



Wwise Unity Integration

Wwise Unity IntegrationUnityWwiseUnity
UnityC#Wwise SDK APIEditorWwise SDK
WwiseCHMSDK

Unity-WiseWwise APIWwise

C:\Program Files(x86)\Audiokinetic\Ww

\Authoring\Help

-
- **Unity**
- **Wwise Integration Package**
- **Wwise Unity Integration**
- **Build your Unity Game for a Target Platform**
- **WwiseUnityDLC**
- **Build the Native Integration Plug-in from Source**
- **API**
-
- **Licensing (Free & Commercial)**
- **Wwise**
- **Using UnityWwise Spatial Audio**
-

Contact Us

If you have questions about this integration, please post your questions to our [Q&A community forum](#).

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



Wwise Unity Integration

Wwise Unity Integration:

- **Wwise Unity Integration 2017.2.0.6500.947**
 - **2017.2**
 - **2017.2**
- **Wwise Unity Integration 2017.1.4.6407.845**
- **Wwise Unity Integration 2017.1.3.6377.812**
- **Wwise Unity Integration 2017.1.2.6361.791**
- **Wwise Unity Integration 2017.1.1.6340.770**
- **Wwise Unity Integration 2017.1.0.6302.726**
 - **2017.1**
 - **2017.1**
- **Wwise Unity Integration 2016.2.4.6098.531**
- **Wwise Unity Integration 2016.2.3.6077.504**
- **Wwise Unity Integration 2016.2.2.6022.430**
- **Wwise Unity Integration 2016.2.1.5995.409**
- **Wwise Unity Integration 2016.2.1**
- **Wwise Unity Integration 2016.2.0**
- **Wwise Unity Integration 2016.1.3**
- **Wwise Unity Integration 2016.1.2**
- **Wwise Unity Integration 2016.1.1**
- **Wwise Unity Integration 2016.1**
- **Wwise Unity Integration 2015.1.4**
- **Wwise Unity Integration 2015.1.3**
- **Wwise Unity Integration 2015.1.2**
- **Wwise Unity Integration 2015.1.1**
- **Wwise Unity Integration 2015.1**
- **Wwise Unity Integration 2014.1.6**
- **Wwise Unity Integration 2014.1.5**
- **Wwise Unity Integration 2014.1.4**
- **Wwise Unity Integration 2014.1.3**
- **Wwise Unity Integration 2014.1.2**
- **Wwise Unity Integration 2014.1.1**
- **Wwise Unity Integration 2014.1**
- **Wwise Unity Integration 2013.2.9**
- **Wwise Unity Integration 2013.2.8**

- **Wwise Unity Integration 2013.2.5**
- **Wwise Unity Integration 2013.2.4**
- **Wwise Unity Integration 2013.1.1**
- **Wwise Unity Integration 2013.1**

Wwise Unity Integration 2017.2.0.6500.947

Wwise 2017.2.0 Wwise SDK Unity 2017.3

- Wwise SDK: 2017.2.0
- Unity 5.5.6 2017.1 2017.2 2017.3 (Personal Pro)

 **Note:** : Unity 4

	Wwise Unity Integration
Mac Windows	Unity 2017.3.0f3
Android iOS Linux PS4 tvOS UWP (Windows) Xbox One	Unity 2017.2.0f3
Switch	Unity for Nintendo Switch 3.1.2 (Unity 5.6.4 with Nintendo SDK 3.5.2)

:

- **2017.2**

- breaking changes **2017.2**

:

- **WG-25994: C# Using the Audio Input Source Plug-in in Unity.**
- **WG-27337: MIDI Sending MIDI to Wwise.**

- **WG-28541:** AkAk
- **WG-33501:** SoundBank
- **WG-34446:** AkCallbackManager

Wwise Unity Integration 2017.1.4.6407.845

- Wwise SDK: 2017.1.4
- Unity 5.5.6 2017.1 2017.2 (Personal Pro)

 **Note:** : Unity
4

	Wwise Unity Integration
Android iOS Linux Mac PS4 PS Vita tvOS UWP (Windows) Windows Xbox One	Unity 2017.2.0f3
Switch	Unity for Nintendo Switch 3.1.2 (Unity 5.6.4 with NintendoSDK 3.5.2)

:

- **WG-35168:** Switch
- **WG-35383:** WwiseTypesID
- **WG-35384:** AkAudioListener AkInitializer AkTerminator Awake()
OnEnable() Editor **WG-35513:** AkGameObj
- **WG-35958:** Unity 2017.3 Unity 2017.3

Wwise Unity Integration 2017.1.3.6377.812

Wwise 2017.1.3 Wwise SDK Unity 2017.1

- Wwise SDK: 2017.1.3
- Unity 5.5.6 2017.1 2017.2 (Personal Pro)

 **Note:** : Unity 4

	Wwise Unity Integration
Android iOS Linux Mac PS4 PS Vita tvOS UWP (Windows) Windows Xbox One	Unity 2017.2.0f3
Switch	Switch 1.0.1 Unity (Unity 5.5.0p1 with Nintendo SDK 1.4.0)

:

- **WG-34855:** AkSoundEngine.GetCurrentLanguage()
- **WG-35075:** : Unity 2017.2 Wwise Launcher

Wwise Unity Integration 2017.1.2.6361.791

Wwise 2017.1.2Wwise SDK

- Wwise SDK: 2017.1.2
- Unity: Unity 2017.1 (PersonalPro)

 **Note:** : Unity
4

	Wwise Unity Integration
Android iOS Linux Mac PS4 PS Vita tvOS UWP (Windows) Windows Xbox One	Unity 5.6.1p1
Switch	Switch 1.0.1 Unity (Unity 5.5.0p1 with Nintendo SDK 1.4.0)

Wwise Unity Integration 2017.1.1.6340.770

Wwise 2017.1.1 Wwise SDK Unity 2017.1

- Wwise SDK: 2017.1.1
- Unity: Unity 2017.1 (PersonalPro)

 **Note:** : Unity
4

	Wwise Unity Integration
Mac Windows	Unity 2017.1.0f3
Android iOS Linux PS4 PS Vita tvOS UWP (Windows) Xbox One	Unity 5.6.1p1
Switch	Switch 1.0.1 Unity (Unity 5.5.0p1 with Nintendo SDK 1.4.0)

:

- **WG-33018:** : Decode Banks
- **WG-33818:** iOSAndroid
- **WG-34090:** WSA Unity Plugin TLS Allocator Error
- **WG-34188:** System.EventHandlerfully qualified name)
- **WG-34205:** UnityEditor.MenuUnityEditor.MenuItemfully qualified name)

Wwise Unity Integration 2017.1.0.6302.726

Wwise 2017.1.0 Wwise SDK Unity 2017.1

- Wwise SDK: 2017.1.0
- Unity: Unity 2017.1 (PersonalPro)

 **Note:** : Unity
4

	Wwise Unity Integration
Mac Windows	Unity 2017.1.0f3
Android iOS Linux PS4 PS Vita tvOS UWP (Windows) Xbox One	Unity 5.6.1p1
Switch	Switch 1.0.1 Unity (Unity 5.5.0p1 with Nintendo SDK 1.4.0)

:

- **2017.1**

- Wii U
- GameObjectUnity Integration Extensions
and Migration Guide
- AkCallbackManager **2017.1**

Wwise Installation

:

- WG-27479: **AkInitializer**
- **WG-30791:** WwiseTypes **WwiseTypes**
- **WG-31155** AkMemSettings AkChannelConfig
SoundEngine
- **WG-31735** GameObject **Unity Integration**
- **WG-32348** SoundBanksInfoXML
- **WG-32657** foreach
- **WG-33303** AK_MusicPlaylistSelect
- **WG-34003:**

Wwise Unity Integration 2016.2.4.6098.531

Wwise 2016.2.4Wwise SDK

- Wwise SDK: 2016.2.4
- Unity: Unity 5.6 (PersonalPro)

 **Note:** : Unity
4

	Wwise Unity Integration
Android iOS Linux Mac PS4 PS Vita tvOS Windows Windows Store (Windows) Xbox One	Unity 5.6.1p1
Switch	Switch 1.0.1 Unity (Unity 5.5.0p1 with Nintendo SDK 1.4.0)

:

- **WG-33395:**

Wwise Unity Integration 2016.2.3.6077.504

Wwise 2016.2.3Wwise SDK

- Wwise SDK: 2016.2.3
- Unity: Unity 5.6 (PersonalPro)

 **Note:** : Unity
4

	Wwise Unity Integration
Android iOS Linux Mac PS4 PS Vita tvOS Windows Windows Store (Windows) Xbox One	Unity 5.6.0f3
Switch	Unity for Switch 0.6.1
Wii U	Unity 5.4.2f2

:

- WG-32536: Nintendo Switch
- WG-32623: Android

Wwise Unity Integration 2016.2.2.6022.430

Wwise 2016.2.2 Wwise SDK

- Wwise SDK: 2016.2.2
- Unity: Unity 5.5 (PersonalPro)

 **Note:** : Unity
4

	Wwise Unity Integration
Android iOS Linux Mac PS4 PS Vita tvOS Windows Windows Store (Windows) Xbox One	Unity 5.5.0p4
Wii U	Unity 5.4.2f2

:

- WG-31862: enum

Wwise Unity Integration 2016.2.1.5995.409

Wwise 2016.2.1Wwise SDK

- Wwise SDK: 2016.2.1
- Unity: Unity 5.5 (PersonalPro)

 **Note:** : Unity
4

	Wwise Unity Integration
Android iOS Linux Mac PS4 PS Vita tvOS Windows Windows Store (Windows) Xbox One	Unity 5.5.0f3
Wii U	Unity 5.4.2f2

:

- WG-32006: GameObject"Unknown Game Object ID"

Wwise Unity Integration 2016.2.1

Wwise 2016.2.1Wwise SDK

- Wwise SDK: 2016.2.1
- Unity: Unity 5.5 (PersonalPro)

 **Note:** : Unity
4

	Wwise Unity Integration
Android iOS Linux Mac PS4 PS Vita tvOS Windows Windows Store (Windows) Xbox One	Unity 5.5.0f3
Wii U	Unity 5.4.2f2

:

- WG-27085: AuxSends
 - WG-31127: AK_MusicSyncUserCue
 - WG-31650: SoundEngineAkGameObjFixed
NullReferenceException
 - WG-31651: SetObjectPositionAkGameObj
 - WG-31862: enum
-
- [Unity case #861189](#): Unity Windows StoreLauncher

Wwise Unity Integration 2016.2.0

Wwise 2016.2.0Wwise SDK

- Wwise SDK: 2016.2.0
- Unity: Unity 5.4 (PersonalPro)

 **Note:** : Unity
4

	Wwise Unity Integration
Android iOS Linux Mac PS4 PS Vita tvOS Windows Windows Store (Windows) Xbox One	Unity 5.4.1p2
Wii U	Unity 5.2.4f1

-
- Windows Phone 8.1Windows Store 8.08.13
Windows StoreUniversal Windows Platform (UWP)
- Xbox 360
- PS3

:

- WG-30571: LibraryWwise Unity Integration

- WG-30960: AkGameObjUnity
- WG-31507: DurationMediaIdbStreaming

Wwise Unity Integration 2016.1.3

Wwise 2016.2.3Wwise SDK

- Wwise SDK: 2016.1.3
 - Unity: Unity 5.4 (PersonalPro)
-  **Note:** : Integration Unity 4 Unity 4Wwise
Integration Unity

	Wwise Unity Integration
Android iOS Linux Mac PS3 PS4 PS Vita tvOS Windows Windows Store Xbox One	Unity 5.4.0p2
Wii U	Unity 5.2.4f1
Xbox 360	Unity 5.0.1f1

Wwise Unity Integration 2016.1.2

Wwise 2016.1.2 Wwise SDK Wwise Unity

- Wwise SDK: 2016.1.2
- Unity: Unity 5.4 (PersonalPro)

 **Note:** : Unity
4

	Wwise Unity Integration
Android iOS Linux Mac PS3 PS4 PS Vita tvOS Windows Windows Store Xbox One	Unity 5.4.0p2
Wii U	Unity 5.2.4f1
Xbox 360	Unity 5.0.1f1

:

- WG-30567 Fixed: WAV
- SWIGzipzipSWIG
SWIG
- Wwise 2014.1.4 2016.1.2 2015.1.6

2016.1

- Unity 5.4Wwise 2016.1.2 Unity 5.4Wwise 2016.1.2

Wwise Unity Integration 2016.1.1

Wwise 2016.1.1Wwise SDK

- Wwise SDK: 2016.1.1
- Unity: Unity 5.3 (PersonalPro)

 **Note:** : Unity
4

	Wwise Unity Integration
Android iOS Linux Mac PS3 PS4 PS Vita tvOS Windows Windows Store Xbox One	Unity 5.3.5p6
Wii U	Unity 5.2.4f1
Xbox 360	Unity 5.0.1f1

:

- WG-30021: SoundBankSoundBank
- WG-30228: Linux
- WG-30231: tvOS
- WG-30259: GC.Collect [AkGameObj](#)

:

- WG-30128: VitaSoundBank

- WG-30139: Wii USoundBank

Wwise Unity Integration 2016.1

Wwise 2016.1Wwise SDK

- Wwise SDK: 2016.1
- Unity: Unity 5.3 (PersonalPro)

