

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)

IGameBehavior

(Genesis.Core.IGameBehavior.html)

Input (Genesis.Core.Input.html)

(Genesis.Core.Input.html)

IGameBehavior (Genesis.Core.IGameBehavior.html)

(IGameBehavior (Genesis.Core.IGameBehavior.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)

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

Represents a light source in the Genesis framework.

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

Scene (Genesis.Core.Scene.html)

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

Represents a game scene in the Genesis framework.

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

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)

(Storage (Genesis.Core.Storage.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)
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Scene3D
(Genesis.Core.Scene3D.html)
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(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>)

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

Assembly ([Genesis](#))

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

Syntax 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<Texture> ([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)
genesisWindow > Textures { get; set; }

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.h)

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 (Genesis.Graphics.Font.html)	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) - Genesis.Core (Genesis.Core.html)	<i>name</i>	The name of the texture.
Bitmap ((Genesis.Core.html) (https://learn.microsoft.com/dotnet/api/system.drawing.bitmap) AssetManager ((Genesis.Core.AssetManager.html))	<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))	The added texture.

DisposeTextures(Game)

Dispose 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

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

Parameters SceneEventHandler

Type	Name	Description
SceneEventHandler ((Genesis.Core.SceneEventHandler.html)) SceneSizeEventHandler ((Genesis.Core.Game.html)) ((Genesis.Core.SceneSizeEventHandler.html)) Storage ((Genesis.Core.Storage.html))	<i>game</i>	The game object associated with the assets.

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>)

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

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

Genesis.Graphics

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

+ **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)

Texture (Genesis.Core.Texture.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


```
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)

Game (Genesis.Core.Game.html)

Parameters

GameElement

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

+ 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>)
[\(Genesis.Core.html\)](#)

Inherited Members

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

Namespace

Genesis

↳ [Core](#) ([Genesis.Core.html](#))

Assembly

Genesis

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

Syntax

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

Scene3D

public class Game

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

SceneEventHandler

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

SceneSizeEvenHandler

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

Storage

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.SceneEngineDevice, Viewport viewport)

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

Parameters

Genesis.Core.Behaviors.Physics

Type

↳ [Genesis.Core.Behaviors.Physics](#)

Name

Description

Type	Name	Description
↳ Genesis.Core.GameElements (Genesis.Core.GameElements.html)	renderDevice	The rendering device to use.
Viewport (Genesis.Graphics.Viewport.html)	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.Physics)

Property Value

+ Genesis.Core.Behaviors.Physics

Type Genesis.Core.Behaviors.Physics

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		
Genesis.Core.GameEventHandler public Genesis.Core.GameEventHandler { get; set; }		
GenesisWindow		
(Genesis.Core.GenesisWindow.html)		
Property Value IGameBehavior		
Type (Genesis.Core.IGameBehavior.html)	Description	
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.		
SceneEventHandler		
Declaration (Genesis.Core.SceneEventHandler.h)		
SceneSizeEvenHandler		
(Genesis.Core.SceneSizeEvenHandler.html)		
public bool Run { get; set; }		
Storage		
(Genesis.Core.Storage.html)		
Utils (Genesis.Core.Utils.html)		
+ Genesis.Core.Behaviors	Description	
(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.		
Genesis.Core.GameElements		
(Genesis.Core.GameElements.html)		
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.html](#)

Type

[GameEventHandler](#)

(Genesis.Core.GameEventHandler.h)

Scene

(Genesis.Core.Scene.html)

(Genesis.Core.GenesisWindow.html)

IGameBehavior

(Genesis.Core.IGameBehavior.html)

Storage

Input (Genesis.Core.Input.html)

Gets or sets the storage object for managing game data.

Light (Genesis.Core.Light.html)

Declaration

Scene (Genesis.Core.Scene.html)

Scene3D

(Genesis.Core.Scene3D.html)

SceneEventHandler

(Genesis.Core.SceneEventHandler.h)

Property Value

[SceneSizeEvenHandler](#)

Type

(Genesis.Core.SceneSizeEvenHandler.h)

Storage

[Storage](#)

(Genesis.Core.Storage.html)

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

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)

+ Genesis.Core.Behaviors.Physics

public int TargetFPS { get; set; }

(Genesis.Core.Behaviors.Physics)

Genesis.Core.GameElements

Type

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

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

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

Type	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	

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)	

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

Methods

GameEventHandler

(Genesis.Core.GameEventHandler.h)

GenesisWindow

AddScene(Scene)

IGameBehavior
Adds a scene to the list of scenes.
(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

Parameters

(Genesis.Core.Scene3D.html)

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

(Genesis.Core.SceneSizeEventHandler)

Storage

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

Scene (Genesis.Core.Scene.html)

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

GetScreenLocation2D(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)

+ Genesis.Core.GameElements

ScreenLocation2D(GameElement element)

(Genesis.Core.GameElements.h)

Parameters

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

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

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

Vec3 (Genesis.Math.Vec3.html)	A Vec3 representing the screen coordinates of the element.
-------------------------------	--

SceneEventHandler

(Genesis.Core.SceneSizeEvenHandler.h)

GetSceneCord(Vec3)

Storage

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)

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()
```



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](#))

Scene3D
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
GameEventHandler (Genesis.Core.GameEventHandler.html)	

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

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

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

Event triggered before rendering.

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

+ **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)

OnDispose

Event triggered when the game is disposed.

Layer (Genesis.Core.Layer.html)

Declaration 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.

Declaration Behaviors

+ Genesis.Core.Behaviors.Physcis

Declaration Physics

```
public event GameEventHandler OnInit
```

+ Genesis.Core.Behaviors.Physics

Declaration Physics

Event Type

+ Genesis.Core.GameElements

Declaration GameElements

Type GameEventHandler (Genesis.Core.GameEventHandler.html)

+ Genesis.Graphics

Declaration Graphics

Type (Genesis.Graphics.html)

+ Genesis.Graphics.Physics

Description

OnRenderBeginn

Event triggered at the beginning of rendering.

Declaration

```
public event GameEventHandler OnRenderBeginn
```

Event Type

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

Game (Genesis.Core.Game.html)
GameElement

OnRenderEnd

GameElement.html
GameEventHandler

Event triggered at the end of rendering.

Declaration

```
(Genesis.Core.GenesisWindow.html)
```

IGameBehavior

```
public event GameEventHandler OnRenderEnd
```

(Genesis.Core.IGameBehavior.html)

Input (Genesis.Core.Input.html)

Event Type

Type	Description
Light (Genesis.Core.Light.html) Scene (Genesis.Core.Scene.html)	

GameEventHandler (Genesis.Core.GameEventHandler.html)

(Genesis.Core.Scene3D.html)

SceneEventHandler

(Genesis.Core.SceneEventHandler.h)

OnUpdate

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.h)

Event triggered during the game update.

Storage

Declaration

```
(Genesis.Core.Storage.html)
```

Utils (Genesis.Core.Utils.html)

```
public event GameEventHandler OnUpdate
```

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

Event Type

+ Genesis.Core.Behaviors.Physics

Type (Genesis.Core.Behaviors.Physics)

GameEventHandler (Genesis.Core.GameEventHandler.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

Description

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

Class GameElement

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

Enter here to filter...

Inheritance

Genesis.Core

↳ (Genesis.Core.html) <small>https://learn.microsoft.com/dotnet/api/system.object</small>
↳ GameElement
↳ AssetManager
↳ BufferedSprite (Genesis.Core.GameElements.BufferedSprite.html)
↳ CameraElement (Genesis.Core.GameElements.CameraElement.html)
↳ Game (Genesis.Core.Game.html)
↳ Element3D (Genesis.Core.GameElements.Element3D.html)
↳ GameElement
↳ Empty (Genesis.Core.GameElements.Empty.html)
↳ Qube (Genesis.Core.GameElements.Qube.html)
↳ GameEventHandler
↳ RectElement (Genesis.Core.GameElements.RectElement.html)
↳ Sprite (Genesis.Core.GameElements.Sprite.html)
↳ GenesisWindow
↳ Terrain2D (Genesis.Core.GameElements.Terrain2D.html)
↳ Terrain3D (Genesis.Core.GameElements.Terrain3D.html)
↳ GameBehavior
↳ Light (Genesis.Core.Light.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))
Scene (Genesis.Core.Scene.html)
Scene3D
object.Equals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object))
SceneEventHandler
object.ReferenceEquals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.referenceequals)
(Genesis.Core.SceneEventHandler.html)
object.GetHashCode() (https://learn.microsoft.com/dotnet/api/system.object.gethashcode)
SceneSizeEvenHandler
object.GetType() (https://learn.microsoft.com/dotnet/api/system.object.gettype)
(Genesis.Core.SceneSizeEvenHandler.html)
object.MemberwiseClone() (https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)
Storage
Namespace: Genesis (Genesis.html) Core (Genesis.Core.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

Constructors

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

Game (Genesis.Core.Game.html)

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.Behaviors.html)	
Utils (Genesis.Core.Utils.html)	

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

GameElement (Genesis.Core.GameElement.html) >

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Enabled

Genesis.Core.Behaviors.Physics

(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.html)

+ Genesis.Core.Behaviors.Physics

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

(Genesis.Core.Behaviors.Physics.html)

Genesis.Core.GameElements

Type

Type	Description
(Genesis.Core.GameElements.h)	

+ Genesis.Graphics

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

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

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

Properties

Gets or sets the properties associated with the game element.

Declaration

```
public Dictionary<string, object> Propertys { 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](#)),
object ([Genesis.Core.GameElement.html](#))>
([Genesis.Core.GameElement.html](#))

GameEventHandler

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

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

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

SceneEventHandler

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

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

SceneSizeEvenHandler

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

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

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

+ [Genesis.Core.GameElements](#)

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

Size

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

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

+ [Genesis.Graphics.Physics](#)

Description

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)

Methods

+ **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)

```
public void AddBehavior(IGameBehavior behavior)
```

Parameters

Type		Name	Description
IGameBehavior (Genesis.Core.IGameBehavior.html)	- Genesis Core	<i>behavior</i>	The behavior to be added.

(Genesis.Core.html)

AddBehavior<T>(T)

Adds a behavior type to the game element and returns it.

GameElement

Declaration: [\(This is Core GameElement.html\)](#)

GameEventHandler

overrides `AddBehavior(T)` where `T : TGameBehavior`

GenesisWindow

GenesisWindow
(Genesis.Core.GenesisWindow.html)

Parameters

Type	Name	Description
T	Input (Genesis.Core.Input.html) behavior Layer (Genesis.Core.Layer.html)	The behavior to be added.

Returns Light (Genesis.Core.Light.html)

Type	Description
<code>T</code>	(Genesis.Core.Scene3D.html) The added behavior of type <code>T</code> .
<code>SceneEventHandle</code>	

SceneEventHandler

Type Parameters

Name	Description
Storage	The type of the behavior.
T (Genesis.Core.Storage.html)	Utils (Genesis.Core.Utils.html)

± Genesis Core Behaviors

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

Adds a child game element to the current game element.

+ Genesis.Core.Behaviors.Physics

(Configurable Behavior Physics)

+ **Genesis.Core.Behaviors.Physics**
public void AddChild(GameElement element)
(Genesis Core Behaviors Physics)

+ Genesis Core GameElements

Parameters

Type	Name	Description
+ Genesis.Graphics GameElement (Genesis.Core.GameElement.html) (Genesis.Graphics.html)	<i>element</i>	The child game element to be added.

± 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

([Genesis.Core.AssetManager.html](#))
IGameBehavior ([Genesis.Core.GameBehavior.html](#))
Game ([Genesis.Core.Game.html](#))

Type Parameters

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

Name	Description
GameEventHandler	

T	(Genesis.Core.GameEventHandler.h) The type of the behavior. GenesisWindow
---	---

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

IGameBehavior

GetBehaviors<T>()

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

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

Returns all behaviors of type T

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

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

Declaration

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

Scene3D

```
public List<IGameBehavior> GetBehaviors<T>()
```

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

SceneEventHandler

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

Type SceneSizeEvenHandler

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

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

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

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

Description

A list of all behaviors of type T.

Type Parameters

+ Genesis.Core.Behaviors

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

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

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

+
[+ Genesis.Core.Behaviors.Physics](#)
[GetInstance\(GameElement\)](#)

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

Copies the properties from another game element instance to the current one.

+ Genesis.Core.GameElements

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

+ Genesis.Graphics

public virtual voidGetInstance(GameElement element)

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

+ Genesis.Graphics.Physics

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

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

Parameters

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

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

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.GameElements

Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

+ Genesis.Graphics

Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

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)

```
public virtual IAsyncResult BeginInvoke(Game game, IRenderDevice renderDevice, AsyncCallback
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)
GenesisWindow

Declaration

```
IGameBehavior
public virtual void EndInvoke(IAsyncResult result)
    Input (Genesis.Core.Input.html)
    Layer (Genesis.Core.Layer.html)
```

Parameters

Light (Genesis.Core.Light.html)

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

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

SceneEventHandler

(Genesis.Core.SceneEventHandler.h)

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.h)

Declaration

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

+ Genesis.Core.Behaviors

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

Type	Name	Description
Genesis.Core.Behaviors.Physics		
(Genesis.Core.Behaviors.Physics.h)		

Game (Genesis.Core.Game.html)

game

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

renderDevice

(Genesis.Core.Behaviors.Physics.h)

+ Genesis.Core.GameElements

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

+ Genesis.Graphics

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

+ Genesis.Graphics.Physics

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

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 (<https://learn.microsoft.com/dotnet/api/genesis.core.gameelement>)
↳ ContainerControl (<https://learn.microsoft.com/dotnet/api/system.windows.forms.containercontrol>)
↳ 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>)
Scene.EventHandler
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.html>)
(<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)

+ Genesis.Core.Behaviors.Physics

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

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

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>)
 Genesis.Core.AssetManager.html

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>)
 Genesis.Core.GameElement.html

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

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

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

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>)

 SceneEvent.Handler
 ([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)))
 Genesis.Core.Scene.EventHandler

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

(Genesis.Core.Behaviors.Physics.html)

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

+ Genesis.Core.GameElements

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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>)

+ Genesis.Graphics

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

(Genesis.Graphics.html)

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

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
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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
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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
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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()
ContainerControl.PerformLayout()
+ Genesis.Core.Behaviors
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(<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.bindingcontext>)

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

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>)

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

Scene3D
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.onpaddingchanged>)

ScrollableControl.OnPaddingChanged(EventArgs)
SceneEventHandler
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.onpaddingchanged>)

ScrollableControl.SetDisplayRectLocation(int, int)
SceneSizeEvenHandler
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.setdisplayrectlocation>)

ScrollableControl.ScrollControlToIntView(Control)
Storage
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrollcontrolintoview>)

ScrollableControl.ScrollToControl(Control)
Utils
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.scrollTocontrol>)

ScrollableControl.OnScroll(ScrollEventArgs)
+ Genesis.Core.Behaviors
(Genesis.Core.Behaviors.html)

ScrollableControl.OnScroll(ScrollEventArgs)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.onscroll>)

ScrollableControl.SetAutoScrollMargin(int, int)
+ Genesis.Core.Behaviors.Physics
(Genesis.Core.Behaviors.Physics.html)

ScrollableControl.SetAutoScrollMargin(int, int)
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.setautoscrollmargin>)

ScrollableControl.SetScrollState((bool))
+ Genesis.Core.Behaviors.Physics
(Genesis.Core.Behaviors.Physics.html)

ScrollableControl.SetScrollState((bool))
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.setscrollstate>)

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

ScrollableControl.AutoScrollMargin
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.autoscrollmargin>)

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

ScrollableControl.AutoScrollPosition
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.autoscrollposition>)

ScrollableControl.AutoScrollMinSize
+ Genesis.Graphics
(Genesis.Graphics.html)

ScrollableControl.AutoScrollMinSize
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.autoscrollminsize>)

ScrollableControl.DisplayRectangle
(Genesis.Graphics.Physcis.html)

ScrollableControl.DisplayRectangle
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.displayrectangle>)

ScrollableControl.HScroll
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.hscroll>)

ScrollableControl.HorizontalScroll
(Genesis.Graphics.Physcis.html)

ScrollableControl.HorizontalScroll
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.scrollablecontrol.horizontalscroll>)

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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>)
([Genesis.Core.SceneEvent.Handler.html](#))

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

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

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>)
Genesis.Core.GameElements
Genesis.Core.GameElements.html

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>)
Genesis.Graphics
Genesis.Graphics.html

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

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.UseWaitCursor (<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>)

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

Control.CauseValidationChanged
 (<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.IGameBehavior
(<https://learn.microsoft.com/dotnet/api/genesis.core.igamebehavior.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>)
SceneEvent.Handler
(<https://learn.microsoft.com/dotnet/api/genesis.core.sceneevent.handler>)
Control.QueryContinueDrag
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.querycontinuedrag>)
SceneSizeEven.Handler
(<https://learn.microsoft.com/dotnet/api/genesis.core.scenesizeeven.handler>)
Control.QueryAccessibilityHelp
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.queryaccessibilityhelp>)
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>)
Genesis.Core.Behaviors
(<https://learn.microsoft.com/dotnet/api/genesis.core.behaviors>)
Genesis.Core.Behaviors.Physics
(<https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics>)
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>)
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.behaviors.physic>)
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>)
Genesis.Core.GameElements.h
(<https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.h>)
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>)
Genesis.Graphics.h
(<https://learn.microsoft.com/dotnet/api/genesis.graphics.h>)
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.Prepare
(<https://learn.microsoft.com/dotnet/api/system.windows.forms.control.dpichangedbeforeparent>)
Genesis.Graphics.Physics
(<https://learn.microsoft.com/dotnet/api/genesis.graphics.physics>)
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.dispose#system-componentmodel-component-dispose>)

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

Component.Scene3D
 ([Scene3D.html](#))
 ([Component.Events.html](#))

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

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

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

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

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

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

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

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

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

object.Equals(object, object) (([Genesis.Core.Behaviors.Physics.html](#))

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

+ Genesis.Core.GameElements
 ([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>)

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

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

Assembly: Genesis.dll

+ Genesis.Graphics.Physics
 ([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)
Input (Genesis.Core.Input.html)
Layer (Genesis.Core.Layer.html)
Game
Light (Genesis.Core.Light.html)
Declaration
Scene (Genesis.Core.Scene.html)
Scene3D
p(Genesis.Core.Scene3DEvent); }
SceneEventHandler
(Genesis.Core.SceneEventHandler.h)

Properties

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)
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

	Name	Description
game		

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.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

On Genesis.EventHandler

Syntax

Genesis.Core.SceneSizeEvenHandler
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)

+ 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.

IGameBehavior.RenderDevice

Declaration

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

Property Value	
Type	Description
GameElement (Genesis.Core.GameElement.html) (Genesis.Core.AssetManager.html)	

Methods

(Genesis.Core.GameEventHandler.h)

GenesisWindow

[Genesis Core](#) | [Genesi Window](#) | [htm](#)

OnDestroy(Game, GameElement)

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(GenesisCoreScene.html)
```

Scene3D

- [Scenes3D](#)
- [\(Genesis Core Scenes3D.html\)](#)

Parameters		Name	Description
Type	Value		
SceneEventHandler (Genesis.Core.SceneEventHandler.h)			
GameSizeEventHandler (Genesis.Core.Game.html)	<i>game</i>		The game instance.
GameElement (Genesis.Core.GameElement.html)	<i>parent</i>		The parent game element.
Storage			

OnInit(Game, GameElement)

• Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)
Called when the game behavior is initialized.

• Genesis Core Behaviors Physics

~~GENESIS~~.CURE.BE Declaration

(Genesis.Core.Behaviors.Physic

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

• Genesis.Core.Behaviors.Physics ‘Collision’ Game Behavior Blueprint

(Genesis.Core.Behaviors.Physical)

Parameters + Genesis Core Game

Type [necis.Core.GameElements.h](#)

+ Genesis.Core.GameElements		Name	Description
Type	(Genesis.Core.GameElements.h)		
Game (Genesis.Core.Game.html)		<i>game</i>	The game instance.
+ Genesis.Graphics	(Genesis.Graphics.html)	<i>parent</i>	The parent game element.

+ Genesis.Graphics.Physics

(Genesis Graphics Physics.html)

OnRender(Game, GameElement)

+ 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)

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.
GameElement (Genesis.Core.GameElement.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)))
 ↳ Genesis.Core.IGameBehavior.html
 ↳ 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.

ReturnGameElement

Type	(Genesis.Core.GameElement.html) GameEventHandler	Description
short	(Genesis/Core/GameEventHandler.html#net/api/system.int16)	True if the key is down; otherwise, false.

GenesisWindow
(Genesis.Core.GenesisWindow.html)
IGameBehavior
GetAsyncKeyState(Keys)
(Genesis.Core.IGameBehavior.html)

6 / Input (Genesis Core Input.html)

Gets the state of the specified key.
Layer (Genesis Core Layer.html)

Layer (Genesis.Core.Layer.html)

Declaration (Genesis.Core.Light.html)

Scene (Genesis.Core.Scene.html)

pubone3D static extern short Ge

(Genesis.Core.Scene3D.html)

SceneEventHandler

SCENEVENT Handler Parameters.

(Genesis.Core.SceneEventHandler.h)

TypeSceneS

<code>Keys</code> Storage (https://learn.microsoft.com/dotnet/api/system.windows.forms.keys) (Genesis.Core.Storage.html)	<code>vKey</code>	The virtual key code to check.
--	-------------------	--------------------------------

Util

Returns

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

(Genesis Core Behaviors Physical)

• Genesis-Core-Behaviors Physics

GetMousePos() behaviors.Physics

(Genesis.Core.Behaviors.Physical)

GetMousePosition

+ Genesis.Core.GameElements Declaration

Declaration: (Genesis.Core.GameElements.h)

+ Genesis.Graphics 3 GetMousePos()

(Genesis Graphics.html)

Robotics Graphics Physics

Type	Description
+Genesis.Graphics.RenderDevice (Genesis.Graphics.RenderDevice)	A Vec3 representing the current mouse position.

GetRefMousePos(Game)

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

Declaration

```
public static Vec3 GetRefMousePos(Game game)
```

Parameters
Game (Genesis.Core.Game.html)

GameElement

Type (Genesis.Core.GameElement.html)

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

GenesisWindow

Returns (Genesis.Core.GenesisWindow.html)

Type GameBehavior

Description

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

Layer (Genesis.Core.Layer.html)

Light (Genesis.Core.Light.html)

GetRefMousePos(IntPtr)

Scene3D

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

Declaration

SceneEventHandler
(Genesis.Core.SceneEventHandler.h)

SceneSizeEvenHandler

public static Vec3 GetRefMousePos(IntPtr handle)
(Genesis.Core.SceneSizeEvenHandler.h)

Storage

Parameters (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)

Returns

Genesis.Core.Behaviors.Physics

Type Genesis.Core.Behaviors.Physics

Description

A Vec3 representing the mouse position relative to the control.

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.h)

Gets the mouse position relative to the specified control.

Genesis.Graphics

(Genesis.Graphics.html)

Declaration

+ Genesis.Graphics.Physics

public static Vec3 GetRefMousePos(Control control)
(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

Parameters (Genesis.Graphics.RenderDevice.h)

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

SceneEventHandler
([Genesis.Core.SceneEventHandler.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

SceneEventHandler

Assembly

Genesis.Core

Syntax

SceneSizeEvenHandler
(Genesis.Core.SceneSizeEvenHandler)
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)

Creates a new instance of the Layer class.

+ Genesis.Core.Behaviors.Physics

Declaration
(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.GameElements

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

+ 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)

+ 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:

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

Scene (Genesis.Core.Scene.html)

Property Value

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

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.html)

Storage

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

Methods

Init(Game, RenderDevice)

(Genesis.Core.Behaviors.html)

Initializes all game elements within the layer.

+ Genesis.Core.Behaviors.Physics

Declaration:

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

Parameters:

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.html)

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
Scene (Genesis.Core.Scene.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

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)
SceneSizeEvenHandler
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnDestroy_Genesis_Core_Game_Storage)
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.GameElement.html#Genesis_Core_GameElement_Location)

+ Genesis.Core.GameElements

(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.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)

GameElement.Parent (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Parent)

(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**

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

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

location

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)

GenesisWindow

```
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.h)

SceneSizeEvenHandler

GetLightColor()

SceneSizeEvenHandler

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

+ Genesis.Core.Behaviors.Physics

Description

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\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))
Scene ([Genesis.Core.Scene.html](https://learn.microsoft.com/dotnet/api/genesis.core.scene.html))
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.html](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics.html))

+ Genesis.Core.Behaviors.Physics Scene()

([Genesis.Core.Behaviors.Physics.html](https://learn.microsoft.com/dotnet/api/genesis.core.behaviors.physics.html))

Creates a new game scene.

