

# Motus 1 Unity Plugin

1.0.5

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# Chapter 1

## Namespace Index

### 1.1 Packages

Here are the packages with brief descriptions (if available):

<b>Motus_1_Plugin</b> . . . . .	5
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## Chapter 2

# Class Index

### 2.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

<b>Motus_1_Plugin.PluginInterface</b> . . . . .	7
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## Chapter 3

# Namespace Documentation

### 3.1 Motus\_1\_Plugin Namespace Reference

#### Classes

- class **PluginInterface**



## Chapter 4

# Class Documentation

### 4.1 Motus\_1\_Plugin.PluginInterface Class Reference

#### Static Public Member Functions

- static void **Initialize** ()

*Initialize should be called only once upon startup from the character controll script. It initializes the log file for the motus-1 plugin and sets all properties and fields to known states.*

- static void **Service** ()

*Service must be called from the Update function of the script which employs character movement. Service handles all communications with hardware device and provides movement data from the motus-1. Service also handles all logging from the various sub-modules of the plugin.*

- static Vector3 **GetXZVector** ()

*GetXZVector will return the current translation vector from the motus-1 device. Use this method to update the user's movement in game space. The XZ vector is analogous to a typical 'left' joystick type movement in a traditional gamepad control stream. The XZ vector controls forward, backward, and lateral movement of the character.*

- static Quaternion **GetCharacterRotation** ()

*GetCharacterRotation returns a quaternion representing the rotation that the character has with respect to the game space coordinate frame. GetCharacterRotation must be called in conjunction with GetXZVector to allow the user to properly orient the character and the motus-1 device within game space. If any form of steering is enabled, GetCharacterRotation also applies any steering vector to the character. Steering motion is analogous to 'right' joystick type motion in a traditional gamepad control scheme.*

- static void **OrientMotus** ()

*OrientMotus must be called at least once at the beginning of the application to orient the motus-1 hardware with the game space coordinates. This orientation will be represented in the GetCharacterRotation quaternion. Please note that the motus-1 hardware may not function correctly if OrientMotus is never called.*

- static Vector3 **GetDeviceLocationInRoomScaleCoordinate** ()

*GetDeviceLocationInRoomScaleCoordinate will return the local (room scale) offset of the motus-1 device so that you can factor that into your in-game representation of the motus-1 hardware and display it in the proper location.*

#### Public Attributes

- const string **versionInfo** = "1.0.5"

*The current version of the unity plugin.*

## Static Public Attributes

- static bool **enableHeadSteering** = false  
*Set this property to true to enable steering via the user's look rotation.*
- static bool **enableHandSteering** = false  
*Not implemented.*

### 4.1.1 Member Function Documentation

#### 4.1.1.1 GetCharacterRotation()

```
static Quaternion Motus_1_Plugin.PluginInterface.GetCharacterRotation ( ) [static]
```

GetCharacterRotation returns a quaternion representing the rotation that the character has with respect to the game space coordinate frame. GetCharacterRotation must be called in conjunction with GetZXVector to allow the user to properly orient the character and the motus-1 device within game space. If any form of steering is enabled, GetCharacterRotation also applies any steering vector to the character. Steering motion is analogous to 'right' joystick type motion in a traditional gamepad control scheme.

##### Returns

Character rotation.

#### 4.1.1.2 GetDeviceLocationInRoomScaleCoordinate()

```
static Vector3 Motus_1_Plugin.PluginInterface.GetDeviceLocationInRoomScaleCoordinate ( ) [static]
```

GetDeviceLocationInRoomScaleCoordinate will return the local (room scale) offset of the motus-1 device so that you can factor that into your in-game representation of the motus-1 hardware and display it in the proper location.

##### Returns

Room Scale position of the motus-1 platform in vector3 format.

#### 4.1.1.3 GetXZVector()

```
static Vector3 Motus_1_Plugin.PluginInterface.GetXZVector ( ) [static]
```

GetXZVector will return the current translation vector from the motus-1 device. Use this method to update the user's movement in game space. The XZ vector is analogous to a typical 'left' joystick type movement in a traditional gamepad control stream. The XZ vector controls forward, backward, and lateral movement of the character.

##### Returns

#### 4.1.1.4 Initialize()

```
static void Motus_1_Plugin.PluginInterface.Initialize ( ) [static]
```

Initialize should be called only once upon startup from the character controll script. It initializes the log file for the motus-1 plugin and sets all properties and fields to known states.

#### 4.1.1.5 OrientMotus()

```
static void Motus_1_Plugin.PluginInterface.OrientMotus ( ) [static]
```

OrientMotus must be called at least once at the beginning of the application to orient the motus-1 hardware with the game space coordinates. This orientation will be represented in the GetCharacterRotation quaternion. Please note that the motus-1 hardware may not function correctly if OrientMotus is never called.

#### 4.1.1.6 Service()

```
static void Motus_1_Plugin.PluginInterface.Service ( ) [static]
```

Service must be called from the Update function of the script which employs character movement. Service handles all communications with hardware device and provides movement data from the motus-1. Service also handles all logging from the various sub-modules of the plugin.

### 4.1.2 Member Data Documentation

#### 4.1.2.1 enableHandSteering

```
bool Motus_1_Plugin.PluginInterface.enableHandSteering = false [static]
```

Not implemented.

#### 4.1.2.2 enableHeadSteering

```
bool Motus_1_Plugin.PluginInterface.enableHeadSteering = false [static]
```

Set this property to true to enable steering via the user's look rotation.

#### 4.1.2.3 versionInfo

```
const string Motus_1_Plugin.PluginInterface.versionInfo = "1.0.5"
```

The current version of the unity plugin.

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

- C:/Users/warre/Repositories/VMUV/VMUV/Motus-1/Trunk/Software/Motus-1-Plugin/Motus-1-Plugin/PluginInterface.cs



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