 **Note:** : Unity
4

	Wwise Unity Integration
Android iOS Linux Mac PS3 PS4 PS Vita Windows Windows Store Xbox One	Unity 5.3.4p3
Wii U	Unity 5.2.4f1
Xbox 360	Unity 5.0.1f1

:

- WG-25675 : WwiseSoundBankWwise Picker
"Generate SoundBanks"
- WG-27583 Fixed: UnitySoundBankUnity
SoundBank
- WG-28175 : WwiseGlobal
- WG-26011 : SceneAK Audio ListenerDefault Unity Audio
Listener

- SWIGzipzipSWIG
SWIG
- Wwise 2014.1.42016.12015.1.6
2016.1

:

- WG-30021: EditorDecodeBanks
- WG-30021: DecodeBanksSoundBankSoundBank
DecodedBanks
- WG-30128: VitaSoundBank
- WG-30139: WiiUSoundBank

Wwise Unity Integration 2015.1.4

Wwise 2016.1 Wwise SDK

- Wwise SDK: 2015.1.4
- Unity: Unity 4.6 Pro / Unity 5.2 (Personal Pro)

	Wwise Unity Integration
Android iOS Linux Mac Metro PS3 PS4 PS Vita Windows Windows Phone Xbox One	Unity 5.2.2p1
Wii U	Unity 4.3.7f1 / Wii U 2.2.5
Xbox 360	Unity 5.0.1f1

:

- WG-28412 : [AkGameObj](#) Prefab
- WG-28723 : PS4

Wwise Unity Integration 2015.1.3

Wwise 2015.1.3 Wwise SDK Universal Windows Platform

- Wwise SDK: 2015.1.3
- Unity: Unity 4.6 Pro Unity 5.2 (Personal Pro)

	Wwise Unity Integration
Android iOS Linux Mac PS3 PS4 PS Vita Windows Windows Store Apps Xbox One	Unity 5.2.2p1
Wii U	Unity 4.3.7f1 Wii U 2.2.5
Xbox 360	Unity 5.0.1f1

:

- Universal Windows Platform Windows Store Apps
- Windows Store Apps SDK 8.1
- Windows Phone 8.0
- Windows Store Apps SDK 8.0

:

- WG-25945 : WwiseUnity WwiseGlobal Wwise Unity
- WG-26011 : SceneAK Audio Listener Default Unity Audio Listener
- WG-28108 : Editor Editor

- WG-28175 : WwiseGlobal
- WG-28479 : SetupMain Camera
Setup
- WG-28526 : Unity EditorGameObjectsSoundEngine

Wwise Unity Integration 2015.1.2

Wwise 2016.1Wwise SDK

- Wwise SDK: 2015.1.2
- Unity: Unity 4.6.5 ProUnity 5.1.2p2 (Personal Pro)

	Wwise Unity Integration
Android iOS Linux Mac Metro PS3 PS4 PS Vita Windows Windows Phone Xbox One	Unity 5.2.0f3
Wii U	Unity 4.3.7f1Wii U2.2.5
Xbox 360	Unity 5.0.1f1

:

- WG-27029 : Unity GameObject
- WG-28200 : Everything(0, 0, 0)GameObject3D
L0

AkGameObj

Wwise Unity Integration 2015.1.1

Wwise 2015.1.1Wwise SDK

- Wwise SDK: 2015.1.1
- Unity: Unity 4.6.5 ProUnity 5.1.2p2 (Personal Pro)

	Wwise Unity Integration
Android iOS Linux Mac Metro PS3 PS4 PS Vita Windows Windows Phone Xbox One	Unity 5.1.2p2
Wii U	Unity 4.3.7f1Wii U2.2.5
Xbox 360	Unity 5.0.1f1

:

- WG-27977 : Unity
- WG-28030 : Wii U/Unity: Release RPLTRCNDEBUG
- WG-28042 : Unity: Wwise
- WG-28044 : Unity: Wwise
- WG-28046 : [AkInitializer](#)
- WG-28048 : Wwise ProfilerGameObject

Wwise Unity Integration 2015.1

Wwise 2015.1Wwise SDK

- Wwise SDK: 2015.1

:

- WG-25669: Wwise PickerAuto PopulateMac Editor

:

- WG-27079 Fixed: WwiseSettings.xml

Wwise Unity Integration 2014.1.6

Wwise 2014.1.6 Wwise SDK

- Wwise SDK: 2014.1.6
- Unity: Unity 4.6.5 Pro Unity 5.1.2p2 (Personal Pro)

	Wwise Unity Integration
Android iOS Linux Mac Metro PS3 PS4 PSVita Windows Windows Phone	Unity 5.0.2p3
Xbox 360	Unity 5.0.1f1
Xbox One	Unity 5.0.2p4

:

- WG-27585 Fixed: Wwise Picker Wwise
- WG-27624 Fixed: (PS3) SetListenerPosition PS3

Unity:

- Xbox One: UnitySoundEngine
- Unity 4 Windows Store Apps: `DllNotFoundException`
unity_troubleshooting

:

- WG-27585 Fixed: Wwise Picker Wwise

Wwise Unity Integration 2014.1.5

Wwise 2014.1.5 Wwise SDK

- Wwise SDK: 2014.1.5
- Unity: Unity 4.6.5 Pro Unity 5.1.2p2 (Personal Pro)

	Wwise Unity Integration
Android iOS Linux Mac Metro PS3 PS4 PSVita Windows Windows Phone	Unity 5.0.2p3
Xbox 360	Unity 5.0.1f1
Xbox One	Unity 5.0.2p4

:

- WG-25669: Wwise Picker Auto Populate Mac Editor

Unity:

- Xbox One: Unity Sound Engine
- Unity 4 Windows Store Apps: `DllNotFoundException`
`unity_troubleshooting`

:

- Android x86
- Windows Store Apps Scripting Define Symbols

:

- WG-27108 Fixed: DestroyUnity
- WG-25733 Fixed: WindowsiOS/Mac
- WG-26875 Fixed: AkMemBankLoader

Wwise Unity Integration 2014.1.4

Wwise 2017.1.1 Wwise SDK Unity 2017.1

- Wwise SDK: 2014.1.4
- Unity: Unity 4 Pro Unity 5 Personal Pro

:

- WG-26780 Fixed: WwiseUnity
- WG-26837 Fixed: AkBankManager

:

- WG-25669: Wwise Picker Auto Populate Mac Editor
- WG-25733: Windows iOS/Mac

:

- Windows Phone 8.1 Metro
- Unity 5 Wwise Unity Integration Plugin Importer API
<UNITY_PROJECT_ROOT>/Assets/Plugins

-- : Unity 4 Unity 5:

- 1.
2. Unity 4 Unity 5 Unity -- -# Unity 5 2014.1.4
Unity
3. "Start"
- 4.
5. Unity 5 Wwise Unity Integration

Wwise Unity Integration 2014.1.3

Wwise 2014.1.3Wwise SDK

- Wwise SDK: 2014.1.3

:

- WG-25669: Wwise PickerAuto PopulateMac Editor
- WG-25733: WindowsiOS/Mac

Wwise Unity Integration 2014.1.2

Wwise 2014.1.2Wwise SDK

- Wwise SDK: 2014.1.2
- Unity Editor (October XDK) Wwise SDK (November XDK) XDK Xbox One

:

- WG-26305 Fixed: Null64-bit
- WG-26337 Fixed: Mac 64-bit
- WG-26385 Fixed: AndroidWwiseUnityCPU
- WG-26395 Fixed: MSBUILDWindows Phone 8
- WG-26430 Fixed: iOSSetBasePath()

:

- WG-25669: Wwise PickerAuto PopulateMac Editor
- WG-25733: WindowsiOS/Mac

Wwise Unity Integration 2014.1.1

Wwise 2014.1.1Wwise SDK

- Wwise SDK: 2014.1.1
- Unity: 4.x 5.0

:

- Wii U
- Plug-in Registration
- Unity "Wwise Settings"Wwise
- GeneratedSoundBanksPopulate

:

- WG-26201: C# System :
- WG-25669: Wwise PickerAuto PopulateMac Editor
- WG-25733: WindowsiOS/Mac
- WG-25669: Wwise PickerAuto PopulateMac Editor
- WG-25733: WindowsiOS/Mac

Wwise Unity Integration 2014.1

Wwise 2014.1 Wwise SDK 2013.2 Wwise
Unity Integration

--

-
-
- 2013.2 Wwise Unity Integration

- Wwise SDK: 2014.1
- Unity: 4.x

--

- Android
- iOS
- Linux*
 - 32-bit
 - 64-bit
- Mac OS X (10.6)
- PS3
- PS4
- PS Vita
- Windows
 - 32-bit
 - 64-bit
- Windows 8 (Metro)
 -
 - IntelARM Windows Store App
- Windows Phone 8.0
- Xbox360
- Xbox One

:

- **Wwise**
- 2013.2 Wwise Unity Integration
- WwiseWwise Unity IntegrationUIDWwiseUnity

- **Adding New Triggers for Wwise Events**
- Wwise **AkAmbientInspector**
- AkSoundEngine
- WwiseGlobalAkListener

:

- WG-25783: Callback Manager
- WG-25677: Mac

:

- WG-25669: Wwise PickerAuto PopulateMac Editor
- WG-25733: WindowsiOS/Mac

Wwise Unity Integration 2013.2.9

Wwise 2013.2.9 Wwise SDK

-- -- :

-

- Wwise SDK: 2013.2.9
- Unity: 4.x

--

- Android
- iOS
- Linux*
 - 32-bit
 - 64-bit
- Mac OS X (10.6)
- PS3
- PS4
- PS Vita
- Windows
 - 32-bit
 - 64-bit
- Windows 8 (Metro)
 - IntelARM Windows Store App
- Windows Phone 8.0
- Xbox360
- Xbox One

:

- Windows Phone 8.0

Wwise Unity Integration 2013.2.8

Wwise 2013.2.8 Wwise SDK Wwise-Unity

--

- **Unity**
- Wwise Picker **Wwise Picker**
- Unity **Wwise Unity Integration** Wwise 2015.1
Wwise SDK

- Wwise SDK: 2013.2.8
- Unity: 4.x

--

- Android
- iOS
- Linux*
 - 32-bit
 - 64-bit
- Mac OS X (10.6)
- PS3
- PS4
- PS Vita
- Windows
 - 32-bit
 - 64-bit
- Windows 8 (Metro)
 - IntelARM Windows Store App
- Windows Phone 8.0
- Xbox360
- Xbox One

:

- Xbox One
 - PS4
 - Linux
 - * Unity Integration for LinuxWwise 2013.2.8 Linux BETA
 - Windows Phone 8.0
-
- WindowsMetroUnityScripting Define Symbol
-
- IntegrationUnity Editor
 - Integration
 - Windows IDEVisual Studio 20082010
 - WindowsMetro

Wwise Unity Integration 2013.2.5

Wwise 2013.2.5Wwise SDK

- Wwise SDK: 2013.2, 2013.2.x
- Unity: 4.x

--

- Android
- iOS
- Mac OS X (10.6)
- PS3
- PS4
- PS Vita
- Windows
 - 32-bit
 - 64-bit
- Windows 8 (Metro)
 - IntelARMWindows Store App
- Xbox 360
- Xbox One

:

- : PS4
- : PS Vita
- : Xbox One
- Android: API **AddBasePath()**/OPOSIX

:

- WG-24351: iOS:

Wwise Unity Integration 2013.2.4

Wwise 2013.2.4Wwise SDK

- Wwise SDK: 2013.2, 2013.2.x
- Unity: 4.x

--

- Windows 8 (Metro)
 - - IntelARMWindows Store App
- Windows
 - 32-bit
 - 64-bit
- Mac OS X (10.6)
- iOS
- Android
- Xbox360
- PS3

:

- Integration **Wwise > Help**
- Wwise SDKVersion.txt

:

- WG-24080: Windows APIMac APIAndroid

- Android armeabi

Wwise Unity Integration 2013.2.1

Wwise 2013.2.1Wwise SDK

- Wwise SDK: 2013.2, 2013.2.1
- Unity: 4.x3.x

--

- Windows 8 (Metro)
 - - IntelARMWindows Store App
- Windows
 - 32-bit
 - 64-bit
- Mac OS X (10.6)
- iOS
- Android
- Xbox360
- PS3

:

- Unity IntegrationUnityUnity Editor
- WwiseUnity EditorUI:
 -
 -
 - SoundBank ID C++ C#
- Unity 4Scripting Define SymbolsWindows
-
- IntegrationDemo
- Android: SoundBankAndroid Expansion Files (OBB)

:

- WG-23781: Bank
- WG-23734: WindowsMarker
- WG-23345: Unity Editor
- WG-23436: Unity:
- WG-23423: UnityGameObject
- WG-22533: Unity: API

- iOS
-

-
- **Unity**
-
- iOSXcodeAPI
- UI
- Apple
- SWIG2.0.11MacSWIGpg_compileswig

Build for iOS

Wwise Unity Integration 2013.1.1

Wwise 2016.1 Wwise SDK Integration

Wwise Unity Integration 2013.1

Wwise 2013.1 Wwise SDK Android

- Wwise SDK: 2012.2.x, 2013.1
- Unity: 3.4.x, 3.5.x, 4.x

--

- Windows 8
 - - Intel ARM Windows Store App
- Windows (32bit)
- Windows (64bit)
- Mac OS X (10.6)
- iOS
- Android
- Xbox360
- PS3

