

Namespace LuaMod

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Class LuaBehaviour

Namespace: [LuaMod](#)

Assembly: LuaMod.dll

```
public class LuaBehaviour : MonoBehaviour
```

Inheritance

object ← Il2CppObjectBase ← Object ← Object ← Component ← Behaviour ← MonoBehaviour ← LuaBehaviour

Derived

[LuaGun](#)

Fields

AwakeFunction

```
protected DynValue AwakeFunction
```

Field Value

DynValue

BehaviourScript

```
public LuaModScript BehaviourScript
```

Field Value

[LuaModScript](#)

FixedUpdateFunction

`protected` DynValue FixedUpdateFunction

Field Value

DynValue

LateStartFunction

`protected` DynValue LateStartFunction

Field Value

DynValue

LateUpdateFunction

`protected` DynValue LateUpdateFunction

Field Value

DynValue

OnBecameInvisibleFunction

`protected` DynValue OnBecameInvisibleFunction

Field Value

DynValue

OnBecameVisibleFunction

`protected DynValue OnBecameVisibleFunction`

Field Value

DynValue

OnCollisionEnterFunction

`protected DynValue OnCollisionEnterFunction`

Field Value

DynValue

OnCollisionExitFunction

`protected DynValue OnCollisionExitFunction`

Field Value

DynValue

OnCollisionStayFunction

`protected DynValue OnCollisionStayFunction`

Field Value

DynValue

OnDestroyFunction

`protected DynValue OnDestroyFunction`

Field Value

DynValue

OnDisableFunction

`protected DynValue OnDisableFunction`

Field Value

DynValue

OnEnableFunction

`protected DynValue OnEnableFunction`

Field Value

DynValue

OnJointBreakFunction

`protected DynValue OnJointBreakFunction`

Field Value

DynValue

OnParticleCollisionFunction

`protected` DynValue OnParticleCollisionFunction

Field Value

DynValue

OnParticleSystemStoppedFunction

`protected` DynValue OnParticleSystemStoppedFunction

Field Value

DynValue

OnParticleTriggerFunction

`protected` DynValue OnParticleTriggerFunction

Field Value

DynValue

OnParticleUpdateJobScheduledFunction

`protected` DynValue OnParticleUpdateJobScheduledFunction

Field Value

DynValue

OnTransformChildrenChangedFunction

`protected` DynValue OnTransformChildrenChangedFunction

Field Value

DynValue

OnTransformParentChangedFunction

`protected` DynValue OnTransformParentChangedFunction

Field Value

DynValue

OnTriggerEnterFunction

`protected` DynValue OnTriggerEnterFunction

Field Value

DynValue

OnTriggerExitFunction

`protected` DynValue OnTriggerExitFunction

Field Value

DynValue

OnTriggerStayFunction

```
protected DynValue OnTriggerStayFunction
```

Field Value

DynValue

Ready

Indicates whether this LuaBehaviour is initialized and ready.

```
public bool Ready
```

Field Value

bool

ScriptAsset

```
public TextAsset ScriptAsset
```

Field Value

TextAsset

ScriptName

The name of the Lua script file (used if ScriptAsset is null).

```
public string ScriptName
```

Field Value

string

ScriptTags

Optional list of tags associated with this Lua Behaviour.

```
public List<string> ScriptTags
```

Field Value

List<string>

SlowUpdateFunction

```
protected DynValue SlowUpdateFunction
```

Field Value

DynValue

SlowUpdateTime

The interval at which the SlowUpdate function is called in seconds.

```
public float SlowUpdateTime
```

Field Value

float

StartFunction

```
protected DynValue StartFunction
```

Field Value

DynValue

UpdateFunction

`protected DynValue UpdateFunction`

Field Value

DynValue

Methods

CallFunction(string, params DynValue[])

```
public bool CallFunction(string functionname, params DynValue[] args)
```

Parameters

`functionname` string

`args` DynValue[]

Returns

bool

CallFunctionULTEvent(string, int, float, string, Object)

```
public void CallFunctionULTEvent(string functionname, int param1, float param2, string param3, Object param4)
```

Parameters

`functionname` string

`param1` int

`param2` float

param3 string

param4 Object

GetScriptVariable(string)

```
public DynValue GetScriptVariable(string name)
```

Parameters

name string

Returns

DynValue

SetScriptVariable(string, DynValue)

```
public void SetScriptVariable(string name, DynValue DyVar)
```

Parameters

name string

DyVar DynValue

SetSlowUpdate(bool, float)

```
public void SetSlowUpdate(bool running, float time)
```

Parameters

running bool

time float

Class LuaGun

Namespace: [LuaMod](#)

Assembly: LuaMod.dll

```
public class LuaGun : LuaBehaviour
```

Inheritance

object ← Il2CppObjectBase ← Object ← Object ← Component ← Behaviour ← MonoBehaviour ← [LuaBehaviour](#) ← LuaGun

Inherited Members

[LuaBehaviour.ScriptName](#) , [LuaBehaviour.ScriptAsset](#) , [LuaBehaviour.SlowUpdateTime](#) ,
[LuaBehaviour.ScriptTags](#) , [LuaBehaviour.Ready](#) , [LuaBehaviour.BehaviourScript](#) ,
[LuaBehaviour.StartFunction](#) , [LuaBehaviour.LateStartFunction](#) , [LuaBehaviour.UpdateFunction](#) ,
[LuaBehaviour.FixedUpdateFunction](#) , [LuaBehaviour.AwakeFunction](#) , [LuaBehaviour.OnEnableFunction](#) ,
[LuaBehaviour.OnDisableFunction](#) , [LuaBehaviour.OnDestroyFunction](#) ,
[LuaBehaviour.OnCollisionEnterFunction](#) , [LuaBehaviour.OnCollisionExitFunction](#) ,
[LuaBehaviour.OnCollisionStayFunction](#) , [LuaBehaviour.SlowUpdateFunction](#) ,
[LuaBehaviour.LateUpdateFunction](#) , [LuaBehaviour.OnTriggerEnterFunction](#) ,
[LuaBehaviour.OnTriggerExitFunction](#) , [LuaBehaviour.OnTriggerStayFunction](#) ,
[LuaBehaviour.OnBecameInvisibleFunction](#) , [LuaBehaviour.OnBecameVisibleFunction](#) ,
[LuaBehaviour.OnParticleSystemStoppedFunction](#) , [LuaBehaviour.OnParticleCollisionFunction](#) ,
[LuaBehaviour.OnParticleTriggerFunction](#) , [LuaBehaviour.OnParticleUpdateJobScheduledFunction](#) ,
[LuaBehaviour.OnTransformChildrenChangedFunction](#) ,
[LuaBehaviour.OnTransformParentChangedFunction](#) , [LuaBehaviour.OnJointBreakFunction](#) ,
[LuaBehaviour.SetSlowUpdate\(bool, float\)](#) , [LuaBehaviour.SetScriptVariable\(string, DynValue\)](#) ,
[LuaBehaviour.GetScriptVariable\(string\)](#) ,
[LuaBehaviour.CallFunctionULTEvent\(string, int, float, string, Object\)](#) ,
[LuaBehaviour.CallFunction\(string, params DynValue\[\]\)](#)