+ Genesis.Core.GameElements

([Genesis.Core.GameElements.html](https://learn.microsoft.com/dotnet/api/genesis.core.gameelements.html))

+ Genesis.Graphics

public Scene()
([Genesis.Graphics.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.html))

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.physics.html))

+ Genesis.Graphics.RenderDevice

Creates a new game scene with the specified name.
([Genesis.Graphics.RenderDevice.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.renderdevice.html))

Declaration

+ Genesis.Graphics.Shaders.OpenGL

([Genesis.Graphics.Shaders.OpenGL.html](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl.html))

```
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](#))

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

Declaration

```
Scene3D  
(Genesis.Core.Scene3D.html)  
public SceneEventHandler AfterCanvasRender { get; set; }  
SceneEventHandler  
(Genesis.Core.SceneEventHandler.html)
```

Property Value

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

+ Genesis.Core.Behaviors

AfterSceneRenderBehavior

Event handler triggered after scene rendering.

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

+ Genesis.Core.Behaviors.Physics

Event handler triggered after scene rendering.
[AfterSceneRenderBehavior](#) ([Genesis.Core.Behaviors.Physics.html](#))

+ Genesis.Core.GameElements

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

Type	Description
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](#))

```
public SceneEventHandler BeforeCanvasPreperation { get; set; }
```

Property Value

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

GameEventHandler

(Genesis.Core.GameEventHandler.h)

GenesisWindow

(Genesis.Core.GenesisWindow.html)

BeforeCanvasRender

Event handler triggered before UI canvas rendering.

(Genesis.Core.IGameBehavior.html)

Declaration

Input (Genesis.Core.Input.html)

Layer (Genesis.Core.Layer.html)

```
public SceneEventHandler BeforeCanvasRender { get; set; }
```

Scene (Genesis.Core.Scene.html)

Scene3D

Property Value

(Genesis.Core.Scene3D.html)

Type

SceneEventHandler

(Genesis.Core.SceneEventHandler.h)

SceneEventHandler (Genesis.Core.SceneEventHandler.html)

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.h)

Storage

BeforeScenePreperation

Utils (Genesis.Core.Utils.html)

Event handler triggered before scene preparation.

+ Genesis.Core.Behaviors

Declaration

(Genesis.Core.Behaviors.html)

+ Genesis.Core.Behaviors.Physics

```
public SceneEventHandler BeforeScenePreperation { get; set; }
```

(Genesis.Core.Behaviors.Physics.html)

Property Value

Genesis.Core.Behaviors.Physics

Type

SceneEventHandler

(Genesis.Core.SceneEventHandler.html)

SceneEventHandler (Genesis.Core.SceneEventHandler.html)

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

BeforeSceneRender

(Genesis.Graphics.html)

Event handler triggered before scene rendering.

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Declaration

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

```
public SceneEventHandler BeforeSceneRender { get; set; }
```

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Op

Property Value

(Genesis.Graphics.Shaders.Op.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)

CanvasEvent Handler

Gets SceneSizeEven Handler canvases within the scene.
(Genesis.Core.SceneSizeEvenHandler.h)

Declaration
Storage
 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.html)</i>	

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

Canvas (Genesis.UI.Canvas.html) >

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

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
(Genesis.Graphics.RenderDevice.html)

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

+ Genesis.Graphics.Shaders.Open
Layer (Genesis.Core.Layer.html) >
(Genesis.Graphics.Shaders.Open.html)

Type	Description
(Genesis.Graphics.RenderDevice.html)	

Name

Gets or sets the name of the scene.

Declaration

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

Property Value

(Genesis.Core.GameEventHandler.h)

Type

GenesisWindow

Description

(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

Storage

(Genesis.Core.Storage.html)

Description

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

Methods

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.OpenGL

AddCanvas(Canvas)

(Genesis.Graphics.Shaders.OpenGL.html)

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)		

AddLayer(string)

Adds a layer to the scene
Scene (Genesis.Core.Scene.html)

Declaration

```
(Genesis.Core.Scene3D.html)
```

```
public void AddLayer(string layerName)
```

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

```
SceneSizeEvenHandler
```

Parameters

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

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

GetCanvas(string)

+ Genesis.Core.Behaviors.Physics

Gets the canvas with the given name.

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

```
public Canvas GetCanvas(string name)
```

+ 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)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator.html)

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.h)
```

Parameters

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string) (Genesis.Core.IGameBehavior.html)	name	

Returns

Layer (Genesis.Core.Layer.html)

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

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

Scene3D (Genesis.Core.Scene3D.html)

SceneEventHandler

GetElement(string, string)

SceneSizeEvenHandler
Gets the element with the given name out of the given layer.
(Genesis.Core.SceneSizeEvenHandler.h)

Declaration

```
(Genesis.Core.Storage.html)  
public GameElement GetElement(string layerName, string name)  
Utils (Genesis.Core.Utils.html)
```

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

Type	Name	Description
(Genesis.Core.Behaviors.Physics)	layerName	
string (https://learn.microsoft.com/dotnet/api/system.string) (Genesis.Core.Behaviors.Physics)	name	

Returns

GameElements

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

+ Genesis.Graphics

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Gets the elements from the given layer.

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator.html)

public List<GameElement> GetElements(string layername)

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

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)[]	<i>layer</i>	

Returns (Genesis.Core.Utils.html)

Type	Description
(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)
GetLayer(string)

(Genesis.Core.Behaviors.Physics)

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

(Genesis.Graphics.Physics.html)
Type

+ Genesis.Graphics.RenderDevice

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

(Genesis.Graphics.RenderDevice)

Returns

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL)

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
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)		

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
(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](#))

Parameters
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
Scene3D	<i>layer</i>	

Type	Name	Description
Viewport	<i>viewport</i>	The viewport containing information about the new dimensions.

+ **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.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.Behaviors**
+ **Genesis.Core.Behaviors.html**
+ **Genesis.Core.Behaviors.Physics**
+ **Genesis.Core.Behaviors.Physic**

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.GameElements**
+ **Genesis.Core.GameElements.html**

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.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)

+ **Genesis.Graphics.Physics**
+ **Genesis.Graphics.Physics.html**

Scene.Camera (Genesis.Core.Scene.html#Genesis_Core_Scene_Camera)

Scene.Canvas (Genesis.Core.Scene.html#Genesis_Core_Scene_Canvas)

+ **Genesis.Graphics.RenderDevice**
+ **Genesis.Graphics.RenderDevice.html**

Scene.BeforeScenePreperation (Genesis.Core.Scene.html#Genesis_Core_Scene_BeforeScenePreperation)

Scene.BeforeSceneRender (Genesis.Core.Scene.html#Genesis_Core_Scene_BeforeSceneRender)

+ **Genesis.Graphics.Shaders.OpenGL**
+ **Genesis.Graphics.Shaders.OpenGL.html**

Scene.AfterSceneRender (Genesis.Core.Scene.html#Genesis_Core_Scene_AfterSceneRender)

Scene.BeforeCanvasPreperation (Genesis.Core.Scene.html#Genesis_Core_Scene_BeforeCanvasPreperation)

+ **Genesis.Graphics.Shaders.SL**
+ **Genesis.Graphics.Shaders.SL.html**

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
Scene3D(string name, Light sun)
(Genesis.Core.Behaviors.html)

Parameters

Type 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

(Genesis.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.Oper

PropertyValue

+ Genesis.Graphics.Shaders.Oper

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.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.OpenGL.html)
```

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

Storage
 (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

Genesis.Core.Behaviors.Physics
Type

+ Genesis.Core.Behaviors.Physics

```
object (https://learn.microsoft.com/dotnet/api/system.object)  
(Genesis.Core.Behaviors.Physics)
```

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

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

Methods
(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

BeginInvoke(Scene scene, Game game, IRenderDevice renderDevice, AsyncCallback object)
(Genesis.Graphics.Physics.h)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice
public virtual IAsyncResult BeginInvoke(Scene scene, Game game, IRenderDevice renderDevice,

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL.h)

+ 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

(Genesis.Core.SceneSIZEVENHANDLER.h)

SceneSizeEvenHandler(object, IntPtr)

Declaration

(Genesis.Core.Storage.html)

Utils (Genesis.Core.Utils.html)

```
public SceneSizeEvenHandler(object @object, IntPtr method)
```

+ Genesis.Core.Behaviors

(Genesis.Core.Behaviors.html)

Parameters

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

(Genesis.Core.Behaviors.Physic

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

(Genesis.Core.Behaviors.Physic

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

Methods

+ Genesis.Graphics

(Genesis.Graphics.html)

BeginInvoke(Scene, Viewport, AsyncCallback, object)

+ Genesis.Graphics.Physics

Declaration

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

```
public virtual IAsyncResult BeginInvoke(Scene scene, Viewport viewport, AsyncCallback callback, object @object)
```

+ Genesis.Graphics.Shaders.Op

Parameters

+ Genesis.Graphics.Shaders.Op

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

(Genesis.Core.SceneSizeEvenHandler)

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)

(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.Oper

Declaration

(Genesis.Graphics.Shaders.Ope

· Genesis.Graphics.Shaders.Oper

```
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)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

Removes disabled elements from the game and the garbage collector

Genesis.Core.Behaviors.Physics

(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

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator.html)

+ Genesis.Graphics.Shader

Name

Description

game

scene

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)

Genesis.Core.Behaviors

(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.Operator**
(Genesis.Graphics.Shaders.Operator.html)

+ **Genesis.Graphics.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
Genesis.Graphics.html	

Vec3 (Genesis.Math.Vec3.html)

+ Genesis.Graphics.Physics

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

Type	Name	Description
Vec3 (Genesis.Math.Vec3.html) (Genesis.Core.Behaviors.Physics.html)	point1	
Vec3 (Genesis.Math.Vec3.html)	point2	

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

Returns

+ Genesis.Core.GameElements

Type
(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

Declaration
(Genesis.Graphics.RenderDevice.html)

+ public static float CalculateYaw(Vec3 point1, Vec3 point2)

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL.html)

Parameters

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

Type	Description
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.html)
```

Storage

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.html)

Type	Description
(Genesis.Core.GameElements.html)	

+ Genesis.Graphics

(Genesis.Graphics.html)

CreateEmptyNormalMap(int, int)

(Genesis.Graphics.Physics.html)

Creates an empty normal map

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

+ public static Bitmap CreateEmptyNormalMap(int width, int height)

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL.html)

Parameters

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
(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

+ Vec3 (Genesis.Math.Vec3.html)

+ 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

(Genesis.Graphics.html)

Type

Name

Description

GameElement (Genesis.Core.GameElement.html)

element

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

Description

+ Genesis.Graphics.Shaders.Operation

(Genesis.Graphics.Shaders.Operation)

+ Genesis.Graphics.Shader

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)

SceneEventHandler

(Genesis.Core.SceneEventHandler.h)

Returns
SceneSizeEventHandler

(Genesis.Core.SceneSizeEventHandler.h)

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.html)

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator.html)

+ 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 (Genesis.Core.GenesisWindow.html) IGameBehavior (Genesis.Core.IGameBehavior.html)

GetModelSpaceRotation(GameElement, Vec3)

Converts the world rotation to the model space rotation
Layer (Genesis.Core.Layer.html)

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 (Genesis.Core.SceneSizeEvenHandler.h)		
GameElement (Genesis.Core.GameElement.html)	<i>element</i>	

Vec3 (Genesis.Math.Vec3.html)	<i>worldRotation</i>	
Utils (Genesis.Core.Utils.html)		

Returns

Genesis.Core.Behaviors

Type	Description
Genesis.Core.Behaviors.html	

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

+ Genesis.Core.Behaviors.Physics

GetModelSpaceScale(GameElement, Vec3)

Converts the world scale to the model space scale

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

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.Operator

(Genesis.Graphics.Shaders.Operator.h)

Returns

+ Genesis.Graphics.Shader

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

GetModelTransformation(GameElement)

Returns the model transform matrix relative to the world location
GameEventHandler

(Genesis.Core.GameEventHandler.h)

GenesisWindow

(Genesis.Core.GenesisWindow.html)
IGameBehavior

(Genesis.Core.IGameBehavior.html)

Parameters (Genesis.Core.Input.html)

Type Layer (Genesis.Core.Layer.html)

Light (Genesis.Core.Light.html)

SceneEvent (Genesis.Core.GameElement.html)

Scene3D

Returns (Genesis.Core.Scene3D.html)

Type SceneEventHandler

(Genesis.Core.SceneEventHandler.h)

Type mat4

(Genesis.Core.SceneSizeEvenHandler.h)

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)

Parameters

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Type GameElement (Genesis.Core.GameElement.html)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

(Genesis.Graphics.html)

mat4

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

GetStringBounds(Vec3, string, float, float)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.h)

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator.h)

+ Genesis.Graphics.Shader

```
public static Rect GetStringBounds(Vec3 location, string text, float fontSize, float spacing)
```

Parameters

Type	Name	Description
Vec3 (Genesis.Math.html)	<i>location</i>	
(Genesis.Core.GameEventHandler.h string (https://learn.microsoft.com/dotnet/api/system.string) GenesisWindow	<i>text</i>	
float (https://learn.microsoft.com/dotnet/api/system.single) IGameBehavior	<i>fontSize</i>	
float (https://learn.microsoft.com/dotnet/api/system.single) (Genesis.Core.GameBehavior.html)	<i>spacing</i>	

Input (Genesis.Core.Input.html)

Return type (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.html)

SceneSizeEventHandler

GetStringHeight(string, float, float)

Declaration

Storage

(Genesis.Core.Storage.html)

```
public static float GetStringHeight(string text, float fontSize, float spacing)
```

Utils (Genesis.Core.Utils.html)

+ Genesis.Core.Behaviors

Parameters

(Genesis.Core.Behaviors.html)

Type	Name	Description
(Genesis.Core.Behaviors.html)		
string (https://learn.microsoft.com/dotnet/api/system.string)	<i>text</i>	
(Genesis.Core.Behaviors.Physic		

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

(Genesis.Core.Behaviors.Physic

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

(Genesis.Core.Behaviors.Physic

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

(Genesis.Core.Behaviors.Physic

Type	Description
(Genesis.Core.GameElements.h	

Type	Description
(Genesis.Graphics.html)	

+ Genesis.Graphics.Physics

GetStringWidth(string, float)

Declaration

Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice

```
public static float GetStringWidth(string text, float fontSize, float spacing)
```

+ Genesis.Graphics.Shaders.Oper

(Genesis.Graphics.Shaders.Ope

Parameters

(Genesis.Graphics.Shaders.Ope

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)

Layer (<https://genesis.core.Layer.html>)

Declaration Light (<https://genesis.core.Light.html>)

Scene (<https://genesis.core.Scene.html>)

Scene3D static Vec3 GetVMirroredPosition(Vec3 vref, Camera camera)

(Genesis.Core.Scene3D.html)

SceneEventHandler

Parameters SceneEventHandler (<https://genesis.core.SceneEventHandler.html>)

Type	Name	Description
SceneSizeEvenHandler (Genesis.Core.SceneSizeEvenHandler.html)	vref	
Vec3 (https://genesis.math.Vec3.html) Storage	camera	

Returns + Genesis.Core.Behaviors

Type	Description
+ Genesis.Core.Behaviors.Physic (Genesis.Core.Behaviors.Physic)	

+ Genesis.Core.Behaviors.Physic
GetVMirroredPosition(float, float, float, Camera)

Declaration + Genesis.Core.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 (https://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)

(Genesis.Core.Scene3D.html)

Vec3 (Genesis.Math.Vec3.html)

SceneEventHandler

(Genesis.Core.SceneEventHandler.h)

SceneSizeEvenHandler

(Genesis.Core.SceneSizeEvenHandler.h)

Storage

(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)

+ Genesis.Graphics

Returns

(Genesis.Graphics.html)

Type

+ Genesis.Graphics.Physics

Vec3 (Genesis.Math.Vec3.html)

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

ToDegrees(float)

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator)

- Genesis.Graphics.Shaders.Operator

Description

Type	Description

```
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) (GameBehavior) (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

SceneSizeEvenHandler Parameters

(Genesis.Core.SceneSize)

Type	Name	Description
Storage		
float (Genesis.Core.Storage.html)	degrees	
Utils (Genesis.Core.Utils.html)		

Returns + Genesis Core Behaviors

Type	Description
<code>Genesis.Core.Behaviors.html</code>	<code>GetBehaviors</code> (<code>get/api/system.single</code>)

(Genesis.CoreBehaviors.Physic

+ Genesis.CoreBehaviors.Physics

TransformToWorldCords(Game, float, float)

Declaration + Genesis Core GameElements

(Genesis.Core.GameElements.h)

```
public static Vec3 TransformToWorldCords(Game game, float x, float y)
```

+ Genesis.Graphics

(Genesis.Graphics.html)

Genesis, Graphics, Physics

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.OpenGL		

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.III](#)

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

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

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

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

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

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) + Genesis.Core.Behaviors.Physics (https://genesis.core.behaviors.physics)		animationSheet	The texture containing the animation frames.

Properties

Properties.Behaviors.Physics

+ **Genesis.Core.GameElements**

AnimationSheet

Contains the **Texture** containing the animation frames.

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

Declaration

+ **Genesis.Graphics.Physics**

Property Value

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

+ **Genesis.Graphics.RenderDevice**

Property Value

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

Type

+ **Genesis.Graphics.Shaders.OpenGL**

Property Value

([Genesis.Graphics.Shaders.OpenGL.html](https://genesis.graphics.shaders.opengl.html))

+ **Genesis.Graphics.Shapes**

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

Animations

+ **Genesis.Math**

Gets or sets the list of animations available for this behavior.

([Genesis.Math.html](https://genesis.math.html))

Declaration

+ **Genesis.Physics**

([Genesis.Physics.html](https://genesis.physics.html))

Property Value

(<https://genesis.physics.html>)

+ **Genesis.UI** ([Genesis.UI.html](https://genesis.ui.html))

Property Value

Description

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.SpriteMove](#))

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

+ Genesis.Core.Behaviors.Physics

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

genesis.Core.Behaviors.Physics

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

Gets or sets the time in milliseconds between animation frames.

+ Genesis.Core.GameElements

Declaration

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

+ 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](#))

+ Genesis.Graphics.Shaders.Operations

([Genesis.Graphics.Shaders.Operations](#))

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>)

Description

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)
```

Methods

SpriteMovementController

```
(Genesis.Core.Behaviors.SpriteMove
```

Physics

AddAnimation(Animation)

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

Adds an animation to the list of available animations.

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

Declaration

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

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

```
PUBLIC VOID AddAnimation(Animation animation)
```

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

Graphics

Animation

Type	Name	Description
(Genesis.Graphics.html)		

Physics

Animation

```
Animation (Genesis.Graphics.Animation.html)
```

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

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

LoadAnimation(string)

Loads the specified animation by name.

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

Declaration

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

```
PUBLIC VOID LoadAnimation(string name)
```

+ [Genesis.Math.html](#)

Parameters

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

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	name	The name of the animation to load.

+ [Genesis.UI \(Genesis.UI.html\)](#)

OnDestroy(Game, GameElement)

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()

Type	Name	Description
Game (Genesis.Core.Game.html)	<i>game</i>	
GameElement (Genesis.Core.GameElement.html)	<i>parent</i>	

▼

- + **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))
↳ SpriteMovementController

+ Genesis.Core

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

↳ [IGameBehavior Parent](#) ([Genesis.Core.IGameBehavior.html#Genesis_Core_IGameBehavior_Parent](https://genesis.core.html#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)))
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.Physics](#)
Namespace: [Genesis.html](https://genesis.html#Genesis.Core.html).Core ([Genesis.Core.html](https://genesis.core.html)).Behaviors ([Genesis.Core.Behaviors.html](https://genesis.core.html))
Assembly: [Genesis.dll](https://genesis.html)

↳ [Genesis.Core.GameElements](#)

([Genesis.Core.GameElements.html](https://genesis.core.html))
+ [Genesis.Graphics](#)
↳ [Genesis.Graphics.Physic](#)
([Genesis.Graphics.html](https://genesis.graphics.html))

↳ [Genesis.Graphics.Physics](#)

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

+ [Genesis.Graphics.RenderDevice](#)
↳ [SpriteMovementController](#)
([Genesis.Graphics.RenderDevice.SpriteMovementController](https://genesis.graphics.html#Genesis_Graphics_RenderDevice_SpriteMovementController))

Declaration
+ [Genesis.Graphics.Shaders.Operations](#)
([Genesis.Graphics.Shaders.Operations](https://genesis.graphics.html#Genesis_Graphics_Shaders_Operations))

+ [Genesis.Graphics.Shapes](#)
([Genesis.Graphics.html](https://genesis.graphics.html))

+ [Genesis.Math](#)
Properties
([Genesis.Math.html](https://genesis.math.html))

+ [Genesis.Physics](#)
Automove
([Genesis.Physics.html](https://genesis.physics.html))

Declaration
+ [Genesis.UI](#) ([Genesis.UI.html](https://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

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

```
public void MoveRight()
```

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

+ 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
Genesis.Graphics.Shaders.Operation	game	The game instance.
GameElement (Genesis.Core.GameElement.html)	parent	The parent game element.

+ Genesis.Math

(Genesis.Math.html)

IGameBehavior (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.CoreBehaviors.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)

([Genesis.Physics.PhysicsBehavior.html#Genesis_Physics_PhysicsBehavior_Collide_Genesis_Core_Scene_Genesis_Core_Game_Behavior_Rigidbody_Physics2D](#))

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.html](#))

```
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](#))

+ **Genesis.Graphics.RenderDevice**

Type	Description
object (https://learn.microsoft.com/dotnet/api/system.object)	The Rigidbody physics object.

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

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

GameElement

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

(Genesis.Core.GameElement.html)

+ Genesis.Graphics

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

Overrides

IGameBehavior.OnDestroy(Game, GameElement)

+ Genesis.Graphics.Physics

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

GameElement_

+ Genesis.Graphics.RenderDevice

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

OnInit(Game, GameElement)

+ Genesis.Graphics.Shaders.Operation

Called when the associated game element is being initialized.

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

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 (Genesis.Core.Behaviors.Physics2D.html)	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)

+ Genesis.Graphics.Physics

Updates the graphics sub-systems during the 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_)

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

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

+ Genesis.Graphics.RenderDevice Constructors

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

+ Genesis.Graphics.Shaders.Operator ConvexHullBehavior()

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

Declaration

+ Genesis.Graphics.Shapes

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

public ConvexHullBehavior()

+ Genesis.Math

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

+ Genesis.Physics Properties

([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

scene (Genesis.Core.Scenes.html)

game (Genesis.Core.Game.html)

collisionObject (Genesis.Core.Behaviors.Physics3D.CubeConvexHull)

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

Rigidbody

+ Genesis.Graphics

(Genesis.Graphics.html)

PhysicsBehavior.Collide(Scene, Game, Rigidbody)

+ Genesis.Graphics.Physics

(Genesis.Physics.PhysicsBehavior.html#Genesis_Physics_PhysicsBehavior_Collide_Genesis_Core_Scene_Genesis_Core_Game_BulletSharp_Rigidbody_)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

CreateRigidbody(PhysicHandler, float)

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator.html)

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

Parameters

+ Genesis.Math

(Genesis.Math.html)

PhysicHandler (Genesis.Physics.PhysicHandler.html)

float (Genesis.Physics.html)

com.dotnet/api/system/single)

+ Genesis.UI (Genesis.UI.html)

Type	Name	Description
PhysicHandler (Genesis.Physics.PhysicHandler.html)	handler	
float (Genesis.Physics.html)	mass	

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)		

Type	Name	Description
Game (Genesis.Core.Game.html)	<i>game</i>	The game instance.
StaticMeshBehavior		
(Genesis.Core.Behaviors.Physics3D.html)		
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.

Type	Name	Description
+ 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

(public void UpdateRigidBody())

+ 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)
+ Genesis.Core
↳ 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 (<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))
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
QubeConvexHull : PhysicsBehavior

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

+ Genesis.Graphics.Physics

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

+ Genesis.Graphics.RenderDevice

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

Declaration
+ 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.UI ([Genesis.UI.html](#))

```
public Rigidbody Rigidbody { get; set; }
```

Property Value

Type	Description
Rigidbody	

+ Genesis.Core

(Genesis.Core.html)

Methods

(Genesis.Core.Behaviors.html)

ConvexHullBehavior(PhysicsScene, Game, Rigidbody)

(Genesis.Core.Behaviors.Physics3D.html)
Declaration

- Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics3D.html) (scene, Game game, Rigidbody collisionObject)

ConvexHullBehavior

(Genesis.Core.Behaviors.Physics3D.html)
Parameters

QubeConvexHull

Type (Genesis.Core.Behaviors.Physics3D.html)

Scene (Genesis.Core.Scene.html)

Name

Description

scene

Game (Genesis.Core.Game.html)

game

+ Genesis.Core.GameElements

Rigidbody

(Genesis.Core.GameElements.html)

collisionObject

Genesis.Graphics

(Genesis.Graphics.html)

PhysicsBehavior(PhysicsScene, 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

+ Genesis.Physics

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

(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](#))

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

GetPhysicsObject<T> Physics

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

Declaration

ConvexHullBehavior

```
public override T GetPhysicsObject<T>()
```

QubeConvexHull

[\(Genesis.Core.Behaviors.Physics3D.html\)](#)

Returns

StaticMeshBehavior

Type [\(Genesis.Core.Behaviors.Physics3D.html\)](#) Description

+T Genesis.Core.GameElements

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

Type Parameters

Genesis.Graphics

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

+T Genesis.Graphics.Physics

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

Overrides

[+ Genesis.Graphics.RenderDevice](#)

PhysicsBehavior.GetPhysicsObject<T>()

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

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

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

+ Genesis.Graphics.Shaders.Opener

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

+ 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)
Declaration

+ Genesis.Graphics.Shaders.OpenGL

(Genesis.Graphics.Shaders.OpenGL.html)

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

Type

+ Genesis.Math

Game (Genesis.Core.Game.html)

(Genesis.Math.html)

GameElement (Genesis.Core.GameElement.html)

+ Genesis.Physics

(Genesis.Physics.html)

Overrides

+ Genesis.UI (Genesis.UI.html)

Name

Description

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.