:

- Android: SoundBanksAndroid (apk) LoadBank() API
- Windows 64bit
- Windows 8

: WG-22948: PS3

- WG-22938: Mac OSX Unity Integration
- WG-22334: UnityMusic userCue
- WG-22329: Unity IntegrationPostEvent()
- WG-22255: Unity Android:
- WG-22165: 3DiOS Android
- WG-21933: AkCallbackManager.cs floatUserCue
- WG-21365: Unity iOS: iOS

- WG-22533: API

- 1UnityWindowsMac
-
- quietverbose
- Python
- IntegrationUnity

- Integration for PS3Visual Studio 2010
- Python 2.6Python 2.7.x3.x
- IntegrationUNITY_PROJECT_ROOTIntegration
UNITY_PROJECT_ROOT
Plug-in from Source
- AndroidPostprocessBuildPlayerUnity
- IntegrationDemoUnity4



Wwise Unity Integration »

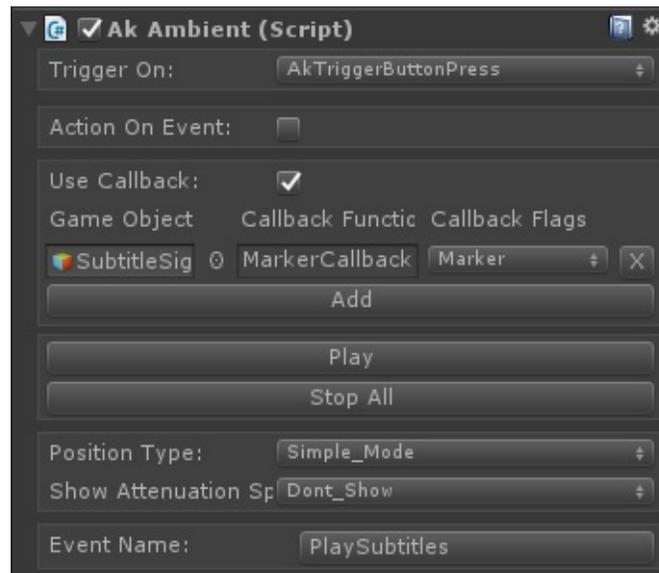
2017.2

Wwise 2017.2Unity Integration:

- **Edit Mode**
 - **Edit**
- **WwiseGlobal**
- **Wwise Audio Input**
- **MIDI**
- **Automatic SoundBank Management**

Edit Mode

WwiseUnityEditPlayWwise **AkEvent** (**AkAmbient**) The Play/Stop button plays and stops individual Events. When multiple objects that have AkEvents are selected, the Play Multiple and Stop Multiple buttons play or stop all currently selected Events. The Stop All button stops all currently playing Events.



Edit

EditAkBankLoad On:AwakeUnload On:Never

WwiseGlobal

WwiseGlobalAkEditorEventPlayerEdit

AkEventWwiseEventsWwiseGlobal

AkGameObj AkAudioListenerEdit AkEnvironment AkGameObj AkRoom

pg_installprojectchange

sect_audio_i

Audio Input Wwise Audio InputC#

Source Plug-in in Unity.

MIDI

WwiseMIDIC#

Sending MIDI to Wwise.

Automatic SoundBank Management

SoundBank **Deploying SoundBanks in single-platform projects**
 Deploying SoundBanks in multi-platform projects

Spatial Audio

UnityAPI

Wwise Unity Integration Mon Jan 8 10:46:17 2018  1.6.3



Wwise Unity Integration »

2017.2

:

Pre-2017.2:	New in 2017.2:
ErrorCode	AK.Monitor.ErrorCode
ErrorLevel	AK.Monitor.ErrorLevel
DynamicSequenceType	AK.SoundEngine.DynamicSequence.DynamicSequenceTy
MultiPositionType	AK.SoundEngine.MultiPositionType
PreparationType	AK.SoundEngine.PreparationType
RTPCValue_type	AK.SoundEngine.Query.RTPCValue_type

:

Pre-2017.2:	New in 2017.2:
Iterator	AkIterator
Playlist	AkPlaylist
PlaylistItem	AkPlaylistItem



Wwise Unity Integration »

2017.1

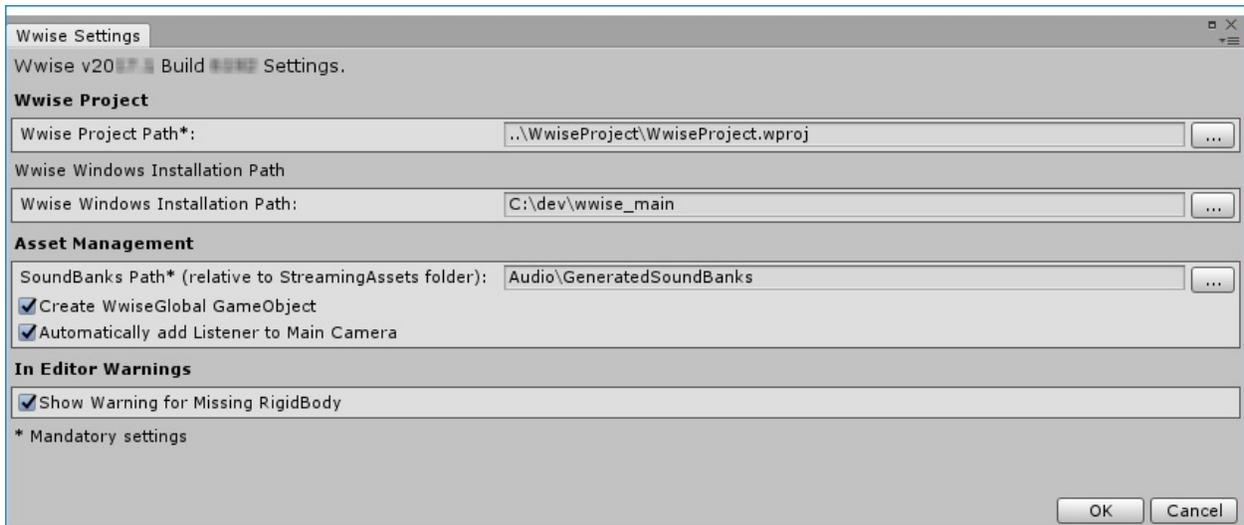
Wwise 2017.1Unity Integration:

-
- **WwiseTypes**
- **Unity Integration**
- **3D Busses**

[RequireComponent(typeof(AkGameObject))] AkEvent

AkEnvironment AkEnvironmentPortal Rigidbody
Rigidbody AkEnvironmentAkEnvironmentPortalno
Rigidbody AkGameObject"Environment aware" RigidbodyEditor :
**AkGameObject-AkEnvironment interactions require a Rigidbody
component on the object or the environment.**AkGameObject-
AkEnvironmentRigidbody

WwiseSettings Show Warning for Missing Rigidbody



WwiseTypes

"WwiseTypes"WwiseEventSwitchesStates
Wwise



:

```
public class Footsteps : MonoBehaviour
{
    [Header("Wwise Types")]
    public AK.Wwise.Event FootStepEvent = null;
    public AK.Wwise.RTPC SpeedRTPC = null;
    public AK.Wwise.Switch UnderFootMaterialSwitch =
null;
    public AK.Wwise.Bank FootStepBank = null;

    void InitializeSound() { FootStepBank.Load(); }
    void FinalizeSound() { FootStepBank.Unload(); }

    void PlayFootStepSound(float speed)
    {
        SpeedRTPC.SetValue(gameObject, speed);
        UnderFootMaterialSwitch.SetValue(gameObject)
;
        FootStepEvent.Post(gameObject);
    }
}
```

Unity Integration

AkSoundEngine Launcher

3D Busses

Wwise3D

AkAudioListener

AkGameObj

AkGameObj

AkAudioListener





Wwise Unity Integration »

2017.1

AkCallbackManager

- AkCallbackManager.AudioInterruptionCallback() h

```
public delegate AKRESULT AudioInterruptionCallba  
ck(bool in_bEnterInterruption, object in_Cookie)  
;
```

- AkCallbackManager.BGMCallback() has a new signature:

```
public delegate AKRESULT BGMCallback(bool in_bOt  
herAudioPlaying, object in_Cookie);
```

- AkCallbackManager.EventCallback() has a new signature:

```
public delegate void EventCallback(object in_coo  
kie, AkCallbackType in_type, AkCallbackInfo in_i  
nfo);
```

- AkCallbackManager [AkCallbackInfoC++](#)
- gameObjID ulong IntPtr
- AkCallbackManager.AkMidiEventCallbackInfo
[AkMIDIEventCallbackInfo](#)"MIDI"
- AkCallbackManager.AkMusicSyncCallbackInfoBase
[AkMusicSyncCallbackInfo](#)
- [AkCallbackManager.AkMusicSyncCallbackInfo.segmentInfo](#)
AkMusicSyncCallbackInfo.segmentInfo_*



Wwise Unity Integration

Unity

WwiseUnityIntegration UnityPackageUnityWwiseUnity
Editor

-
- **Wwise Integration Package**
- **Unity**
-
- **SoundBank**
-
- **Wwise Integration Package**



Wwise Unity Integration » Unity

Wwise:

Unity:

Platform	Required components
	Unity 5 PersonalPro
iOS	Xcode 4.2 or above with compatible iOS SDK
Linux	libSDL2 (See Linux)
Windows	DirectX End-User runtime

The x64 Visual Studio 2013 redistributable

Windows 32-bit Debug

The x86 Visual Studio 2013 redistributable



Wwise Unity Integration » Unity

Wwise Integration Package

Wwise Launcher

Wwise Launcher WwiseUnity

Warning:



- LauncherUnity
- WwiseUnity(Warning)
- UnityUnity

Unity Integration

Launcher

Wwise Unity Integration Mon Jan 8 10:46:17 2018  1.6.3



Wwise Unity Integration » Unity

Unity

Unity

- Edit > Project Settings > AudioDisable Audio
- "Create WwiseGlobal GameObject""Wwise Global"Wwise
The WwiseGlobal object is also given AkEditorEventPlayer, **AkAudioListener** and **AkGameObj** scripts which are used for previewing **AkEvent** objects in edit mode. A Rigidbody component is added such that interactions between **AkEnvironment**, **AkRoom** and **AkGameObj** can also be previewed.
- Script Execution OrderWwise (**AkInitializer**, **AkGameObj**, **AkAudioListener**, **AkBank**, **AkTerminator**)
- "Add Ak Listener to Main Camera"Audio Listener
Main Camera AkAudioListene
- Play in BackgroundWwise Profiler



Wwise Unity Integration » Unity

WwiseWwiseSoundBankWwise

1. WAVWindows Explorer1Project ExplorerAudio
Sound1
2. EventSound New Event
3. SoundBankSoundBanksF7New
4. EventSoundBankEventProject ExplorerSoundBank
5. Generate SoundBanks

Unity

1. **Wwise Picker** (**Window > Wwise Picker**)Event
SoundBank
2. SoundBank
3. Event
- 4.

UnityWwiseUnity

- **AkAmbient**
- **AkBank** SoundBank
- **AkEnvironment** Collider
-

-- Wwise API2

- **WWISE**
- **AK::SOUNDENGINE**



Wwise Unity Integration » Unity

SoundBank

Unity EditorSoundBankWwise

GeneratedSoundBanks

Unity1

...SoundBank

WwiseSoundBankTo avoid packaging the
SoundBanks for all platforms with your game, you should enable the
automatic generation of SoundBanks or use a [BuildPlayerPipeline](#) script.
:
Build your Unity Game for a Target Platform.

Wwise Unity IntegrationMon Jan 8 10:46:17 2018

 1.6.3



Wwise Unity Integration » Unity

WwiseUnitySoundBank

:

- Wwise.
- SoundBank
- Unity
- SoundBank *StreamingAssetsEditor*
- Editor

Note: Unity

- Wwise Compressor
- Wwise Delay
- Wwise Expander
- Wwise Gain
- Wwise Matrix Reverb
- Wwise Meter
- Wwise Parametric EQ
- Wwise Peak Limiter
- Wwise RoomVerb
- Wwise Silence
- Wwise Sine
- Wwise Tone Generator



WwiseUnity

Creating New Plug-ins

Wwise (McDSP, iZotope, Auro, SoundSeed, Crankcase REV, Convolution Reverb, Motion)



Wwise Unity Integration » Unity

Wwise Integration Package

Warning:

- UnityUnity
- UnityUnity
- WwiseUnity(Warning)
- C++ AkSoundEngineC++ Wwise SDK C++
Wwise Integration Package



Wwise IntegrationUnity
Integration Package

IntegrationWwise LauncherWwise
Integration

Wwise
UnityWwise



Warning: Wwise IntegrationWwise

2WwiseUnity

WwiseWwise

1. UnityWwise IntegrationWwise
2. Wwise Project
3. Wwise'Yes'
4. Wwise SoundBankUnityWwiseOnce completed, make sure to regenerate your Wwise SoundBanks to be ready to carry on with your work after updating the Unity project to the new Wwise version.