Constructors

LuaGun(IntPtr)

```
public LuaGun(IntPtr ptr)
```

Parameters

`ptr` IntPtr

Fields

AttachedGun

`public` Gun AttachedGun

Field Value

Gun

AttachedGunSlide

`public` SlideVirtualController AttachedGunSlide

Field Value

SlideVirtualController

SupressBullet

`public bool` SupressBullet

Field Value

bool

Methods

ForceGunFire()

```
public bool ForceGunFire()
```

Returns

bool

GetFirepointPosition()

```
public DynValue GetFirepointPosition()
```

Returns

DynValue

GetMagazineRounds()

```
public DynValue GetMagazineRounds()
```

Returns

DynValue

LuaSpawnCartridge(Spawnable)

```
public bool LuaSpawnCartridge(Spawnable spawnableCartridge)
```

Parameters

spawnableCartridge Spawnable

Returns

bool

LuaTriggerPulled()

```
public bool LuaTriggerPulled()
```

Returns

bool

OnFire()

```
public bool OnFire()
```

Returns

bool

OnGripAttached(InteractableHost, Hand)

```
public void OnGripAttached(InteractableHost host, Hand hand)
```

Parameters

host InteractableHost

hand Hand

OnMagazineEjected()

```
public void OnMagazineEjected()
```

OnSlideGrabbed()

```
public void OnSlideGrabbed()
```

OnSlideReleased()

```
public void OnSlideReleased()
```

OnSlideUpdate(float)

```
public void OnSlideUpdate(float pos)
```

Parameters

pos float

SetMagazineRounds(int)

```
public bool SetMagazineRounds(int rounds)
```

Parameters

rounds int

Returns

bool

SetupBehaviourFunctions()

```
public override bool SetupBehaviourFunctions()
```

Returns

bool

Start()


```
public void Start()
```

Class LuaMemoryProfiler

Namespace: [LuaMod](#)

Assembly: LuaMod.dll

```
public static class LuaMemoryProfiler
```

Inheritance

object ← LuaMemoryProfiler

Methods

EstimateMemoryMB(Script, Dictionary<string, DynValue>)

```
public static float EstimateMemoryMB(Script script, Dictionary<string,  
DynValue> loadedModules)
```

Parameters

script Script

loadedModules Dictionary<string, DynValue>

Returns

float

ScriptMemoryReport(Script, Dictionary<string, DynValue>)

```
public static string ScriptMemoryReport(Script script, Dictionary<string,  
DynValue> loadedModules)
```

Parameters

script Script

`loadedModules` Dictionary<string, DynValue>

Returns

string

Class LuaMod

Namespace: [LuaMod](#)

Assembly: LuaMod.dll

```
public class LuaMod : MelonMod
```

Inheritance

object ← MelonBase ← MelonTypeBase<MelonMod> ← MelonMod ← LuaMod

Inherited Members

MelonMod.OnLevelWasLoaded(int) , MelonMod.OnLevelWasInitialized(int) , MelonMod.InfoAttribute ,
MelonMod.GameAttributes ,
MelonTypeBase<MelonMod>.ExecuteAll(LemonAction<MelonMod>, bool, string) ,
MelonTypeBase<MelonMod>.RegisteredMelons , MelonTypeBase<MelonMod>.TypeName ,
MelonTypeBase<MelonMod>.MelonTypeName , MelonBase.OnMelonRegistered ,
MelonBase.OnMelonUnregistered , MelonBase.OnMelonInitializing , MelonBase.OnRegister ,
MelonBase.OnUnregister ,
MelonBase.CreateWrapper<T>(string, string, string, MelonGameAttribute[], MelonProcessAttribute[], int,
Color?, Color?, string) ,
MelonBase.RegisterSorted<T>(IEnumerable<T>) , MelonBase.OnPreSupportModule() ,
MelonBase.OnUpdate() , MelonBase.OnFixedUpdate() , MelonBase.OnLateUpdate() , MelonBase.OnGUI() ,
MelonBase.OnApplicationQuit() , MelonBase.OnPreferencesSaved() ,
MelonBase.OnPreferencesSaved(string) , MelonBase.OnPreferencesLoaded() ,
MelonBase.OnPreferencesLoaded(string) , MelonBase.OnEarlyInitializeMelon() ,
MelonBase.OnInitializeMelon() , MelonBase.OnLateInitializeMelon() , MelonBase.OnDeinitializeMelon() ,
MelonBase.FindIncompatibilities(MelonGameAttribute, string, string, string, string, MelonPlatform
Attribute.CompatiblePlatforms, MelonPlatformDomainAttribute.CompatibleDomains) ,
MelonBase.FindIncompatibilities(MelonGameAttribute, string, string, SemVersion, string, MelonPlatform
Attribute.CompatiblePlatforms, MelonPlatformDomainAttribute.CompatibleDomains) ,
MelonBase.FindIncompatibilitiesFromContext() ,
MelonBase.PrintIncompatibilities(MelonBase.Incompatibility[], MelonBase) , MelonBase.Register() ,
MelonBase.FindMelon(string, string) , MelonBase.Unregister(string, bool) ,
MelonBase.ExecuteAll(LemonAction<MelonBase>, bool, string) ,
MelonBase.ExecuteList<T>(LemonAction<T>, List<T>, bool, string) ,
MelonBase.SendMessageAll(string, params object[]) , MelonBase.SendMessage(string, params object[]) ,
MelonBase.OnApplicationLateStart() , MelonBase.OnApplicationStart() ,
MelonBase.OnModSettingsApplied() , MelonBase.MelonAssembly , MelonBase.Priority ,
MelonBase.ConsoleColor , MelonBase.AuthorConsoleColor , MelonBase.Info ,

