)
- + **Genesis.Graphics.RenderDevice**
(Genesis.Graphics.RenderDevice.html)
- + **Genesis.Graphics.Shaders.Operator**
(Genesis.Graphics.Shaders.Operator.html)
- + **Genesis.Graphics.Shapes**
(Genesis.Graphics.Shapes.html)
- + **Genesis.Math**
(Genesis.Math.html)
- + **Genesis.Physics**
(Genesis.Physics.html)
- **Genesis.UI (Genesis.UI.html)**
 - Canvas (Genesis.UI.Canvas.html)
 - ImageButton
 (Genesis.UI.ImageButton.html)
 - Label (Genesis.UI.Label.html)
 - ListItem
 (Genesis.UI.ListItem.html)
 - ListItemBehavior
 (Genesis.UI.ListItemBehavior.html)
 - ListSelector
 (Genesis.UI.ListSelector.html)
 - ListSelectorBehavior
 (Genesis.UI.ListSelectorBehavior.html)
 - Panel (Genesis.UI.Panel.html)

Delegate UIParseHandler

Namespace: Genesis (Genesis.html).UI (Genesis.UI.html)

Assembly: Genesis.dll

Syntax

+ **Genesis.Core.Behaviors.Physics**

(**Genesis.Core.Behaviors.Physics**)

```
public delegate Widget UIParseHandler(JObject data, AssetManager assets)
```

+ **Genesis.Core.Behaviors.Physics**

(**Genesis.Core.Behaviors.Physics**)

+ **Type** **Genesis.Core.GameElements**

(**Genesis.Core.GameElements.h**)

JObject ([Genesis.Core.GameElements.html](#))

Name

Description

+ **Genesis.Graphics**

([Genesis.Graphics.html](#))

AssetManager ([Genesis.Core.AssetManager.html](#))

data

+ **Returns** **Genesis.Graphics.Physics**

([Genesis.Graphics.Physics.html](#))

Widget ([Genesis.UI.Widget.html](#))

Description

+ **Genesis.Graphics.RenderDevice**

(**Genesis.Graphics.RenderDevice**)

+ **Genesis.Graphics.Shaders.Operator**

(**Genesis.Graphics.Shaders.Operator**)

+ **Type** **Genesis.Graphics.Shapes**

(**Genesis.Graphics.Shapes.html**)

Declaration

+ **Genesis.Math**

([Genesis.Math.html](#))

```
public void SetHandler(object @object, IntPtr method)
```

+ **Genesis.Physics**

([Genesis.Physics.html](#))

- **Type** **Genesis.UI** ([Genesis.UI.html](#))

object ([https://learn.microsoft.com/dotnet/api/system.object](#))

Name

Description

ImageButton ([https://learn.microsoft.com/dotnet/api/system.IntPtr](#))

object

([Genesis.UI.ImageButton.html](#))

method

Label ([Genesis.UI.Label.html](#))

ListItem

([Genesis.UI.ListItem.html](#))

Methods

+ **BeginInvoke** (JObject, AssetManager, AsyncCallback, object)

([https://learn.microsoft.com/dotnet/api/system.delegate.begininvoke](#))

Declaration

ListSelectorBehavior ([Genesis.UI.ListSelectorBehavior.htm](#))

Panel ([Genesis.UI.Panel.html](#))

```
public virtual IAsyncResult BeginInvoke(JObject data, AssetManager assets, AsyncCallback callback, object @object)
```

Parameters

Type	Name	Description
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html) AssetManager (Genesis.Core.AssetManager.html)	<i>data</i>	
+ Genesis.Core.Behaviors.Physics AsyncCallback (https://learn.microsoft.com/dotnet/api/system.asynccallback) (Genesis.Core.Behaviors.Physics.html) object (https://learn.microsoft.com/dotnet/api/system.object)	<i>callback</i>	
+ Genesis.Core.GameElements (Genesis.Core.GameElements.html)	<i>object</i>	

Return Value

Type	Description
+ Genesis.Graphics (Genesis.Graphics.html) IAsyncResult (https://learn.microsoft.com/dotnet/api/system.iasyncresult)	

+ Genesis.Graphics.Physics (Genesis.Graphics.Physics.html) EndInvoke(IAsyncResult) + Genesis.Graphics.RenderDevice Declaration (Genesis.Graphics.RenderDevice.html)	
---	--