UnityWwise

UnityWwiseWwise Launcher

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



Wwise Unity Integration

Wwise Integration Package

Wwise Integration PackageUnityAssets/Wwise
Wwise

Wwise Unity IntegrationMon Jan 8 10:46:17 2018

 1.6.3



Wwise Unity Integration

Wwise Unity Integration

- **AkAmbient** Use this component to attach a Wwise Event to any object in a scene. The sound can be started at various moments, dependent on the selected Unity trigger. This component is more useful for ambient sounds (sounds related to scene-bound objects) but could also be used for other purposes. Since **AkAmbient** has **AkEvent** as its base class, it features the play/stop, play multiple, stop multiple and stop all buttons for previewing the associated Wwise event. . **AkAmbientInspector**
- **AkAudioListener**
Add this script on the game object that represent a listener. This is normally added to the Camera object or the Player object, but can be added to any game object when implementing 3D busses.
`isDefaultListener` determines whether the game object will be considered a default listener - a listener that automatically listens to all game objects that do not have listeners attached to their `AkGameObjectListenerList`'s.
- **AkBank**
Loads and unloads a SoundBank at a specified moment. Vorbis sounds can be decompressed at a specified moment using the decode compressed data option. In that case, the SoundBank will be prepared.
- **AkEmitterObstructionOcclusion**
Obstructs/Occludes the emitter of the current game object from its listeners if at least one object is between them.
- **AkEnvironment**
Use this component to define a reverb zone. This needs to be added to a collider object to work properly. **AkEnvironment**
AkEnvironmentPortalInspector (Reverb Zones) .
- **AkEnvironmentPortal**
Use this component to define an area that straddles two different AkEnvironments zones and allow mixing between both zones.
AkEnvironmentAkEnvironmentPortalInspector (Reverb Zones) .
- **AkEvent**
Wwise EventUnityHelper

- **AkGameObj**
This component represents a sound object in your scene tracking its position and other game syncs such as Switches, RTPC and environment values. You can add this to any object that will emit sound, and it will be added to any object that an **AkAudioListener** is attached to. Note that if it is not present, Wwise will add it automatically, with the default values, to any Unity Game Object that is passed to Wwise.
- **AkRoom**
An **AkRoom** is an enclosed environment that can only communicate to the outside/other rooms with AkRoomPortals.
- **AkRoomPortal**
An **AkRoomPortal** can connect two **AkRoom** components together.
- **AkRoomPortalObstruction**
Obstructs/Occludes the spatial audio portal of the current game object from the spatial audio listener if at least one object is between them.
- **AkSpatialAudioEmitter**
Add this script on the GameObject which represents an emitter that uses the Spatial Audio API.
- **AkSpatialAudioListener**
Add this script on the game object that represent a listener. This is normally added to the Camera object or the Player object, but can be added to any game object when implementing 3D busses.
`isDefaultListener` determines whether the game object will be considered a default listener - a listener that automatically listens to all game objects that do not have listeners attached to their `AkGameObjListenerList`'s.
- **AkState**
This will call `AkSoundEngine.SetState()` whenever the selected Unity event is triggered. For example this component could be set on a Unity collider to trigger when an object enters it.
- **AkSurfaceReflector**
This component will convert the triangles of the GameObject's geometry into sound reflective surfaces.
- **AkSwitch**
This will call `AkSoundEngine.SetSwitch()` whenever the selected Unity event is triggered. For example this component could be set on a Unity collider to trigger when an object enters it.

:

Wwise Picker

:

- **AK.Wwise.AuxBus**
This type represents an auxiliary send in the Master-Mixer Hierarchy.
- **AK.Wwise.Bank**
This type can be used to load/unload SoundBanks.
- **AK.Wwise.CallbackFlags**
This type represents the values of the flags used when posting an **Event** with a callback.
- **AK.Wwise.Event**
This type can be used to post Events to the sound engine.
- **AK.Wwise.RTPC**
This type can be used to set game parameter values to the sound engine.
- **AK.Wwise.State**
This type can be used to set Wwise States.
- **AK.Wwise.Switch**
This type can be used to set **Switch** values on gameobjects.
- **AK.Wwise.Trigger**
This type can be used to post triggers to the sound engine.

:

Wwise Types

Wwise

3

- **Wwise Picker** EventWwise PickerUnity Viewer
InspectorAkAmbientGame Object
- **Add Component** AkAmbientAkEventUnity Game
Object
- **Wwise Types** `AK.Wwise.Event.Post()` C#
- `AKSoundEngine::SetGameObjectAuxSendValues()`C#

AkAmbientInspector

- **AkAmbient:**
 - **Trigger On:**

Provides a list of Unity events that can trigger your event.
AkSoundEngine.PostEvent

Adding New Triggers for Wwise Events
 - **Event Name:**

Specifies the name of the current event.
Ok Wwise Picker
 - **Action On Event:**

Enables users to override some event parameters defined in Wwise directly from Unity.

 - *Action On Event Type:*

Overrides the event type.
 - *Curve Interpolation:*

Overrides the interpolation curve.
 - *Fade Time:*

Overrides the sound's fade time.
 - **Use Callback:**

Provides an easy way to make a game object react to an event callback.

 - *Game Object:*

The game object that will receive the callback.
 - *Callback Function:*

This is the function that will get called by *Game Object* when the callback happens.
Function

For this to work, *Game Object* must define *Callback Function* in one of its components.
The function's definition must be **void**
FunctionName(AkEventCallbackMsg in_info).
 - *Callback Flags:*

Select a flag which specifies when *Callback Function* will be called.
 - **Play / Stop:**

Can be used to preview the Wwise Event when in Edit mode.

- **Stop All:**
Stops all currently playing Wwise events.
- **Position Type:**
Defines the way the event's position will be sent to the audio engine.
 - *Simple_Mode:*
The event's position will be the same as the game object to which it's attached.
 - *Large_Mode:*
The event can have multiple positions that are defined by a set of points. **AkAmbient Tool BarAdd**
 - *MultiPosition_Mode:*
This mode enables us to have only one instance of a sound for all instances of **AkAmbient** using the same event **in order to save memory**.
All **AkAmbient** instances that are using this mode and that have the same event will automatically get detected and the same sound instance will be used for all of them instead of loading the same sound multiple times.
Note that all **AkAmbient** instances in this mode and with the same event will have the same trigger (see *Trigger On* in **AkEvent**). 1AkAmbient
 - **Show Attenuation Sphere:**
Shows a sphere that defines the space where the sound played by an event can be heard.
For this to work you need to enable *Max Attenuation* in the SoundBank settings in your Wwise project (Project->Project Settings->Soundbanks->Max attenuation)
 - *Dont_Show:*
No attenuation sphere is shown.
 - *Current_Event_Only:*
Shows the attenuation spheres for all the sounds that would be played after a call to `AkSoundEngine.PostEvent` while in the current mode.
If in *Simple_Mode*, then only the attenuation sphere of the sound coming from the game object is shown.
if in *Large_Mode*, then an attenuation sphere is shown

for each point.

If in *MultiPosition_Mode*, then an attenuation sphere is shown for every other **AkAmbient** in *MultiPosition_Mode* with the same event.

- *All_Events*:
Shows the attenuation sphere of all **AkAmbient** instances in the scene.

Using Wwise with Unity Timeline

For Unity's Timeline feature, there are custom Wwise tracks for triggering Wwise events and setting Wwise RTPC values.

:

Wwise Timeline Integration

AkEnvironmentAkEnvironmentPortalInspector (Reverb Zones)

WwiseReverb Zone Environment Auxiliary Sends
Wwise

AkEnvironmentAkEnvironmentColliderTo add an
AkEnvironment to your scene:

- **Using the Wwise Picker.** This is the simplest way to add an **AkEnvironment**. AuxBusWwise PickerUnity ViewerInspector AkAmbientGame Object
- **"Add Component"** AkEnvironmentUnity Game ObjectInspector
- **Using scripts.** You can call `AkSoundEngine.SetGameObjectAuxSendValues()` at any time from a C# script.

2

This is useful if a game object is standing between two rooms or in a tunnel connecting two environments.

- To add an environment portal to your project, go to GameObject->Wwise->Environment Portal in Unity's menu bar.

AkGameObj

AkEnvironmentPortal objects will automatically detect **AkEnvironment** objects that overlap it. Inspector2

Wwise4Those 4 environments are selected as follows:

- The environments that are connected to a portal and that have the highest priority are selected until we reach 4 environments or until there are no more environments connected to a portal.
- If we still don't have 4 selected environments, we select the environments that are not connected to a portal as follows:
 - Environments with the highest priority will be selected until we reach 4 environments (if the *Default* and *Exclude Others* flags

are not set).

- *Default*
- *Exclude Others*

- **AkEnvironment** component:

Only 4 environments can be active at the same time.

- **Priority:**

Defines the priority of an environment.

A smaller number has a higher priority.

If a game object is inside more than 4 environments, only the 4 environments with the highest priority will be active (if the *Default* and *Exclude Others* flags are not set).

- **Default:**

A default environment will be active only if it's the only environment containing your game object.

If your game object is inside more than one default environment, then only the one with the highest priority will be active.

- **Exclude Others:**

An environment with this flag can't be overlapped by other environments.

If your game object is inside an environment with the *Exclude Others* flag, then all other environments will get discarded.

If your game object is inside more than one environment with the *Exclude Others* flag, only the one with the highest priority will be active.

- **AuxBus Name:**

Specifies the name of the current AuxBus. AuxBusAuxBus

AuxBusAuxBus

AuxBus Wwise PickerAuxBus

- **AkEnvironmentPortal** component:

You can create an environment portal in Unity by going to GameObject->Wwise->Environment Portal.

You can place an environment portal between two environments to combine their effects while your game object is inside the portal.

The closer the game object is from an environment, the more that environment will contribute towards the final effect.

- **Environment #1:**

The portal will automatically detect all environments that intersect the portal.

- **Environment #2:**

The portal will automatically detect all environments that intersect the portal.

- **Axis:**

The axis is used to find the contribution of each environment. For example, if the z axis is chosen, then moving along the x axis won't have any effect on the contribution of each environment. Z

Note that the axis is in object space. So, rotating the portal will also rotate the axis.

:

- [Integrating Environments and Game-defined Auxiliary Sends](#)
- [AK::SoundEngine::SetGameObjectAuxSendValues](#)

Using C# code to control the sound engine

Most Wwise SDK functions are available in Unity through the AkSoundEngine class. C++ AK::SoundEngine AK::MusicEngine SDKAPI pg_limitations WwiseAPI GameObjectID GameObjectUnityAkGameObj GameObject

EventBankID

Wwise APIIDWwiseC# Wwise_IDS.h Wwise_IDS.cs **Assets > Wwise > Convert Wwise SoundBank IDsPython**

Sending MIDI to Wwise.

MIDI can be sent to Wwise by filling the AkMIDIPost members of AkMIDIPostArray class and calling any of the following methods:

- AkMIDIPostArray.PostOnEvent()
- AkSoundEngine.PostMIDIOnEvent()
- **AK.Wwise.Event.PostMIDI()**

The following is a basic script that sends MIDI messages to the sound engine:

```
public class MyMIDIBehaviour : UnityEngine.MonoBehaviour
{
    public AK.Wwise.Event SynthEvent;

    private void Start()
    {
        AkMIDIPostArray MIDIPostArrayBuffer = new AkMIDIPostArray(6);
        AkMIDIPost midiEvent = new AkMIDIPost();
    }
}
```

```

midiEvent.byType = AkMIDIEventTypes.NOTE_ON;
midiEvent.byChan = 0;
midiEvent.byOnOffNote = 56;
midiEvent.byVelocity = 127;
midiEvent.uOffset = 0;
MIDIPostArrayBuffer[0] = midiEvent;

midiEvent.byOnOffNote = 60;
MIDIPostArrayBuffer[1] = midiEvent;

midiEvent.byOnOffNote = 64;
MIDIPostArrayBuffer[2] = midiEvent;

midiEvent.byType = AkMIDIEventTypes.NOTE_OFF
;
midiEvent.byOnOffNote = 56;
midiEvent.byVelocity = 0;
midiEvent.uOffset = 48000 * 8;
MIDIPostArrayBuffer[3] = midiEvent;

midiEvent.byOnOffNote = 60;
MIDIPostArrayBuffer[4] = midiEvent;

midiEvent.byOnOffNote = 64;
MIDIPostArrayBuffer[5] = midiEvent;

    SynthEvent.PostMIDI(gameObject, MIDIPostArrayBuffer);
    }
}

```

Using the Audio Input Source Plug-in in Unity.

The audio input source plug-in can be used via C# scripting. See [Audio Input Source Plug-in from the Wwise SDK documentation](#).