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)

[QuadraticConvexHull](#)

(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>)

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

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

StaticMeshBehavior
(Genesis.Graphics.Shaders.Operation.html)

+ Genesis.Graphics.Shapes

StaticMeshBehavior
(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!)
```

QubeConvexHull

Parameters

([Genesis.Core.Behaviors.Physics3D.html](#))

Type	Name	Description
StaticMeshBehavior		
(Genesis.Core.Behaviors.Physics3D!)		
Scene (Genesis.Core.Scene.html)	scene	
+ Genesis.Core.GameElements		
Game (Genesis.Core.Game.html)	game	
(Genesis.Core.GameElements.html)		
Rigidbody	collisionObject	

+ Genesis.Graphics

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

Overrides

+ Genesis.Graphics.Physics

PhysicsBehavior.Collide(Scene, Game, Rigidbody)

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

+ Genesis.Graphics.RenderDevice

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

CreateRigidBody(PhysicHandler, float, Mesh)

+ Genesis.Graphics.Shaders.OpenGL

CreateRigidBody(PhysicHandler, float, Mesh)

+ Genesis.Graphics.Shaders.OpenGLES

Delegates

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

Parameters

+ Genesis.Math

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

Parameters

+ Genesis.Physics

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

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

+ Genesis.UI

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

Type	Name	Description
(Genesis.Physics.html)	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([GenesisCore.Behaviors.Physics](#))

Genesis.Core.Behaviors.Physics

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

public override object GetPhysicsObject()

 ConvexHullBehavior

 ([Genesis.Core.Behaviors.Physics3D](#).()

 CubeConvexHull

 ([Genesis.Core.Behaviors.Physics3D](#).()

Returns

 StaticMeshBehavior

 ([GenesisCore.Behaviors.Physics3D](#).()

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

+ 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>\(\).](#)

+ Genesis.Graphics.Shaders.Operation

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

Type	Description
+ Genesis.Graphics.Shapes	

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

+ Genesis.Math

Type Parameters

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

Name

+ 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

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

Name

Description

+ [Genesis.Graphics.Physics](#)

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

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

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

game

parent

+ [Genesis.Graphics.RenderDevice](#)

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

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.Physics)
Inherited Members
+ Genesis.Core.Behaviors.Physics
GameElement.OnDestroy(Game)
(Genesis.Core.Behaviors.Physics)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnDestroy_Genesis_Core_Game_Element_OnDestroy)
GameElement
(Genesis.Core.GameElements)
(Genesis.Core.Gameelements.html#Genesis_Core_GameElement_AddBehavior_1__0_)
GameElement.AddBehavior(IGameBehavior)
BufferedSprite
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddBehavior_Genesis_Core_IGameBehavior_Genesis_Core_BufferedSprite)
GameElement.GetBehavior<T>() (Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetBehavior_1)
CameraElement
GameElement.GetBehaviors<T>()
(Genesis.Core.Gameelements.Camera.html#Genesis_Core_GameElements_Camera_Element3D)
GameElement.AddChild(GameElement)
(Genesis.Core.Gameelements.Empty.html#Genesis_Core_GameElement_AddChild_Genesis_Core_GameElement_Empty)
GameElement.GetInstance(GameElement)
(Genesis.Core.Gameelements.Empty.html#Genesis_Core_GameElement_GetInstance_Genesis_Core_GameElement_Qube)
GameElement.Name (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Name)
(Genesis.Core.Gameelements.Qube.html#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.Rect.html#Genesis_Core_GameElements_Rect)
GameElement.Rotation (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Rotation)
Skybox
GameElement.Size (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Size)
(Genesis.Core.Gameelements.Skybox.html#Genesis_Core_GameElements_Skybox)
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.html#Genesis_Core_GameElements_Sprite)
GameElement.Enabled (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Enabled)
Terrain2D
GameElement.Properties (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Properties)
(Genesis.Core.Gameelements.Terrain.html#Genesis_Core_GameElements_Terrain)
GameElement.Children (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Children)
Terrain3D
GameElement.Parent (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Parent)
(Genesis.Core.Gameelements.Terrain.html#Genesis_Core_GameElements_Terrain)
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-object-system-object))
+ Genesis.Graphics
object.Equals(object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object))
+ Genesis.Graphics.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)
+ Genesis.Graphics.RenderDevice
object.MemberwiseClone() (https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone)
(Genesis.Graphics.RenderDevice)
Namespace: Genesis (Genesis.core.html).Core (Genesis.Core.html).GameElements (Genesis.Core.GameElements.html)
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.Oper

Declaration

Description

Type	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.Came	
Element3D	

Texture (https://genesis.graphics.Texture.html)

(Genesis.Core.GameElements.Elemen

Empty

(Genesis.Core.GameElements.Empty)

Verticies

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

Gets or sets the list of vertices for the sprite.

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

Declaration

Skybox

(Genesis.Core.GameElements.Skybo

```
public List<float> Verticies { get; set; }
```

Sprite

(Genesis.Core.GameElements.Sprite

Property Value

Terrain2D (https://genesis.core.Terrai

Type 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.Terrai

+ 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.RenderDevic](#)

Declaration

[\(Genesis.Graphics.Shaders.Oper](#)

```
public void AddShape(Vec3 location, Vec3 size)
```

Parameters

Type		Name	Description
Vec3 (Genesis.Math.Vec3.html)		<i>location</i>	The location for the sprite.
(Genesis.Core.Behaviors.html)		<i>size</i>	The size for the sprite.

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

Init(Game, IRenderDevice)

+ Genesis.Core.Behaviors.Physics

Init(Game game, IRenderDevice renderDevice)

(Genesis.Core.Behaviors.Physics)

Declaration

Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

```
public override void Init(Game game, IRenderDevice renderDevice)
```

 BufferedSprite
 (Genesis.Core.GameElements.Buffer

Parameters

Type		Name	Description
Genesis.Core.GameElements.Came Element3D			
Game (Genesis.Core.GameElements.Elemen Empty		<i>game</i>	The game instance.

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

(Genesis.Core.GameElements.Empty)

 renderDevice The render device used for rendering.

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)

(Genesis.Core.GameElements.Camera)

(Genesis.Core.GameElements.CameraElement)

(Genesis.Core.GameElements.CameraElement3D)

(Genesis.Core.GameElements.CameraElementCore)

(Genesis.Core.GameElements.CameraElementCore3D)

(Genesis.Core.GameElements.CameraElementCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore3D)

(Genesis.Core.GameElements.CameraElementCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCoreCore)

+ 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_	
BufferedSprite	
IRenderDevice	
(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_	
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	
Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetBehavior_1	
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)	
TerrainData	
GameElement_Behaviors (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Behaviors)	
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	
↳ GameElements (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Propertys)	
(Genesis.Graphics.html)	
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-system-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.

Camera (Genesis.Graphics.Camera.html)

Skybox

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

Sprite

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

CameraElement(string, Vec3, Vec3, float, float, CameraType)

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

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, Cam  
eraType 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.RenderDevice**

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

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

+ **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.Physics + Genesis.Core.Behaviors.Physics + Genesis.Core.Behaviors.Physics + Genesis.Core.Behaviors.Physics + Genesis.Core.Behaviors.Physics + Genesis.Core.Behaviors.Physics	<i>near</i>	The near clipping plane distance of the camera.
float (https://learn.microsoft.com/dotnet/api/system.single) + Genesis.Core.Behaviors.Physics + Genesis.Core.Behaviors.Physics + Genesis.Core.Behaviors.Physics + Genesis.Core.Behaviors.Physics + Genesis.Core.Behaviors.Physics + Genesis.Core.Behaviors.Physics	<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.h)

Properties

(Genesis.Core.GameElements.Buffer)
CameraElement

Camera
(Genesis.Core.GameElements.Came

Element3D
Gets or sets the camera associated with this element.
(Genesis.Core.GameElements.Eleme

Declaration

(Genesis.Core.GameElements.Empty)
Qube
public Camera Camera { get; set; }
(Genesis.Core.GameElements.Qube)

RectElement

Property Value
(Genesis.Core.GameElements.RectE

Type
Skybox
(Genesis.Core.GameElements.Skybo

Camera (Genesis.Graphics.Camera.html)

(Genesis.Core.GameElements.Sprite)
Terrain2D

Terrain3D
(Genesis.Core.GameElements.Terrai

TerrainData
Gets (Genesis.Core.GameElements.Terrai

Declaration
(Genesis.Core.GameElements.Terrai

- + **Genesis.Graphics**
Location { get; set; }
(Genesis.Graphics.html)

Properties

Type
(Genesis.Graphics.Physics.html)

+ **Genesis.Graphics.RenderDevice**
(Genesis.Graphics.RenderDevice

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

Type	Description
+ Genesis.Graphics.RenderDevice (Genesis.Graphics.RenderDevice	

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)	

+ [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.Eleme](#)

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>()
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetBehaviors_1)
(Genesis.Core.GameElements.Came
GameElement.AddChild(GameElement)
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddChild_Genesis_Core_GameElement_)
(Genesis.Core.GameElements.Eleme
GameElement.GetInstance(GameElement)
(Genesis.Core.GameElements.Empty
GameElement.Name (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Name)
(Genesis.Core.GameElements.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)
(Genesis.Core.GameElements.RectE
GameElement.Rotation (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Rotation)
(Genesis.Core.GameElements.RectE
GameElement.Size (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Size)
(Genesis.Core.GameElements.Skybox
GameElement.Behaviors (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Behaviors)
(Genesis.Core.GameElements.Skybox
GameElement.Scene (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Scene)
(Genesis.Core.GameElements.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)
(Genesis.Core.GameElements.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)
(Genesis.Core.GameElements.Terrai
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.Core.GameElements.Terrai
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.Physics
(Genesis.Graphics.Physics.html)
object.ReferenceEquals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.referenceequals)
+ 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

(Genesis.Core.GameElements.Skybox)

Sprite

(Genesis.Core.GameElements.Sprite)

Terrain2D

(Genesis.Core.GameElements.Terrain2D)

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)>

Material (Genesis.Graphics.Material.html)>

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

Meshes.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.html)		
ShaderProgram (Genesis.Graphics.ShaderProgram.html)		
Qube		
(Genesis.Core.GameElements.Qube)		
RectElement		
(Genesis.Core.GameElements.RectE		
Skybox		
(Genesis.Core.GameElements.Skybo		
Sprite		
(Genesis.Core.GameElements.Sprite)		

GetMaterialBuffers(int)

(Genesis.Core.GameElements.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

Type	Name	Description
(Genesis.Graphics.html) int (https://learn.microsoft.com/dotnet/api/system.int32)	material	The material index.

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Returns

+ 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.Core.Behaviors.html)

Gets the shape data of the 3D element.

Declaration

(Genesis.Core.Behaviors.Physics.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

Returns

- Genesis.Core.GameElements

Type
(Genesis.Core.GameElements.html)

float[] (https://learn.microsoft.com/dotnet/api/system.single)[]

Description

An array representing the shape data.

(Genesis.Core.GameElements.Buffer.html)

CameraElement

(Genesis.Core.GameElements.GameElement3D.html)

Init(Game, IRenderDevice)

(Genesis.Core.GameElements.GameElement.html)

Called when the game element is initialized. Override to provide custom initialization logic.

Empty

Declaration

(Genesis.Core.GameElements.Empty.html)

Qube

p(Genesis.Core.GameElements.Trait)(Game game, IRenderDevice renderDevice)

RectElement

(Genesis.Core.GameElements.RectElement.html)

Skybox

Type
(Genesis.Core.GameElements.Skybox.html)

Sprite

Game (Genesis.Core.Game.html)

(Genesis.Core.GameElements.Sprite.html)

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

Name

Description

game

The game instance.

renderDevice

The render device used for rendering.

Terrain3D

TerrainData

(Genesis.Core.GameElement.html#Genesis_Core_GameElement_Init_Genesis_Core_Game_Genesis_Graphics_IRe

ndevice_

+ 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)

Declaration

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

public override void OnDestroy(Game game)

+ Genesis.Graphics.Shaders.Oper

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)

BufferedSprite

Parameters

Type	Name	Description
CameraElement (Genesis.Core.GameElements.CameraElement3D)	game	The game instance.
IRenderDevice (Genesis.Elements.RenderDevice.html)	renderDevice	The render device used for rendering.

Empty

Overrides

Cube
GameElement.OnRender(Game, IRenderDevice)

(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnRender_Genesis_Core_Game_Graphics_RenderElement)
IRenderDevice_

(Genesis.Core.GameElements.RectE)

Skybox

OnUpdate(Game, IRenderDevice)

Sprite

Called when the game is being updated. Override to provide custom update logic.

Terrain2D

(Genesis.Core.GameElements.Terrain)

Terrain3D

public override void OnUpdate(Game game, IRenderDevice renderDevice)
(Genesis.Core.GameElements.Terrain)

TerrainData

(Genesis.Core.GameElements.Terrain)

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

+ 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.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)

+ **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

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

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)))

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.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 (Genesis.Graphics.Physics.html	location		The initial location of the cube.
Vec3 (Genesis.Math.Vec3.html) + Genesis.Graphics.Physics (Genesis.Graphics.Physics.html	size		The size of the cube.

+ **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 (Genesis.Core.Behaviors.Physics)	<i>rotation</i>	The initial rotation of the cube.

- Genesis.Core.GameElements

Properties

BufferedSprite

(Genesis.Core.GameElements.BufferedSprite)

Color

(Genesis.Core.GameElements.Came

Gets or sets the color of the cube.

Element3D

(Genesis.Core.GameElements.Eleme

Empty

(Genesis.Core.GameElements.Empty)
public Color Color { get; set; }

Qube

(Genesis.Core.GameElements.Qube)

Property Value

Type

(Genesis.Core.GameElements.RectE

Skybox

Color (<https://learn.microsoft.com/dotnet/api/system.drawing.color>)

Sprite

(Genesis.Core.GameElements.Sprite)

Terrain2D

(Genesis.Core.GameElements.Terrai

Terrain3D

Gets or sets the shader program associated with this cube.

(Genesis.Core.GameElements.Terrai

Declaration

TerrainData

(Genesis.Core.GameElements.Terrai

public ShaderProgram Shader { get; set; }

+ Genesis.Graphics

(Genesis.Graphics.html)

Property Value

+ Genesis.Graphics.Physics

Type
(Genesis.Graphics.Physics.html)

ShaderProgram (<https://learn.microsoft.com/dotnet/api/genesis.graphics.shaderprogram.html>)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

SKin (Genesis.Graphics.Shaders.Oper

Gets or sets the cube shape definition.

Declaration

```
public QubeShape Shape { get; set; }
```



Property Value

Type	Description
(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.html](#))

GetColors(Color)

BufferedSprite

Gets an array of color values based on the specified color.

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

CameraElement

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

Element3D

```
public static float[] GetColors(Color color)
```

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

Empty

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

Qube
Type

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

Color
<https://learn.microsoft.com/dotnet/api/system.drawing.color>)

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

Skybox

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

Sprite
Type

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

float
<https://learn.microsoft.com/dotnet/api/system.single>[])

Terrain2D

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

Terrain3D

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

TerrainData

Initializes the game element.

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

Declaration

+ Genesis.Graphics

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

```
public override void Init(Game game, IRenderDevice renderDevice)
```

+ Genesis.Graphics.Physics

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

Parameters

+ [Genesis.Graphics.RenderDevice](#)

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

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

game

The game instance.

+ 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
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_OnRender_Genesis_Core_Game_Graphics_

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)

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.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.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-system-object)))

+ **Genesis.Graphics.RenderDevice**

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

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

CameraElement

```
public RectElement(string name, Vec3 location, Vec3 size)  
Element3D
```

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

Parameters

Empty

Type		Name	Description
Genesis.Core.GameElements.Empty			
Qube			
string (https://learn.microsoft.com/dotnet/api/system.string)	name		The name of the rectangle.
RectElement (Genesis.Math.Vec3.html)			
(Genesis.Core.GameElements.RectE)	location		The location of the rectangle.
Vec3 (Genesis.Math.Vec3.html)		size	The size of the rectangle.

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

Sprite

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

Terrain2D

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

Terrain3D

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

TerrainData

Gets ([Genesis.Core.Color](#)) of the rectangle's border.

Properties

([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.Shaders.Oper	

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](#)

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	

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

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

+ Genesis.Graphics.Physics

HasFill

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

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](#))

Element3D

([Genesis.Core.GameElements.Element3D.html](#))

Parameters

Type	Name	Description
Empty	game	The game instance.
IRenderDevice (Genesis.Graphics.RenderDevice.html)	renderDevice	The render device used for rendering.

RectElement

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

Skybox

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

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

([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.Operations](#)

([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

([Genesis.Core.GameElements.Element3D.html](#)#Genesis_Core_GameElements_Element3D_OnDestroy_Genesis_Core_Element3D)

_Game

(Genesis.Core.GameElements.Eleme

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

([Genesis.Core.GameElements.Element3D.html](#)#Genesis_Core_GameElements_Element3D_Shader)

Skybox

Element3D.Meshes

(Genesis.Core.GameElements.Skybc

([Genesis.Core.GameElements.Element3D.html](#)#Genesis_Core_GameElements_Element3D_Meshes)

Sprite

Element3D.Materials

(Genesis.Core.GameElements.Sprite

([Genesis.Core.GameElements.Element3D.html](#)#Genesis_Core_GameElements_Element3D_Materials)

Terrain2D

GameElement.AddBehavior<T>(T)

(Genesis.Core.GameElements.Terrai

([Genesis.Core.GameElement.html](#)#Genesis_Core_GameElement_AddBehavior_1__0_)

Terrain3D

GameElement.AddBehavior(IGameBehavior)

(Genesis.Core.GameElements.Terrai

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

TerrainData

GameElement.GetBehavior<T>()

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

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_)

GameElement.CreateInstance(GameElement)

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

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

+ **Genesis.Graphics.RenderDevice**

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

([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
```

Terrain3D

Parameters

(Genesis.Core.GameElements.Terrain3D)

Type		Name	Description
TerrainData	(Genesis.Core.GameElements.TerrainData)		
string	(https://learn.microsoft.com/dotnet/api/system.string)	name	The name of the skybox.
+ Genesis.Graphics	string (https://learn.microsoft.com/dotnet/api/system.string)	path	The path to the texture for the skybox.
+ Genesis.Graphics.Physics	Vec3 (Genesis.Math.Vec3.html)	location	The initial location of the skybox.
+ Genesis.Graphics.Physics.html	Vec3 (Genesis.Math.Vec3.html)	rotation	The initial rotation of the skybox.
+ Genesis.Graphics.RenderDevice	Vec3 (Genesis.Math.Vec3.html)	scale	The initial scale of the skybox.

(**Genesis.Graphics.RenderDevice**)

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

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](#))

↳ (Genesis.Core.GameElements.Came

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-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.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**

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

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.OpenG](#)

NativeGraphics.Shaders.OpenG (Genesis.Core.html).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.Terrain2D)

+ **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**

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

+ **Genesis.Graphics.OcclusionCulling**

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

+ **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 (Genesis.Core.GameElements.h)		
Declaration		
BufferedSprite public TexCoords TexCoords { get; set; } (Genesis.Core.GameElements.Buffer)		
CameraElement (Genesis.Core.GameElements.Came		
Property Value		
Element3D (Genesis.Core.GameElements.Eleme		
Type		
Empty (Genesis.Graphics.TexCoords.html) (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; } (Genesis.Core.GameElements.Texture)		
Terrain2D (Genesis.Core.GameElements.Terrai		
Property Value		
Terrain (Genesis.Core.GameElements.Terrai		
Type		
TerrainData (Genesis.Graphics.TerrainData.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 (Genesis.Graphics.Shaders.Operati		

Declaration

```
public float[] CalculateVerticies()
```

Returns

Type	Description
float (Genesis.Core.Behaviors.html) (https://learn.microsoft.com/dotnet/api/system.single)	An array containing the vertex coordinates of the sprite.

+ Genesis.CoreBehaviors.Physics
GetBounds2D()
(Genesis.CoreBehaviors.Physics)

Genesis.Core.GameElements

(Genesis.Core.GameElements)

Declaration

BufferedSprite
p(GenesisCoreGameElements).BufferedSprite

Returns CameraElement
(Genesis.Core.GameElements.CameraElement)

Type [Genesis.Core.GameElements.Element](#)

`Empty`
Rect (Genesis.Math.Rect.html) A
(Genesis.Core.GameElements.Empty)

Qube
(Genesis.Core.GameElements.Qube)

GetCenterLocation()
(Genesis.Core.GameElements.RectE
Gets the center location of the sprite.

Declaration Gets the location of the sprite.

```
        public Vec3 GetCenterLocation()
```

terrain2D
(Genesis.Core.GameElements.Terrai
n2D)

Type TerrainData
(Genesis.Core.GameElements.Terrai

```
    terrainData  
    {  
        Genesis::GameElements.Terrain  
        Vec3( Genesis::Math::Vec3 )
```

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

Init(Game, IRenderDevice) + Genesis.Graphics.Physics

Initialization of the Graphics API

+ **Genesis.Graphics.RenderDevice**
(Genesis.Graphics.RenderDevice)

+ Genesis.Graphics.Shaders.Oper

Type	Description
<code>(Genesis.Core.GameElements.TerrainData)</code>	
<code>Vec3<Genesis.Core.Math.Vectors></code>	The center location of the sprite.

+ Genesis.Graphics

(Genesis.Graphics.html)

Init(Game, IRenderDevice)

+ Genesis.Graphics.Physics
Initialize the physics API
(Genesis.Graphics.Physics.html)

Declaration

Genesis.Graphics.RenderDevice

+ **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	
↳ 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_	
+ 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_	
CaméraElement	
GameElement.GetBehavior<T>().(Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetBehavior_1)	
(Genesis.Core.GameElements.Came	
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(GameEлемент)	
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)	
Skybox	
GameElement.Location (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Location)	
GameElement.Rotation (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Rotation)	
Spr	
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-equals(system-object-object))	
+ Genesis.Graphics.Physics	
(Genesis.Graphics.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.Graphics.RenderDevice	
(Genesis.Graphics.RenderDevice)	
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	
Native (Genesis.Core.html).GameElements (Genesis.Core.GameElements.html)	

Syntax

```
public class Terrain2D : GameElement
```

**Constructors**

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

Terrain2D(string, Vec3, 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, Texture texture

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

BufferedSprite

Parameters

Type	Name	Description
CameraElement (Genesis.Core.GameElements.Camera.html)		
string (https://learn.microsoft.com/dotnet/api/system.string)	<i>name</i>	The name of the terrain.
Vec3 (Genesis.Math.Vec3.html) Empty	<i>location</i>	The initial location of the terrain.
float (https://learn.microsoft.com/dotnet/api/system.single)	<i>cellsX</i>	The number of cells in the X direction.
Qube float (https://learn.microsoft.com/dotnet/api/system.single)	<i>cellsY</i>	The number of cells in the Y direction.
RectElement float (https://learn.microsoft.com/dotnet/api/system.single)	<i>cellSize</i>	The size of each cell.
Texture (Genesis.Graphics.Texture.html) Skybox	<i>texture</i>	The texture for the terrain.

(Genesis.Core.GameElements.Skybox.html)

Sprite

(Genesis.Core.GameElements.Sprite.html)

Properties

(Genesis.Core.GameElements.Terrain2D.html)

Terrain3D

CellSize
(Genesis.Core.GameElements.Terrain2D.html)

TerrainData

Gets or sets the size of each cell.

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

+ **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)	

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	Description
+ Genesis.Graphics.Texture (Genesis.Graphics.Texture.html)	

(Genesis.Graphics.html)

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

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.Camera](#))

Parameters

Element3D

Type
[\(Genesis.Core.GameElements.Element3D.html\)](#)

Empty

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

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

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

Qube

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

Name

Description

game

The game instance.

renderDevice

The render device used for rendering.

Overrides

[Element](#)

GameElement (Game, IRenderDevice)

Skybox (GameElement.html#Genesis_Core_GameElement_Init_Genesis_Core_Game_Graphics_IRenderDevice)

Sprite

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

OnDestroy(Game)

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

Handles cleanup and resource disposal when the terrain is destroyed.

Terrain3D

Declaration
[Terrain3D](#)

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](#))

+ [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_RenderDevice)

Terrain3D

(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.Physics)	
↳ Genesis.Core.Behaviors.Physic	
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_Genesis_Graphics_
+ Genesis.Core.GameElements	GameElement (https://learn.microsoft.com/dotnet/api/genesis.core.gameelement.html)
(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.Cam	
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddBehavior_Genesis_Core_IGameBehavior_Element3D)	
GameElement.GetBehavior<T>()	
(Genesis.Core.GameElements.Ele	
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_GetBehavior_1)	
GameElement.GetBehaviors<T>()	
Empty	
(Genesis.Core.GameElements.Empty)	
GameElement.AddChild(GameElement)	
Qube	
(Genesis.Core.GameElement.html#Genesis_Core_GameElement_AddChild_Genesis_Core_GameElement_Qube	
GameElement.GetInstance(GameElement)	
RectElement	
(Genesis.Core.GameElements.Rect)	
GameElement.Name (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Name)	
Skybox	
GameElement.Tag (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Tag)	
(Genesis.Core.GameElements.Skybox)	
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.Terr)	
GameElement.Scene (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Scene)	
Terrain3D	
GameElement.Enabled (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Enabled)	
(Genesis.Core.GameElements.Terr)	
GameElement.Propertys (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Propertys)	
TerrainData	
GameElement.Children (Genesis.Core.GameElement.html#Genesis_Core_GameElement_Children)	
(Genesis.Core.GameElements.Terr)	
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	
object.Equals(object, object)	(https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-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
```

CameraElement

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

Element3D

([Genesis.Core.GameElements.Element3D.html](#))

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

Name

Description

name

The name of the terrain.

Empty

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

location

The initial location of the terrain.

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 cell
```

Height)

Terrain3D

([Genesis.Core.GameElements.Terrain3D.html](#))

Parameters ([Terrain3D.html](#))

TerrainData

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

Name

Description

+ **Genesis.Graphics**

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.Physics**

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

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

cellsX

The number of cells in the X direction.