+ Genesis.Graphics.Shaders.Operation public virtual Widget EndInvoke(IAsyncResult result) (Genesis.Graphics.Shaders.Operation.html)	
---	--

Parameters

Type	Name	Description
+ Genesis.Math IAsyncResult (https://learn.microsoft.com/dotnet/api/system.iasyncresult) (Genesis.Math.html)	<i>result</i>	

Returns

Type	Description
+ Genesis.Physics (Genesis.Physics.html)	

Widget

Genesis.UI (Genesis.UI.html)

Canvas ([Genesis.UI.Canvas.html](#))
ImageButton
([Genesis.UI.ImageButton.html](#))
Label ([Genesis.UI.Label.html](#))

Invoke(JObject, AssetManager)

Declaration	
ListItem	
(Genesis.UI.ListItem.html)	
plusItemBehaviorWidget Invoke(JObject data, AssetManager assets)	

ListItemBehavior

Type	Name	Description
+ ListSelectorBehavior (Genesis.UI.ListSelectorBehavior.html) JObject Panel (Genesis.UI.Panel.html)	<i>data</i>	

Type	Name	Description
AssetManager (Genesis.Core.AssetManager.html)	assets	

Returns

Type	Description
Widget (Genesis.UI.Widget.html)	
+ Genesis.Core.Behaviors.Physics	
(Genesis.Core.Behaviors.Physics)	
+ Genesis.Core.Behaviors.Physics	
(Genesis.Core.Behaviors.Physics)	
+ Genesis.Core.GameElements	
(Genesis.Core.GameElements.h)	
+ Genesis.Graphics	
(Genesis.Graphics.html)	
+ Genesis.Graphics.Physics	
(Genesis.Graphics.Physics.html)	
+ Genesis.Graphics.RenderDevice	
(Genesis.Graphics.RenderDevice)	
+ Genesis.Graphics.Shaders.Oper	
(Genesis.Graphics.Shaders.Ope	
+ Genesis.Graphics.Shapes	
(Genesis.Graphics.Shapes.html)	
+ Genesis.Math	
(Genesis.Math.html)	
+ Genesis.Physics	
(Genesis.Physics.html)	
- Genesis.UI (Genesis.UI.html)	
Canvas (Genesis.UI.Canvas.html)	
ImageButton	
(Genesis.UI.ImageButton.html)	
Label (Genesis.UI.Label.html)	
ListItem	
(Genesis.UI.ListItem.html)	
ListItemBehavior	
(Genesis.UI.ListItemBehavior.html)	
ListSelector	
(Genesis.UI.ListSelector.html)	
ListSelectorBehavior	
(Genesis.UI.ListSelectorBehavior.htm	
Panel (Genesis.UI.Panel.html)	

Class UIParser

This class provides funtions to parse an json object as an widget.

▼ Enter here to filter...

Inheritance

+ **Genesis.Core.Behaviors.Physics**

↳ **object** (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ **(Genesis.Core.Behaviors.Physics)**
↳ **UIParser**

+ **Genesis.Core.Behaviors.Physics**

Inherited Members

(Genesis.Core.Behaviors.Physics)

object.ToString() (<https://learn.microsoft.com/dotnet/api/system.object.tostring>)

+ **Genesis.Core.GameElements** ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))

(Genesis.Core.GameElements.h)

object.Equals(object, object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals\(system-object-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object)))

+ **Genesis.Graphics**

(Genesis.Graphics.html)

object.ReferenceEquals(object, object) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)

object.GetHashCode() (<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>)

+ **Genesis.Graphics.Physics**

object.GetType() (<https://learn.microsoft.com/dotnet/api/system.object.gettype>)

(Genesis.Graphics.Physics.html)

object.MemberwiseClone() (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

Syntax

+ **Genesis.Graphics.Shaders.Oper**

(Genesis.Graphics.Shaders.Ope
public class UIParser

+ **Genesis.Graphics.Shapes**

(Genesis.Graphics.Shapes.html)

Constructors

UIParser()
(Genesis.Math.html)

UIParser(Physics)

(Genesis.Physics.html)

Declaration

- **Genesis.UI (Genesis.UI.html)**

public UIParser()
Canvas ([Genesis.UI.Canvas.html](https://genesis-ui.readthedocs.io/en/latest/Canvas.html))
ImageButton
([Genesis.UI.ImageButton.html](https://genesis-ui.readthedocs.io/en/latest/ImageButton.html))
Label ([Genesis.UI.Label.html](https://genesis-ui.readthedocs.io/en/latest/Label.html))