The following is a basic script that sends a test tone to the audio input

source plug-in:

```
public class MyAudioInputBehaviour : UnityEngine.MonoBehaviour
{
    public AK.Wwise.Event AudioInputEvent;
    public uint SampleRate = 48000;
    public uint NumberOfChannels = 1;
    public uint SampleIndex = 0;
    public uint Frequency = 880;
    private bool IsPlaying = true;

    bool AudioSamplesDelegate(uint playingID, uint channelIndex, float[] samples)
    {
        for (uint i = 0; i < samples.Length; ++i)
            samples[i] = UnityEngine.Mathf.Sin(Frequency * 2 * UnityEngine.Mathf.PI * (i + SampleIndex) / SampleRate);

        if (channelIndex == NumberOfChannels - 1)
            SampleIndex = (uint)(SampleIndex + samples.Length) % SampleRate;

        // Return false to indicate that there is no more data to provide. This will also stop the associated event.
        return IsPlaying;
    }

    void AudioFormatDelegate(uint playingID, AkAudioFormat audioFormat)
    {
        audioFormat.channelConfig.uNumChannels = NumberOfChannels;
        audioFormat.uSampleRate = SampleRate;
    }
}
```

```

private void Start()
{
    AkAudioInputManager.PostAudioInputEvent(AudioInputEvent, gameObject, AudioSamplesDelegate, AudioFormatDelegate);
}

// This method can be called by other scripts to stop the callback
public void StopSound()
{
    IsPlaying = false;
}

private void OnDestroy()
{
    AudioInputEvent.Stop(gameObject);
}
}

```

Apply Custom Positioning in Unity

By default, the **AkGameObj** component is attached to a specific Unity `gameObject` and uses its transform (with an optional offset) for full positioning. This is usually adequate for many games, such as first-person shooters. However, games with custom camera angles, such as many third-person games, may find it difficult to accommodate the two aspects of positioning (distance attenuation and spatialization) by simply attaching the audio listener to one game object, such as the main camera in Unity. Other games may want players to experience other custom positioning.

To this end, the **AkGameObj** component class provides overridable positioning to Unity users. Through the three virtual methods `GetPosition()`, `GetForward()`, and `GetUpward()`, users can derive a subclass from **AkGameObj** and use that subclass component to customize any number of Unity `gameObjects`' positioning.

Here is a simple example of how to use a custom component to override the default **AkAudioListener** behavior. With a third-person project integrated with Wwise, remove the existing **AkAudioListener** and its associated **AkGameObj**. Then attach the following script to the MainCamera object, attach **AkAudioListener**, and finally specify the target Unity `gameObject` (such as the player avatar) that the audio listener's position will follow. After this, the distance attenuation of all the emitters will rely on the selected target Unity `gameObject`'s position as the listener position (an on-screen distance listener), while the orientation of all the emitters is still based on the main camera orientation as the listener orientation (an off-screen orientation listener).

```
#if !(UNITY_DASHBOARD_WIDGET || UNITY_WEBPLAYER || U
UNITY_WII || UNITY_WIIU || UNITY_NACL || UNITY_FLASH
|| UNITY_BLACKBERRY) // Disable under unsupported pl
atforms.

//
// Copyright (c) 2017 Audiokinetic Inc. / All Rights
Reserved
//

using UnityEngine;
using System;
using System.Collections.Generic;

[AddComponentMenu ("Wwise/AkGameObj3rdPersonCam")]
[ExecuteInEditMode] //ExecuteInEditMode necessary to
maintain proper state of isStaticObject.
public class AkGameObj3rdPersonCam : AkGameObj
{
    public Transform target; // The posit
ion that this camera will be following. User can spe
cify this to the player character's Unity gameObject
in the Inspector.
```

```
    // Sets the camera position to the player's position to handle distance attenuation.
    public override Vector3 GetPosition ()
    {
        return target.GetComponent<AkGameObj> ().GetPosition ();
    }
}
#endif // #if !(UNITY_DASHBOARD_WIDGET || UNITY_WEBPLAYER || UNITY_WII || UNITY_WIIU || UNITY_NACL || UNITY_FLASH || UNITY_BLACKBERRY) // Disable under unsupported platforms.
```



Wwise Unity Integration » Wwise Unity Integration

Wwise Picker

Wwise PickerWwiseEventSwitchWwise Picker
Wwise SettingsMenu **Edit > Wwise Settings...**Wwise
Unity

WwiseWwise Picker Wwise Picker
Refresh ProjectWwiseSoundBankXML

Wwise PickerWwise Picker

+-

SoundBank

SoundBank Generate SoundBanksSoundBankWwise
PickerSoundBankWwiseUnity:
WwiseUnity: SoundBanks generation successfulWwiseUnity: SoundBanks
generation has warning(s) WwiseUnity: SoundBanks generation
error ConsoleSoundBank



Note: Wwise SettingsWwise Windows Installation Path Mac
Wwise ApplicationUnity Generate SoundBanksWwiseUnity

Wwise Picker

Wwise PickerGame ObjectInspector

:

- Event **AkAmbient**
- SoundBank **AkBank.**
- Switch Value **AkSwitch**
- State Value **AkState**
- Aux Bus **AkEnvironment**

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



Wwise Unity Integration » Wwise Unity Integration

Wwise Types

Wwise Types
WwiseSoundBanksEvents
StatesSwitchesWwise TypesEvent

Wwise Types:

```
public class WwiseTypesExample : UnityEngine.MonoBehaviour
{
    public AK.Wwise.Bank MyBank = null;
    public AK.Wwise.Event MyEvent = null;
    public AK.Wwise.RTPC MyRTPC = null;

    public void Awake()
    {
        MyBank.Load();
    }

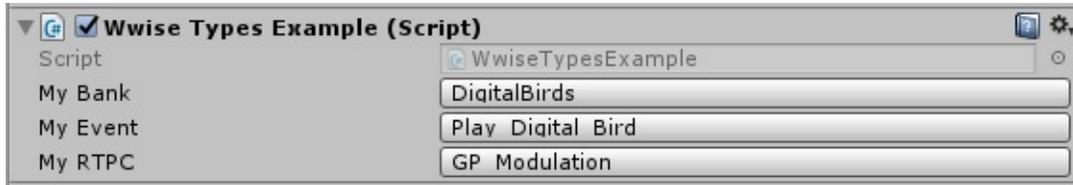
    public void Start()
    {
        MyEvent.Post(gameObject);
    }

    private float CalculateMyValue()
    {
        return (float)System.Math.Sin(System.Math.PI
* UnityEngine.Time.timeSinceLevelLoad);
    }

    public void Update()
    {
        MyRTPC.SetValue(gameObject, CalculateMyValue
());
    }
}
```

```
}
```

inspector:

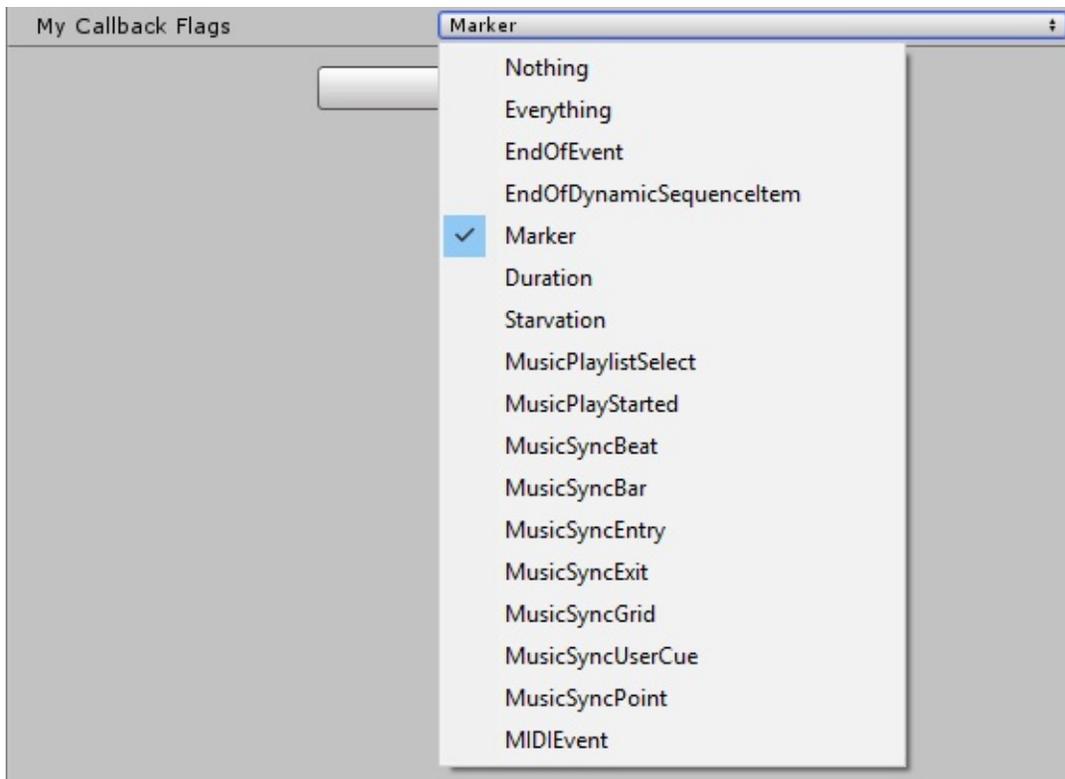


WwiseTypesExampleMarker callbacks

```
public AK.Wwise.CallbackFlags MyCallbackFlags = null
;

public void Start()
{
    MyEvent.Post(gameObject, MyCallbackFlags, EventC
allback);
}

private void EventCallback(object cookie, AkCallback
Type type, AkCallbackInfo info)
{
    if (type == AkCallbackType.AK_Marker)
    {
        var markerInfo = info as AkMarkerCallbackInf
o;
        if (markerInfo != null)
        {
            // ...
        }
    }
}
```





Wwise Unity Integration » Wwise Unity Integration

Adding New Triggers for Wwise Events

In most of Wwise components for Unity, there is a "Trigger On" property from which you can select which Unity notification/event will trigger the Wwise component (Event, Switch, State, etc). Unity Integration

```
AkTriggerBaseC#AkTriggerBase"Trigger On"  
    triggerDelegate(GameObject in_target)"target"  
ColliderWwiseColliderPost  
  
GetComponent<YourTriggerClass>  
().triggerDelegate(GameObject in_target)
```

 **Note:** Currently the maximum number of derivative classes of **AkTriggerBase** is 32.

Here is an example, with a custom function:

```
public class TriggerOnGunHit : AkTriggerBase  
{  
    void Hit()  
    {  
        if(triggerDelegate != null)  
        {  
            triggerDelegate(null);  
        }  
    }  
}
```

From your game code, you could have this code:

```
if (playerIsShot)  
{  
    GetComponent<TriggerOnGunHit>().Hit();  
}
```

TriggerOnGunHitWwiseNote that in many simple situations, this is completely superfluous; you could also simply call the base Wwise SDK through `AkSoundEngine.PostEvent("GunHit", gameObject)` and let the sound designer handle the effect of this event in Wwise.



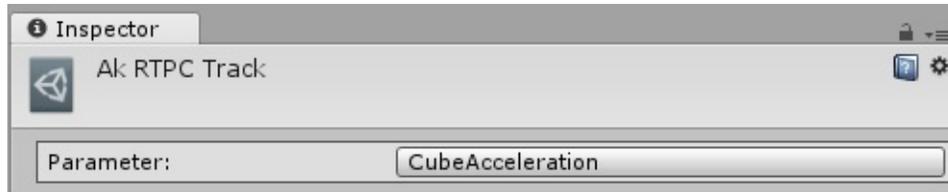
Wwise Unity Integration » Wwise Unity Integration

Wwise Timeline Integration

Timeline is Unity's cinematic editing tool. It can be used to create game-play sequences, audio sequences, and other cinematic content.

For more information on Timeline refer to [Timeline Docs](#).

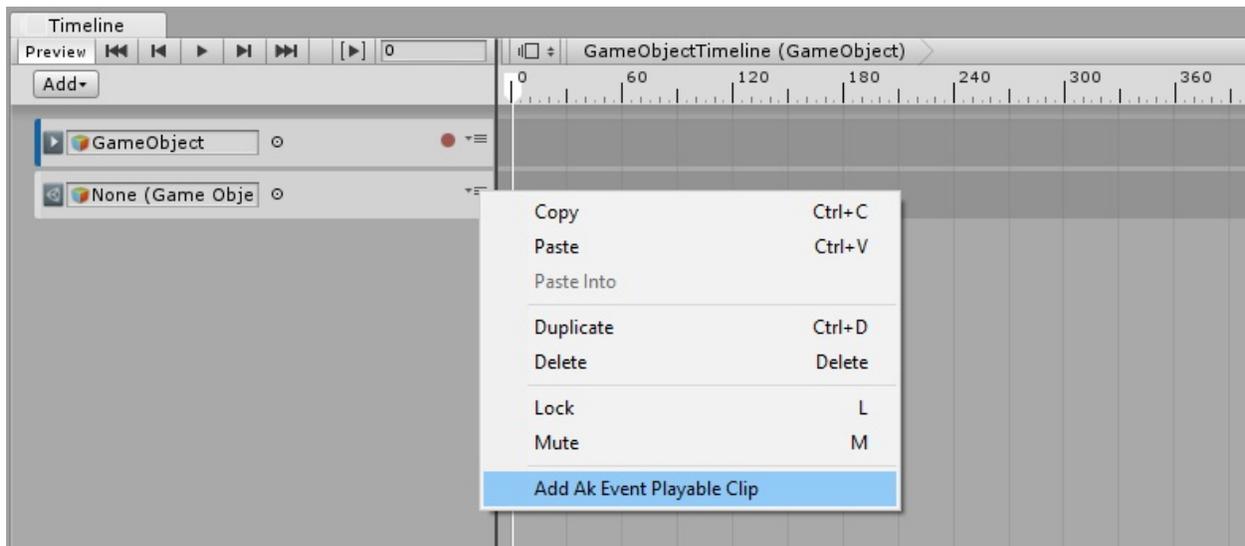
For instructions on how to create a Timeline Asset and Timeline instance, refer to [Timeline Usage](#).