+ **Genesis.Graphics.RenderDevice**

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

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

cellsZ

The number of cells in the Z direction.

+ **Genesis.Graphics.Shaders.OpenGL**

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

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

cellWidth

The width of each cell.

+ **Genesis.Graphics.Shaders.OpenGL**

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

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

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](#))

Methods

Element3D

([Genesis.Core.GameElements.Element3D.html](#))

CreateTerrainTileColor(Color)

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

Creates color data for a terrain tile.

Empty

([Genesis.Core.GameElements.Empty.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**

Description

([Genesis.Core.GameElements.Terrain2D.html](#))

Name

Color (<https://learn.microsoft.com/dotnet/api/system.drawing.color>)

Description

color

Terrain3D

([Genesis.Core.GameElements.Terrain3D.html](#))

Returns **TerrainData**

Type **TerrainData**

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

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**

([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	

TerrainData ([Genesis.Core.GameElements.TerrainData.html](https://genesis.core.gameelements.terrandata.html))

Type	Description
+ Genesis.Graphics.Physics	

TerrainData ([Genesis.Core.GameElements.TerrainData.html](https://genesis.core.gameelements.terrandata.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](#))

Terrain3D

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

Overrides

[TerrainData](#)

[Game](#).[GenerateTerrainTile](#)([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.RenderDevic](#)

+ **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.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

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](#))

Field Value

+ [Genesis.Graphics](#)

cellWidth

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

Declaration

+ [Genesis.Graphics.Physics](#)

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

public int [cellWidth](#)

+ [Genesis.Graphics.RenderDevice](#)

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

Field Value

+ [Genesis.Graphics.Shaders.Operator](#)

Description

Type	Description
Terrain3D	

Type	Description
int (https://learn.microsoft.com/dotnet/api/system.int32)	

Type	Description
TerrainData	

Type	Description
+ Genesis.Graphics	

Type	Description
cellWidth	

Type	Description
(Genesis.Graphics.Physics.html)	

Type	Description
public int cellWidth	

Type	Description
+ Genesis.Graphics.RenderDevice	

Type	Description
(Genesis.Graphics.RenderDevice.html)	

Type	Description
Field Value	

Type	Description
+ Genesis.Graphics.Shaders.Operator	

Type	Description
(Genesis.Graphics.Shaders.Operator.html)	

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
(Genesis.Core.GameElements.Qube)

- **RectElement**
<https://learn.microsoft.com/dotnet/api/system.int32>
(Genesis.Core.GameElements.RectElement)

 Skybox
colors
(Genesis.Core.GameElements.Skybox)

Declaration
 Sprite
 Terrain2D
 Terrain3D
public float[] **colors**
(Genesis.Core.GameElements.Terrain3D)

 TerrainData
Field Value
TerrainData
(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**

```
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.html)

- Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

Field Value

Type	Description
BufferedSprite (Genesis.Core.GameElements.Buffer	

float (<https://learn.microsoft.com/dotnet/api/system.single>)[]

(Genesis.Core.GameElements.Came

Element3D
(Genesis.Core.GameElements.Ele

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

TerrainFeature
(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

Namespace Genesis.Graphics

Classes

▼ Enter here to filter...

Animation (Genesis.Graphics.Animation.html)

(Genesis.Core.Behaviors.Physics) A class representing an animation 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)

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

ValueForSurfacePixel

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.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**

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)))

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.h

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

Framebuffer

(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

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

Name

(Genesis.Graphics.ShaderProgram.html)

Gets or sets the name of the animation.

(Genesis.Graphics.ShaderProgram.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)	

Camera

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

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

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

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

+

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)	<i>renderer</i>	

Class Camera

Inheritance

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

↳ Camera

+ **Genesis.Core.Behaviors.Physics**
↳ PerspectiveCamera ([Genesis.Graphics.PerspectiveCamera.html](https://genesis.graphics.PerspectiveCamera.html))
(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

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>)
(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.Graphics.Camera.html](https://genesis.graphics.Camera.html)

Assembly: [Genesis.dll](https://genesis.dll)

Syntax: [Genesis.Graphics.CameraType.html](https://genesis.Graphics.CameraType.html)

Face

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

Font

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

Framebuffer

Constructors

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

Glyphe

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

Camera(Vec3, Vec3, float, float)

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

Material

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

public Camera(Vec3 location, Vec3 size, float near, float far)

MaterialBuffer

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

Mesh

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

Type

PerspectiveCamera

Vec3 [Genesis.Math.Vec3.html](https://genesis.Math.Vec3.html)

PerspectiveCamera

Shader

[Genesis.Math.Vec3.html](https://genesis.Math.Vec3.html)

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

float <https://learn.microsoft.com/dotnet/api/system.single>

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

float <https://learn.microsoft.com/dotnet/api/system.single>

TexCoords

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

Texture

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

..

Type	Name	Description
Genesis.Graphics.PerspectiveCamera	<i>location</i>	
Genesis.Math.Vec3	<i>size</i>	
Genesis.Graphics.ShaderProgram	<i>near</i>	
Genesis.Graphics.TexCoords	<i>far</i>	
Genesis.Graphics.Texture		

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

(Genesis.Graphics.IRenderDevice.htm

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

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)
```

Parameters

Type	Name	Description
Camera (Genesis.Graphics.Camera.html)		
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\(object, object\)**](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#system-object-referenceequals(system-object-object-object)) ([\(https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals\(system-object-object-object\)\)](https://learn.microsoft.com/dotnet/api/system.object.referenceequals#system-object-referenceequals(system-object-object-object))
[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)
[CamType](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 Face
([Genesis.Graphics.Font.html](#))
[Framebuffer](#)
([Genesis.Graphics.Framebuffer.html](#))

Constructors

[Face\(\)](#)
([Genesis.Graphics.IRenderDevice.html](#))
[Declaration](#)
Material
([Genesis.Graphics.Material.html](#))
MaterialBuffer
public Face()
([Genesis.Graphics.MaterialBuffer.html](#))
[Mesh](#)
([Genesis.Graphics.Mesh.html](#))
[PerspectiveCamera](#)
[Face\(Texture\)](#)
([Genesis.Graphics.PerspectiveCamera.html](#))
[Declaration](#)

Shader
([Genesis.Graphics.Shader.html](#))
ShaderProgram
public Face(Texture texture)
([Genesis.Graphics.ShaderProgram.html](#))
[TexCoords](#)

[Parameters](#)
([Genesis.Graphics.TexCoords.html](#))
Type
Texture
([Genesis.Graphics.Texture.html](#))
Texture
([Genesis.Graphics.Texture.html](#))
Viewport
([Genesis.Graphics.Viewport.html](#))

Type	Name	Description
Texture (Genesis.Graphics.Texture.html)	<i>texture</i>	

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<Genesis.Graphics.Meshing> 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 Value
[\(Genesis.Graphics.Camera.html\)](#)

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

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

Properties 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](#))

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](#))
[Texture](#) **int 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)

- Type: Genesis.Graphics

(Genesis.Graphics.html)

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

Name

Description

base64

Animation

Return Type: Genesis.Graphics.Animation

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)

Face

(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

file

Material

(Genesis.Graphics.Material.html)

MaterialBuffer

(Genesis.Graphics.MaterialBuffer.html)

Mesh

(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

character

(Genesis.Graphics.TexCoords.html)

Texture

(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

(Genesis.Graphics.Animation3D.htm)

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>)
[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.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)))
[equals\(system-object-system-object\)](#)
[\(Genesis.Graphics.Animation.html\)](#)
[object.ReferenceEquals\(object, object\)](#) (<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>)
[Animation](#)
[\(Genesis.Graphics.Animation3D.html\)](#)
[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](#)
([Genesis.Graphics.IRenderDevice.html](#))

Framebuffer()

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

Properties

[TexCoords](#)
([Genesis.Graphics.TexCoords.html](#))
[Texture](#) [int 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.h)

TexCoords

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

([Genesis.Graphics.TexCoordUs.h](#))

Texture

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

Viewport

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

Description

Description

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 Character	(Genesis.Core.GameElements.html) (https://learn.microsoft.com/dotnet/api/system.char)

- [Genesis.Graphics](#)

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

[Column](#)

Animation

Declaration:

Animation3D

[\(Genesis.Graphics.Animation3D.html\)](#)

Camera

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

Property Value

CameraType

Type	Description
Genesis.Graphics.CameraType.html Face int (https://learn.microsoft.com/dotnet/api/system.int32)	(Genesis.Graphics.Face.html)

Font

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

[Row](#)

Framebuffer

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

Declaration

Material

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

Property Value

MaterialBuffer

Type	Description
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

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

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](#))

CreateDynamicVertexBuffer(float[])

Shader ([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

void ([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	<i>bufferedSprite</i>	

(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) Element3D (Genesis.Core.GameElements.Element3D.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)

- 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.PerspectiveCamera.html)

Declaration (Genesis.Graphics.PerspectiveCamera.html)

Shader

(Genesis.Graphics.Shader.html)

ShaderProgram

(Genesis.Graphics.ShaderProgram.html)

Parameters TexCoords

Type	Name	Description
Texture (Genesis.Graphics.Texture.html)	<i>texture</i>	

Sprite

(Genesis.Core.GameElements.Sprite.html)

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>	
Texture 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

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

Font

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

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

Framebuffer

float (<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](#))

DrawVectors(Vec3[], Color)

Material

Declaration

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

MaterialBuffer

void DrawVectors(**MaterialBuffer**, **Vec3**[] vecs, **Color** color)

Mesh

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

Parameters

PerspectiveCamera

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

Shader

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

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

ShaderProgram

Color (<https://learn.microsoft.com/dotnet/api/system.drawing.color>)

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

TexCoords

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

End()

Texture

Declaration

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.PerspectiveCamera.html)

Shader

Parameters
(Genesis.Graphics.Shader.html)

Type

ShaderProgram

(Genesis.Graphics.ShaderProgram.html)

Scene (Genesis.Core.Scene.html)

TexCoords

(Genesis.Graphics.TexCoords.html)

Texture

(Genesis.Graphics.Texture.html)

GetError()

Viewport

Declaration
(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](#))
Framebuffer
([Genesis.Graphics.Framebuffer.html](#))
void [Init\(\)](#)
Glyphe
([Genesis.Graphics.Glyphe.html](#))

IRenderDevice
([Genesis.Graphics.RenderDevice.html](#))
InitElement3D(Element3D)
Material

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

MaterialBuffer
([Genesis.Graphics.MaterialBuffer.html](#))
Element
Element3D ([Genesis.Core.GameElements.Element3D.html](#))
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

 (Genesis.Graphics.PerspectiveCamera.html)

 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
Genesis.Graphics.CameraType.htm		
Face Scene (Genesis.Core.Scene.html) (Genesis.Graphics.Face.html)		scene

Font
Canvas (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
Mesh (Genesis.Graphics.Mesh.html)		

Scene (Genesis.Graphics.Mesh.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
Shader (Genesis.Graphics.Shader.html)		

ShaderProgram

(**Genesis.Graphics.ShaderProgram.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](#))
TextureClampT()

Material
 ([Genesis.Graphics.Material.html](#))
MaterialBuffer
 ([Genesis.Graphics.MaterialBuffer.html](#))
Mesh
 ([Genesis.Graphics.Mesh.html](#))
PerspectiveCamera

TextureRepeats()

PerspectiveCamera
Shader
 ([Genesis.Graphics.Shader.html](#))
ShaderProgram
void TextureRepeats()
 ([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)

Glyphe

(Genesis.Graphics.Glyphe.html)

IRenderDevice

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)

Name

Description

x

y

z

Material

(Genesis.Graphics.Material.html)

MaterialBuffer

UpdateFramebufferSize(Framebuffer, int, int)

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

width

height

Texture

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

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.IRenderDevice.html](#))
[Material\(IIRenderDevice\)](#)
([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](#))
[Shader](#)
([Genesis.Graphics.Shader.html](#))

Properties
[DiffuseColor](#)
([Genesis.Graphics.ShaderProgram.html](#))

[Declaration](#)
[TexCoords](#)
([Genesis.Graphics.TexCoords.html](#))
[DiffuseColor](#) 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

Framebuffer

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

Glyphe

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

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

IRenderDevice

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

Propeterys

Material

Declaration

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

MaterialBuffer

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

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

Mesh

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

Perspective Camera

Property Value

Type PerspectiveCamera

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](#))



- + **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

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

Normals

Shader

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

ShaderProgram

public float[] Normals

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

FieldValue

TexCoords

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

Type

Texture

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

Viewport

float (<https://learn.microsoft.com/dotnet/api/system.single>)[]

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

Description

Description

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

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**](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)
[**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](#)
[Font](#)
[Framebuffer](#)
[Glyphe](#)
[IRenderDevice](#)
[Material](#)
[MaterialBuffer](#)
[Mesh](#)
[PerspectiveCamera](#)

Constructors

[Glyphe](#)
[IRenderDevice](#)
[Material](#)
[MaterialBuffer](#)
[Mesh](#)
[PerspectiveCamera](#)
[Shader](#)
[ShaderProgram](#)
[TexCoords](#)

Properties

[Faces](#)
[TextureList<float>](#) [Faces](#) { get; set; }
[Texture](#)
[Viewport](#)
[Property Value](#)
[Viewport](#)

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

(Genesis.Graphics.Framebuffer.html)

Property Value

Glyphe

Type	Description
(Genesis.Graphics.Glyphe.html)	

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

(Genesis.Graphics.Shader.html)

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

Declaration

(Genesis.Graphics.Viewport.html)

```
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

Properties
(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

Vericies
(Genesis.Graphics.Framebuffer.html)

Glyphe

(Genesis.Graphics.Glyphe.html)

IRenderDevice
public List<float> Vericies { get; set; }
(Genesis.Graphics.IRenderDevice.htm)

Material

Properties
(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.PerspectiveCame

Shader

(Genesis.Graphics.Shader.html)

ShaderProgram

(Genesis.Graphics.ShaderProgram.h)

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 ([Genesis.Graphics.Camera.html](https://genesis.graphics.Camera.html))
↳ PerspectiveCamera ([Genesis.Graphics.PerspectiveCamera.html](https://genesis.graphics.PerspectiveCamera.html))

+ Genesis.Core.GameElements

Int ([Genesis.games.GameElements.h](https://genesis.games.GameElements.h))

CameraLookAt(GameElement)
([Genesis.Graphics.html](https://genesis.graphics.html))
Camera.LookAt(GameElement, bool)
Animation
([Genesis.Graphics.Camera.html](https://genesis.graphics.Camera.html)#Genesis_Graphics_Camera_LookAt_Genesis_Core_GameElement_)
([Genesis.Graphics.Animation.html](https://genesis.graphics.Animation.html))
Camera.GetRect() ([Genesis.Graphics.Camera.html](https://genesis.graphics.Camera.html)#Genesis_Graphics_Camera_GetRect)
Animation3D
Camera.Location ([Genesis.Graphics.Camera.html](https://genesis.graphics.Camera.html)#Genesis_Graphics_Camera_Location)
([Genesis.Graphics.Animation3D.html](https://genesis.graphics.Animation3D.html))
Camera.Size ([Genesis.Graphics.Camera.html](https://genesis.graphics.Camera.html)#Genesis_Graphics_Camera_Size)
Camera
Camera.Rotation ([Genesis.Graphics.Camera.html](https://genesis.graphics.Camera.html)#Genesis_Graphics_Camera_Rotation)
([Genesis.Graphics.Camera.html](https://genesis.graphics.Camera.html))
Camera.Near ([Genesis.Graphics.Camera.html](https://genesis.graphics.Camera.html)#Genesis_Graphics_Camera_Near)
CameraType
Camera.Far ([Genesis.Graphics.Camera.html](https://genesis.graphics.Camera.html)#Genesis_Graphics_Camera_Far)
([Genesis.Graphics.CameraType.html](https://genesis.graphics.CameraType.html))
Camera.Type ([Genesis.Graphics.Camera.html](https://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://genesis.graphics.Face.html))
object.Equals(object) ([https://learn.microsoft.com/dotnet/api/system.object.equals#system-object>equals\(system-object\)\)
\(\[Genesis.Graphics.Font.html\]\(https://genesis.graphics.Font.html\)\)
object.Equals\(object, object\) \(\[https://learn.microsoft.com/dotnet/api/system.object.equals#system-object>equals\\(system-object-system-object\\)\\)
\\(\\[Genesis.Graphics_FRAMEBUFFER.html\\]\\(https://genesis.graphics_FRAMEBUFFER.html\\)\\)
object.ReferenceEquals\\(object, object\\) \\(<https://learn.microsoft.com/dotnet/api/system.object.referenceequals>\\)
object.GetHashCode\\(\\) \\(<https://learn.microsoft.com/dotnet/api/system.object.gethashcode>\\)
\\(\\[Genesis.Graphics.Glyphe.html\\]\\(https://genesis.graphics.Glyphe.html\\)\\)
object.GetType\\(\\) \\(<https://learn.microsoft.com/dotnet/api/system.object.gettype>\\)
IRenderDevice
object.MemberwiseClone\\(\\) \\(<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>\\)
\\(\\[Genesis.Graphics.IRenderDevice.html\\]\\(https://genesis.graphics.IRenderDevice.html\\)\\)\]\(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)))

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

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

MaterialBuffer

([Genesis.Graphics.MaterialBuffer.html](https://genesis.graphics.MaterialBuffer.html))
Mesh
public class PerspectiveCamera : Camera
([Genesis.Graphics.Mesh.html](https://genesis.graphics.Mesh.html))
PerspectiveCamera
([Genesis.Graphics.PerspectiveCamera.html](https://genesis.graphics.PerspectiveCamera.html))

Constructors

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

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

Texture
public PerspectiveCamera(Vec3 location, Vec3 size, float near, float far)
([Genesis.Graphics.Texture.html](https://genesis.graphics.Texture.html))

Viewport
([Genesis.Graphics.Viewport.html](https://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
Face
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.RenderDevice.html](#))

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

Parameters:
MaterialBuffer

Type	Name	Description
MaterialBuffer (Genesis.Graphics.MaterialBuffer.html)	<i>distance</i>	

Returns: [Genesis.Graphics.PerspectiveCamera.html](#)

Type	Description
Shader (Genesis.Graphics.Shader.html)	

MoveBackward(float)
([Genesis.Graphics.Texture.html](#))

Declaration:
([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](#))

Framebuffer

```
(Genesis.Graphics.Framebuffer.html)  
public void MoveForward(float value)  
Glyphe
```

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

Parameters IRenderDevice

Type		Name	Description
Material (Genesis.Graphics.Material.html)			

MaterialBuffer

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

Mesh

MoveLeft(float)

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

Parameters IPerspectiveCamera

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

```
Shader  
public void MoveLeft(float value)  
(Genesis.Graphics.Shader.html)
```

ShaderProgram

Parameters IShaderProgram

([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)	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)
[**CamType**](https://learn.microsoft.com/dotnet/api/genesis.graphics.camertype)
Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#))

Assembly

[Genesis.Graphics.CameraType.htm](#)

Syntax

[Face](#)
[Font](#)

```
public class Shader
```

[Font](#)
[Framebuffer](#)
[Framebuffer](#)

Constructors

[Glyphe](#)
[IRenderDevice](#)
Shader()

[Material](#)
[Declaration](#)

```
public Shader()
```

[Material](#)

[MaterialBuffer](#)

```
public Shader()
```

[MaterialBuffer](#)
[Mesh](#)

[PerspectiveCamera](#)
Shader(string)

[PerspectiveCamera](#)

[Shader](#)
Declaration

```
public Shader(string source)
```

[Shader](#)

[ShaderProgram](#)

```
public Shader(string source)
```

[ShaderProgram](#)
[TexCoords](#)

Parameters
[Texture](#)

[Texture](#)
[String](#)
[Viewport](#)

[Viewport](#)

Type	Name	Description
Texture String Viewport	<i>source</i>	

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

Declaration

(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)

MaterialBuffer

Declaration

(Genesis.Graphics.MaterialBuffer.html)

Mesh

(Genesis.Graphics.Mesh.html)

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

(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](#))
 ↳ [\(Genesis.Graphics.Animation.html\)](#)
 ↳ [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>)
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](#)
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](#)
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

Mesh

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

 ↳ [PerspectiveCamera](#)
 public class [ShaderProgram](#)
 ↳ [\(Genesis.Graphics.PerspectiveCamera.html\)](#)
 Shader
 ↳ [\(Genesis.Graphics.Shader.html\)](#)

Constructors

Constructor

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

TexCoords

ShaderProgram()

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

Texture Declaration

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

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 FramebufferProgramID { get; set; }
```

(Genesis.Graphics.Framebuffer.html)

Glyphe

(Genesis.Graphics.Glyphe.html)

Property Value

Type	Description
IRenderDevice	

RenderDevice

(Genesis.Graphics.IRenderDevice.html)

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

Material

(Genesis.Graphics.Material.html)

MaterialBuffer

VertexShader

Mesh

Declaration

(Genesis.Graphics.Mesh.html)

PerspectiveCamera

```
public Shader VertexShader { get; set; }
```

Shader

(Genesis.Graphics.Shader.html)

Property Value

ShaderProgram

Type (Genesis.Graphics.ShaderProgram.html)

TexCoords
Shader (Genesis.Graphics.Shader.html)
(Genesis.Graphics.TexCoords.html)

Texture

(Genesis.Graphics.Texture.html)

Viewport

(Genesis.Graphics.Viewport.html)

Type	Description
Texture	
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)

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>)

Face

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
Animation3D
(Genesis.Graphics.Animation3D.html)

Camera
publ Vec3 BottomLeft { get; set; }
(Genesis.Graphics.Camera.html)

Property Value
CameraType
(Genesis.Graphics.CameraType.html)

Type	Description
Face (Genesis.Graphics.Face.html)	

Type	Description
Font (Genesis.Graphics.Font.html)	

BottomRight
(Genesis.Graphics.Framebuffer.html)

Glyphe
(Genesis.Graphics.Glyphe.html)

Declaration
IRenderDevice
(Genesis.Graphics.RenderDevice.html)

publ IRenderDevice RenderDevice { get; set; }

Material
(Genesis.Graphics.Material.html)

Property Value
MaterialBuffer
(Genesis.Graphics.MaterialBuffer.html)

Type	Description
Mesh Vec3 (Genesis.Math.Vec3.html) (Genesis.Graphics.Mesh.html)	

PerspectiveCamera
(Genesis.Graphics.PerspectiveCamera.html)

Shader
(Genesis.Graphics.Shader.html)

Declaration
ShaderProgram
(Genesis.Graphics.ShaderProgram.html)

publ TexCoords TopLeft { get; set; }

Texture
(Genesis.Graphics.Texture.html)

Property Value
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

GetType

(Genesis.Graphics.CameraType.html)

Face

(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)

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)) ([\(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](#))

Assembly

[Genesis.Graphics.CameraType.htm](#)

Syntax

[Face](#)
([Genesis.Graphics.Face.html](#))
[Font](#)
public class Texture
([Genesis.Graphics.Font.html](#))
[Framebuffer](#)
([Genesis.Graphics.Framebuffer.html](#))

Constructors

[Texture\(Bitmap\)](#)
([Genesis.Graphics.Glyphe.html](#))
[IRenderDevice](#)
([Genesis.Graphics.IRenderDevice.html](#))

[Declaration](#)
([Genesis.Graphics.Material.html](#))
[MaterialBuffer](#)
public Texture(Bitmap bitmap)
([Genesis.Graphics.MaterialBuffer.html](#))
[Mesh](#)
([Genesis.Graphics.Mesh.html](#))

[Parameters](#)
Type PerspectiveCamera
([Genesis.Graphics.PerspectiveCamera.html](#))
Shader [Bitmap](https://learn.microsoft.com/dotnet/api/system.drawing.bitmap) (<https://learn.microsoft.com/dotnet/api/system.drawing.bitmap>)
([Genesis.Graphics.Shader.html](#))
[ShaderProgram](#)
([Genesis.Graphics.ShaderProgram.html](#))
Texture(int)
texCoords
([Genesis.Graphics.TexCoords.html](#))

[Declaration](#)
Texture
([Genesis.Graphics.Texture.html](#))
Viewport
public Texture(int RenderID)
Viewport
([Genesis.Graphics.Viewport.html](#))

Type	Name	Description
Bitmap (https://learn.microsoft.com/dotnet/api/system.drawing.bitmap)	<i>bitmap</i>	

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](#))

Framebuffer

Declaration: ([Genesis.Graphics.Framebuffer.html](#))