Properties

ListItem
([Genesis.UI.ListItem.html](https://genesis-ui.readthedocs.io/en/latest/ListItem.html))

ListItemBehavior

([Genesis.UI.ListItemBehavior.html](https://genesis-ui.readthedocs.io/en/latest/ListItemBehavior.html))

ListSelector

Declaration
([Genesis.UI.ListSelector.html](https://genesis-ui.readthedocs.io/en/latest/ListSelector.html))

ListSelectorBehavior

([Genesis.UI.ListSelectorBehavior.html](https://genesis-ui.readthedocs.io/en/latest/ListSelectorBehavior.html))

Panel ([Genesis.UI.Panel.html](https://genesis-ui.readthedocs.io/en/latest/Panel.html))

```
public Dictionary<string, UIParseHandler> UIHandler { get; set; }
```

Property Value

Type	Description
Dictionary (https://learn.microsoft.com/dotnet/api/system.collections.generic.dictionary-2)< + Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)>	
+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)	
+ Genesis.Core.GameElements (Genesis.Core.GameElements.h)	
+ Genesis.Graphics (Genesis.Graphics.html)	
+ Genesis.Graphics.Physics (Genesis.Graphics.Physics.html)	
+ Genesis.Graphics.RenderDevice (Genesis.Graphics.RenderDevice)	
+ Genesis.Graphics.Shaders.Operator (Genesis.Graphics.Shaders.Operator)	
+ Genesis.Graphics.Shapes (Genesis.Graphics.Shapes.html)	
+ Genesis.Math (Genesis.Math.html)	
+ Genesis.Physics (Genesis.Physics.html)	
- Genesis.UI (Genesis.UI.html)	
Canvas (Genesis.UI.Canvas.html)	
ImageButton	
(Genesis.UI.ImageButton.html)	
Label (Genesis.UI.Label.html)	
ListItem	
(Genesis.UI.ListItem.html)	
ListItemBehavior	
(Genesis.UI.ListItemBehavior.html)	
ListSelector	
(Genesis.UI.ListSelector.html)	
ListSelectorBehavior	
(Genesis.UI.ListSelectorBehavior.html)	
Panel (Genesis.UI.Panel.html)	

Declaration

```
public List<Widget> Children { get; set; }
```

Property Value

Type	Description
+ Genesis.Core.Behaviors.Physics (https://learn.microsoft.com/dotnet/api/system.collections.generic.list-1) < Widget> (Genesis.Core.Behaviors.Physics)	

+ Genesis.Core.Behaviors.Physics Debug + Genesis.Core.GameElements Declaration (Genesis.Core.GameElements.h)	
+ Genesis.Graphics { get; set; } (Genesis.Graphics.html)	

Property Value

Type	Description
+ Genesis.Graphics.Physics (https://learn.microsoft.com/dotnet/api/system.boolean) (Genesis.Graphics.RenderDevice)	

+ Genesis.Graphics.Shaders.Operations Enabled (Genesis.Graphics.Shaders.Operations.h)	
---	--

Declaration + Genesis.Graphics.Shapes (Genesis.Graphics.Shapes.html) public bool Enabled { get; set; }	
--	--

+ Genesis.Math (Genesis.Math.html)	
--	--

Type	Description
+ Genesis.Physics (https://learn.microsoft.com/dotnet/api/system.boolean) (Genesis.Physics.html)	

- Genesis.UI ([Genesis.UI.html](#))

Canvas (Genesis.UI.Canvas.html)	
ImageButton (Genesis.UI.ImageButton.html)	
Label (Genesis.UI.Label.html)	
ListItem p(Genesis.UI.ListItem.html) get; set; }	
ListItemBehavior (Genesis.UI.ListItemBehavior.html)	

Property Value	Description
ListSelector ListSelectorBehavior Vec3 (Genesis.Math.Vec3.html) (Genesis.UI.ListSelectorBehavior.html) Panel (Genesis.UI.Panel.html)	

Name

Declaration

```
public string Name { get; set; }
```



Property Value

+ **Genesis.Core.Behaviors.Physics**

Description

(**Genesis.Core.Behaviors.Physics**)

string (<https://learn.microsoft.com/dotnet/api/system.string>)

+ **Genesis.Core.Behaviors.Physics**

(**Genesis.Core.Behaviors.Physics**)

Parent

+ **Genesis.Core.GameElements**

(**Genesis.Core.GameElements.h**)