RTPC Track Parameter Property

Wwise Timeline Playable Clips

The **AkEvent** track and the **AkRTPC** tracks each hold corresponding clips: the **AkEventPlayable** clip and the **AkRTPCPlayable** clip. These can be added to a track using the track's menu.



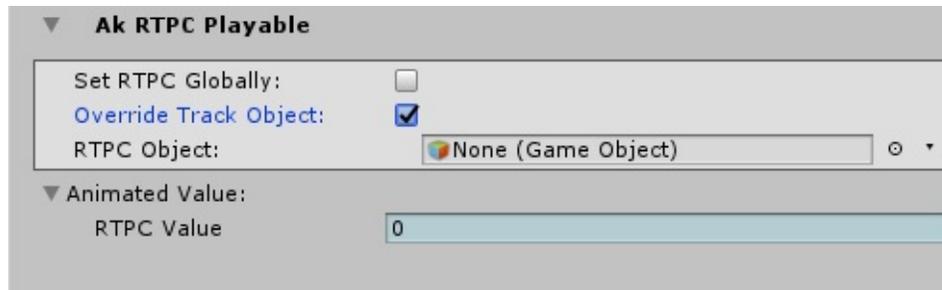
Adding AK clips to AK tracks

Timeline Clip Properties

All clips in Timeline have timing properties that are displayed in the top portion of the inspector. For more information on these properties, refer to [Clip Properties](#).

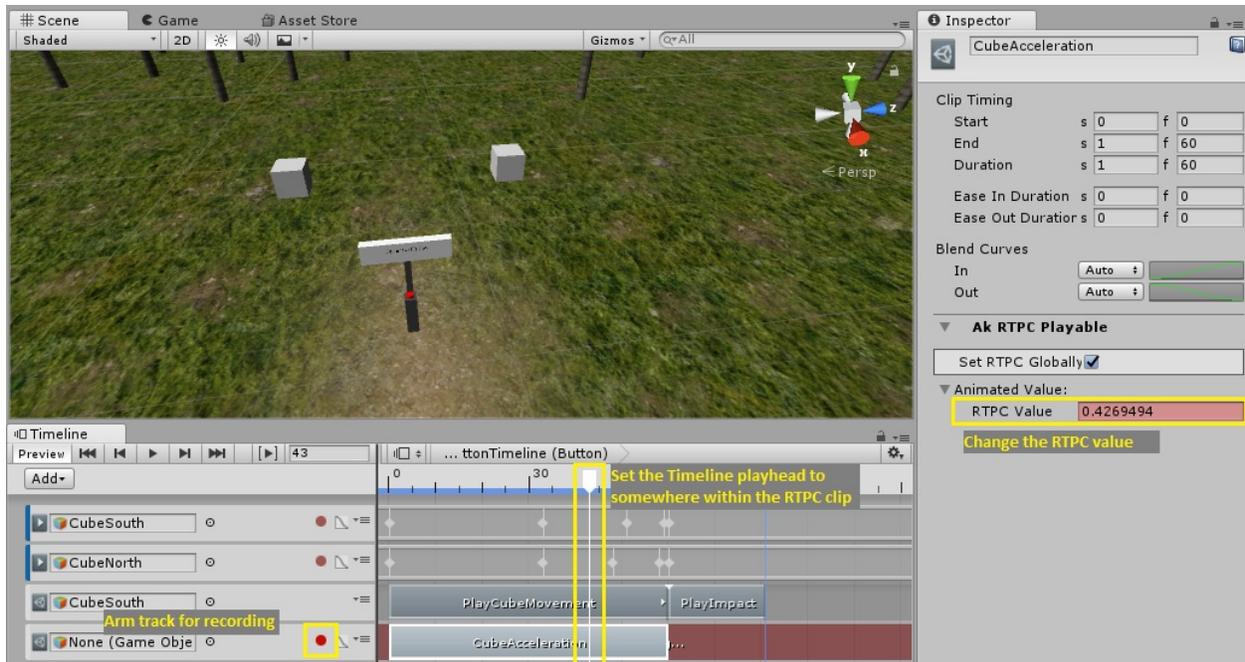
AkRTPCPlayable Clip Properties

The following properties are accessible from the inspector of an **AkRTPCPlayable** clip:



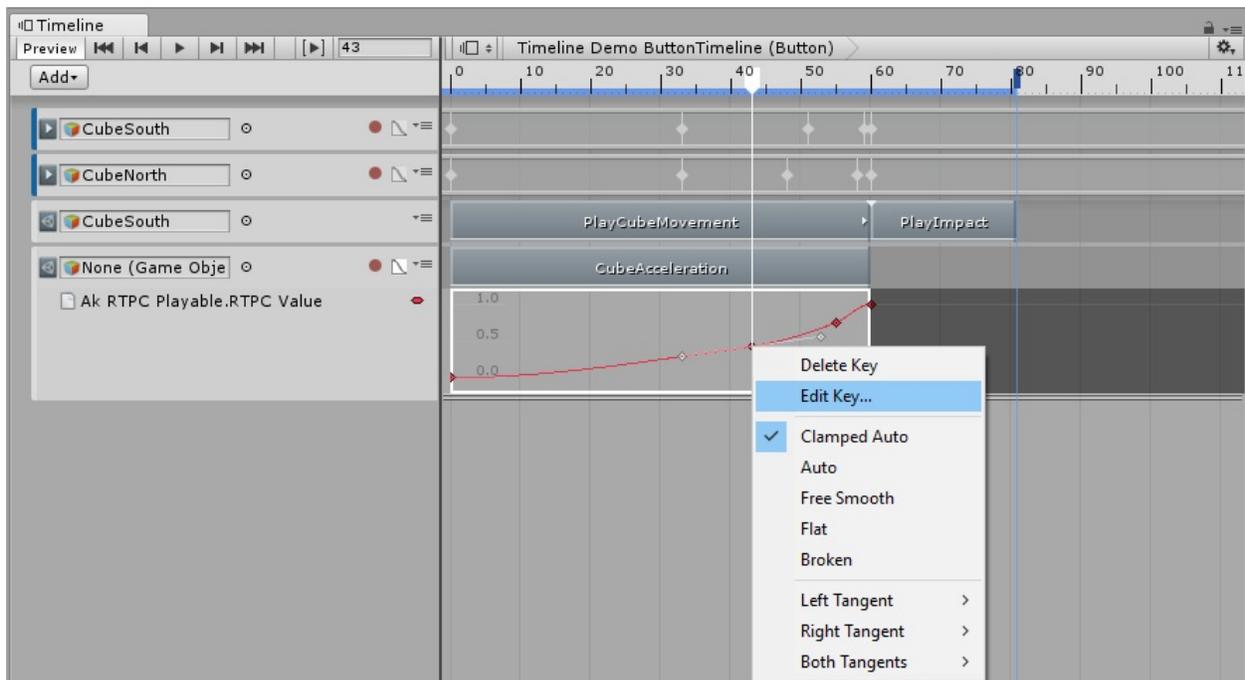
AkRTPCPlayable Clip Properties

- **Set RTPC Globally:** If this is checked, the RTPC will be set globally for all objects.
- **Override Track Object:** If this is checked, the RTPC will be set for the selected Game Object in the RTPC Object property (only available when **Set RTPC Globally** is unchecked).
- **RTPC Object:** The Game Object for which the RTPC will be updated. If this is set to **None**, the RTPC will be set on the track object (or the Timeline's owner object if the track object is set to **None**). This is only available when **Override Track Object** is checked.
- **Animated Value: RTPC Value:** This is the value that will be animated by the RTPC track. In order to begin animating this value you need to arm the track for recording, set the playhead to somewhere within the RTPCPlayable clip, and then edit the value from the property inspector.

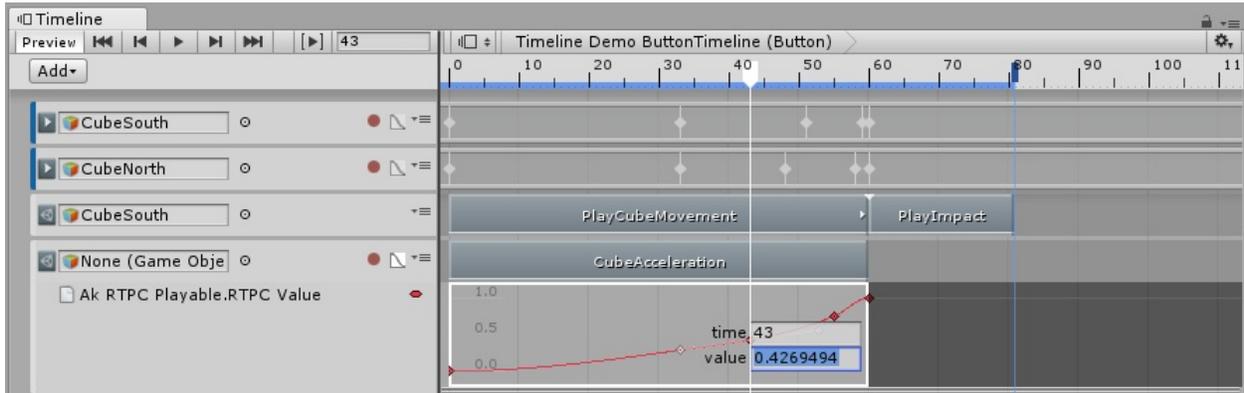


Animating RTPC Values from Timeline

Following these steps will insert a keyframe into the RTPC track, below the RTPC clip. You can then use this Unity curve editor to add more keyframes. The keyframes have a context menu that can be used for more precise values.



RTPC Keyframe Context Menu



Editing RTPC Keyframe Values

AkEventPlayable Clip Properties

The following properties are accessible from the inspector of an **AkEventPlayable** clip:



AkEventPlayable Clip Properties

- **Override Track Object:** This can be checked in order to have the Event emitted from a specific Game Object, different to the track binding object. This will also override the Timeline owner object if the track binding is set to None (see [Ak Track Object Bindings](#)).
- **Emitter Object Ref:** The Game Object from which the Event should be emitted (only available when **Override Track Object** is checked).
- **Event:** The Wwise Event that will be triggered from this clip.

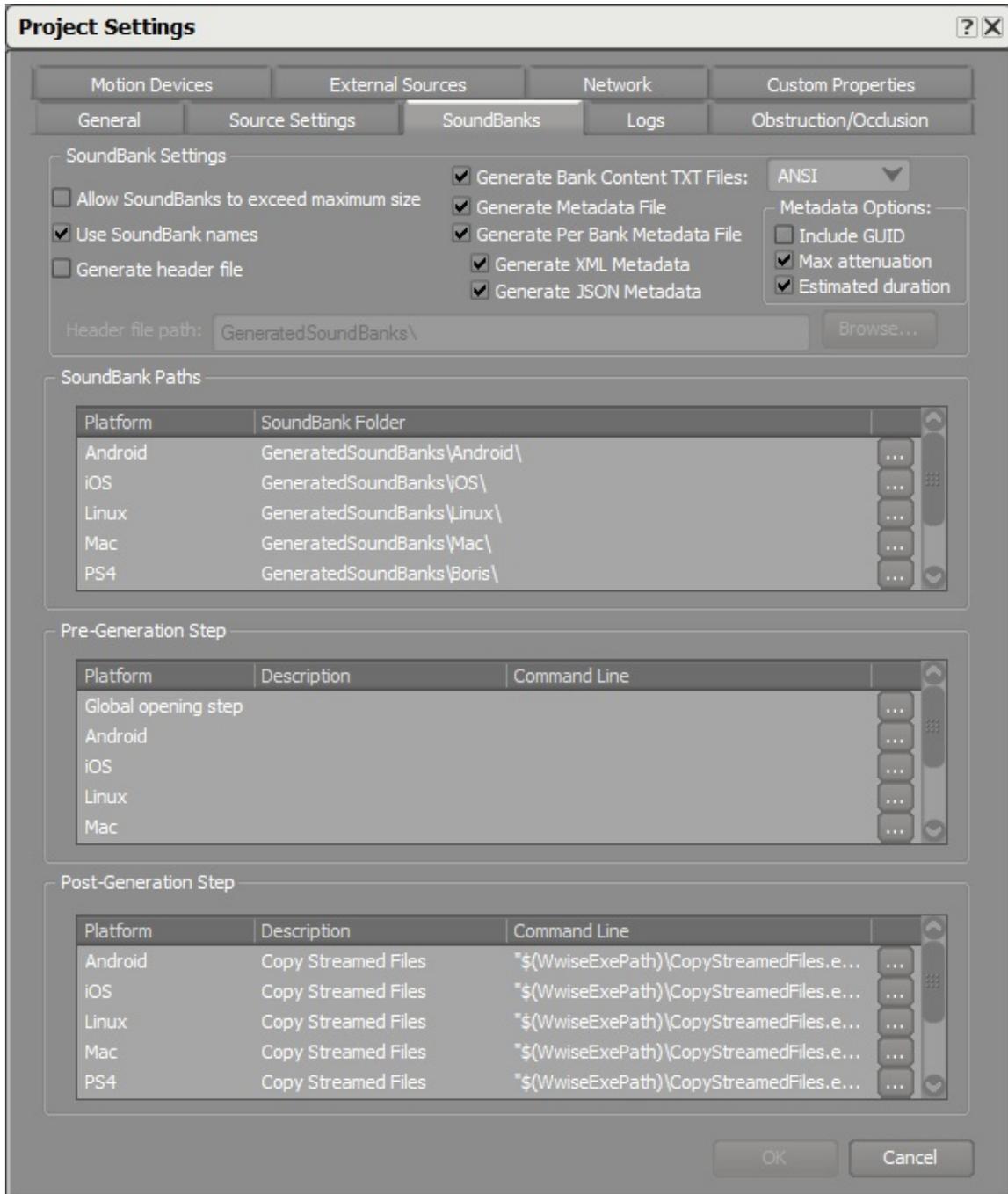
Currently scrubbing is only supported in Play mode in the Unity editor. This is due to an issue with Unity Playable callbacks in edit mode. Unity are aware of the issue: [953109](#). This means that "Play from anywhere" behavior is not supported in edit mode either. If you place the playhead somewhere between the beginning and end of a clip and play the timeline, while in edit mode, the event will not be triggered.