Glyphe

```
public Glyphe Name { 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](#))

TexCoords

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

Property Value

Texture

([Genesis.Graphics.Texture.html](#))
string (<https://learn.microsoft.com/dotnet/api/system.string>)

Viewport

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

Description

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)
[\(Genesis.Graphics.Animation\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-object))
[\(Genesis.Graphics.Animation.html\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object-object))
[\(Genesis.Graphics.Animation3D\)](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/system.object.memberwiseclone#system-object-memberwiseclone(system-object))
[\(Genesis.Graphics.Camera.html\)](https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone#system-object-memberwiseclone(system-object))
Namespace: [Genesis](#) ([Genesis.html](#)).[Graphics](#) ([Genesis.Graphics.html](#))
CameraType: [CameraType](#)

Assembly: [Genesis.Graphics.CameraType.htm](#)

Syntax

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

Font
public class Viewport
[\(Genesis.Graphics.Font.html\)](#)

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

Constructors

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

IRenderDevice

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

Declaration

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

MaterialBuffer

public Viewport()
[\(Genesis.Graphics.MaterialBuffer.html\)](#)

Mesh

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

PerspectiveCamera

Viewport(float, float)
[\(Genesis.Graphics.PerspectiveCamera.html\)](#)

Declaration

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

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.PerspectiveCame](https://learn.microsoft.com/dotnet/api/genesis.graphics.perspectivecame)

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))

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**

(<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>)

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

Animation3D

(<https://learn.microsoft.com/dotnet/api/genesis.graphics.animation3d>)

Camera

Y (Genesis.Graphics.Camera.html)

CameraType

Declaration

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

Face

public float X { get; set; }

Font

Property Value

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

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>)

Material

Methods

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

MaterialBuffer

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

GetSize()

Mesh

Declaration

PerspectiveCamera

public Size GetSize()

Shader

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

Returns

ShaderProgram

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

TexCoords

Size (<https://learn.microsoft.com/dotnet/api/system.drawing.size>)

Texture

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

Viewport

GetSizer()

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

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.Physics2D**
[\(Genesis.Core.Behaviors.Physics2D.html\)](#)
- + **Genesis.Core.GameElements**
[\(Genesis.Core.GameElements.html\)](#)
- + **Genesis.Graphics**
[\(Genesis.Graphics.html\)](#)
- **Genesis.Graphics.Physics**
[\(Genesis.Graphics.Physics.html\)](#)
 - 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>↳ 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, int, 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.DrawPhysicsBody(BulletBody, 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.DrawSphere(float, ref Matrix, ref Vector3) (https://learn.microsoft.com/dotnet/api/system.single)</p> <p>DebugDraw.DrawSphere(ref Vector3, float, ref Vector3) (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, ref Vector3, float, float, float, float, float, ref Vector3)</p> <p>(https://learn.microsoft.com/dotnet/api/system.single)</p> <p>DebugDraw.DrawSpherePatch(ref Vector3, 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(ref Matrix, float) (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) (https://learn.microsoft.com/dotnet/api/system.boolean)</p> <p>object.ToString() (https://learn.microsoft.com/dotnet/api/system.object.tostring)</p> <p>object.Equals(object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object))</p> <p>object.Equals(object, object) (https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-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

`public BulletDebugRenderer(IRenderDevice RenderDevice)`
[\(Genesis.Core.GameElements.h\)](#)

Parameters

+ Genesis.Graphics

Type	Name	Description
(Genesis.Graphics.html) IRenderDevice (Genesis.Graphics.IRenderDevice.html)	<code>RenderDevice</code>	

- Genesis.Graphics.Physics

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

`BulletDebugRenderer`

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

Properties

+ Genesis.Graphics.RenderDevice

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

DebugMode

+ Genesis.Graphics.Shaders.Operations

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

+ 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

+ Genesis.Graphics

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

ClassicGL

OpenGLFramebuffer ([OpenGLFramebuffer.html](#))

GLRenderer

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

Parameters

+ Genesis.Graphics.Shaders.Operator

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

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

+ Genesis.Graphics.Shapes

int (<https://learn.microsoft.com/dotnet/api/system.int32>)
[\(Genesis.Graphics.Shapes.html\)](#)

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

+ Genesis.Math

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

Returns

+ Genesis.Physics

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.Phy**

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

+ **Genesis.Core.Behaviors.Phy**

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

+ **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.Cla**

Type
+ **GLRenderer**

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

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

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

([Genesis.Graphics.Shaders.Ope](#))

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.html)

```
public void Dispose()
```

+ **Genesis.Core.Behaviors**

(Genesis.Core.Behaviors.html)

+ **Genesis.Core.Behaviors.Physics**
DisposeElement3D(Element3D)
(Genesis.Core.Behaviors.Physics)

Declaration

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

(Genesis.Core.Behaviors.Physics)

```
public void DisposeElement3D(Element3D element)
```

+ **Genesis.Core.GameElements**

(Genesis.Core.GameElements.h)

+ **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)
```

GLRenderer

(Genesis.Graphics.RenderDevice.GL)

Parameters

+ **Genesis.Graphics.Shaders.Operations**

(Genesis.Graphics.Shaders.Operations.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		

B (Genesis.Core.Behaviors.Physics.html) Elements.BufferedSprite (Elements.BufferedSprite.html)

bufferedSprite

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

DrawElement3D(Element3D)

+ Genesis.Core.GameElements

Declaration

(Genesis.Core.GameElements.html)

+ Genesis.Graphics

(Genesis.Graphics.html) Element3D (Element3D element)

(Genesis.Graphics.html)

Parameters
+ Genesis.Graphics.Physics

Type	Name	Description
Genesis.Graphics.Physics.html		

- Element3D (Element3D.html) (Elements.Element3D.html)

element

(Genesis.Graphics.RenderDevice)

(Genesis.Graphics.RenderDevice.html)

ClassicGL

DrawGameElement(GameElement)

GLRenderer

Declaration
(Genesis.Graphics.RenderDevice.GL.html)

+ Genesis.Graphics.Shaders.Oper

public void DrawGameElement(GameElement element)

(Genesis.Graphics.Shaders.Oper

Parameters
+ Genesis.Graphics.Shapes

Type	Name	Description
Genesis.Math.html		

GameElement (Genesis.Core.GameElement.html)

element

(Genesis.Math.html)

+ 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**

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

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

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

Name

Description

skybox

+ **Genesis.Core.GameElements**

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

DrawSprite(Sprite)

+ **Genesis.Graphics**

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

+ **Genesis.Graphics.Physics**

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

Parameters

Type
Genesis.Graphics.RenderDevice

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

Name

Description

ClassicGL

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

sprite

GLRenderer

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

DrawSprite(Vec3, Vec3, Texture)

+ **Genesis.Graphics.Shaders.OpenGL**

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

Declaration

+ **Genesis.Graphics.Shapes**

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

+ **Genesis.Math**

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

Type

+ **Genesis.Physics**

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

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

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

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

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

Name

Description

location

size

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

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

Name

Description

text

+ Genesis.Core.Behaviors.Physics

Vec3 (<https://learn.microsoft.com/dotnet/api/system.math.ve>c3.html)

location

+ Genesis.Core.GameElements

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

fontSize

(Genesis.Core.GameElements.h)

Font (<https://learn.microsoft.com/dotnet/api/genesis.graphics.font.html>)

font

+ Genesis.Graphics

Color (<https://learn.microsoft.com/dotnet/api/system.drawing.color>)

color

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

DrawString([Genesis.Graphics.Physics.html](#), Vec3, float, float, Font, Color)

Declaration

Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice)

```
public void DrawString(string text, Vec3 location, float fontSize, float spacing, Font font,
    Color color)
```

(Genesis.Graphics.RenderDevice.ClassicGL)

GLRenderer

(Genesis.Graphics.RenderDevice.GL)

Parameters

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator)

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

Name

Description

text

+ Genesis.Graphics.Shapes

Vec3 (<https://learn.microsoft.com/dotnet/api/system.math.ve>c3.html)

location

(Genesis.Graphics.Shapes.html)

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

fontSize

+ Genesis.Math

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

spacing

(Genesis.Math.html)

Font (<https://learn.microsoft.com/dotnet/api/genesis.graphics.font.html>)

font

+ Genesis.Physics

Color (<https://learn.microsoft.com/dotnet/api/system.drawing.color>)

color

+ 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
(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)	<i>color</i>	

ClassicGL
([Genesis.Graphics.RenderDevice.ClassicGL](#))
GLRenderer
([Genesis.Graphics.RenderDevice.GL](#))

End()
Declaration
(Genesis.Graphics.Shaders.Operator.html)
+ **Genesis.Graphics.Shapes**
(Genesis.Graphics.Shapes.html)

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)	<i>rect</i>	
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	<i>color</i>	

FinishCanvasRendering(Scene, Canvas)

+ Genesis.Core Declaration (Genesis.Core.html)

+ **Genesis.Core.Behaviors** (Scene scene, Canvas canvas) **(Genesis.Core.Behaviors.html)**

Parameters + Genesis Core Behaviors Physics

Type	Name	Description
Genesis.Core.Behaviors.Physics		
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
Genesis.Core.Behaviors.Physics (Genesis.Core.Behaviors.Physics)		
Canvas (Genesis.UI.Canvas.html)	<i>canvas</i>	

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

FinishSceneRendering(Scene) + Genesis.Graphics

Declarations Graphics.html

(Genesis.Graphics.html)

+ **Genesis.Graphics.Physics**
public void FinishSceneRendering(Scene scene)
(Genesis.Graphics.Physics.html

Genesis.Graphics.RenderDevice

Type	Name	Description
ClassicGL		
Scene (Genesis.Core.Scene.html) (Genesis.Graphics.RenderDevice.Cla	<i>scene</i>	

GLRenderer (Genesis.Graphics.RenderDevice.GL)

GenerateTexture(OpenGL, Texture) + Genesis.Graphics.Shaders.OpenGL

Genesis.Graphics.Shaders.One

† Genesis Graphics Shapes

Declaration.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

+ **Genesis.Math**

(Genesis.Math.html)

Parameters

+ Genesis. True

Type (Genesis.Physics)

OpenGL

+ Genesis.UI (Genesis.UI.html)

Texture (Genesis.Graphics.Texture.html)

Name	Description
------	-------------

gl

texture

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

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

Declaration

ClassicGL

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

GLRenderer

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

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

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

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

+ Genesis.UI [\(Genesis.UI.html\)](#)

Returns

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

public void LoadTexture(Texture texture)

([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()

Declaration

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

public void ModelViewMatrix()

ClassicGL

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

GLRenderer

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

PopMatrix()

+ Genesis.Graphics.Shaders.Operations

Declaration

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

+ [Genesis.Graphics.Shapes](#)

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

+ Genesis.Math

PrepareCanvasRendering(Scene, Canvas)

Declaration

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

public void PrepareCanvasRendering(Scene scene, Canvas canvas)

+ Genesis.Physics (Genesis.Physics.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

SetCamera(Camera)

Declaration

```
public void SetCamera(Camera camera)
```



Parameters

Type	Name	Description
+ Genesis.Core (Genesis.Core.html)	<i>camera</i>	

+ Genesis.Core.Behaviors

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

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

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

Parameters

Genesis.Core.GameElements

Type	Name	Description
+ Genesis.Graphics (Genesis.Graphics.Framebuffer.html)	<i>framebuffer</i>	

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

+ Genesis.Graphics.Physics

+ [Genesis.Graphics.Physics](#)

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

Genesis.Graphics.RenderDevice

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

```
public void SetFramebuffer(int framebuffer)  
    ClassicGL
```

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

Parameters

Renderer

Type	Name	Description
+ Genesis.Graphics.Shaders.Operations (Genesis.Graphics.Shaders.Operations.html)	<i>framebuffer</i>	

+ Genesis.Graphics.Shapes

+ [Genesis.Graphics.Shapes](#)

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

Genesis.Math

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

```
public void SetLightSource(Light light)
```

+ Genesis.Physics

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

Parameters

+ [Genesis.UI](#) ([Genesis.UI.html](#))

Type

Type	Name	Description
Light (Genesis.Core.Light.html)	<i>light</i>	

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()

([Genesis.Graphics.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)		
+ Genesis.Graphics.Shaders.OpenGL	x	
float (https://learn.microsoft.com/dotnet/api/system.single)	y	
+ Genesis.Graphics.Shapes	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)))
[\(Genesis.Core.Behaviors.Physics\)](#)
[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)))
[\(Genesis.Core.Behaviors.Physics\)](#)
[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](#)

([GLRenderer\(IntPtr\)](#))

([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](#))

Name	Description
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

(https://docs.microsoft.com/dotnet/api/system.int32)

int (https://docs.microsoft.com/dotnet/api/system.int32)

width

height

+ 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.Behaviors.Physics.html](#))

+ 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)	height	
int (https://learn.microsoft.com/dotnet/api/system.int32)	texture	

+ Genesis.Graphics.Shaders.Operator

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

+ Genesis.Graphics.Shapes

([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.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**

(Genesis.Graphics.html)

Declaration

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

+ [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](#)

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

+ [Genesis.Graphics.RenderDevice](#)

[\(Genesis.Graphics.RenderDevice.html\)](#)
Draws a fine

ClassicGL

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

GLRenderer

```
public void DrawLine(Vec3 from, Vec3 to, Color color)
```

+ [Genesis.Graphics.Shaders.Operator](#)

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

Type	Name	Description
+ Genesis.Graphics.Shapes (Genesis.Graphics.Shapes.html)	<i>from</i>	
+ Genesis.Math (Genesis.Math.html)	<i>to</i>	
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	<i>color</i>	

+ [Genesis.Physics](#)

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

+ [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>	
+ Genesis.Core (https://learn.microsoft.com/dotnet/api/system.drawing.color) (Genesis.Core.html)		<i>color</i>	

+ [Genesis.Core.Behaviors](#)

[DrawRect\(Rect, Color\)](#) [\(Genesis.Core.Behaviors.html\)](#)

Draws a rect with no fill

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

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

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

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

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

Type

+ [Genesis.Graphics.Shapes](#)

[Rect \(Genesis.Math.Rect.html\)](#) [\(Genesis.Graphics.Shapes.html\)](#)

+ [Genesis.Math](#)

<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\(Skybox\)](#) [\(Genesis.0.html\)](#)

Declaration

Type		Name	Description
Rect (Genesis.Math.Rect.html)		<i>rect</i>	
+ Color (https://learn.microsoft.com/dotnet/api/system.drawing.color) (Genesis.Math.html)		<i>color</i>	
float (https://learn.microsoft.com/dotnet/api/system/single)		<i>borderWidth</i>	

```
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

Draws a sprite

(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) GLRenderer (Genesis.Graphics.RenderDevice.GL)	<i>color</i>	
Texture (Genesis.Graphics.Texture.html) (Genesis.Graphics.RenderDevice.ClassicGL) GLRenderer (Genesis.Graphics.RenderDevice.GL)	<i>texture</i>	

DrawSprite(Vec3, Vec3, Color, Texture, TexCoords)

+ Genesis.Graphics.Shaders.Oper

DrawSprite(Vec3, Vec3, Color, Texture, TexCoords)

Parameters

(Genesis.Graphics.Shapes.html)

```
public void DrawSprite(Vec3 location, Vec3 size, Color color, Texture texture, TexCoords tex
```

+ Genesis.Math

(Genesis.Math.html)

Parameters

(Genesis.Physics.html)

+ Genesis.Math
(Genesis.Math.html)

Vec3 (Genesis.Math.Vec3.html)

Type	Name	Description
Vec3 (Genesis.Math.Vec3.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)	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](#))

Type
+ [Genesis.Core.Behaviors.Physics](#)
Vec3 ([Genesis.Math.Vec3.html](#))

+ [Genesis.Core.GameElements](#)
Vec3 ([Genesis.Core.GameElements.html](#))

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

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

DrawVectors(Vec3[], Color)
([Genesis.Graphics.RenderDevice.html](#))

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

GLRenderer
public void DrawVectors(Vec3[] vecs, Color color)
([Genesis.Graphics.RenderDevice.GL.html](#))

+ [Genesis.Graphics.Shaders.Operations](#)
Parameters
([Genesis.Graphics.Shaders.Operations.html](#))

Type
+ [Genesis.Graphics.Shapes](#)
Vec3 ([Genesis.Math.Vec3.html](#))

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

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

Ends the rendering

+ [Genesis.UI](#) ([Genesis.UI.html](#))
Declaration

Type	Name	Description
+ Genesis.Core.Behaviors (Vec3 location, Vec3 size, float repeatX, float repeatY, Texture texture) (Genesis.Core.Behaviors.html)	location	
+ Genesis.Core.Behaviors.Physics Vec3 (Genesis.Math.Vec3.html)	size	
+ Genesis.Core.GameElements Vec3 (Genesis.Core.GameElements.html)	repeatX	
+ Genesis.Graphics float (https://learn.microsoft.com/dotnet/api/system.single)	repeatY	
+ Genesis.Graphics Texture (Genesis.Graphics.Texture.html)	texture	

Type	Name	Description
+ Genesis.Graphics.Shapes Vec3 (Genesis.Math.Vec3.html)	vecs	
+ Genesis.Math (Genesis.Math.html)	color	

```
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>)

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

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

+ [Genesis.Core.GameElements](#)

[GenerateTexture\(OpenGL, Bitmap\)](#)

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

Generates a texture

+ [Genesis.Graphics](#)

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

+ [Genesis.Graphics.Physics](#)

[public int GenerateTexture\(OpenGL gl, Bitmap texture\)](#)

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

Parameters

+ [Genesis.Graphics.RenderDevice](#)

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

Type	Name	Description
+ OpenGL (Genesis.Graphics.RenderDevice.OpenGL)	<i>gl</i>	
Bitmap (https://learn.microsoft.com/dotnet/api/system.drawing.bitmap)	<i>texture</i>	

(Genesis.Graphics.RenderDevice.GL)

Returns

+ [Genesis.Graphics.Shaders.Operator](#)

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

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

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

+ [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
ClassicGL	

OpenGL

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

GLRenderer

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

GetShaderProgram(ShaderProgram)

+ Genesis.Graphics.Shaders.Operations

Returns the shader program with the type of the refProgram. Returns null if no program found

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

+ 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
refProgram		

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>)

+ **Genesis.UI** (Genesis.UI.html)

InitElement3DTexture(string)

Initial the diffuse texture for the 3D model If the texture file isn't existing an empty 1x1 texture get created

Declaration

<code>public int InitElement3DTexture(string path)</code>		
---	--	--

Parameters

Genesis.Core		
---------------------	--	--

Type	Name	Description
-------------	-------------	--------------------

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

+ Genesis.Core.Behaviors		
---------------------------------	--	--

+ string (https://learn.microsoft.com/dotnet/api/system.string)	path	
--	-------------	--

(Genesis.Core.Behaviors.html)		
--------------------------------------	--	--

Returns

+ Genesis.Core.Behaviors.Physics		
---	--	--

Type	Description
-------------	--------------------

(Genesis.Core.Behaviors.Physics)	
---	--

+ int (https://learn.microsoft.com/dotnet/api/system.int32)	
--	--

(Genesis.Core.Behaviors.Physics)	
---	--

Parameters

+ Genesis.Core.GameElements		
------------------------------------	--	--

InitGameElement(GameElement)		
-------------------------------------	--	--

(Genesis.Core.GameElements.h)		
--------------------------------------	--	--

Inits the game element

+ Genesis.Graphics		
---------------------------	--	--

Declaration	(Genesis.Graphics.html)	
--------------------	--------------------------------	--

+ Genesis.Graphics.Physics		
-----------------------------------	--	--

public void InitGameElement(GameElement element)		
---	--	--

(Genesis.Graphics.Physics.html)		
--	--	--

Parameters

Type	Name	Description
-------------	-------------	--------------------

ClassicGL		
------------------	--	--

GameElement (Genesis.Core.GameElement.html)		
--	--	--

(Genesis.Graphics.RenderDevice.ClassicGL)		
--	--	--

GLRenderer

(Genesis.Graphics.RenderDevice.GL)

InitSprite(Sprite)

+ Genesis.Graphics.Shaders.Operator		
--	--	--

(Genesis.Graphics.Shaders.Operator)		
--	--	--

Initial the sprite

Declaration

(Genesis.Graphics.Shapes.html)		
---------------------------------------	--	--

+ public void InitSprite(Sprite sprite)		
--	--	--

+ Genesis.Math		
-----------------------	--	--

(Genesis.Math.html)		
----------------------------	--	--

Parameters

+ Genesis.Physics		
--------------------------	--	--

Type	Name	Description
-------------	-------------	--------------------

(Genesis.Physics.html)		
-------------------------------	--	--

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

+ 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)

Parameters

ClassicGL

public void SetCamera(RenderDevice.Camera)

GLRenderer

(Genesis.Graphics.RenderDevice.GL)

Type

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator Camera)

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

Name

camera

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

SetFramebuffer(Framebuffer)

(Genesis.Math.html)

Declaration

+ Genesis.Physics

(public void SetFramebuffer(Framebuffer framebuffer))

+ 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

GLRenderer

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](#))

- [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

+ [Genesis.Graphics.Shaders.Operations](#)

([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](#))
([Genesis.Graphics.Shaders.OpenGL](#)).
DiffuseNormalLightning

[MVPShader](#) ([Genesis.Graphics.Shaders.OpenGL.MVPShader.html](#))
([Genesis.Graphics.Shaders.OpenGL](#)).
DiffuseNormalShader

[MVPSolidShader](#) ([Genesis.Graphics.Shaders.OpenGL.MVPSolidShader.html](#))
([Genesis.Graphics.Shaders.OpenGL](#)).
DiffuseSolidShader

[ScreenShader](#) ([Genesis.Graphics.Shaders.OpenGL.ScreenShader.html](#))
MVPRectShader
([Genesis.Graphics.Shaders.OpenGL](#)).
MVPRectShader

[SkyboxShader](#) ([Genesis.Graphics.Shaders.OpenGL.SkyboxShader.html](#))
([Genesis.Graphics.Shaders.OpenGL](#)).
MVPSolidShader

[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](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

BasicShader()

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[MVPRectShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[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](#)

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 DiffuseLightning : ShaderProgram
[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseNormalShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

[DiffuseShader](#)

[\(Genesis.Graphics.Shaders.OpenGL.](#)

Constructors

DiffuseLightning()

[MVPRectShader](#)

Declaration: [\(Genesis.Graphics.Shaders.OpenGL.](#)

[MVPShader](#)

public DiffuseLightning(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)
(Genesis.Core.Behaviors.Physics)
↳ DiffuseNormalLightning

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

DiffuseLighting

(Genesis.Graphics.Shaders.OpenGL)

DiffuseNormalLightning

```
public class DiffuseNormalLightning : ShaderProgram  
(Genesis.Graphics.Shaders.OpenGL.
```

DiffuseNormalShader

(Genesis.Graphics.Shaders.OpenGL.

DiffuseShader

(Genesis.Graphics.Shaders.OpenGL.

DiffuseSolidShader

(Genesis.Graphics.Shaders.OpenGL.

DiffuseNormalLightning()

MVPRectShader

(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.