MelonBase.AdditionalCredits , MelonBase.SupportedProcesses , MelonBase.Games ,
MelonBase.SupportedGameVersions , MelonBase.OptionalDependencies ,
MelonBase.SupportedPlatforms , MelonBase.SupportedDomain , MelonBase.SupportedMLVersion ,
MelonBase.SupportedMLBuild , MelonBase.HarmonyInstance , MelonBase.LoggerInstance ,
MelonBase.ID , MelonBase.Registered , MelonBase.harmonyInstance , MelonBase.Harmony ,
MelonBase.Assembly , MelonBase.HarmonyDontPatchAll , MelonBase.Hash , MelonBase.Location

Methods

OnSceneWasInitialized(int, string)

Runs once a Scene is initialized.

```
public override void OnSceneWasInitialized(int buildIndex, string sceneName)
```

Parameters

buildIndex int

sceneName string

OnSceneWasLoaded(int, string)

Runs when a new Scene is loaded.

```
public override void OnSceneWasLoaded(int buildIndex, string sceneName)
```

Parameters

buildIndex int

sceneName string

OnSceneWasUnloaded(int, string)

Runs once a Scene unloads.

```
public override void OnSceneWasUnloaded(int buildIndex, string sceneName)
```

Parameters

buildIndex int

sceneName string

Class LuaModScript

Namespace: [LuaMod](#)

Assembly: LuaMod.dll

```
public class LuaModScript
```

Inheritance

object ← LuaModScript

Fields

MaxScriptExecutionTime

```
protected const int MaxScriptExecutionTime = 500
```

Field Value

int

PostReloadScript

```
public LuaModScript.del_postreload PostReloadScript
```

Field Value

[LuaModScript.del_postreload](#)

ScriptMemoryBudget

```
protected const float ScriptMemoryBudget = 15
```

Field Value

float

Methods

CallScriptFunction(DynValue, params object[])

```
public DynValue CallScriptFunction(DynValue luaFunc, params object[] Args)
```

Parameters

luaFunc DynValue

Args object[]

Returns

DynValue

DestroyScript()

```
public void DestroyScript()
```

GetGlobal(string)

```
public DynValue GetGlobal(string name)
```

Parameters

name string

Returns

DynValue

IsScriptPathSafe(string)

```
public static bool IsScriptPathSafe(string path)
```

Parameters

path string

Returns

bool

LoadScript(string, bool)

```
public bool LoadScript(string filename, bool reloading)
```

Parameters

filename string

reloading bool

Returns

bool

LoadScript(TextAsset, bool)

```
public bool LoadScript(TextAsset scriptAsset, bool reloading)
```

Parameters

scriptAsset TextAsset

reloading bool

Returns

bool

ScriptIsValid()

```
public bool ScriptIsValid()
```

Returns

bool

SetGlobal(string, object)

```
public void SetGlobal(string name, object val)
```

Parameters

name string

val object

Class LuaModScript.ScriptStrikeRecord

Namespace: [LuaMod](#)

Assembly: LuaMod.dll

```
public class LuaModScript.ScriptStrikeRecord
```

Inheritance

object ← LuaModScript.ScriptStrikeRecord

Fields

Reason

```
public LuaModScript.StrikeReason Reason
```

Field Value

[LuaModScript.StrikeReason](#)

Strikes

```
public int Strikes
```

Field Value

int

Enum LuaModScript.StrikeReason

Namespace: [LuaMod](#)

Assembly: LuaMod.dll

```
public enum LuaModScript.StrikeReason
```

Fields

```
ExecutionTime = 0
```

```
MemoryUse = 1
```

Delegate LuaModScript.del_postreload

Namespace: [LuaMod](#)

Assembly: LuaMod.dll

```
public delegate bool LuaModScript.del_postreload()
```

Returns

bool

Class LuaResources

Namespace: [LuaMod](#)

Assembly: LuaMod.dll

```
public class LuaResources : MonoBehaviour
```

Inheritance

object ← Il2CppObjectBase ← Object ← Object ← Component ← Behaviour ← MonoBehaviour ←
LuaResources

Fields

boolKeys

```
public List<string> boolKeys
```

Field Value

List<string>

boolValues

```
public List<bool> boolValues
```

Field Value

List<bool>

floatKeys

```
public List<string> floatKeys
```

Field Value

List<string>

floatValues

```
public List<float> floatValues
```

Field Value

List<float>

objectKeys

```
public List<string> objectKeys
```

Field Value

List<string>

objectValues

```
public List<Object> objectValues
```

Field Value

List<Object>

stringKeys

```
public List<string> stringKeys
```

Field Value

List<string>

stringValues

```
public List<string> stringValues
```

Field Value

List<string>

Properties

Bools

```
public Dictionary<string, bool> Bools { get; }
```

Property Value

Dictionary<string, bool>

Floats

```
public Dictionary<string, float> Floats { get; }
```

Property Value

Dictionary<string, float>

Objects

```
public Dictionary<string, Object> Objects { get; }
```

Property Value

Dictionary<string, Object>

Strings

```
public Dictionary<string, string> Strings { get; }
```

Property Value

Dictionary<string, string>

Methods

Cast<T>(Object)

```
public static T Cast<T>(Object input) where T : class
```

Parameters

input Object

Returns

T

Type Parameters

T

GetAllKeys()

```
public HashSet<string> GetAllKeys()
```

Returns

HashSet<string>

GetBool(string)

```
public bool GetBool(string key)
```

Parameters

key string

Returns

bool

GetDuplicateKeys()

```
public List<string> GetDuplicateKeys()
```

Returns

List<string>

GetFloat(string)

```
public float GetFloat(string key)
```

Parameters

key string

Returns

float

GetObject(string, string)

```
public DynValue GetObject(string key, string CompType)
```