Wwise Project Setup

AkAudioEvent Tracks JSONWwise
Project SettingsSoundBanks
Estimated duration
JSON Metadata

SoundBank Settings

Metadata Optio
Generate



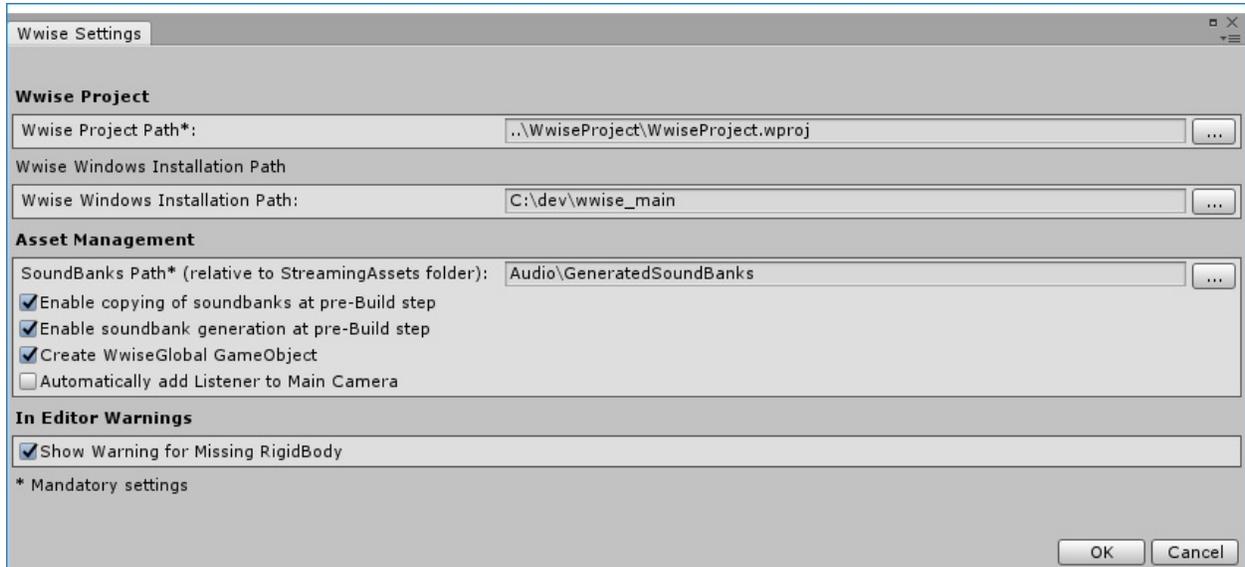
AkEvent



Wwise Unity Integration

Build your Unity Game for a Target Platform

Building your Unity game for a target platform is now as simple as building your application using Unity's standard pipeline or a build script. Pre- and post-build steps that generate, copy and delete SoundBanks can be enabled/disabled within the **Edit > Wwise Settings...**



Wwise plug-in deployment

The Unity build system automatically packages the Wwise plug-in with the game.

Profile Wwise

PluginsWwise

Release



Note: Debug is only used for debugging specific issues with the sound engine, which is usually done with the assistance of Audiokinetic support.

:

-
- **Android**
- **Build for iOS**
- **Linux**
- **UnityWwise**

StreamingAssets folder

Unity normally creates a `StreamingAssets` folder (manually create one if it does not exist in your Unity project) in the Unity project's `Assets` folder, as shown here: `<UNITY_PROJECT_ROOT>\Assets\StreamingAssets`.
Unity `StreamingAssets`

`SoundBank` `Audio\GeneratedSoundBanks` `StreamingAssetsUnity`
`WwisePlatform Manager`
`<UNITY_PROJECT_ROOT>\Assets\StreamingAssets\Audio\GeneratedSoundBank`
`<YourPlatform>`



Note: If necessary, you can modify `AkInitializer::basePath` to change the default `SoundBanks` path.

Unity Editor `SoundBankWwiseProject SettingsWwise`
`GeneratedSoundBankWindowsMac`

Deploying SoundBanks in single-platform projects

If you are working on a single platform title, instead of physically moving SoundBank files into the `StreamingAssets` folder, the SoundBank output path in a Wwise project can be set to the desired folder under the **StreamingAssets folder** so that the SoundBanks can be generated directly into the desired location. Using this method, be sure to disable the pre-build steps related to generating and copying SoundBanks within the **Wwise Settings** window.

Deploying SoundBanks in multi-platform projects

For productions that ship on multiple platforms, the pre-build steps can generate the SoundBanks and copy them over to the `StreamingAssets` folder before the binary is built, and then delete the SoundBanks in a post-build step to ensure that only SoundBanks for the target platforms are deployed.

Handling multiple custom platforms for a reference platform

If, in your Wwise project, you have defined multiple versions of the same reference platform, such as an iPad and an iPhone platform targeting iOS, some more scripting will be needed. **UnityWwise**

Exclude SoundBank metadata

Wwise generates SoundBank metadata files (such as TXTs and XMLs).
SoundBank

Wwise Unity Integration Mon Jan 8 10:46:17 2018  1.6.3



Wwise Unity Integration » Build your Unity Game for a Target Platform

Android

APKAndroidSoundBankLoadBank() API StreamingAssets
SoundBankUnityAPK AssetsLow-Level IOSoundBankA

Low-Level IOAndroidSoundBankSDCard
 AkSoundEngine.AddBasePath(YourPath) APK
APKAPKDLC

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



Wwise Unity Integration » Build your Unity Game for a Target Platform

Build for iOS

UnityiOS
Unity

BuildBuild and RunUnity EditorUnityXcode

```
UNITY_PROJECT_ROOT/Assets/Plugins/iOS
```

UnityThumbXcodeThumb

Building for release

The Wwise Integration library, `libAkSoundEngine.a`, normally contains all debug symbols. (iOS) Player Settings

Settings **Stripping Level**12MB

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



Wwise Unity Integration » Build your Unity Game for a Target Platform

Linux

UnityLinuxUnity Editor
Linux

BuildBuild RunUnity
.x8632 bit.x86_6464 bit

Wwise Unity Integration for Linux needs `libSDL2` installed on the machine to work. "DLLNotFoundException"

`libSDL2` **Ubuntu 12.04:**

- `sudo apt-get install build-essential libasound2-dev`
- `wget http://www.libsdl.org/release/SDL2-2.0.3.tar.gz`
- `tar -zxvf SDL2-2.0.3.tar.gz`
- `cd SDL2-2.0.3`
- `./configure`
- `make`
- `sudo make install`
- `sudo ldconfig`

requirements may vary depending on the machine's configuration.
libsdl.org



Wwise Unity Integration » Build your Unity Game for a Target Platform

UnityWwise

Wwise Unity IntegrationWwise
C#



Note: SoundBank
SoundBank

GetPlatformName

UNITY_PROJECT_ROOT/Assets/Wwise/Deployment/Components/AkBasePathGett
GetPlatformName

PS4

iOS/iOS3:iPod/iPhone
iPad1

1. Wwise3Platform Manager: "iPod", "iPhone",
"iPad" WwisePlatform Manager Wwise
[Setting Up Your Projects > Managing Platforms](#)
2. Unity AkBasePathGetterC#:

Wwi:

```
public partial class AkBasePathGetter
{
    #if UNITY_IOS
        static partial void GetCustomPlatformName(ref string platformName)
        {
            switch(UnityEngine.iOS.Device.generation)
            {
                case UnityEngine.iOS.DeviceGeneration.iPodTouch1Gen:
                case UnityEngine.iOS.DeviceGeneration.iPodTouch2Gen:
                case UnityEngine.iOS.DeviceGeneration.iPodTouch3Gen:
                case UnityEngine.iOS.DeviceGeneration.iPodTouch4Gen:
                case UnityEngine.iOS.DeviceGeneration.iPodTouch5Gen:
                case UnityEngine.iOS.DeviceGeneration.iPodTouchUnknown:
                    platformName = "iPod";
                    break;

                case UnityEngine.iOS.DeviceGeneration.iPad1Gen:
                case UnityEngine.iOS.DeviceGeneration
```

```
n.iPad2Gen:
    case UnityEngine.iOS.DeviceGeneratio
n.iPad3Gen:
    case UnityEngine.iOS.DeviceGeneratio
n.iPadMini1Gen:
    case UnityEngine.iOS.DeviceGeneratio
n.iPad4Gen:
    case UnityEngine.iOS.DeviceGeneratio
n.iPadAir1:
    case UnityEngine.iOS.DeviceGeneratio
n.iPadMini2Gen:
    case UnityEngine.iOS.DeviceGeneratio
n.iPadMini3Gen:
    case UnityEngine.iOS.DeviceGeneratio
n.iPadAir2:
    case UnityEngine.iOS.DeviceGeneratio
n.iPadUnknown:
    platformName = "iPad";
    break;

n.iPhone:
    case UnityEngine.iOS.DeviceGeneratio
n.iPhone3G:
    case UnityEngine.iOS.DeviceGeneratio
n.iPhone3GS:
    case UnityEngine.iOS.DeviceGeneratio
n.iPhone4:
    case UnityEngine.iOS.DeviceGeneratio
n.iPhone4S:
    case UnityEngine.iOS.DeviceGeneratio
n.iPhone5:
    case UnityEngine.iOS.DeviceGeneratio
n.iPhone5C:
    case UnityEngine.iOS.DeviceGeneratio
n.iPhone5S:
    case UnityEngine.iOS.DeviceGeneratio
```

```

n.iPhone6:
    case UnityEngine.iOS.DeviceGeneratio
n.iPhone6Plus:
    case UnityEngine.iOS.DeviceGeneratio
n.iPhoneUnknown:
    default:
        platformName = "iPhone";
        break;
    }
}
#endif
}

```

 **Note:**platformName Unity

3. Either, (a) create a C# that extends AkBuildPreprocessor or (b) create a C# script that uses the functionality within AkBuildPreprocessor. The contents of the file could be as follows:

```

public class WwiseIOSBuildPreprocessor : IPrepro
cessBuild, IPostprocessBuild
{
    public int callbackOrder { get { return 0; }
}
    string iPodDestinationSoundBankFolder = stri
ng.Empty;
    string iPadDestinationSoundBankFolder = stri
ng.Empty;
    string iPhoneDestinationSoundBankFolder = st
ring.Empty;

    public void OnPreprocessBuild(BuildTarget ta
rget, string path)
    {
        if (target == BuildTarget.iOS)
        {
            AkBuildPreprocessor.CopySoundbanks(t
rue, "iPod", iPodDestinationSoundBankFolder);

```

```

        AkBuildPreprocessor.CopySoundbanks(t
true, "iPad", iPadDestinationSoundBankFolder);
        AkBuildPreprocessor.CopySoundbanks(t
true, "iPhone", iPhoneDestinationSoundBankFolder)
;
    }
}

public void OnPostprocessBuild(BuildTarget t
arget, string path)
{
    DeleteSoundbanks(iPodDestinationSoundBan
kFolder);
    DeleteSoundbanks(iPadDestinationSoundBan
kFolder);
    DeleteSoundbanks(iPhoneDestinationSoundB
ankFolder);
}
}

```

4. Or in Wwise, generate the SoundBanks for all three platforms "iPhone", "iPod", and "iPad", and copy the three resulting folders to UNITY_PROJECT_ROOT/Assets/StreamingAssets/Audio/GeneratedSoundBa
5. UnityiOS
6. SoundBank



Wwise Unity Integration

WwiseUnityDLC

Wwise

DLCWwiseFile PackageAuthoring: [Wwise > Help > Finishing Your Project > Managing File Packages > Downloadable Content Overview](#)BNKWEMDLC
Wwise/UnityLow-Level IO

UnityAkInitializerBase Path
AkSoundEngine.LoadFilePackage() Wwise

Base PathiOSAndroid

AndroidiOS
AkSoundEngine.LoadFilePackage() AkSoundEngine.AddBasePath()
Operating System:

```
#if UNITY_IPHONE
    string fileNameBase = Application.dataPath.Substring(0, Application.dataPath.LastIndexOf('/'));
    fileName = fileNameBase.Substring(0, fileNameBase.LastIndexOf('/')) + "/Documents/" + FILE_NAME;
#elif UNITY_ANDROID
    fileName = Application.persistentDataPath + "/" + FILE_NAME ;
#else
    fileName = Application.dataPath + "/" + FILE_NAME;
#endif
```

Androidsdcard

:

- **OBB (Android)**

Unity WWW

UnityWWWDLCAkMemBankLoader.cs
Wwise IO

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



Wwise Unity Integration

Build the Native Integration Plug-in from Source

The Wwise-Unity integration is a thin layer of C# calling the native Wwise API. IntegrationC++
C++

The procedure

1. Install the Wwise SDK for the platforms you wish to build using the Wwise Launcher.
2. WwiseUnityOSWindowsMacsourcezip
LauncherUnityzipzip_Src.zip
3. WindowsMaczip
4. Integration
5. zip **Unity**
6. 2: **Build using console utility Integrated**
 Development Environment (IDE) .
7. Deployment API

Notes

- During the build, you can monitor warnings, errors, or critical messages, if any, by reading the detailed log messages found in the **Build Log**.