+ **Genesis.Graphics**

public Widget Parent { get; set; }

(**Genesis.Graphics.html**)

+ **Genesis.Graphics.Physics**

Property Value

(**Genesis.Graphics.Physics.html**)

Type

+ **Genesis.Graphics.RenderDevice**

Widget ([Genesis.UI.Widget.html](#))

(**Genesis.Graphics.RenderDevice**)

+ **Genesis.Graphics.Shaders.Operator**

(**Genesis.Graphics.Shaders.Operator.html**)

+ **Genesis.Graphics.Shapes**

Declaration

(**Genesis.Graphics.Shapes.html**)

+ **Genesis.Math**

(**Genesis.Math.html**)

Property Value

+ **Genesis.Physics**

Type

(**Genesis.Physics.html**)

- **Genesis.UI** ([Genesis.UI.html](#))

Canvas ([Genesis.UI.Canvas.html](#))

ImageButton

([Genesis.UI.ImageButton.html](#))

Label ([Genesis.UI.Label.html](#))

ListItem

([Genesis.UI.ListItem.html](#))

Methods

AddChildren(Widget)

ListItemBehavior

([Genesis.UI.ListItemBehavior.html](#))

Adds a children to the entity. Also sets the parent of the child entity

ListSelector

Declaration

([Genesis.UI.ListSelector.html](#))

ListSelectorBehavior

([Genesis.UI.ListSelectorBehavior.html](#))

Panel ([Genesis.UI.Panel.html](#))

GetRelativeBounds2D(Canvas)

Get the bounds relative to the canvas

Declaration

```
public Rect GetRelativeBounds2D(Canvas canvas)
```

+ Genesis.Core.Behaviors.Physics

Parameters

(Genesis.Core.Behaviors.Physics)

Type

+ Genesis.Core.Behaviors.Physics

Canvas (Genesis.UI.Canvas.html)

(Genesis.Core.Behaviors.Physics)

ReGenesis.Core.GameElements

(Genesis.Core.GameElements.h)

Type

+ Genesis.Graphics

Rect (Genesis.Math.Rect.html)

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

GetRelativePos(Canvas)

(Genesis.Graphics.Physics.html)

Gets the relative position of the canvas

(Genesis.Graphics.RenderDevice)

(Genesis.Graphics.RenderDevice.html)

Declaration

+ Genesis.Graphics.Shaders.Operator

public void GetRelativePos(Canvas canvas)

+ Genesis.Graphics.Shapes

Parameters

(Genesis.Graphics.Shapes.html)

Type

+ Genesis.Math

Canvas (Genesis.UI.Canvas.html)

(Genesis.Math.html)

+ Genesis.Physics

Returns

(Genesis.Physics.html)

Type

- Genesis.UI (Genesis.UI.html)

Vec3 (Genesis.Math.Vec3.html)

Canvas (Genesis.UI.Canvas.html)

ImageButton

(Genesis.UI.ImageButton.html)

IsHover(Game, Scene, Canvas)

Label (Genesis.UI.Label.html)

ListItem

Rework!!! Checks if the mouse hovers over the entity

(Genesis.UI.ListItem.html)

Declaration

Behavior

(Genesis.UI.ListItemBehavior.html)

ListSelector

```
public bool IsHover(Game game, Scene scene, Canvas canvas)
```

(Genesis.UI.ListSelector.html)

ListSelectorBehavior

Parameters

(Genesis.UI.ListSelectorBehavior.html)

Panel (Genesis.UI.Panel.html)

Type	Name	Description
Game (Genesis.Core.Game.html)	<i>game</i>	
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
Canvas (Genesis.UI.Canvas.html) ▼	<i>canvas</i>	

Returns
+ **Genesis.Core.Behaviors.Physics**

Type
+ **Genesis.Core.Behaviors.Physics**

+ **bool** (<https://learn.microsoft.com/dotnet/api/system.boolean>)

(**Genesis.Core.Behaviors.Physics**)

+ **Genesis.Core.GameElements**
OnDispose(Game, Scene, Canvas)
(**Genesis.Core.GameElements.h**)

Dispose the entity

+ **Genesis.Graphics**

(**Genesis.Graphics.html**)

+ **Genesis.Graphics.Physics**

public virtual void OnDispose(Game game, Scene scene, Canvas canvas)
(**Genesis.Graphics.Physics.html**)