Parameters

key string

CompType string

Returns

DynValue

GetString(string)

```
public string GetString(string key)
```

Parameters

key string

Returns

string

RebuildAll()

```
public void RebuildAll()
```

SetBool(string, bool)

```
public void SetBool(string key, bool value)
```

Parameters

key string

value bool

SetFloat(string, float)

```
public void SetFloat(string key, float value)
```

Parameters

key string

value float

SetObject(string, Object)

```
public void SetObject(string key, Object value)
```

Parameters

key string

value Object

SetString(string, string)

```
public void SetString(string key, string value)
```

Parameters

key string

value string

Class LuaSafeCall

Namespace: [LuaMod](#)

Assembly: LuaMod.dll

```
public static class LuaSafeCall
```

Inheritance

object ← LuaSafeCall

Methods

Run(Action, string)

```
public static void Run(Action action, string context = "Unknown")
```

Parameters

action Action

context string

Run<T>(Func<T>, string)

```
public static T Run<T>(Func<T> func, string context = "Unknown")
```

Parameters

func Func<T>

context string

Returns

T

Type Parameters

T

Class ScriptManager

Namespace: [LuaMod](#)

Assembly: LuaMod.dll

```
public static class ScriptManager
```

Inheritance

object ← ScriptManager

Fields

ScriptList

```
public static List<LuaModScript> ScriptList
```

Field Value

List<[LuaModScript](#)>

Methods

DeregisterScript(LuaModScript)

```
public static void DeregisterScript(LuaModScript script)
```

Parameters

script [LuaModScript](#)

InitiateFileSystemMonitor()

```
public static void InitiateFileSystemMonitor()
```

RegisterScript(LuaModScript)

```
public static void RegisterScript(LuaModScript script)
```

Parameters

script [LuaModScript](#)

ReloadScripts()

```
public static void ReloadScripts()
```


Namespace LuaMod.BoneMenu

Classes

[LuaFunctionElement](#)

Class LuaFunctionElement

Namespace: [LuaMod.BoneMenu](#)

Assembly: LuaMod.dll

```
public class LuaFunctionElement : FunctionElement
```

Inheritance

object ← Element ← FunctionElement ← LuaFunctionElement

Inherited Members

Element.OnElementChanged , Element._elementName , Element._elementColor ,
Element._elementTooltip , Element.OnElementAdded() , Element.OnElementHover() ,
Element.OnElementDeselected() , Element.OnElementPressed() , Element.OnElementRemoved() ,
Element.SetProperty(ElementProperties) , Element.SetTooltip(string) , Element.ElementName ,
Element.ElementColor , Element.ElementTooltip , Element.HasTooltip , Element.Properties

Constructors

LuaFunctionElement(string, Color, LuaBehaviour, string)

```
public LuaFunctionElement(string name, Color color, LuaBehaviour own, string luafunc)
```

Parameters

name string

color Color

own [LuaBehaviour](#)

luafunc string

Properties

Logo

```
public Texture2D Logo { get; set; }
```

Property Value

Texture2D

Methods

OnElementSelected()

```
public override void OnElementSelected()
```

Namespace LuaMod.LuaAPI

Classes

[API_Audio](#)

[API_BoneMenu](#)

[API_Events](#)

NOTE: THIS CLASS PROBABLY A MEMORY LEAK - NEED TO DESTROY SCRIPT REFERENCES WHEN DESTROYED

[API_FileAccess](#)

Provides Lua-accessible file operations such as opening and checking for file existence.

[API_GameObject](#)

Lua-exposed API for GameObject manipulation in Bonelab. Provides methods for spawning, destroying, and modifying Unity GameObjects from Lua scripts.

[API_Input](#)

[API_Particles](#)

Lua-exposed API for working with Unity particle systems and trail segments.

[API_Physics](#)

[API_Player](#)

[API_Random](#)

[API_Renderer](#)

Lua-exposed API for modifying MeshRenderer materials. Supports getting, setting, and replacing materials from Lua scripts.

[API_SLZ_Combat](#)

[API_SLZ_NPC](#)

[API_SLZ_VoidLogic](#)

[API_Utils](#)

[API_Vector](#)

[BLFileAccess](#)

Structs

[EventListener](#)

Class API_Audio

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

```
public class API_Audio
```

Inheritance

object ← API_Audio

Fields

Instance

```
public static readonly API_Audio Instance
```

Field Value

[API_Audio](#)

Methods

BL_Play3DOneShot(AudioClip, Vector3, float, float, float)

```
public bool BL_Play3DOneShot(AudioClip Clip, Vector3 position, float volume = 1, float pitch  
= 1, float spatialBlend = 1)
```

Parameters

Clip AudioClip

position Vector3

volume float

pitch float

`spatialBlend` float

Returns

bool

Class API_BoneMenu

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

```
public class API_BoneMenu
```

Inheritance

object ← API_BoneMenu

Fields

BL_Page

```
public static Page BL_Page
```

Field Value

Page

Instance

NOTE: AS IT STANDS, PLAYERS CAN STILL CALL PAGE.CREATEFUNCTION - NEEDS TO BE REMOVED FOR SAFETY

```
public static readonly API_BoneMenu Instance
```

Field Value

[API_BoneMenu](#)

Methods

BL_CreateFunction(Page, string, Color, LuaBehaviour, string)


```
public static LuaFunctionElement BL_CreateFunction(Page page, string name, Color color,
LuaBehaviour owner, string function)
```

Parameters

page Page

name string

color Color

owner [LuaBehaviour](#)

function string

Returns

[LuaFunctionElement](#)

BL_DeletePage(Page)

```
public static bool BL_DeletePage(Page page)
```

Parameters

page Page

Returns

bool

InvokeFloatAction()

```
public static void InvokeFloatAction()
```

Class API_Events

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

NOTE: THIS CLASS PROBABLY A MEMORY LEAK - NEED TO DESTROY SCRIPT REFERENCES WHEN DESTROYED

```
public class API_Events
```