(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

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

DiffuseSolidShader

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

Constructors

DiffuseNormalShader()

MVPRectShader

Declaration

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

MVPShader

public class DiffuseNormalShader

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

MVPSolidShader

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

ScreenShader

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

SkyboxShader

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

SpriteShader

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

Class 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)))

[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 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.](#)

Constructors

DiffuseSolidShader()

[MVPRectShader](#)

Declaration: ([Genesis.Graphics.Shaders.OpenGL.](#)

[MVPSolidShader](#)

public class DiffuseSolidShader ([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](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

Constructors

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
Base Class: Shaders.OpenGL (<https://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.](#)

[MVPRectShader](#)

MVPShader ([Genesis.Graphics.Shaders.OpenGL](https://genesis.graphics.shaders.opengl))

[MVPRectShader](#)

Declaration: ([Genesis.Graphics.Shaders.OpenGL](https://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)))

[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 MVPSolidShader : ShaderProgram  
(Genesis.Graphics.Shaders.OpenGL)
```

[DiffuseNormalShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

MVPSolidShader()

[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](#))
(Genesis.Core.Behaviors.Physics)
↳ [ScreenShader](#)

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 ScreenShader : ShaderProgram
[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseNormalShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[DiffuseSolidShader](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

ScreenShader()

[MVPRectShader](#)

Declaration: [\(Genesis.Graphics.Shaders.OpenGL\)](#)

[MVPSHader](#)

public ScreenShader
[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[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.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.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

[\(\[Genesis.Graphics.Physics.html\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.physics.html\)\)](https://learn.microsoft.com/dotnet/api/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 \(Genesis.html\).Graphics \(Genesis.Graphics.html\).Shaders \(Genesis.Graphics.Shaders.html\).OpenGL](https://learn.microsoft.com/dotnet/api/genesis.html.graphics.shaders)

[\(\[Genesis.Graphics.Shaders.OpenGL.html\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl.html)

Assembly: [Genesis.Graphics.Shaders.OpenGL](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl).

DiffuseLightning

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

DiffuseNormalLightning

public class SkyboxShader : ShaderProgram

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

DiffuseNormalShader

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

DiffuseShader

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

DiffuseSolidShader

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

SkyboxShader()

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

MVPRectShader

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

MVPSolidShader

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

ScreenShader

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

SkyboxShader

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

SpriteShader

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

Class SpriteShader

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)

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

- Genesis.Graphics.Physics

[\(\[Genesis.Graphics.Physics.html\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.physics.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.physics.html)

[object.MemberwiseClone\(\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.physics.html#genesis_graphics_physics_memberwiseclone) (https://learn.microsoft.com/dotnet/api/genesis.graphics.physics.html#genesis_graphics_physics_memberwiseclone)

(Genesis.Graphics.Shaders.OpenGL)

Namespace: [Genesis \(Genesis.html\).Graphics \(Genesis.Graphics.html\).Shaders \(Genesis.Graphics.Shaders.html\).OpenGL](https://learn.microsoft.com/dotnet/api/genesis.html.graphics.shaders)

[\(\[Genesis.Graphics.Shaders.OpenGL.html\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl.html)

Assembly: [Genesis.Graphics.Shaders.OpenGL](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

Syntax

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[DiffuseLightning](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[public class SpriteShader : ShaderProgram](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[DiffuseNormalShader](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[DiffuseShader](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[DiffuseSolidShader](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

Constructors

SpriteShader()

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[MVPRectShader](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[MVPSolidShader](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[ScreenShader](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[SkyboxShader](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[SpriteShader](https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl)

[\(\[Genesis.Graphics.Shaders.OpenGL\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.shaders.opengl\).](https://learn.microsoft.com/dotnet/api/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](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

[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](#)

[\(Genesis.Graphics.Shaders.OpenGL\)](#)

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)
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) ([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)
+ **Genesis.Graphics.RenderDevice**
public class BufferedSpriteShape : Shape
(Genesis.Graphics.RenderDevice.html)
+ **Genesis.Graphics.Shaders.Operator**
(Genesis.Graphics.Shaders.Operator.html)
- **Genesis.Graphics.Shapes**
BufferedSpriteShape (<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()
Declaration
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)))

+ 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 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.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 GlyphShape

Inheritance

↳ Enter here to filter
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ Shape (<https://genesis.graphics.Shapes.Shape.html>)
↳ GlyphShape

+ **Genesis.Core.Behaviors**
Inherited Members
(Genesis.Core.Behaviors.html)
Shape.vbo (https://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**
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.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.graphics.html>).Graphics (<https://genesis.graphics.html>).Shapes (<https://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.Operator**
Contract
(Genesis.Graphics.Shaders.Operator.html)

- **Genesis.Graphics.Shapes**
GlyphShape (<https://genesis.graphics.Shapes.html>)

Declaration
BufferedSpriteShape
(<https://genesis.graphics.Shapes.BufferedSpriteShape.html>)
FrameShape
public GlyphShape()
(<https://genesis.graphics.Shapes.FrameShape.html>)
GlyphShape
(<https://genesis.graphics.Shapes.GlyphShape.html>)
LineShape
(<https://genesis.graphics.Shapes.LineShape.html>)
PlaneShape
(<https://genesis.graphics.Shapes.PlanarShape.html>)

Methods

GetShape()
(<https://genesis.graphics.Shapes.QubeShape.html>)

Declaration
RectShape
public override float[] GetShape()
(<https://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 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))

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 ([Name.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

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

↳ **Genesis.Core.html**

↳ PlaneShape

+ 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 PlaneShape : Shape

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

+ Genesis.Graphics.Shaders.Operations

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

- Genesis.Graphics.Shapes

([PlaneShape.html](#))

Declaration

(Genesis.Graphics.Shapes.BufferedSpriteShape)

FrameShape

public PlaneShape()

(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)

protected 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 QubeShape

Inheritance

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

↳ Shape (<https://genesis-core.readthedocs.io/en/latest/genesis.Graphics.Shapes.Shape.html>)

↳ QubeShape

+ Genesis.Core.Behaviors

Inherited Members

([Genesis.Core.Behaviors.html](https://genesis-core.readthedocs.io/en/latest/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 (<https://genesis-core.readthedocs.io/en/latest/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-core.readthedocs.io/en/latest/genesis.Graphics.Physics.html))

+ Genesis.Graphics.RenderDevice

public class QubeShape : Shape

([Genesis.Graphics.RenderDevice.html](https://genesis-core.readthedocs.io/en/latest/genesis.Graphics.RenderDevice.html))

+ Genesis.Graphics.Shaders.Operations

([Genesis.Graphics.Shaders.Operations.html](https://genesis-core.readthedocs.io/en/latest/genesis.Graphics.Shaders.Operations.html))

- Genesis.Graphics.Shapes

QubeShape (<https://genesis-core.readthedocs.io/en/latest/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

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, 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.Operator](#)

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

- [Genesis.Graphics.Shapes](#)

public abstract class Shape

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

↳ [BufferedSpriteShape](#)

↳ [\(Genesis.Graphics.Shapes.BufferedSpriteShape.html\)](#)

↳ [Constructor](#)

↳ [\(Genesis.Graphics.Shapes.FrameShape.html\)](#)

↳ [GlypheShape](#)

↳ [\(Genesis.Graphics.Shapes.GlypheShape.html\)](#)

↳ [LineShape](#)

↳ [\(Genesis.Graphics.Shapes.LineShape.html\)](#)

↳ [PlaneShape](#)

protected Shape() ([\(Genesis.Graphics.Shapes.PlaneShape.html\)](#)

↳ [QubeShape](#)

↳ [\(Genesis.Graphics.Shapes.QubeShape.html\)](#)

↳ [RectShape](#)

↳ [\(Genesis.Graphics.Shapes.RectShape.html\)](#)

↳ [Shape](#)

↳ [\(Genesis.Graphics.Shapes.Shape.html\)](#)

↳ [Properties](#)

↳ [\(Genesis.Graphics.Shapes.Shape.html\)](#)

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-core-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-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 SpriteShape : Shape
(Genesis.Graphics.RenderDevice.html)
+ **Genesis.Graphics.Shaders.Operator**
Contract: Genesis.Graphics.Shaders.Operator
- **Genesis.Graphics.Shapes**
SpriteShape (<https://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)
 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](#))

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](#) ([\(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)))
[\(Genesis.Core.Behaviors.html\)](#)
`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.Behaviors.Physics](#)
[\(Genesis.Core.Behaviors.Physics.html\)](#)
`object.ReferenceEquals` (<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: [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

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

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

[Matrix4x4\(\)](#)

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

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

+ Genesis.Graphics.Shapes

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

`public Matrix4x4()`

- Genesis.Math

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

Properties

[\(Genesis.Math.Matrix4x4.html\)](#)

`NoisePoint`

[\(Genesis.Math.NoisePoint.html\)](#)

`PerlinNoise`

[\(Genesis.Math.PerlinNoise.html\)](#)

`Rect` ([Genesis.Math.Rect.html](#))

`Vector3<float>` ([Matrix4x4.html](#)) `int col` { get; set; }

+ Genesis.Physics

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

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

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

- Genesis.Graphics.Shaders.Operations

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

public static Matrix4x4 LookAt(Vec3 eye, Vec3 target, Vec3 up)

+ Genesis.Graphics.Shapes

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

Parameters

- Genesis.Math

Type

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

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

Matrix4x4 ([Genesis.Math.Matrix4x4.html](#))

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

NoisePoint

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

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

PerlinNoise

Returns

[\(Genesis.Math.PerlinNoise.html\)](#)

Type

Description

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

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

[\(Genesis.Core.Behaviors.Physics.html\)](#)
Multiply(Vec3)

+ Genesis.Core.GameElements

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

+ Genesis.Graphics

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

Parameters

Type	Name	Description
+ Genesis.Graphics.Physics Vec3.html	vector	

+ Genesis.Graphics.RenderDevice

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

+ Genesis.Graphics.Shaders.Operator

[\(Genesis.Graphics.Shaders.Operator.html\)](#)
Vec3 (Genesis.Math.Vec3.html)

+ Genesis.Graphics.Shapes

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

Genesis.Math

(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 (Genesis.Math.Rect.html)

Declaration

Vec3 (Genesis.Math.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.Operations

Type

Genesis.Graphics.Operations

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](#)

- Genesis.Math

Type

Genesis.Math

Type	Description
Matrix4x4 (Genesis.Math.Matrix4x4.html)	

[\(Genesis.Math.Matrix4x4.html\)](#)

NoisePoint

[\(Genesis.Math.NoisePoint.html\)](#)

RotateY(float)

PerlinNoise

[\(Genesis.Math.PerlinNoise.html\)](#)

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

[\(Genesis.Math.Rect.html\)](#)

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

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

Type

+ Genesis.Graphics.Physics

Matrix4x4 ([Genesis.Math.Matrix4x4.html](#))

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

+ Genesis.Graphics.RenderDevice

[Scale\(Vec3\)](#)

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

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](#)

[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

Type	Description

```
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**
[\(Genesis.Physics.html\)](#)

Struct NoisePoint

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>)

Namespace: Genesis (Genesis.html) Math (Genesis.Math.html)

+ Genesis.Core.Behaviors.Physics

Assembly: Genesis.dll

+ Genesis.Core.Behaviors.Physics

Syntax

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics)

public struct NoisePoint

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.h)

Constructors

+ Genesis.Graphics

(Genesis.Graphics.html)

NoisePoint(float, float, float)

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

public NoisePoint(float x, float y, float value)

(Genesis.Graphics.RenderDevice)

+ Genesis.Graphics.Shaders.Operation

(Genesis.Graphics.Shaders.Operation)

Type

+ Genesis.Graphics.Shapes

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

(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)

	Name	Description
x		
y		
value		

```
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.Phys.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](#))

Class PerlinNoise

Inheritance

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

+ Genesis.Core

Inherited Members

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

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

[object.Equals\(\)](#) ()

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

[object.Equals\(object, object\)](#) ()

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

[object.ReferenceEquals\(\)](#) (<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.html](#)) [Math](#) ([Genesis.Math.html](#))

+ Genesis.Core.GameElements

As [GameElement](#)

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

Syntax

+ Genesis.Graphics

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

public class PerlinNoise

+ Genesis.Graphics.Physics

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

Constructors

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

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

PerlinNoise()

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

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

+ Genesis.Graphics.Shapes

public PerlinNoise()

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

- Genesis.Math

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

Methods

[\(Genesis.Math.Matrix4x4.html\)](#)

NoisePoint

[\(Genesis.Math.NoisePoint.html\)](#)

PerlinNoise

[\(Genesis.Math.PerlinNoise.html\)](#)

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

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

GenerateNoise (float x, float y, float persistence, int octaves, int seed, float d)

+ Genesis.Physics

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

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) ▼	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\(system-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-system-object)))
([Genesis.Core.Behaviors.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>)

+ Genesis.Core.Behaviors.Physics

([Genesis.Core.Behaviors.Physics.html](#))
Namespace: Genesis (Genesis.html).Math (Genesis.Math.html)

+ Genesis.Core.GameElements

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

+ Genesis.Graphics

public class Rect
([Genesis.Graphics.html](#))

+ Genesis.Graphics.Physics

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

Constructors

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

+ Genesis.Graphics.Shaders.Operator
Declaration
([Genesis.Graphics.Shaders.Operator.html](#))

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

- Genesis.Math

Rect(float, float, float, float)
([Genesis.Math.html](#))

Declaration

Matrix4x4
([Genesis.Math.Matrix4x4.html](#))

NoisePoint
public Rect(float x, float y, float width, float height)
([Genesis.Math.NoisePoint.html](#))

PerlinNoise

Parameters
([Genesis.Math.PerlinNoise.html](#))

Type	Name	Description
Rect (Genesis.Math.Rect.html)	x	
Vec3 (Genesis.Math.Vec3.html)	y	
float (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.Shaders.Operation.html](#))

Description

+ **Genesis.Graphics.Shapes**

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

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

- **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](#))

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	https://learn.microsoft.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](#))

+ Genesis.Graphics

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

Type	Name	Description
+ Genesis.Graphics.Physics	x	
float (https://learn.microsoft.com/dotnet/api/system.single)	y	

+ 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(Rect)

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

Declaration

Matrix4x4

([Genesis.Math.Matrix4x4.html](#))

public bool Intersects(Rect rect)

NoisePoint

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

Parameters

Type ([Genesis.Math.PerlinNoise.html](#))

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

Rect ([https://learn.microsoft.com/dotnet/api/system.value-tuple](#))

+ Genesis.Physics

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

Type	Name	Description
Rect (Genesis.Math.Rect.html)	rect	

+ Genesis.Physics

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

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>)

+ **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.Operations**

([Genesis.Graphics.Shaders.Operations.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.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.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>)
[\(Genesis.Core.Behaviors.Physics.html\)](#)

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>)

(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.Oper

Vec3 ([Genesis.Graphics.Shaders.Oper](#)

genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

public Vec3(vec3 vec3)

- Genesis.Math

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

Parameters

Matrix4x4

Type	Name	Description
Genesis.Math.Matrix4x4		

vec3 NoisePoint

vec3 ([Genesis.Math.NoisePoint.html](#))

PerlinNoise

[\(Genesis.Math.PerlinNoise.html\)](#)

Vec3(Point)

Vec3 ([Genesis.Math.Rect.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	

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

+ Genesis.Graphics

Vec3(Size)

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

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

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

[public Vec3\(Size size\)](#)

+ Genesis.Graphics.RenderDevice

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

Genesis.Graphics.Physics

Genesis.Graphics.Physics

Genesis.Graphics.Shaders.Operator

Genesis.Graphics.Shaders.Operator

Genesis.Graphics.Shapes

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

Vec3(SizeF)

Genesis.Math

(Genesis.Math.html)

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

Matrix4x4

[\(Genesis.Math.Matrix4x4.html\)](#)

NoisePoint

[\(Genesis.Math.NoisePoint.html\)](#)

Parameters

PerlinNoise

Genesis.Math.PerlinNoise

Genesis.Math.PerlinNoise

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)

Physics

Physics</h

Vec3(float)

Creates a new Vector

Declaration

```
public Vec3(float value)
```

Parameters

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

Name	Description
value	

+ [Genesis.Core.Behaviors](#)

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

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

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

[Vec3\(float, float\)](#)

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

Creates a new Vector

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

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

+ [Genesis.Core.GameElements](#)

[public Vec3\(float x, float y\)](#)

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

+ [Genesis.Graphics](#)

Parameters

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

Name	Description
x	
y	

+ [Genesis.Graphics.Physics](#)

[float \(<https://learn.microsoft.com/dotnet/api/system.single>\)](#)

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

[float \(<https://learn.microsoft.com/dotnet/api/system.single>\)](#)

+ [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
x	
y	
z	

NoisePoint

[\(Genesis.Math.NoisePoint.html\)](#)

PerlinNoise

[\(Genesis.Math.PerlinNoise.html\)](#)

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

[float \(<https://learn.microsoft.com/dotnet/api/system.single>\)](#)

[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

Path (Genesis.Graphics.Shapes.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)		z	

NoisePoint (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)

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

Parameters

+ Genesis.Graphics.Shapes

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

- float (<https://learn.microsoft.com/dotnet/api/system.single>)

- Genesis.Math

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

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](#))

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

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

+ 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	Description
+ 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

NoisePoint

Type	Name	Description
Type Genesis.Math.NoisePoint.html)		
PerlinNoise float (https://learn.microsoft.com/dotnet/api/system.single) (Genesis.Math.PerlinNoise.html)	x	

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

y

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.html](#))

Returns
+ **Genesis.Core.GameElements**
Type
([Genesis.Core.GameElements.html](#))

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.html](#))

float Dot(RenderDevice renderDevice, Vec3 vec1, Vec3 vec2)

+ **Genesis.Graphics.Shaders.Operator**
Dot
([Genesis.Graphics.Shaders.Operator.html](#))

+ Type
+ **Genesis.Graphics.Shapes**
([Genesis.Graphics.Shapes.html](#))

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

- **Genesis.Math**
([Genesis.Math.html](#))

Returns
Matrix4x4

Type
NoisePoint
([Genesis.Math.NoisePoint.html](#))

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

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

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

Forward(Vec3, float)
([Genesis.Physics.html](#))

Returns the forward vector

+ **Genesis.Physics**

Declaration
([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)

public Vec3 Normalize()

+ [Genesis.Graphics](#)

(Genesis.Graphics.html)

+ Type [Genesis.Graphics.Physics](#)

(Genesis.Graphics.Physics.html)

Vec3 (Genesis.Math.Vec3.html)

+ [Genesis.Graphics.RenderDevice](#)

(Genesis.Graphics.RenderDevice.html)

Normalized(Vec3)

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

(Genesis.Graphics.Shaders.Operation.html)

+ [Genesis.Graphics.Shapes](#)

public static Vec3 Normalized(Vec3 vec)

(Genesis.Graphics.Shapes.html)

Genesis.Math

+ Parameters [Genesis.Math.html](#)

Type	Name	Description
Matrix4x4 Vec3 (Genesis.Math.Vec3.html) (Genesis.Math.Matrix4x4.html)	<i>vec</i>	

NoisePoint

Returns [\(Genesis.Math.NoisePoint.html\)](#)

+ 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)

Type	Description
Vec3 (Genesis.Math.Vec3.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

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

Subtract

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

Subtract the vector

+ Genesis.Graphics.Shapes

Declaration

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

- Genesis.Math.Sub

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

Parameters

[\(Genesis.Math.Matrix4x4.html\)](#)

Type NoisePoint

[\(Genesis.Math.NoisePoint.html\)](#)

PerlinNoise

[\(Genesis.Math.PerlinNoise.html\)](#)

Rect ([\(Genesis.Math.Rect.html\)](#))

ToBulletVec3()

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

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](#)

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

[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 ([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](#))

NoisePoint 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](#))

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

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

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](#)

[\(Genesis.Math.PerlinNoise.html\)](#)

Returns

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

Type [\(Genesis.Math.Rect.html\)](#)

+ **Genesis.Physics**

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

+ **Genesis.Physics** [\(Genesis.Physics.html\)](#)

Type	Description

Operators

operator +(Vec3, Vec3)

Add operator



Declaration

+ Genesis.Core

public static Vec3 operator +(Vec3 vec1, Vec3 vec2)
(Genesis.Core.html)

+ Genesis.Core.Behaviors

Parameters

(Genesis.Core.Behaviors.html)

Type

+ Genesis.Core.Behaviors.Physics

Vec3 (Genesis.Math.Vec3.html)

+ Genesis.Core.Behaviors.Physics

Vec3 (Genesis.Math.Vec3.html)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.Physics.html)

Returns

+ Genesis.Core.GameElements

(Genesis.Core.GameElements.html)

Vec3 (Genesis.Math.Vec3.html)

+ 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

(Genesis.Graphics.Shaders.Operator.html)

Type

+ Genesis.Graphics.Shapes

Vec3 (Genesis.Math.Vec3.html)

+ Genesis.Graphics.Shapes

Vec3 (Genesis.Math.Vec3.html)

- Genesis.Math

(Genesis.Math.html)

Returns

Matrix4x4

(Genesis.Math.Matrix4x4.html)

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)

- **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)

- (Vec3 vec1, Vec3 vec2)

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.Ope

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.html)

MatrixSet

(Genesis.Physics.MatrixSet.html)

MouseRay2

(Genesis.Physics.MouseRay2.html)

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

PhysicHandler

(Genesis.Physics.PhysicHandler.htm

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

(Genesis.Physics.PhysicHandlerEven

PhysicPropetrys

(Genesis.Physics.PhysicPropetrys 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 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>)
[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.gameelements) ([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) (<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)
[object.MemberwiseClone\(\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.html) (<https://learn.microsoft.com/dotnet/api/system.object.memberwiseclone>)

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

Syntax

+ [Genesis.Graphics.RenderDevice](https://learn.microsoft.com/dotnet/api/genesis.graphics.renderdevice)
[object](https://learn.microsoft.com/dotnet/api/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)
[object](https://learn.microsoft.com/dotnet/api/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)

[object](https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.html) (<https://learn.microsoft.com/dotnet/api/genesis.graphics.shapes.html>)

[Aabb\(\)](https://learn.microsoft.com/dotnet/api/genesis.aabb)

+ [Genesis.Math](https://learn.microsoft.com/dotnet/api/genesis.math)

Create a new [Aabb](https://learn.microsoft.com/dotnet/api/genesis.math.html) (<https://learn.microsoft.com/dotnet/api/genesis.math.html>)

Declaration

[Genesis.Physics](https://learn.microsoft.com/dotnet/api/genesis.physics)

[object](https://learn.microsoft.com/dotnet/api/genesis.physics.html) (<https://learn.microsoft.com/dotnet/api/genesis.physics.html>)

public [Aabb\(\)](https://learn.microsoft.com/dotnet/api/genesis.aabb)

[Aabb](https://learn.microsoft.com/dotnet/api/genesis.physics.aabb.html) (<https://learn.microsoft.com/dotnet/api/genesis.physics.aabb.html>)

HitResult

[HitResult](https://learn.microsoft.com/dotnet/api/genesis.physics.hitresult.html) (<https://learn.microsoft.com/dotnet/api/genesis.physics.hitresult.html>)

[Aabb](https://learn.microsoft.com/dotnet/api/genesis.aabb) (<https://learn.microsoft.com/dotnet/api/genesis.aabb>)

MatrixSet

[MatrixSet](https://learn.microsoft.com/dotnet/api/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.html) (<https://learn.microsoft.com/dotnet/api/genesis.physics.matrixset.html>)

MouseRay2

[Declaration](https://learn.microsoft.com/dotnet/api/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) (<https://learn.microsoft.com/dotnet/api/genesis.physics.physichandler>)

PhysicHandlerEvent

[PhysicHandlerEvent](https://learn.microsoft.com/dotnet/api/genesis.physics.physichandlerevent) (<https://learn.microsoft.com/dotnet/api/genesis.physics.physichandlerevent>)

Parameters

PhysicProperties

[PhysicProperties](https://learn.microsoft.com/dotnet/api/genesis.physics.physicproperties) (<https://learn.microsoft.com/dotnet/api/genesis.physics.physicproperties>)

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	Type	Description
+ Genesis.Graphics.Physic	Vec3 (Genesis.Math.Vec3.html)	(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice	Min	
Min	Genesis.Graphics.RenderDevice	
Declaration	Genesis.Graphics.Shaders.Operation	
(Genesis.Graphics.Shaders.Operation)	public Vec3 Min { get; set; }	
+ Genesis.Graphics.Shapes		

Properties	Value	Description
+ Genesis.Graphics.Shapes		(Genesis.Graphics.Shapes.html)

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

- Genesis.Physics		
(Genesis.Physics.html)		

Aabb		
(Genesis.Physics.Aabb.html)		

HitResult		
(Genesis.Physics.HitResult.html)		

MatrixSet		
(Genesis.Physics.MatrixSet.html)		

Contains(Vec3)		
(Genesis.Physics.MatrixSet.html)		

MouseRay		
(Genesis.Physics.MouseRay2.html)		

PhysicHandler		
(Genesis.Physics.PhysicHandler.html)		

Contains(PhysicHandlerEvent)		
(Genesis.Physics.PhysicHandlerEvent.html)		

PhysicProperties		
(Genesis.Physics.PhysicProperties.html)		

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.Shaders.Operator)

Aabb (Genesis.Physics.Aabb.html)

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

IntersectRay(Vec3, Vec3, Vec3, Vec3)

+ Genesis.Math

(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		

(Genesis.Physics.PhysicHandlerEvent)

PhysicPropertys

(Genesis.Physics.PhysicProperties.h)

Returns

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](https://learn.microsoft.com/genesis/html/genesis.graphics.html))

+ Genesis.Graphics.Physics

([Genesis.Graphics.Physics.html](https://learn.microsoft.com/genesis/html/genesis.graphics.physics.html))

Fields

Genesis.Graphics.RenderDevice
([Genesis.Graphics.RenderDevice.html](https://learn.microsoft.com/genesis/html/genesis.graphics.renderdevice.html))

Genesis.Graphics.Shaders.Operation
([Genesis.Graphics.Shaders.Operation.html](https://learn.microsoft.com/genesis/html/genesis.graphics.shaders.operation.html))

Declaration

+ Genesis.Graphics.Shapes

([Genesis.Graphics.Shapes.html](https://learn.microsoft.com/genesis/html/genesis.graphics.shapes.html))

+ Genesis.Math

Field Value
([Genesis.Math.html](https://learn.microsoft.com/genesis/html/genesis.math.html))

Type Genesis.Physics

Value
([Genesis.Physics.html](https://learn.microsoft.com/genesis/html/genesis.physics.html))

Aabb

([Genesis.Physics.Aabb.html](https://learn.microsoft.com/genesis/html/genesis.physics.aabb.html))

HitResult

([Genesis.Physics.HitResult.html](https://learn.microsoft.com/genesis/html/genesis.physics.hitresult.html))

Declaration

MatrixSet
([Genesis.Physics.MatrixSet.html](https://learn.microsoft.com/genesis/html/genesis.physics.matrixset.html))

MouseRay2 rayEnd

([Genesis.Physics.MouseRay2.html](https://learn.microsoft.com/genesis/html/genesis.physics.mouseray2.html))

PhysicHandler

Field Value
([Genesis.Physics.PhysicHandler.html](https://learn.microsoft.com/genesis/html/genesis.physics.physichandler.html))

Type PhysicHandlerEvent

([Genesis.Physics.PhysicHandlerEvent.html](https://learn.microsoft.com/genesis/html/genesis.physics.physichandlerevent.html))

Vec3
([Genesis.Math.Vec3.html](https://learn.microsoft.com/genesis/html/genesis.math.vec3.html))

PhysicPropetrys

([Genesis.Physics.PhysicPropetrys.html](https://learn.microsoft.com/genesis/html/genesis.physics.physicpropetrys.html))

Description

Type	Description
Genesis.Physics	

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](#))

+ **Genesis.Graphics.Physics**
Type
([Genesis.Graphics.Physics.html](#))
RigidBody

+ **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](#))

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

Description

Description

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.Core.GameElements

(**Genesis.Core.GameElements.h**)

+ Genesis.Graphics

(**Genesis.Graphics.html**)

+ Genesis.Graphics.Physics

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

Fields

(**Genesis.Graphics.RenderDevice**)

projectionMatrix

(**Genesis.Graphics.Shaders.OpenGL.html**)

Declaration

+ Genesis.Graphics.Shapes

(**Genesis.Graphics.Shapes.html**)

+ Genesis.Math

Field Value

(**Genesis.Math.html**)

Type	Description
- Genesis.Physics	

(**Genesis.Physics.html**)

Aabb

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

viewMatrix

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

Declaration

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

pmouseRay2 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>)
+ Genesis.Graphics
 (Genesis.Graphics.html)

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

 (Genesis.Physics.PhysicHandler.html)

 public Vector3 GetRayTo(Point point, PerspectiveCamera camera, Viewport viewport)

PhysicHandlerEvent

 (Genesis.Physics.PhysicHandlerEvent)

Parameters

 PhysicProperties

 (Genesis.Physics.PhysicProperties.html)

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.html](#)), Physics ([Genesis.Physics.html](#))
Assembly: Genesis.dll
+ **Genesis.Graphics.RenderDevice**
System.Object ([Object.html](#))
+ **Genesis.Graphics.Shaders.Operation**
public abstract class PhysicHandler
+ **Genesis.Graphics.Shapes**
Genesis.Graphics.Shapes.html
+ **Genesis.Math**
PhysicsMath.html
+ **Genesis.Physics**
Declaration: PhysicHandler ()
+ **Properties**
MatrixSet
+ **Callbacks**
PhysicHandlerEvent
Declaration: PhysicHandlerEvent
+ **Properties**
public Dictionary<object, PhysicHandlerEvent> Callbacks { get; set; }
PhysicPropertys
+ **Properties**
PhysicProperties h

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)

Declarations

(**Genesis.Graphics.Shaders.OpenGL.html**)

(**Genesis.Graphics.Shapes.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)
public virtual void Invoke(Scene scene, Game game, object element)

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		
object (https://learn.microsoft.com/dotnet/api/system.object)	<i>element</i>	

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/genesis/genesis.graphics.html>)

+ Genesis.Graphics.Physics

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

Fields

(<https://learn.microsoft.com/genesis/genesis.graphics.renderdevice.html>)

gravity

(<https://learn.microsoft.com/genesis/genesis.graphics.shaders.operation.html>)

Declaration

+ Genesis.Graphics.Shapes

(<https://learn.microsoft.com/genesis/genesis.graphics.shapes.html>)

+ Genesis.Math

Field Value
(<https://learn.microsoft.com/genesis/genesis.math.html>)

Type Genesis.Physics

float (<https://learn.microsoft.com/genesis/genesis.physics.html>)

Description

Aabb

(<https://learn.microsoft.com/genesis/genesis.physics.aabb.html>)

HitResult

(<https://learn.microsoft.com/genesis/genesis.physics.hitresult.html>)

Declaration

MatrixSet (<https://learn.microsoft.com/genesis/genesis.physics.matrixset.html>)

MouseRay2

gravity (<https://learn.microsoft.com/genesis/genesis.physics.mouseray2.html>)

PhysicHandler

Value (<https://learn.microsoft.com/genesis/genesis.physics.physichandler.html>)

Type PhysicHandlerEvent

float (<https://learn.microsoft.com/genesis/genesis.physics.physichandlerevent.html>)

Description

(<https://learn.microsoft.com/genesis/genesis.physics.physicproperterys.h>)

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

[\(Genesis_Physics_PhysicPropeterys.h\)](#)

Class PhysicsBehavior

Inheritance

↳ Enter here to filter
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ [IGameBehavior](#) ([Genesis.Core.IGameBehavior.html](#))
↳ PhysicsBehavior
+ **Genesis.Core.Behaviors.Physics**
↳ Rigidbody2D ([Genesis.Core.Behaviors.Physics2D.Rigidbody2D.html](#))
↳ ConvexHullBehavior ([Genesis.Core.Behaviors.Physics3D.ConvexHullBehavior.html](#))
↳ QubeConvexHull ([Genesis.Core.Behaviors.Physics3D.QubeConvexHull.html](#))
↳ StaticMeshBehavior ([Genesis.Core.Behaviors.Physics3D.StaticMeshBehavior.html](#))
+ **Genesis.Core.Behaviors.Physics**
+ **Genesis.Core.Behaviors.Physics**
Inherited Members
+ **Genesis.Core.GameElements**
IGameBehavior.OnInit(Game, GameElement)
[\(Genesis.Core.GameElements.html\)](#)
([Genesis.Core.IGameBehavior.html](#)#Genesis_Core_IGameBehavior_OnInit_Genesis_Core_Game_Genesis_Core_GameElement)
+ **Genesis.Graphics**
IGameBehavior.OnUpdate(Game, GameElement)
[\(Genesis.Graphics.html\)](#)
([Genesis.Core.IGameBehavior.html](#)#Genesis_Core_IGameBehavior_OnUpdate_Genesis_Core_Game_Genesis_Core_GameElement)
+ **Genesis.Graphics.Physics**
IGameBehavior.OnRender(Game, GameElement)
[\(Genesis.Graphics.Physics.html\)](#)
([Genesis.Core.IGameBehavior.html](#)#Genesis_Core_IGameBehavior_OnRender_Genesis_Core_Game_Genesis_Core_GameElement)
+ **Genesis.Graphics.RenderDevice**
IGameBehavior.OnDestroy(Game, GameElement)
[\(Genesis.Graphics.RenderDevice.html\)](#)
([Genesis.Core.IGameBehavior.html](#)#Genesis_Core_IGameBehavior_OnDestroy_Genesis_Core_Game_Genesis_Core_GameElement)
+ **Genesis.Graphics.Shaders.OpenGL**
IGameBehavior.Parent ([Genesis.Core.GameBehavior.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)))
+ **Genesis.Graphics.Shapes**
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 ([Spaces.Seraphin.Genesis.html](#)) Physics ([Genesis.Physics.html](#)) Physics ([Genesis.Physics.html](#))
Assembly: Genesis.dll
HitResult
[\(Genesis.Physics.HitResult.html\)](#)
Syntax
MatrixSet
[\(Genesis.Physics.MatrixSet.html\)](#)
public abstract class PhysicsBehavior : IGameBehavior
MouseRay2
[\(Genesis.Physics.MouseRay2.html\)](#)
PhysicHandler
[\(Genesis.Physics.PhysicHandler.html\)](#)
PhysicHandlerEvent
[\(Genesis.Physics.PhysicHandlerEvent.html\)](#)
PhysicsBehavior()
[\(Genesis_Physics_PhysicsBehavior.h\)](#)

Constructors

PhysicsBehavior()

([Genesis_Physics_PhysicsBehavior.h](#))

Declaration