+ **Genesis.Graphics.RenderDevice**

(**Genesis.Graphics.RenderDevice**)

+ **Genesis.Graphics.Shaders.Operator**
Game (Genesis.Core.Game.html)
(**Genesis.Graphics.Shaders.Operator**)

Scene (Genesis.Core.Scene.html)

+ **Genesis.Graphics.Shapes**

Canvas (Genesis.UI.Canvas.html)

(**Genesis.Graphics.Shapes.html**)

+ **Genesis.Math**

(**Genesis.Math.html**)

OnInit(Game, Scene, Canvas)

+ **Genesis.Physics**

Initial the entity

(**Genesis.Physics.html**)

Declaration

- **Genesis.UI** (**Genesis.UI.html**)

Canvas (Genesis.UI.Canvas.html) Game game, Scene scene, Canvas canvas)

ImageButton

(**Genesis.UI.ImageButton.html**)

Parameters

Label (Genesis.UI.Label.html)

Type

ListItem

(**Genesis.UI.ListItem.html**)

Game (Genesis.Core.Game.html)

ListItemBehavior

(**Genesis.UI.ListItemBehavior.html**)

ListSelector

Canvas (Genesis.UI.Canvas.html)

(**Genesis.UI.ListSelector.html**)

ListSelectorBehavior

(**Genesis.UI.ListSelectorBehavior.html**)

Panel (Genesis.UI.Panel.html)

Name

Description

game

scene

canvas

OnRender(Game, IRenderDevice, Scene, Canvas)

Renders the entity

Declaration

```
public virtual void OnRender(Game game, IRenderDevice renderDevice, Scene scene, Canvas canvas)
```

+ Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics.html)

Parameters

Type	Name	Description
(Genesis.Core.Behaviors.Physics.html)	<i>game</i>	
IRenderDevice (Genesis.Graphics.IRenderDevice.html)	<i>renderDevice</i>	
Scene (Genesis.Core.Scene.html)	<i>scene</i>	

+ Genesis.Core.GameElements (Genesis.Core.GameElements.html)

Scene (Genesis.Core.Scene.html)

+ Genesis.Graphics (Genesis.Graphics.html)

Canvas (Genesis.UI.Canvas.html)

+ Genesis.Graphics.Physics

OnUpdate(Game, Scene, Canvas)

+ Genesis.Graphics.RenderDevice

Update the entity

(Genesis.Graphics.RenderDevice.html)

Declaration

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator.html)

```
public virtual void OnUpdate(Game game, Scene scene, Canvas canvas)
```

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

Type	Name	Description
(Genesis.Math.html)	<i>game</i>	
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
Canvas (Genesis.UI.Canvas.html)	<i>canvas</i>	

- Genesis.UI (Genesis.UI.html)

Canvas (Genesis.UI.Canvas.html)

ImageButton

Events

Label (Genesis.UI.Label.html)

ListItem

Click

(Genesis.UI.ListItem.html)

ListItemBehavior

(Genesis.UI.ListItemBehavior.html)

ListSelector

`public event UIEvent Click`

(Genesis.UI.ListSelector.html)

ListSelectorBehavior

Event Type

Panel (Genesis.UI.Panel.html)

Type	Description
UIEvent (Genesis.UI.UIEvent.html)	

MouseEnter

Declaration
+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics
public event UIEvent MouseEnter)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics
Event type)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h
UIEvent (Genesis.UI.UIEvent.html))

+ Genesis.Graphics

(Genesis.Graphics.html)

MouseLeave

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)
Declaration

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice
public event UIEvent MouseLeave)

+ Genesis.Graphics.Shaders.Oper

(Genesis.Graphics.Shaders.Oper
Event type)

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)
UIEvent (Genesis.UI.UIEvent.html)

+ Genesis.Math

(Genesis.Math.html)

+ Genesis.Physics

(Genesis.Physics.html)

- Genesis.UI (Genesis.UI.html)

Canvas (Genesis.UI.Canvas.html)

ImageButton

(Genesis.UI.ImageButton.html)

Label (Genesis.UI.Label.html)

ListItem

(Genesis.UI.ListItem.html)

ListItemBehavior

(Genesis.UI.ListItemBehavior.html)

ListSelector

(Genesis.UI.ListSelector.html)

ListSelectorBehavior

(Genesis.UI.ListSelectorBehavior.html)

Panel (Genesis.UI.Panel.html)

Type	Description
UIEvent (Genesis.UI.UIEvent.html)	