Inheritance

object ← API_Events

Fields

EventListeners

```
public static Dictionary<string, List<EventListener>> EventListeners
```

Field Value

Dictionary<string, List<[EventListener](#)>>

Instance

```
public static readonly API_Events Instance
```

Field Value

[API_Events](#)

Methods

BL_InvokeEvent(string, params DynValue[])

```
public static bool BL_InvokeEvent(string eventName, params DynValue[] args)
```

Parameters

eventName string

args DynValue[]

Returns

bool

BL_SubscribeEvent(string, LuaBehaviour, string)

```
public static bool BL_SubscribeEvent(string eventName, LuaBehaviour Owner, string func)
```

Parameters

eventName string

Owner [LuaBehaviour](#)

func string

Returns

bool

BL_SubscribeEvent(UnityEvent, LuaBehaviour, string)

```
public static bool BL_SubscribeEvent(UnityEvent Uevent, LuaBehaviour Owner, string func)
```

Parameters

Uevent UnityEvent

Owner [LuaBehaviour](#)

`func` string

Returns

bool

SetUpEvents()

```
public static void SetUpEvents()
```

Class API_FileAccess

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

Provides Lua-accessible file operations such as opening and checking for file existence.

```
public class API_FileAccess
```

Inheritance

object ← API_FileAccess

Remarks

Use this API to safely interact with the file system from Lua scripts. File paths are validated to prevent unauthorized access outside the mod sandbox.

Files opened with [BL_OpenFile\(string\)](#) return a [BLFileAccess](#) object for reading or writing contents.

Fields

Instance

```
public static readonly API_FileAccess Instance
```

Field Value

[API_FileAccess](#)

Methods

BL_FileExists(string)

Determines whether a file exists at the specified relative path within the mod's sandbox.

```
public static bool BL_FileExists(string name)
```

Parameters

name string

The relative file path to check.

Returns

bool

Returns **true** if the file exists and the path is safe; otherwise, **false**. Throws an exception if the path is unsafe.

BL_OpenFile(string)

Opens a file at the specified path and returns a [BLFileAccess](#) object for interacting with it.

```
public static BLFileAccess BL_OpenFile(string name)
```

Parameters

name string

The relative path to the file.

Returns

[BLFileAccess](#)

A BLFileAccess object if the path is safe; throws an exception otherwise.

Class API_GameObject

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

Lua-exposed API for GameObject manipulation in Bonelab. Provides methods for spawning, destroying, and modifying Unity GameObjects from Lua scripts.

```
public class API_GameObject
```

Inheritance

object ← API_GameObject

Fields

Instance

Singleton instance of the API_GameObject class.

```
public static readonly API_GameObject Instance
```

Field Value

[API_GameObject](#)

Methods

BL_AddComponent(GameObject, string)

Adds a component of the specified type to the GameObject.

```
public DynValue BL_AddComponent(GameObject obj, string CompType)
```

Parameters

obj GameObject

`CompType` string

Returns

DynValue

BL_CreateEmptyGameObject()

Creates a new empty GameObject in the scene.

```
public GameObject BL_CreateEmptyGameObject()
```

Returns

GameObject

BL_Destroy(Object)

Destroys the specified Unity Object.

```
public static void BL_Destroy(Object obj)
```

Parameters

`obj` Object

BL_EntityPose(string)

Creates a DataCardReference for the given EntityPose barcode.

```
public DataCardReference<EntityPose> BL_EntityPose(string barcode)
```

Parameters

`barcode` string

Returns

DataCardReference<EntityPose>

BL_FindAllInChildren(GameObject, string)

Finds all child GameObjects with the specified name.

```
public DynValue BL_FindAllInChildren(GameObject gameObject, string name)
```

Parameters

gameObject GameObject

name string

Returns

DynValue

BL_FindAllInWorld(string)

Finds all GameObjects in the scene with the specified name.

```
public DynValue BL_FindAllInWorld(string name)
```

Parameters

name string

Returns

DynValue

BL_FindComponentsInWorld(string, bool)

Gets all components of the specified type in the world. Don't overuse this function.

```
public DynValue BL_FindComponentsInWorld(string compType, bool includeInactive = false)
```

Parameters

compType string

includeInactive bool

Returns

DynValue

BL_FindInChildren(GameObject, string)

Finds a child GameObject by name under the specified parent GameObject.

```
public DynValue BL_FindInChildren(GameObject gameObject, string name)
```

Parameters

gameObject GameObject

name string

Returns

DynValue

BL_FindInWorld(string)

Finds a GameObject in the scene by name.

```
public DynValue BL_FindInWorld(string name)
```

Parameters

name string

Returns

DynValue

BL_GetComponent(GameObject, string)

Gets a component of the specified type on the GameObject.

```
public DynValue BL_GetComponent(GameObject obj, string CompType)
```

Parameters

obj GameObject

CompType string

Returns

DynValue

BL_GetComponentInChildren(GameObject, string)

Gets a component of the specified type from the GameObject's children.

```
public DynValue BL_GetComponentInChildren(GameObject obj, string CompType)
```

Parameters

obj GameObject

CompType string

Returns

DynValue

BL_GetComponents(GameObject, string)

Gets all components of the specified type on the GameObject.

```
public List<DynValue> BL_GetComponents(GameObject obj, string CompType)
```

Parameters

obj GameObject

CompType string

Returns

List<DynValue>

BL_GetComponentsInChildren(GameObject, string, bool)

Gets all components of the specified type in the GameObject's children.

```
public List<DynValue> BL_GetComponentsInChildren(GameObject obj, string CompType, bool  
includeInactive = false)
```

Parameters

obj GameObject

CompType string

includeInactive bool

Returns

List<DynValue>

BL_InstantiateGameObject(GameObject)

Instantiates a new GameObject based on the provided original.

```
public GameObject BL_InstantiateGameObject(GameObject original)
```

Parameters

original GameObject

Returns

GameObject

BL_IsValid(Object)

Returns true if the given Unity Object is valid (not null).

```
public static bool BL_IsValid(Object obj)
```