```
protected PhysicsBehavior()
```

▼

Fields

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

+ **Genesis.Core.Behaviors.Physics**
Of [CollisionCore.Behaviors.Physics](#)

Declaration: [Genesis.Core.Behaviors.Physics](#)

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

public PhysicsBehaviorEvent OnCollide

+ **Genesis.Core.GameElements**

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

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](#))

+ **Genesis.Graphics.Shaders.Operations**

Collide([Scene](#), [Game](#), [RigidBody](#))

Declaration: [Genesis.Graphics.Shapes](#)

([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](#))

[PhysicHandlerEvent](#) GetPhysicsObject()

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

PhysicPropertys

Returns

([Genesis.Physics.PhysicProperties.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

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

+ **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

[\(Genesis_Physics_PhysicPropeterys.h\)](#)

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

+ **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: 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](#)

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

Assembly: [Genesis.dll](#)

+ [Genesis.Graphics.Shaders.Oper](#)

Syntax
([Genesis.Graphics.Shaders.Ope](#)

+ [Genesis.Graphics.Shapes](#)

↳ [PhysicsHandler2D](#) : [PhysicHandler](#)

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

+ [Genesis.Math](#)

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

- [Genesis.Physics](#)

[PhysicsHandler2D](#) ([float](#), [float](#))

[Aabb](#)

Initializes a new instance of the PhysicsHandler2D class with specified gravity values.

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

Declaration

[PhysicsHandler2D](#)

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

[MatrixSet](#) ([PhysicsHandler2D](#) ([float](#) [gravityX](#), [float](#) [gravityY](#))

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

[MouseRay2](#)

Parameters
([Genesis.Physics.MouseRay2.html](#))

Type [physicHandler](#)

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

[float](#) (<https://learn.microsoft.com/dotnet/api/system.single>)

[PhysicHandlerEvent](#)

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

[float](#) (<https://learn.microsoft.com/dotnet/api/system.single>)

Name

Description

[gravityX](#)

The X component of gravity.

[gravityY](#)

The Y component of gravity.

[PhysicPropertys](#)

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

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 (Genesis.Physics.HitResult.html)	HitResult	
MatrixSet (Genesis.Physics.MatrixSet.html)	<pre>public override void Process(Scene scene, Game game)</pre>	
MouseRay2 (Genesis.Physics.MouseRay2.html)	MouseRay2	
Type	Name	Description
(Genesis.Physics.PhysicHandler.html)		
(Genesis.Core.Scene.html)	<i>scene</i>	The current game scene.
(Genesis.Physics.PhysicHandlerEvent.html)	<i>game</i>	The current game instance.
(Genesis.Physics.PhysicProperties.html)		

Overrides

PhysicHandler.Process(Scene, Game)

(Genesis.Physics.PhysicHandler.html#Genesis_Physics_PhysicHandler_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](#))

PhysicHandler

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

PhysicHandlerEvent

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

PhysicPropeterys

([Genesis_Physics_PhysicPropeterys.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.Oper](#)

Syntax

([Genesis.Graphics.Shaders.Ope](#))

+ [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

INResult

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

MatrixSet PhysicsHandler3D(PhysicPropeterys propeterys)

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

MouseRay2

Parameters

([Genesis.Physics.MouseRay2.html](#))

Type

physicHandler

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

PhysicPropeterys

PhysicHandlerEvent

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

([Genesis.Physics.PhysicHandlerEver](#))

PhysicPropeterys

([Genesis_Physics_PhysicPropeterys_h](#))

Type	Name	Description
physicHandler	propeterys	The physics properties containing gravity values.

PhysicPropeterys

([Genesis_Physics_PhysicPropeterys_h](#))

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
Genesis.Physics.PhysicHandler

PhysicHandlerEvent

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

PhysicPropertys

```
(Genesis.Physics.PhysicPropertys.html)
```

Description

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: [Camera](https://learn.microsoft.com/dotnet/api/genesis.graphics.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: [Viewport](https://learn.microsoft.com/dotnet/api/genesis.graphics.viewport)

[\(\[Genesis.Graphics.Viewport.html\]\(https://learn.microsoft.com/dotnet/api/genesis.graphics.viewport.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.graphics.viewport.html)

MouseRay2

[MouseRay2](https://learn.microsoft.com/dotnet/api/genesis.physics.mouseray2)

[\(\[Genesis.Physics.MouseRay2.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.mouseray2.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.mouseray2.html)

PhysicHandler

[PhysicHandler](https://learn.microsoft.com/dotnet/api/genesis.physics.physichandler)

[\(\[Genesis.Physics.PhysicHandler.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.physichandler.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.physichandler.html)

PhysicHandlerEvent

[PhysicHandlerEvent](https://learn.microsoft.com/dotnet/api/genesis.physics.physichandlerevent)

[\(\[Genesis.Physics.PhysicHandlerEvent.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.physicshandlerevent.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.physicshandlerevent.html)

PhysicPropertys

[PhysicPropertys](https://learn.microsoft.com/dotnet/api/genesis.physics.physicpropertys)

[\(\[Genesis.Physics.PhysicPropertys.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.physicpropertys.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.physicpropertys.html)

Properties

[Camera](https://learn.microsoft.com/dotnet/api/genesis.camera)

[Physics Camera](https://learn.microsoft.com/dotnet/api/genesis.physics.physiccamera)

[\(\[Genesis.Physics.PhysicCamera.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.physiccamera.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.physiccamera.html)

[Camera](https://learn.microsoft.com/dotnet/api/genesis.camera)

[Physics Camera](https://learn.microsoft.com/dotnet/api/genesis.physics.physiccamera)

[\(\[Genesis.Physics.PhysicCamera.html\]\(https://learn.microsoft.com/dotnet/api/genesis.physics.physiccamera.html\)\)](https://learn.microsoft.com/dotnet/api/genesis.physics.physiccamera.html)

[Physics Camera](https://learn.microsoft.com/dotnet/api/genesis.physics.physiccamera)

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.Physics**

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

Type
Aabb

Camera (Genesis.Graphics.Camera.html)

HitResult
Viewport (Genesis.Graphics.Viewport.html)
[\(Genesis.Physics.HitResult.html\)](#)

int ([MatrixSet.learn.microsoft.com/dotnet/api/system.int32](https://learn.microsoft.com/dotnet/api/system.int32))
[\(Genesis.Physics.MatrixSet.html\)](#)

int ([MouseRay2](https://learn.microsoft.com/dotnet/api/system.int32))
[\(Genesis.Physics.MouseRay2.html\)](#)

Returns
PhysicHandler

Type
[\(Genesis.Physics.PhysicHandler.html\)](#)

PhysicHandlerEvent

vec4 ([\(Genesis.Physics.PhysicHandlerEvent.html\)](#)

PhysicPropertys

[\(Genesis.Physics.PhysicPropertys.html\)](#)

Type	Description
(Genesis.Physics.PhysicHandlerEvent.html)	

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

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>	

Returns

[Aabb](#)
([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 void GetRayDir(vec4 start, vec4 end)
```

PhysicPropetrys

([Genesis_Physics_PhysicPropetrys.h](#))

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.Opener

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

([Genesis.Graphics.Shaders.Opener](#))

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

MouseRay2 ([Genesis.Physics.MouseRay2.html](#))

Type PhysicHandler

CanPhysicHandler ([Genesis.Physics.PhysicHandler.html](#))

PhysicHandlerEvent

Returns PhysicHandlerEvent

PhysicPropertys

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

PhysicPropertys h

	Name	Description
+ Genesis.Graphics.RenderDevice	<i>camera</i>	
+ Genesis.Graphics.RenderDevice	<i>vp</i>	
+ Genesis.Graphics.Shaders.Opener	<i>posX</i>	
+ Genesis.Graphics.Shapes	<i>posY</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)	<i>camera</i>	
+ Genesis.Graphics		
Viewport (Genesis.Graphics.Viewport.html)	<i>viewport</i>	
(Genesis.Graphics.html)		
PhysicHandler (Genesis.Physics.PhysicHandler.html)	<i>physicHandler</i>	
+ Genesis.Graphics.Physics		
int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>posX</i>	
(Genesis.Graphics.Physics.html)		
int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>posY</i>	
+ Genesis.Graphics.RenderDevice		
(Genesis.Graphics.RenderDevice.html)		
Returns		

Type	Description
(Genesis.Graphics.Shaders.Oper	
(Genesis.Graphics.Shaders.Ope	
HitResult (Genesis.Physics.HitResult.html)	

+ 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	<i>physicHandler</i>	
MatrixSet		
(Genesis.Physics.MatrixSet.html)		
int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>posX</i>	
MouseRay2		
int (https://learn.microsoft.com/dotnet/api/system.int32)	<i>posY</i>	

PhysicHandler

Returns

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

Type	Description
PhysicHandlerEvent	
(Genesis.Physics.PhysicHandlerEvent.html)	

HitResult

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

([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
[\(Genesis.Physics.PhysicHandlerEvent.html\)](#)

PhysicPropertys
[\(Genesis.Physics.PhysicPropertys.html\)](#)

Namespace Genesis.UI

Classes

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Canvas (Genesis.UI.Canvas.html)
(Genesis.Core.Behaviors.Physics)

ImageButton (Genesis.UI.ImageButton.html)
(Genesis.Core.Behaviors.Physics)

Label (Genesis.UI.Label.html)
(Genesis.Core.GameElements.h)

ListItem (Genesis.UI.ListItem.html)
(Genesis.Graphics.html)

ListSelector (Genesis.UI.ListSelector.html)
(Genesis.Graphics.Physics)

Panel (Genesis.UI.Panel.html)
(Genesis.Graphics.RenderDevice.h)

ProgressBar (Genesis.UI.ProgressBar.html)
(Genesis.Graphics.Shaders.OpenGL)

+ **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.html)

Delegates (Genesis.UI.Delegates.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)

ListItemBehavior

UIEvent (Genesis.UI.UIEvent.html)

(Genesis.UI.ListBehavior.html)

ListSelector

UIParseHandler (Genesis.UI.UIParseHandler.html)
(Genesis.UI.ListSelectorBehavior.html)

(Genesis.UI.ListSelectorBehavior.htr)

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 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**

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

Type

Canvas ([Genesis.UI.Canvas.html](#))

ImageButton

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

([Genesis.UI.ImageButton.html](#))

Label ([Genesis.UI.Label.html](#))

ListItem

Size ([Genesis.UI.ListItem.html](#))

ListItemBehavior

Declaration

([Genesis.UI.ListItemBehavior.html](#))

ListSelector

public Vec3 Size { get; set; }

([Genesis.UI.ListSelector.html](#))

ListSelectorBehavior

([Genesis.UI.ListSelectorBehavior.html](#))

Property Value

Panel ([Genesis.UI.Panel.html](#))

Description

Description

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**

(**Genesis.Graphics.Shaders.Operator**
Adds a entity to the canvas)

+ **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)

Rect (Genesis.Math.Rect.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

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)

Type	Name	Description
(Genesis.UI.ListSelector.html)	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

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

Parameters

+ Type	Name	Description
+ Genesis.Graphics		
(Genesis.Graphics.html)	File	Path to the JSON file containing canvas configuration. (https://learn.microsoft.com/dotnet/api/system.string)
+ Genesis.Graphics.Physics		
(Genesis.Graphics.Physics.html)	assets	Asset manager for managing resources such as images, fonts, etc. (Genesis.Core.AssetManager.html)
+ Genesis.Graphics.RenderDevice		
(Genesis.Graphics.RenderDevice.html)	parser	UI parser that contains the logic for parsing the JSON data. (Genesis.UI.UIParser.html)
+ Genesis.Graphics.Shaders.Operator		
(Genesis.Graphics.Shaders.Operator.html)		

Returns

+ [Genesis.Graphics.Shapes](#)

Type	Description
(Genesis.Graphics.Shapes.html)	The created canvas based on the JSON configuration. (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

ImageButton

[\(Genesis.UILib.ImageButton.html\)](#) Widget(JObject data, AssetManager assets, UIParser parser)

Label (Genesis.UI.Label.html)

ListItem

Parameters

[\(Genesis.UI.ListItem.html\)](#)

Type	Name	Description
ListItemBehavior		
(Genesis.UI.ListItemBehavior.html)	data	JSON data containing the configuration of the widget to be created. (Genesis.UILib.ListSelector.html)
ListSelector		
(Genesis.UI.ListSelector.html)	assets	Asset manager for managing resources such as images, fonts, etc. (Genesis.Core.ListSelectorBehavior.html)
ListSelectorBehavior		
(Genesis.Core.ListSelectorBehavior.html)	Panel	(Genesis.UI.Panel.html)

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 OnDispose(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)
ImageButton (Genesis.UI.ImageButton.html)
Scene (Genesis.Core.Scene.html)
Label (Genesis.UI.Label.html)

ListItem
(Genesis.UI.ListItem.html)

OnRender (Game, IRenderDevice, Scene)
(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
Game (Genesis.Core.Game.html)	game	
Scene (Genesis.Core.Scene.html)	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_Canva
va)
 (Genesis.Graphics.html)
Widget.OnDispose(Game, Scene, Canvas)
([Genesis.Graphics.html](https://genesis.graphics.html)#Genesis_UI_Widget_OnDispose_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Ca
nv)
 (Genesis.Graphics.Physics.html)
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.GetRelativeBounds(Canvas)
([Genesis.Graphics.html](https://genesis.graphics.html)#Genesis_UI_Widget_GetRelativeBounds2D_Genesis_UI_Canvas_)
+ **Genesis.Graphics.Shaders.OpenGL**
Widget.IsHover(Game, Scene, Canvas)
 (Genesis.Graphics.Shaders.OpenGL)
([Genesis.Shaders.html](https://genesis.shaders.html)#Genesis_UI_Widget_IsHover_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canva
s)
+ **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.Shapes.html](https://genesis.shapes.html)#Genesis_UI_Widget_Location)
Widget.Size ([Genesis.Shapes.html](https://genesis.shapes.html)#Genesis_UI_Widget_Size)
Widget.Parent ([Genesis.Shapes.html](https://genesis.shapes.html)#Genesis_UI_Widget_Parent)
Widget.Children ([Genesis.Shapes.html](https://genesis.shapes.html)#Genesis_UI_Widget_Children)
Widget.Enabled ([Genesis.Shapes.html](https://genesis.shapes.html)#Genesis_UI_Widget_Enabled)
Widget.Debug ([Genesis.Shapes.html](https://genesis.shapes.html)#Genesis_UI_Widget_Debug)
Widget.MouseEnter ([Genesis.Shapes.html](https://genesis.shapes.html)#Genesis_UI_Widget_MouseEnter)
Widget.MouseLeave ([Genesis.Shapes.html](https://genesis.shapes.html)#Genesis_UI_Widget_MouseLeave)
Widget.Click ([Genesis.Shapes.html](https://genesis.shapes.html)#Genesis_UI_Widget_Click)
object (https://learn.microsoft.com/dotnet/api/system.object.ToString)
object.Equals(object) (object.Equals(item) (object.Equals(object) (object.ReferenceEquals(object, object) (object.GetHashCode () (object.GetType () (object.MemberwiseClone () (Namespaces:
 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](#))

Description

```
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_IRenderDevice_Ge nesis_Core_Scene_Genesis_UI_Canvas_()
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 Label

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**
↳ Label
 (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.html](https://genesis.coregameelements.html))
Widget.OnUpdate(Game, Scene, Canvas)
([Genesis.Core.GameElements.html](https://genesis.coregameelements.html)#Genesis_UI_Widget_OnUpdate_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canva
s)
+ **Genesis.Graphics**
Widget.OnDispose(Game, Scene, Canvas)
([Genesis.Graphics.html](https://genesis.graphics.html))
Widget.OnDispose(Game, Scene, Canvas)
([Genesis.Graphics.html](https://genesis.graphics.html)#Genesis_UI_Widget_OnDispose_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Ca
nv)
+ **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.RenderDevice.html](https://genesis.graphics.renderdevice.html)#Genesis_UI_Widget_GetChildren_System_String_)
Widget.GetRelativeBounds(Canvas) ([Genesis.Graphics.RenderDevice.html](https://genesis.graphics.renderdevice.html)#Gen
esis_UI_Widget_GetRelativeBounds_Genesis_UI_Canvas_)
+ **Genesis.Graphics.Shaders.OpenGL**
Widget.IsHover(Game, Scene, Canvas)
 (Genesis.Graphics.Shaders.OpenGL)
([Genesis.Graphics.Shaders.OpenGL.html](https://genesis.graphics.shaders.opengl.html))
Widget.FindChildren(string) ([Genesis.Graphics.Shaders.OpenGL.html](https://genesis.graphics.shaders.opengl.html)#Gen
esis_UI_Widget_FindChildren_System_String_)
Widget.Name ([Genesis.Graphics.Shaders.OpenGL.html](https://genesis.graphics.shaders.opengl.html)#Genesis_UI_Widget_Name)
Widget.Location ([Genesis.Math.html](https://genesis.math.html))
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))
Widget.Enabled ([Genesis.Physics.html](https://genesis.physics.html))
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 (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))
object.Equals(object, 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>)
object.SelectorBehavior() (<https://learn.microsoft.com/dotnet/api/system.object.SelectorBehavior>)
 (Genesis.UI.SelectorBehavior)
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 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](#)

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

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

+ [Genesis.Math](#)

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

+ [Genesis.Physics](#)

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

Font

- [Genesis.UI \(Genesis.UI.html\)](#)

Declaration

Canvas ([Genesis.UI.Canvas.html](#))

ImageButton

Font { get; set; } ([Genesis.UI.ImageButton.html](#))

Label ([Genesis.UI.Label.html](#))

Property Value

ListItem

Type ([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
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	

+ Genesis.Physics

Type	Description
(Genesis.Physics.html)	

- Genesis.UI (Genesis.UI.html)

Methods

OnRender(Game, RenderDevice, Scene, Canvas)

OnRender(Game game, IRenderDevice renderDevice, Scene scene, Canvas canvas)
ListBehavior
Renders the label.
(Genesis.UI.ListItem.html)

ListBehavior
(Genesis.UI.ListBehavior.html)

ListSelector
public override void OnRender(Game game, IRenderDevice renderDevice, Scene scene, Canvas canvas)
(Genesis.UI.ListSelector.html)

ListSelector
(Genesis.UI.ListSelectorBehavior.html)

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_Ge nesis_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></td><td>Label (Genesis.UI.Label.html)</td><td></td><td></td></tr> <tr><td>Type</td><td>ListItem (Genesis.UI.ListItem.html)</td><td>text</td><td></td></tr> <tr><td></td><td>string (https://learn.microsoft.com/dotnet/api/system.string)</td><td></td><td></td></tr> <tr><td>Type</td><td>ListItemBehavior (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></td><td>Panel (Genesis.UI.Panel.html)</td><td></td><td></td></tr> <tr><td>Properties</td><td></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)			Type	ListItem (Genesis.UI.ListItem.html)	text			string (https://learn.microsoft.com/dotnet/api/system.string)			Type	ListItemBehavior (Genesis.UI.ListItemBehavior.html)	func			ListSelector (Genesis.UI.ListSelector.html)				ListSelectorBehavior (Genesis.UI.ListSelectorBehavior.html)				Panel (Genesis.UI.Panel.html)			Properties			
Type	ImageButton (Genesis.UI.ImageButton.html)	Name	Description																																					
	string (https://learn.microsoft.com/dotnet/api/system.string)	name																																						
	Label (Genesis.UI.Label.html)																																							
Type	ListItem (Genesis.UI.ListItem.html)	text																																						
	string (https://learn.microsoft.com/dotnet/api/system.string)																																							
Type	ListItemBehavior (Genesis.UI.ListItemBehavior.html)	func																																						
	ListSelector (Genesis.UI.ListSelector.html)																																							
	ListSelectorBehavior (Genesis.UI.ListSelectorBehavior.html)																																							
	Panel (Genesis.UI.Panel.html)																																							
Properties																																								

Name

Declaration

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



Property Value

Type	Description
(Genesis.Core.Behaviors.Physics) 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.Oper

(Genesis.Graphics.Shaders.Ope

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

`public string Text { get; set; }`

+ 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

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**

(**Genesis.Graphics.Shapes.html**)

