

# Namespace LuaMod

## Classes

[LuaBehaviour](#)

[LuaGun](#)

[LuaMod](#)

[LuaModScript](#)

[LuaResources](#)

[LuaSafeCall](#)

[ScriptManager](#)

## Delegates

[LuaModScript.del\\_postreload](#)

# 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

### CallFunctionULEvent(string, int, float, string, Object)

```
public void CallFunctionULEvent(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

# 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.SetScriptVariable\(string, DynValue\)](#) , [LuaBehaviour.GetScriptVariable\(string\)](#) ,  
[LuaBehaviour.CallFunctionULEvent\(string, int, float, string, Object\)](#) ,  
[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 LuaMod

Namespace: [LuaMod](#)

Assembly: LuaMod.dll

```
public class LuaMod : MelonMod
```

## Inheritance

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

## Inherited Members

MelonMod.OnSceneWasLoaded(int, string) , MelonMod.OnSceneWasInitialized(int, string) ,  
MelonMod.OnSceneWasUnloaded(int, string) , 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

# Class LuaModScript

Namespace: [LuaMod](#)

Assembly: LuaMod.dll

```
public class LuaModScript
```

## Inheritance

object ← LuaModScript

## Fields

### MaxScriptExecutionTime

```
protected const int MaxScriptExecutionTime = 100
```

Field Value

int

### PostReloadScript

```
public LuaModScript.del_postreload PostReloadScript
```

Field Value

[LuaModScript.del\\_postreload](#)

## 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

## ReloadScript()

```
public bool ReloadScript()
```

### Returns

bool

## ScriptIsValid()

```
public bool ScriptIsValid()
```

Returns

bool

## SetGlobal(string, object)

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

Parameters

**name** string

**val** object

# 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](#)

[API\\_Physics](#)

[API\\_Player](#)

[API\\_Random](#)

[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\_DestroyGameObject(GameObject)

Destroys the specified GameObject.

```
public static void BL_DestroyGameObject(GameObject obj)
```

Parameters

`obj` GameObject

## 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\_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

```
public class API_Particles
```

## Inheritance

object ← API\_Particles

## Fields

### Instance

```
public static readonly API_Particles Instance
```

Field Value

[API\\_Particles](#)

## Methods

### BL\_GetParticles(ParticleSystem, int, int)

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

### Parameters

**system** ParticleSystem

**size** int

**offset** int

Returns

Particle[]

## BL\_lineRenderer\_GetPositions(LineRenderer)

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

Parameters

LR LineRenderer

Returns

DynValue

## 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)

```
public static bool BL_SetAvatarPosition(Vector3 pos)
```

Parameters

**pos** Vector3

Returns

bool

## BL\_SetAvatarPosition(Vector3, Quaternion)

```
public static bool BL_SetAvatarPosition(Vector3 pos, Quaternion rot)
```

Parameters

**pos** Vector3

**rot** Quaternion

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](#)

## Methods

### BL\_RandomRange(float, float)

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

Parameters

**min** float

**max** float

Returns

float

## BL\_onUnitSphere()

```
public Vector3 BL_onUnitSphere()
```

Returns

Vector3

# 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

## GetVoidLogicManager()

```
public static VoidLogicManager GetVoidLogicManager()
```

Returns

VoidLogicManager

# 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\_CollectionLength(ICollection)

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

Parameters

**collection** ICollection

Returns

int

## BL\_ConvertObjectToType(Object, string)

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

### Parameters

**obj** Object

**CompType** string

### Returns

DynValue

## BL\_GetBarcode(GameObject)

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

### Parameters

**gameObject** GameObject

### Returns

string

## BL\_GetSceneName()

```
public string BL_GetSceneName()
```

### 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](#)