Parameters

obj Object

Returns

bool

BL_SpawnByBarcode(LuaBehaviour, string, string, Vector3, Quaternion, GameObject, bool)

Spawns a crate by barcode and assigns it to a LuaBehaviour script variable. Note: Crate spawning is asynchronous, so the variable won't be valid immediately

```
public static void BL_SpawnByBarcode(LuaBehaviour LB, string VariableName, string  
SpawnBCode, Vector3 pos, Quaternion rotation, GameObject NewParent, bool Active = true)
```

Parameters

LB [LuaBehaviour](#)

VariableName string

SpawnBCode string

pos Vector3

rotation Quaternion

NewParent GameObject

Active bool

BL_SpawnByBarcode(string, Vector3, Quaternion)

Spawns a crate by barcode at the specified position and rotation.

```
public static void BL_SpawnByBarcode(string SpawnBCode, Vector3 pos, Quaternion rotation)
```

Parameters

SpawnBCode string

pos Vector3

rotation Quaternion

Class API_Input

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

```
public class API_Input
```

Inheritance

object ← API_Input

Fields

Instance

```
public static readonly API_Input Instance
```

Field Value

[API_Input](#)

Methods

BL_IsAButtonDown()

```
public static bool BL_IsAButtonDown()
```

Returns

bool

BL_IsAButtonDownOnce()

```
public static bool BL_IsAButtonDownOnce()
```

Returns

bool

BL_IsAButtonUpOnce()

```
public static bool BL_IsAButtonUpOnce()
```

Returns

bool

BL_IsBButtonDown()

```
public static bool BL_IsBButtonDown()
```

Returns

bool

BL_IsBButtonDownOnce()

```
public static bool BL_IsBButtonDownOnce()
```

Returns

bool

BL_IsBButtonUpOnce()

```
public static bool BL_IsBButtonUpOnce()
```

Returns

bool

BL_IsKeyDown(int)

```
public static bool BL_IsKeyDown(int keyCodeArg)
```

Parameters

keyCodeArg int

Returns

bool

BL_IsXButtonDown()

```
public static bool BL_IsXButtonDown()
```

Returns

bool

BL_IsXButtonDownOnce()

```
public static bool BL_IsXButtonDownOnce()
```

Returns

bool

BL_IsXButtonUpOnce()

```
public static bool BL_IsXButtonUpOnce()
```

Returns

bool

BL_IsYButtonDown()

```
public static bool BL_IsYButtonDown()
```

Returns

bool

BL_IsYButtonDownOnce()

```
public static bool BL_IsYButtonDownOnce()
```

Returns

bool

BL_IsYButtonUpOnce()

```
public static bool BL_IsYButtonUpOnce()
```

Returns

bool

BL_LeftController_IsGrabbed()

```
public static bool BL_LeftController_IsGrabbed()
```

Returns

bool

BL_LeftHand()

```
public static GameObject BL_LeftHand()
```

Returns

GameObject

BL_LeftHandEmpty()

```
public static bool BL_LeftHandEmpty()
```

Returns

bool

BL_RightController_IsGrabbed()

```
public static bool BL_RightController_IsGrabbed()
```

Returns

bool

BL_RightHand()

```
public static GameObject BL_RightHand()
```

Returns

GameObject

BL_RightHandEmpty()

```
public static bool BL_RightHandEmpty()
```

Returns

bool

Class API_Particles

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

Lua-exposed API for working with Unity particle systems and trail segments.

```
public class API_Particles
```

Inheritance

object ← API_Particles

Remarks

This API is experimental. Some functions may be unstable and cause crashes due to issues in the underlying engine or bindings.

Fields

Instance

```
public static readonly API_Particles Instance
```

Field Value

[API_Particles](#)

Methods

BL_GetParticles(ParticleSystem, int, int)

Attempts to retrieve particle data from a Unity ParticleSystem.

```
public static ParticleSystem.Particle[] BL_GetParticles(ParticleSystem system, int size, int offset)
```

Parameters

system ParticleSystem

The ParticleSystem to extract particles from.

size int

The number of particles to retrieve.

offset int

The offset index to start reading particles.

Returns

Particle[]

An array of Particle objects if successful; null otherwise. Currently known to cause crashes.

Remarks

Calling this method will result in a crash to desktop (CTD). A bug report is open with the MelonLoader team.

BL_lineRenderer_GetPositions(LineRenderer)

Attempts to retrieve line segment positions from a Unity LineRenderer.

```
public static DynValue BL_lineRenderer_GetPositions(LineRenderer LR)
```

Parameters

LR LineRenderer

The LineRenderer component to read from.

Returns

DynValue

DynValue containing the position data, or null if failed. Currently unstable.

Remarks

Calling this method will result in a crash to desktop (CTD). A bug report is open with the MelonLoader team.

CreateTrailSegmentArray(int)

```
public Vector3[] CreateTrailSegmentArray(int size)
```

Parameters

size int

Returns

Vector3[]

Class API_Physics

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

```
public class API_Physics
```

Inheritance

object ← API_Physics

Fields

Instance

```
public static readonly API_Physics Instance
```

Field Value

[API_Physics](#)

Methods

BL_BoxCast(Vector3, Vector3, Vector3, Quaternion, float, int)

```
public static DynValue BL_BoxCast(Vector3 center, Vector3 halfExtents, Vector3 direction, Quaternion orientation, float maxDistance, int layerMask = -5)
```

Parameters

center Vector3

halfExtents Vector3

direction Vector3

orientation Quaternion

maxDistance float

layerMask int

Returns

DynValue

BL_BoxCastAll(Vector3, Vector3, Vector3, Quaternion, float, int)

```
public static DynValue BL_BoxCastAll(Vector3 center, Vector3 halfExtents, Vector3 direction, Quaternion orientation, float maxDistance, int layerMask = -5)
```

Parameters

center Vector3

halfExtents Vector3

direction Vector3

orientation Quaternion

maxDistance float

layerMask int

Returns

DynValue

BL_CapsuleCast(Vector3, Vector3, float, Vector3, float, int)

```
public static DynValue BL_CapsuleCast(Vector3 point1, Vector3 point2, float radius, Vector3 direction, float maxDistance, int layerMask = -5)
```