```
public ListItemBehavior(object @object, IntPtr method)
```

+ **Genesis.Math**

Parameters

(**Genesis.Math.html**)

Type

Name

Description

+ **Genesis.Physics**

(**Genesis.Physics.html**)

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

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

```
public delegate void BeginInvoke(Game game, Scene scene, ListItem item, AsyncCallback callback, object object)
```

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
 (https://learn.microsoft.com/dotnet/api/Genesis.Core.Behaviors.Physics)

Type	Description
+ Genesis.Core.GameElements (https://learn.microsoft.com/dotnet/api/Genesis.Core.GameElements)	

+ Genesis.Graphics

 (https://learn.microsoft.com/dotnet/api/Genesis.Graphics)

EndInvoke(IAsyncResult)

+ Genesis.Graphics.Physics

Declaration
 (https://learn.microsoft.com/dotnet/api/Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

 (https://learn.microsoft.com/dotnet/api/Genesis.Graphics.RenderDevice)

Parameters

Genesis.Graphics.Shaders.Oper

Type
 (https://learn.microsoft.com/dotnet/api/Genesis.Graphics.Shaders.Oper)

+ Genesis.Graphics.Shapes
 (https://learn.microsoft.com/dotnet/api/system.asyncresult)

 (https://learn.microsoft.com/dotnet/api/Genesis.Graphics.Shapes.html)

+ Genesis.Math

Invoke(Game, Scene, ListItem)

(https://learn.microsoft.com/dotnet/api/Genesis.Math.Invoke)

Declaration
+ Genesis.Physics

 (https://learn.microsoft.com/dotnet/api/Genesis.Physics)

 public virtual void Invoke(Game game, Scene scene, ListItem item)

- Genesis.UI (Genesis.UI.html)

Parameters

 Canvas (Genesis.UI.Canvas.html)

 ImageButton

Type
 (https://learn.microsoft.com/dotnet/api/Genesis.UI.ImageButton)

 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/Genesis.UI.ListItemBehavior)

 ListSelector

 (https://learn.microsoft.com/dotnet/api/Genesis.UI.ListSelector)

 ListSelectorBehavior

 (https://learn.microsoft.com/dotnet/api/Genesis.UI.ListSelectorBehavior)

 Panel (Genesis.UI.Panel.html)

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

+ **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

↳ Enter here to filter
↳ 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.Math.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.PhysicsDeclaration)

+ Genesis.Core.Behaviors.Physics

(Genesis.Core.Behaviors.PhysicsDeclaration)

+ Genesis.Core.GameElements

Parameters (Genesis.Core.GameElements.h)

Type

+ Genesis.Graphics

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

(Genesis.Graphics.html)

+ Genesis.Graphics.Physics

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

(Genesis.Graphics.Physics.html)

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDeviceDeclaration)

Properties

CenterText (Genesis.Graphics.Shapes.Operator)

(Genesis.Graphics.Shapes.OperatorDeclaration)

+ Genesis.Math

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

+ Genesis.Physics

Property Value (Genesis.Physics.html)

- Type (Genesis.UI (Genesis.UI.html))

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

ImageButton

(Genesis.UI.ImageButton.html)

Label (Genesis.UI.Label.html)

Font

ListItem

Declaration (Genesis.UI.ListItem.html)

ListItemBehavior

(Genesis.UI.ListItemBehavior.html)

ListSelector

(Genesis.UI.ListSelector.html)

Property Value

ListSelectorBehavior

(Genesis.UI.ListSelectorBehavior.html)

Panel (Genesis.UI.Panel.html)

</div

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.html
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 + Genesis.Graphics.Shaders.Operator (Genesis.Graphics.Shaders.Operator)	
Declaration + Genesis.Graphics.Shapes (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

+ **Genesis.Graphics.Physics**

IRenderDevice (Genesis.Graphics.IRenderDevice.html)

renderDevice

(Genesis.Graphics.Physics.html)

Scene (Genesis.Core.Scene.html)

scene

+ **Genesis.Graphics.RenderDevice**

Canvas (Genesis.UI.Canvas.html)

canvas

(Genesis.Graphics.RenderDevice.html)

OnUpdate(Game, Scene, Canvas)

With OnUpdate(Game, Scene, Canvas)

(Genesis.UI.Widget.html#Genesis_UI_Widget_OnUpdate_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

Label (Genesis.UI.Label.html)

Parameters

ListItem (Genesis.Core.Game.html)

(Genesis.UI.ListItem.html)

Scene (Genesis.Core.Scene.html)

ListBehavior (Genesis.UI.ListBehavior.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
Label (Genesis.UI.Label.html)		
ListItem (Genesis.Core.Game.html)	<i>game</i>	
Scene (Genesis.Core.Scene.html)	<i>scene</i>	
Canvas (Genesis.UI.Canvas.html)	<i>canvas</i>	

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)

▼

- + **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

+ **Genesis.Graphics**

(**Genesis.Graphics**)

ListSelector (Genesis.UI.ListSelector.html)

scene

selector

+ **Genesis.Graphics.Physics**

(**Genesis.Graphics.Physics**)

Constructors

+ **Genesis.Graphics.RenderDevice**

(**Genesis.Graphics.RenderDevice**)

ListSelectorBehavior(object, IntPtr)

+ **Genesis.Graphics.Shaders.OpenGL**

(**Genesis.Graphics.Shaders.OpenGL**)

+ **Genesis.Graphics.Shapes**

public ListSelectorBehavior(object @object, IntPtr method)

(**Genesis.Graphics.Shapes**)

+ **Genesis.Math**

Parameters

(**Genesis.Math.html**)

Type

Name

Description

object

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 ListSelectorResult BeginInvoke(Game game, Scene scene, ListSelector selector, AsyncCallback callback, object @object)

(Genesis.UI.ListSelectorBehavior.htm

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.html)

Parameters

Genesis.Graphics.Shaders.Oper

Type (Genesis.Graphics.Shaders.Oper

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>	
ListItemBehavior		
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 Panel

Inheritance

Enter here to filter
↳ object (<https://learn.microsoft.com/dotnet/api/system.object>)
↳ Widget ([Genesis.Core.Behaviors.Physics.html](https://genesis.corebehaviorsphysics.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.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**
 (Genesis.Graphics.html)
Widget.OnDispose(Game, Scene, Canvas)
([Genesis.Graphics.html#Genesis_UI_Widget_OnDispose_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Ca](https://genesis.graphics.html#Genesis_UI_Widget_OnDispose_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Ca)
nv_")
+ **Genesis.Graphics.Physics**
 (Genesis.Graphics.Physics.html)
Widget.GetRelativePos(Canvas) ([Genesis.UI.Widget.html#Genesis_UI_Widget_GetRelativePos_Genesis_UI_Canvas_](https://genesis.graphicsphysics.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.graphicsrenderdevice.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.graphicsshadersopengl.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.graphicsshapes.html#Genesis_UI_Widget_FindChildren_System_String_))
Widget.Name ([Genesis.UI.Widget.html#Genesis_UI_Widget_Name](https://genesis.graphicsshapes.html#Genesis_UI_Widget_Name))
Widget.Location ([Genesis.UI.Widget.html#Genesis_UI_Widget_Location](https://genesis.graphicsshapes.html#Genesis_UI_Widget_Location))
Widget.Size ([Genesis.UI.Widget.html#Genesis_UI_Widget_Size](https://genesis.graphicsshapes.html#Genesis_UI_Widget_Size))
Widget.Parent ([Genesis.UI.Widget.html#Genesis_UI_Widget_Parent](https://genesis.graphicsshapes.html#Genesis_UI_Widget_Parent))
Widget.Children ([Genesis.UI.Widget.html#Genesis_UI_Widget_Children](https://genesis.graphicsshapes.html#Genesis_UI_Widget_Children))
Widget.Enabled ([Genesis.UI.Widget.html#Genesis_UI_Widget_Enabled](https://genesis.graphicsshapes.html#Genesis_UI_Widget_Enabled))
Widget.Debug ([Genesis.UI.Widget.html#Genesis_UI_Widget_Debug](https://genesis.graphicsshapes.html#Genesis_UI_Widget_Debug))
Widget.MouseEnter ([Genesis.UI.Widget.html#Genesis_UI_Widget_MouseEnter](https://genesis.graphicsshapes.html#Genesis_UI_Widget_MouseEnter))
Widget.MouseLeave ([Genesis.UI.Widget.html#Genesis_UI_Widget_MouseLeave](https://genesis.graphicsshapes.html#Genesis_UI_Widget_MouseLeave))
Widget.Click ([Genesis.UI.Widget.html#Genesis_UI_Widget_Click](https://genesis.graphicsshapes.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\(system-object-object-system-object\)](https://learn.microsoft.com/dotnet/api/system.object.equals#system-object-equals(system-object-object-system-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 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/genesis.math.vec3>)
 (Genesis.Graphics.RenderDevice)

+ [Genesis.Graphics.Shaders.Operator](#)
 (Genesis.Graphics.Shaders.Operator)

Properties

+ [Genesis.Graphics.Shapes](#)

Type (Genesis.Graphics.Shapes.html)

BackgroundColor

+ [Genesis.Math](#)

(Genesis.Math.html)

+ [Genesis.Physics](#)

public Color BackgroundColor { get; set; }
 (Genesis.Physics.html)

Genesis.UI (Genesis.UI.html)

Property Value

Type	Description
Canvas (Genesis.UI.Canvas.html) ImageButton Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	

Label ([Genesis.UI.Label.html](https://learn.microsoft.com/dotnet/api/genesis.ui.label))

ListItem

([Genesis.UI.ListItem.html](https://learn.microsoft.com/dotnet/api/genesis.ui.listitem))

BackgroundImage

ListItemBehavior

Declaration ([Genesis.UI.ListItemBehavior.html](https://learn.microsoft.com/dotnet/api/genesis.ui.listitembehavior))

ListSelector

([Genesis.UI.ListSelector.html](https://learn.microsoft.com/dotnet/api/genesis.ui.listselector))

public Texture BackgroundImage { get; set; }

ListSelectorBehavior

([Genesis.UI.ListSelectorBehavior.html](https://learn.microsoft.com/dotnet/api/genesis.ui.listselectorbehavior))

Property Value

Image ([Genesis.UI.Panel.html](https://learn.microsoft.com/dotnet/api/genesis.ui.panel))

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.htm

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 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.OnDispose(Game, Scene, Canvas)

([Genesis.UI.Widget.html#Genesis_UI_Widget_OnUpdate_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Can_](#))
+ **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_Ca_](#))
+ **Genesis.Graphics.RenderDevice**

(Genesis.Graphics.RenderDevice.html)

Widget.GetRelativePos(Canvas) ([Genesis.UI.Widget.html#Genesis_UI_Widget_GetRelativePos_Genesis_UI_Canvas_](#))

Widget.GetChildCount() ([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(Canvas, Scene, Canvas)

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

([Genesis.UI.Widget.html#Genesis_UI_Widget_IsHover_Genesis_Core_Game_Genesis_Core_Scene_Genesis_UI_Canva_](#))

+ **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.ListSelectorBehavior.html

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

↳ ListSelectorBehavior

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

↳ Genesis.UI.ListSelectorBehavior.htm

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

↳ Panel ([Genesis.UI.Panel.html](#))

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

Namespace: Genesis (Genesis.html).UI (Genesis.UI.html)

Assembly: Genesis.dll

Syntax

```
public class ProgressBar : Widget
```

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

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

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

(**Genesis.Core.Behaviors.Physics**
ProgressBar(string, Vec3, Vec3))

+ **Genesis.Core.GameElements**

Creates a new progress bar.

(**Genesis.Core.GameElements.h**)

Declaration

Genesis.Graphics

(**Genesis.Graphics.html**)

public ProgressBar(string name, Vec3 location, Vec3 size)

+ **Genesis.Graphics.Physics**

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

Parameters

+ **Genesis.Graphics.RenderDevice**

Type (**Genesis.Graphics.RenderDevice**)

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

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

Vec3 ([Genesis.Math.Vec3.html](https://learn.microsoft.com/dotnet/api/genesis.math.vec3))

(**Genesis.Graphics.Shaders.Ope**

Vec3 ([Genesis.Math.Vec3.html](https://learn.microsoft.com/dotnet/api/genesis.math.vec3))

+ **Genesis.Graphics.Shapes**

(**Genesis.Graphics.Shapes.html**)

+ **Genesis.Math**

Properties ([Properties.html](https://learn.microsoft.com/dotnet/api/genesis.math.properties))

+ **Genesis.Physics**

BackgroundColor ([BackgroundColor.html](https://learn.microsoft.com/dotnet/api/genesis.physics.backgroundcolor))

Declaration

Genesis.UI ([Genesis.UI.html](https://learn.microsoft.com/dotnet/api/genesis.ui))

Canvas ([Genesis.UI.Canvas.html](https://learn.microsoft.com/dotnet/api/genesis.ui.canvas))

public Color BackgroundColor { get; set; }

([Genesis.UI.ImageButton.html](https://learn.microsoft.com/dotnet/api/genesis.ui.imagebutton))

Label ([Genesis.UI.Label.html](https://learn.microsoft.com/dotnet/api/genesis.ui.label))

Property Value

ListItem

Type ([Genesis.UI.ListItem.html](https://learn.microsoft.com/dotnet/api/genesis.ui.listitem))

ListBehavior

Color (<https://learn.microsoft.com/dotnet/api/system.drawing.color>)

([Genesis.UI.ListItemBehavior.html](https://learn.microsoft.com/dotnet/api/genesis.ui.listitembehavior))

ListSelector

([Genesis.UI.ListSelector.html](https://learn.microsoft.com/dotnet/api/genesis.ui.listselector))

BarColor

ColorSelectorBehavior

([Genesis.UI.ListSelectorBehavior.html](https://learn.microsoft.com/dotnet/api/genesis.ui.listsel))

Declaration

Panel ([Genesis.UI.Panel.html](https://learn.microsoft.com/dotnet/api/genesis.ui.panel))

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	name	
Vec3 (Genesis.Math.Vec3.html)	location	
Vec3 (Genesis.Math.Vec3.html)	size	

Type	Description
Color (https://learn.microsoft.com/dotnet/api/system.drawing.color)	(Genesis.UI.ListItemBehavior.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 <code>public Color BorderColor { get; set; }</code> (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) Label (Genesis.UI.Label.html) set; } ListItem (Genesis.UI.ListItem.html)	
Property Value	
ListBehavior ListItemBehavior (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**)

Constructor

Genesis.Graphics.RenderDevice

+ **Genesis.Graphics.Shaders.Operator**

(**UIEvent(object, IntPtr)**)

Operators

+ **Genesis.Graphics.Shapes**

(**Genesis.Graphics.Shapes.html**)

```
public UIEvent(object @object, IntPtr method)
```

+ **Genesis.Math**

(**Genesis.Math.html**)

Parameters

+ **Genesis.Physics**

(**Genesis.Physics.html**)

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

- **Genesis.UI (Genesis.UI.html)**

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

```
Canvas (Genesis.UI.Canvas.html)
```

ImageButton

(Genesis.UI.ImageButton.html)

Label

(Genesis.UI.Label.html)

Methods

(Genesis.UI.ListItem.html)

ListItemBehavior

BeginInvoke(Widget, Game, Scene, Canvas, AsyncCallback, object)

(Genesis.UI.ListItemBehavior.html)

Declaration

(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](#))

Declaration

([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

([List](#))

ListItem

([ListItem.html](#))

ListItemBehavior

([ListItemBehavior.html](#))

Panel

([Panel.html](#))

Parameters

([Genesis.UI.ListSelector.html](#))

Widget

([Widget.html](#))

ListSelectorBehavior

Game

([GameBehavior.html](#))

Panel

([Panel.html](#))

Type

ListSelector

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Type

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Widget

([Widget.html](#))

ListSelectorBehavior

Game

([GameBehavior.html](#))

Panel

([Panel.html](#))

Parameters

([ListSelector.html</](#)

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

Name

Description

+ **Type** **Genesis.Graphics**

(**Genesis.Graphics.h**)

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

data

+ **Type** **Genesis.Graphics.Physics**

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

Widget ([Genesis.UI.Widget.html](#))

assets

+ **Type** **Genesis.Graphics.RenderDevice**

(**Genesis.Graphics.RenderDevice.h**)

+ **Genesis.Graphics.Shaders.Operator**

(**Genesis.Graphics.Shaders.Operator.h**)

+ **Type** **Genesis.Graphics.Shapes.UIParseHandler**

(**Genesis.Graphics.Shapes.UIParseHandler.h**)

Declaration

+ **Genesis.Math**

(**Genesis.Math.html**)

```
public void UIParser(object @object, IntPtr method)
```

+ **Genesis.Physics**

(**Genesis.Physics.html**)

- **Type** **Genesis.UI** (**Genesis.UI.html**)

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

ImageButton

IntPtr ([https://learn.microsoft.com/dotnet/api/system.IntPtr](#))

([Genesis.UI.ImageButton.html](#))

Label ([Genesis.UI.Label.html](#))

ListItem

([Genesis.UI.ListItem.html](#))

Methods

+ **Genesis.UI.ListItemBehavior**

([Genesis.UI.ListItemBehavior.html](#))

+ **Genesis.UI.ListSelectorBehavior**

([Genesis.UI.ListSelectorBehavior.html](#))

+ **Genesis.UI.Panel**

([Genesis.UI.Panel.html](#))

Declaration

+ **Genesis.UI.ListItemBehavior**

([Genesis.UI.ListItemBehavior.html](#))

+ **Genesis.UI.ListSelectorBehavior**

([Genesis.UI.ListSelectorBehavior.html](#))

+ **Genesis.UI.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)	
+ ListItemBehavior Widget Invoke(JObject data, AssetManager assets)	

Parameters

Type	Name	Description
+ ListSelectorBehavior (Genesis.UI.ListSelectorBehavior.html)	<i>data</i>	

JObject
([Genesis.UI.ListSelectorBehavior.html](#))
Panel ([Genesis.UI.Panel.html](#))

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 (<https://learn.microsoft.com/dotnet/api/genesis.ui.renderdevice>)

↳ **As<Genesis.Graphics.RenderDevice>**

Syntax

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

(Genesis.Graphics.Shaders.Ope
public class UIParser

+ **Genesis.Graphics.Shapes**

(Genesis.Graphics.Shapes.html)

Constructors

UIParser() (<https://learn.microsoft.com/dotnet/api/genesis.math>)

UIParser(Physics)

(Genesis.Physics.html)

Declaration

- **Genesis.UI (Genesis.UI.html)**

public UIParser()
↳ **Canvas** (<https://learn.microsoft.com/dotnet/api/genesis.ui.canvas>)
↳ **ImageButton**
↳ **(Genesis.UI.ImageButton.html)**
↳ **Label** (<https://learn.microsoft.com/dotnet/api/genesis.ui.label>)

Properties

ListItem (<https://learn.microsoft.com/dotnet/api/genesis.ui.listitem>)

ListItemBehavior

(Genesis.UI.ListItemBehavior.html)

ListSelector

Declaration
(Genesis.UI.ListSelector.html)

ListSelectorBehavior

(Genesis.UI.ListSelectorBehavior.htm

Panel (<https://learn.microsoft.com/dotnet/api/genesis.ui.panel>)

```
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)	

Class Widget

Inheritance

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

↳ [Widget](#)

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

↳ [ImageButton](#) ([Genesis.UILab.ImageButton.html](https://genesis.uilab.com/ImageButton.html))

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

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

↳ [ListSelector](#) ([Genesis.UILab.ListSelector.html](https://genesis.uilab.com/ListSelector.html))

↳ [Panel](#) ([Genesis.UILab.Panel.html](https://genesis.uilab.com/Panel.html))

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

↳ [ProgressBar](#) ([Genesis.UILab.ProgressBar.html](https://genesis.uilab.com/ProgressBar.html))

+ **Genesis.Core.GameElements**

Inherited Members

([Genesis.Core.GameElements.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_)))

([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**

([Genesis.Graphics.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.Graphics.RenderDevice**

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

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

+ **Genesis.Graphics.Shaders.OpenGL**

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

Syntax

+ **Genesis.Graphics.Shapes**

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

 public class Widget

+ **Genesis.Math**

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

Constructors

+ **Genesis.Physics**

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

Widget()

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

Creates a new instance for a entity

[Canvas](#) ([Genesis.UILab.Canvas.html](https://genesis.uilab.com/Canvas.html))

[ImageButton](#) ([Genesis.UILab.ImageButton.html](https://genesis.uilab.com/ImageButton.html))

[Label](#) ([Genesis.UILab.Label.html](https://genesis.uilab.com/Label.html))

[ListWidgetItem](#) ()

 ([Genesis.UI.ListItem.html](#))

[ListItemBehavior](#)

 ([Genesis.UI.ListItemBehavior.html](#))

[ListSelector](#)

 ([Genesis.UI.ListSelector.html](#))

[ListSelectorBehavior](#)

 ([Genesis.UI.ListSelectorBehavior.html](#))

Properties

+ **Children**

[Panel](#) ([Genesis.UILab.Panel.html](https://genesis.uilab.com/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) < a href="#">(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 Declaration (Genesis.Graphics.Shaders.Operations.h)
+ 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) Declaration Label (Genesis.UI.Label.html) ListItem p(Genesis.UI.ListItem.html) get; set; } ListItemBehavior (Genesis.UI.ListItemBehavior.html)
Property Value

Type	Description
ListSelectorBehavior Vec3 (Genesis.Math.Vec3.html) (Genesis.UI.ListSelectorBehavior.html) Panel (Genesis.UI.Panel.html)	

Name

Declaration

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



Property Value

Type	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
(Genesis.Graphics.html)

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

Type	Description
+ Genesis.Graphics.RenderDevice Widget (Genesis.UI.Widget.html)	

+ Genesis.Graphics.Shaders.Operator
(Genesis.Graphics.Shaders.Operator.html)

+ Genesis.Graphics.Shapes
(Genesis.Graphics.Shapes.html)

+ Genesis.Math
(Genesis.Math.html)

Property Value	Description
+ Genesis.Physics Type (Genesis.Physics.html)	

- Genesis.UI	Description
(Genesis.UI.html)	

Canvas ([Genesis.UI.Canvas.html](#))

ImageButton

([Genesis.UI.ImageButton.html](#))

Label ([Genesis.UI.Label.html](#))

ListItem

([Genesis.UI.ListItem.html](#))

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](#))

```
public void AddChildren(Widget entity)
```

Parameters

Type	Name	Description
Widget (Genesis.UI.Widget.html)	entity	

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

FindChildren(string)

(Genesis.Core.Behaviors.Physics)

Recursively find a child widget with the given name.

+ Genesis.Core.GameElements

Declaration

(Genesis.Core.GameElements.h)

+ Genesis.Graphics

(Genesis.Graphics.html)

Parameters

+ Genesis.Graphics.Physics

(Genesis.Graphics.Physics.html)

Type	Name	Description
string (https://learn.microsoft.com/dotnet/api/system.string)	name	The name to search for.

+ Genesis.Graphics.RenderDevice

(Genesis.Graphics.RenderDevice.html)

Returns

+ Genesis.Graphics.Shaders.Operator

(Genesis.Graphics.Shaders.Operator.html)

Widget (Genesis.UI.Widget.html)

+ Genesis.Graphics.Shapes

(Genesis.Graphics.Shapes.html)

GetChildren(string)

(Genesis.Math.html)

Returns the children with the name name

+ Genesis.Physics

Declaration

(Genesis.Physics.html)

- GenesisUI(Widget)

Canvas (Genesis.UI.Canvas.html)

Parameters

Type

ImageButton (Genesis.UI.ImageButton.html)

Label (Genesis.UI.Label.html)

ListItem

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

(Genesis.UI.ListItem.html)

Returns

ListItemBehavior

(Genesis.UI.ListItemBehavior.html)

Type

ListSelector

(Genesis.UI.ListSelector.html)

Widget (Genesis.UI.Widget.html)

ListSelectorBehavior

(Genesis.UI.ListSelectorBehavior.html)

Panel (Genesis.UI.Panel.html)

Type	Description
Widget (Genesis.UI.Widget.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)

GetRelativePos(Canvas)

(Genesis.Graphics.Physics.html)

GetRelativePos(Canvas)

(Genesis.Graphics.Physics.html)

GetRelativePos(Canvas)

(Genesis.Graphics.Physics.html)

+ 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.h)

+ **Genesis.Graphics.Shaders.Operator**
Game (Genesis.Core.Game.html)
(Genesis.Graphics.Shaders.Operator.h)

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)

Scene (Genesis.Core.Scene.html)

ListSelector

Canvas (Genesis.UI.Canvas.html)

(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>	
Canvas (Genesis.UI.Canvas.html)	<i>canvas</i>	

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

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

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

(Genesis.Core.Behaviors.Physics.h)

+ **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.h)

+ **Genesis.Graphics.Shaders.Operator**

Game (Genesis.Core.Game.html)

(Genesis.Graphics.Shaders.Operator.h)

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)

Scene (Genesis.Core.Scene.html)

ListSelector

Canvas (Genesis.UI.Canvas.html)

(Genesis.UI.ListSelector.html)

ListSelectorBehavior

(Genesis.UI.ListSelectorBehavior.html)

Panel (Genesis.UI.Panel.html)

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

Properties (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 (Genesis.UI.ImageButton.html)

Label (Genesis.UI.Label.html)

ListItem

Click (Genesis.UI.ListItem.html)

ListItemBehavior

Declaration (Genesis.UI.ListItemBehavior.html)

ListSelector

public event UIEvent Click (Genesis.UI.ListSelector.html)

ListSelectorBehavior

Event Type (Genesis.UI.ListSelectorBehavior.html)

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.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	Description
UIEvent (Genesis.UI.UIEvent.html)	