Parameters

point1 Vector3

point2 Vector3

radius float

direction Vector3

maxDistance float

layerMask int

Returns

DynValue

BL_CapsuleCastAll(Vector3, Vector3, float, Vector3, float, int)

```
public static DynValue BL_CapsuleCastAll(Vector3 point1, Vector3 point2, float radius,
    Vector3 direction, float maxDistance, int layerMask = -5)
```

Parameters

point1 Vector3

point2 Vector3

radius float

direction Vector3

maxDistance float

layerMask int

Returns

DynValue

BL_RayCast(Vector3, Vector3)

```
public static DynValue BL_RayCast(Vector3 start_pos, Vector3 end_pos)
```

Parameters

start_pos Vector3

end_pos Vector3

Returns

DynValue

BL_RayCast(Vector3, Vector3, float)

```
public static DynValue BL_RayCast(Vector3 origin, Vector3 direction, float maxdistance  
= Infinity)
```

Parameters

origin Vector3

direction Vector3

maxdistance float

Returns

DynValue

BL_SphereCast(Vector3, Vector3, float)

```
public static DynValue BL_SphereCast(Vector3 start_pos, Vector3 end_pos, float radius)
```

Parameters

start_pos Vector3

end_pos Vector3

radius float

Returns

DynValue

BL_SphereCast(Vector3, Vector3, float, float)

```
public static DynValue BL_SphereCast(Vector3 origin, Vector3 direction, float radius, float maxdistance)
```

Parameters

origin Vector3

direction Vector3

radius float

maxdistance float

Returns

DynValue

BL_SphereCastAll(Vector3, float, Vector3, float, int)

```
public static DynValue BL_SphereCastAll(Vector3 origin, float radius, Vector3 direction, float maxDistance, int layerMask = -5)
```

Parameters

origin Vector3

radius float

direction Vector3

maxDistance float

layerMask int

Returns

DynValue

BL_SphereCastAll(Vector3, Vector3, float, int)

```
public static DynValue BL_SphereCastAll(Vector3 start_pos, Vector3 end_pos, float radius,  
int layerMask = -5)
```

Parameters

start_pos Vector3

end_pos Vector3

radius float

layerMask int

Returns

DynValue

Class API_Player

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

```
public class API_Player
```

Inheritance

object ← API_Player

Fields

Instance

```
public static readonly API_Player Instance
```

Field Value

[API_Player](#)

Methods

BL_GetAvatar()

```
public static Avatar BL_GetAvatar()
```

Returns

Avatar

BL_GetAvatarCenter()

```
public static DynValue BL_GetAvatarCenter()
```

Returns

DynValue

BL_GetAvatarGameObject()

```
public static GameObject BL_GetAvatarGameObject()
```

Returns

GameObject

BL_GetControllerRig()

```
public static ControllerRig BL_GetControllerRig()
```

Returns

ControllerRig

BL_GetPhysicsRig()

```
public static PhysicsRig BL_GetPhysicsRig()
```

Returns

PhysicsRig

BL_PlayerHealth()

```
public static Health BL_PlayerHealth()
```

Returns

Health

BL_SetAvatarPosition(Vector3, bool)

```
public static bool BL_SetAvatarPosition(Vector3 pos, bool zeroVelocity = true)
```

Parameters

pos Vector3

zeroVelocity bool

Returns

bool

BL_SetAvatarPosition(Vector3, Vector3, bool)

```
public static bool BL_SetAvatarPosition(Vector3 pos, Vector3 fwd, bool zeroVelocity = true)
```

Parameters

pos Vector3

fwd Vector3

zeroVelocity bool

Returns

bool

Class API_Random

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

```
public class API_Random
```

Inheritance

object ← API_Random

Fields

Instance

```
public static readonly API_Random Instance
```

Field Value

[API_Random](#)

Properties

Seed

```
public int Seed { get; set; }
```

Property Value

int

Methods

Bool()

```
public bool Bool()
```

Returns

bool

GetState()

```
public Random.State GetState()
```

Returns

Random.State

InitState(int)

```
public void InitState(int seed)
```

Parameters

seed int

InsideUnitCircle()

```
public Vector2 InsideUnitCircle()
```

Returns

Vector2

InsideUnitSphere()

```
public Vector3 InsideUnitSphere()
```

Returns

Vector3

OnUnitSphere()

```
public Vector3 OnUnitSphere()
```

Returns

Vector3

RangeFloat(float, float)

```
public float RangeFloat(float min, float max)
```

Parameters

min float

max float

Returns

float

RangeInt(int, int)

```
public int RangeInt(int min, int max)
```

Parameters

min int

`max` int

Returns

int

Rotation()

```
public Quaternion Rotation()
```

Returns

Quaternion

RotationUniform()

```
public Quaternion RotationUniform()
```

Returns

Quaternion

SetState(State)

```
public void SetState(Random.State state)
```

Parameters

`state` Random.State

Value()

```
public float Value()
```

Returns

float

Class API_Renderer

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

Lua-exposed API for modifying MeshRenderer materials. Supports getting, setting, and replacing materials from Lua scripts.

```
[MoonSharpUserData]  
public class API_Renderer
```

Inheritance

object ← API_Renderer

Fields

Instance

Singleton instance of the API_Renderer class.

```
public static readonly API_Renderer Instance
```

Field Value

[API_Renderer](#)

Methods

BL_GetAllMaterials(Script, MeshRenderer)

Gets all materials on the MeshRenderer as a Lua table.

```
public static Table BL_GetAllMaterials(Script script, MeshRenderer renderer)
```

Parameters

`script` Script

`renderer` MeshRenderer

Returns

Table

BL_GetMaterialAt(MeshRenderer, int)

Gets the material at the specified index (zero-based).

```
public static DynValue BL_GetMaterialAt(MeshRenderer renderer, int index)
```

Parameters

`renderer` MeshRenderer

`index` int

Returns

DynValue

BL_GetMaterialCount(MeshRenderer)

Returns the number of materials on the given MeshRenderer.

```
public static int BL_GetMaterialCount(MeshRenderer renderer)
```

Parameters

`renderer` MeshRenderer

Returns

int

BL_SetAllMaterials(MeshRenderer, Table)

Sets all materials on the MeshRenderer using a Lua table.

```
public static void BL_SetAllMaterials(MeshRenderer renderer, Table matTable)
```

Parameters

renderer MeshRenderer

matTable Table

BL_SetMaterialAt(MeshRenderer, int, Material)

Sets the material at the specified index (zero-based).

```
public static void BL_SetMaterialAt(MeshRenderer renderer, int index, Material mat)
```

Parameters

renderer MeshRenderer

index int

mat Material

Class API_SLZ_Combat

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

```
public class API_SLZ_Combat
```

Inheritance

object ← API_SLZ_Combat

Fields

Instance

```
public static readonly API_SLZ_Combat Instance
```

Field Value

[API_SLZ_Combat](#)

Methods

ApplyForce(Rigidbody, Vector3, Vector3, float)

```
public static bool ApplyForce(Rigidbody rb, Vector3 pos, Vector3 normal, float force)
```

Parameters

rb Rigidbody

pos Vector3

normal Vector3

force float

Returns

bool

BL_AttackEnemy(GameObject, float, Collider, Vector3, Vector3)

```
public static bool BL_AttackEnemy(GameObject obj, float damage, Collider col, Vector3 pos, Vector3 normal)
```

Parameters

obj GameObject

damage float

col Collider

pos Vector3

normal Vector3

Returns

bool

Class API_SLZ_NPC

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

```
public class API_SLZ_NPC
```

Inheritance

object ← API_SLZ_NPC

Fields

Instance

```
public static readonly API_SLZ_NPC Instance
```

Field Value

[API_SLZ_NPC](#)

Methods

BL_CalculatePath(Vector3, Vector3, int)

```
public static NavMeshPath BL_CalculatePath(Vector3 start_pos, Vector3 end_pos, int areaMask  
= -1)
```

Parameters

start_pos Vector3

end_pos Vector3

areaMask int

Returns

NavMeshPath

BL_SamplePosition(Vector3, float, int)

```
public static Vector3? BL_SamplePosition(Vector3 position, float maxDistance, int areaMask = -1)
```

Parameters

position Vector3

maxDistance float

areaMask int

Returns

Vector3?

BL_SetNPCAnger(GameObject, GameObject)

```
public bool BL_SetNPCAnger(GameObject NPC, GameObject Target)
```

Parameters

NPC GameObject

Target GameObject

Returns

bool

Class API_SLZ_VoidLogic

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

```
public class API_SLZ_VoidLogic
```

Inheritance

object ← API_SLZ_VoidLogic

Fields

Instance

```
public static readonly API_SLZ_VoidLogic Instance
```

Field Value

[API_SLZ_VoidLogic](#)

Methods

BL_SetMarrowEntityPoseDectoratorPose(MarrowEntityPoseDecorator, string)

```
public static bool BL_SetMarrowEntityPoseDectoratorPose(MarrowEntityPoseDecorator posedec,  
string barcode)
```

Parameters

posedec MarrowEntityPoseDecorator

barcode string

Returns

bool

Class API_Utils

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

```
public class API_Utils
```

Inheritance

object ← API_Utils

Fields

Instance

```
public static readonly API_Utils Instance
```

Field Value

[API_Utils](#)

Methods

BL_AppendToArray(object, string, object)

```
public static void BL_AppendToArray(object target, string fieldName, object value)
```

Parameters

target object

fieldName string

value object

BL_CollectionLength(ICollection)

```
public static int BL_CollectionLength(ICollection collection)
```

Parameters

collection ICollection

Returns

int

BL_ConvertObjectToType(Object, string)

```
public static DynValue BL_ConvertObjectToType(Object obj, string CompType)
```

Parameters

obj Object

CompType string

Returns

DynValue

BL_GetArrayElement(object, string, int)

```
public static DynValue BL_GetArrayElement(object target, string fieldName, int index)
```

Parameters

target object

fieldName string

index int

Returns

DynValue

BL_GetBarcode(GameObject)

```
public static string BL_GetBarcode(GameObject gameObject)
```

Parameters

gameObject GameObject

Returns

string

BL_GetSceneName()

```
public static string BL_GetSceneName()
```

Returns

string

BL_SetArrayElement(object, string, int, object)

```
public static void BL_SetArrayElement(object target, string fieldName, int index, object value)
```

Parameters

target object

fieldName string

index int

value object

RemoveDoubleSlashes(string)

```
public static string RemoveDoubleSlashes(string input)
```

Parameters

input string

Returns

string

Class API_Vector

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

```
public class API_Vector
```

Inheritance

object ← API_Vector

Fields

Instance

```
public static readonly API_Vector Instance
```

Field Value

[API_Vector](#)

Methods

BL_Vector3(float, float, float)

```
public static Vector3 BL_Vector3(float x, float y, float z)
```

Parameters

x float

y float

z float

Returns

Class BLFileAccess

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

```
public class BLFileAccess
```

Inheritance

object ← BLFileAccess

Constructors

BLFileAccess(string)

```
public BLFileAccess(string name)
```

Parameters

name string

Fields

currentLineNumber

```
protected int currentLineNumber
```

Field Value

int

relativeFileName

```
protected string relativeFileName
```

Field Value

string

Properties

LineNumber

```
public int LineNumber { get; set; }
```

Property Value

int

Methods

Close()

```
public void Close()
```

ReadLine()

```
public string ReadLine()
```

Returns

string

ReadToEnd()

```
public string ReadToEnd()
```

Returns

string

Write(string, bool)

```
public bool Write(string contents, bool append)
```

Parameters

contents string

append bool

Returns

bool

WriteLine(string, bool)

```
public bool WriteLine(string line, bool append)
```

Parameters

line string

append bool

Returns

bool

Struct EventListner

Namespace: [LuaMod.LuaAPI](#)

Assembly: LuaMod.dll

```
public struct EventListner
```

Fields

function

```
public string function
```

Field Value

string

owner

```
public LuaBehaviour owner
```

Field Value

[LuaBehaviour](#)