Integration:

All platforms	<ul style="list-style-type: none"> • Unity 5 PersonalPro • Wwise SDK • SDK Wwise SDK • > Platform Requirements • Python 2.7.x3.xPhthon
Android	<ul style="list-style-type: none"> • Cygwin (Windows) • Android SDK: 32bitAPI964bitAPI21 • Android NDK r10e. • Apache Ant 1.8.4. • Wwise SDK • Unity • : ◦ CYGWIN_HOME CygwinWindows ◦ ANDROID_HOME Android SDK ◦ ANDROID_NDK_ROOT Android NDK ◦ ANT_HOME Apache Ant
iOS	<ul style="list-style-type: none"> • Xcode 7.2 • iOSWwise SDK <p style="text-align: right;">WWISESDK</p>
Linux	<ul style="list-style-type: none"> • Build-essential (sudo apt-get install build-essential) • SDL2 (SDL2 Linux) • LinuxWwise SDK <p style="text-align: right;">WWISESDK</p>
Mac	<ul style="list-style-type: none"> • Xcode 7.2 • The Wwise SDK for Mac, and a WWISESDK environment variable pointing to it

PS4	Visual Studio 2012 Professional Edition.
Windows	Visual Studio 2013 Professional Edition.
Windows Store	Visual Studio 2015.
Xbox One	Visual Studio 2012 Professional Edition.

How to install the source package

Unzip the source package. Wwise SDK
IntegrationWwiseUnityAssets
IntegrationAssets

- **StreamingAssets:** SoundBank **Deploying SoundBanks in single-platform projects**
- **Wwise:**
 - **Deployment:** Integration
 - **API:** C++ C# Wwise SDK
 - **Dependencies:** Unity
 - **Components:** Unity
 - **Plug-ins:** Unity
 - **Platform**
 - **Architecture:** Files shared by architectures of a multi-architecture platform.
 - **Debug:** Debug **Wwise plug-in deployment** for detail
 - **Profile:** Profile **Wwise plug-in deployment** for detail
 - **Release:** Release **Wwise plug-in deployment** for detail
 - **DSP:** Wwise
 - **Documentation:** Integration
 - **Editor:** WwiseUnityIntegrationEditor WindowInspector
 - **Tools:**

- **Wwise:**
 - **AkSoundEngine:** IntegrationIDC
 - **Common:**
 - **Platform:** IDE

 - **Integration/Assets/Wwise/Deployment:** Integration
 - **API:** API
 - **Generated:** SWIGAPI
 - **Handwritten:** API
 - **Components:** Unity
 - **Plugins:** WwiseAkSoundEngine
 - **<platform>:**
 - **<architecture>:**

Build using console utility

You can build the Integration from the command line using the build script located at `wwise\AkSoundEngine\Common\BuildWwiseUnityIntegration.py`. To see the usage and examples, assuming your current working directory is the parent folder of the script, type in a command console on your computer:

```
python BuildWwiseUnityIntegration.py -h
```

Integrated Development Environment (IDE)

Located in the Wwise Unity Integration source package under:

```
WwiseUnityIntegration_version_platform_Src.zip\Wwise
\AkSoundEngine\YourPlatform
```

the solution (or Xcode project) allows you to build the Integration for the target platform in a supported IDE.

Building for the Mac or iOS platform with Xcode

When building the integration from the command line, the `WWISESDK` path is provided to Xcode automatically based on the one set in the environment variable `$WWISESDK` or the one provided to the build script using the `-w` option. Xcode IDE `WWISESDKXcodeMaciOS`

`AkSoundEngine{platform} Build Settings`

User-Defined

`WWISESDK`

`WWISESDK (ex:`

`/Users/myUser/Wwise/SDK)`

Building for the Linux platform

A premake script is included in the integration source package that generated the necessary makefiles. To build the Linux plug-in from source, simply enter the following commands into a terminal:

- `cd <Integration source location>/AkSoundEngine/Common`
- `./premake4 --akplatform=Linux gmake`
- `make -f AkSoundEngineLinux.make config=<config>`

`<config>` `debug32, profile32, release32, debug64, profile64,`

`release64` `<Integration source location>/Deployment/Plugins/Linux`

Deploy the new lib

The resulting binaries will be found in `Wwise\Deployment\Plugins\`
`[Platform]. Assets\WwiseAssets`

Under the hood

SWIGWwise SDKAPIUnity
WwiseUnitySWIGAPIWwise for Unity
SWIGC++

The build process performs the following task:

1. The Wwise SDK libraries are wrapped into a single library as the Unity plug-in, a dynamic library (.dll) on Windows, a loadable bundle (.bundle) on Mac OS X, a static library (.a) on iOS, or a shared library (.so) on Android. Deployment

:

-
- **Build Log**
- **C++Wwise Integration Package**



Wwise Unity Integration » Build the Native Integration Plug-in from Source

Build Log

WarningUnity EditorBuild LogBuild LogIntegration
Build Log

```
UNITY_PROJECT_ROOT\Assets\Wwise\Logs\BuildWwiseUnity  
Integration.log
```

```
Time: Message type: Source Code File name (Module na  
me): Line number: Message body
```

```
2013-09-26 09:29:56,490: INFO: BuildWwiseUnityIntegr  
ation.py (WindowsBuilder): 91: Building: Windows (Wi  
n32, Debug) ...
```

1Unity Integration
BuildUtil.CreateLogger()

```
WwiseUnityIntegration_version_platform_Src.zip\Wwise  
\AkSoundEngine\Common\AkSoundEngine\Common\BuildUtil  
.py
```

[Python logging.handlers module](#)

IDEVisual Studio

IDE

Wwise Unity IntegrationMon Jan 8 10:46:17 2018

 1.6.3



Wwise Unity Integration » Build the Native Integration Plug-in from Source

C++Wwise Integration Package

Warning:



- UnityUnity
- UnityUnity
- WwiseUnity(Warning)

Wwise IntegrationUnity

Package

LauncherWwise Integration

Wwise Integration

UnityWwise Integration



Warning: Wwise IntegrationWwise

The upgrade is done in a 3-step process. Wwise
Unity

UnityWwise

Wwise LauncherUnityWwise

Updating your Wwise project to the new version

1. Launch the Wwise version that matches the new Wwise Integration version you intend on using in Unity.
2. Wwise Project
3. Wwise 'Yes'
4. Wwise SoundBankUnityWwiseOnce completed, make sure to regenerate your Wwise SoundBanks to be ready to carry on with your work after updating the Unity project to the new Wwise version.
5. SoundBankUnityStreamingAssets

Updating your C++ code modifications

1. Install the updated Wwise SDK on your machine, for all your desired platforms.
2. UnityUnity Integration Source Codezip
3. Extract all the downloaded Unity Integration Source Code packages to the same directory
4. Merge the modifications you have made to the Unity Integration Source Code into the updated location
5. Compile the updated and merged integration source code



Wwise Unity Integration

API

Wwise SDKIntegration:

- UnloadBank() 2
- iOSAPI
 - AK::SoundEngine::iOS::ListenToAudioSessionInterruption()
- GetGameObjectFromPlayingID() WindowsGameObject ID
32bitWindows 32bit64bit
- PostEvent() GameObjectAPIGameObject null
- PostEvent()
- AK::Monitoring::SetLocalOutput()
AkCallbackManager.SetMonitoringCallback()
- AK::SoundEngine::SetPosition()
AkSoundEngine.SetObjectPosition()
- PostEvent() External Sources1
-
- AK::SoundEngine::DynamicSequence APIUnity API
SWIG
API AkSoundEngine.Open() API
AkSoundEngine.DynamicSequenceOpen()
- C++Unity AkArray::operator[]
AkPlaylistArray.ItemAtIndex(uint uiIndex) SWIGC++
- API:
 - iOSAPI
 - AkSpeakerVolumeMatrixCallbackInfo
 - AkSpeakerVolumeMatrixBusCallbackInfo
 - AkBusCallbackFunc
 - AK::SoundEngine::RegisterBusVolumeCallback
 - AK::SoundEngine::RegisterCodec
 - AK::SoundEngine::RegisterGlobalCallback
 - AK::SoundEngine::RegisterPlugin
 - AK::SoundEngine::Query::AkGameObjectsList
 - AK::SoundEngine::Query::GetActiveGameObjects()
 - AK::SoundEngine::Query::GameObjDst
 - AK::SoundEngine::Query::AkRadiusList
 - AK::SoundEngine::Query::GetMaxRadius(AkRadiusList&

- io_RadiusList)
- Event
 - AK::SoundEngine::DynamicDialogue::ResolveDialogueEvent

:

• .



Wwise Unity Integration

Android

- **Android**
- **Background Mode (Android)**
- **OBB (Android)**
- **WwiseUnityDLC**

iOS

- **Build for iOS**
- **Audio Session Interruptions (iOS)**
- **WwiseUnityDLC**

Linux

- Linux

Windows Store Apps

- **Windows Store Apps Specific Information**

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



Wwise Unity Integration »

Background Mode (Android)

AK::SoundEngine::Suspend
AkSoundEngine.WakeupFromSuspend() AkInitializer

Wwise Unity Integration Mon Jan 8 10:46:17 2018  1.6.3



Wwise Unity Integration »

OBB (Android)

Overview of the OBB and Wwise IO

AndroidUnity **Player Settings > Publishing Settings > Split Application Binary**, [APK Expansion Files](#).obbZip
SoundBankStreamingAssetsAndroid SoundBank
SoundBankAPKOBB

OBBAkSoundEngine.SetBasePathOBB
I/OOBBpersistent CPU

Loading banks in memory

AkMemBankLoader.csSoundBank

:

1. SoundBank.
2. InspectorSoundBank **Bank Name**
3. SoundBankInspector Is Localized Bank AkInitializer.cs
SoundBank

2 **AkMemBankLoader.LoadNonLocalizedBank()**

AkMemBankLoader LoadLocalizedBank() SoundBank

- SoundBankIOZip
SoundBankIntegration
streamingmanager_lowlevel
- 11SoundBankSoundBank
- SoundBankAPIAPIIntegration

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



Wwise Unity Integration »

Audio Session Interruptions (iOS)

The Unity Integration supports two audio session categories.

- `AkAudioSessionCategorySoloAmbient` (Default)
`SilentiPhoneRing/Silent`
- `AkAudioSessionCategoryAmbient` `AmbientSound`

BGM (BackGround Music)

UI

`AkCallbackManager.SetBGMCallback()`

SoloAmbientBGMAmbient

BGMBGM



Note: The background and foreground switching is handled internally on iOS, no need to call `Suspend` and `WakeupFromSuspend` manually on this platform.



Wwise Unity Integration »

Windows Store Apps Specific Information

- Universal Windows Platform Windows SoundBanks2SDK
SoundBank

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



Wwise Unity Integration

Licensing (Free & Commercial)

Wwise licenses are required for any games that are released publicly.

1Audiokinetic

- [Free Limited Commercial License](#)
- [Educational & Non Commercial License](#)
- [Royalty-based License](#)
- [Commercial License](#)
- [Licensing FAQ](#)



Wwise Unity Integration

Wwise

Wwise Unity Integration Wwise Launcher Unity Recent
Unity Projects Unity Integration

3D

Wwise Demo SceneWwise Launcher
LauncherUnityWwise

Wwise

:

- SoundBank
- Wwise Project <DEMO_SCENE_ROOT>/WwiseProjectWwise
AssetsDemo

Wwise Demo SceneWwise Unity IntegrationUnity Editor

Wwise Demo Scene:

1. LauncherUnityWwise Demo Scene Unity **Modify Wwise in Project...**
 1. LauncherUnity
2. Deployment Platform **Modify**
3. Unity
4. SoundBank
5. Generated SoundBanksStreamingAssets/Audio
6. Unity

Footsteps

Wwise ProjectRandomSwitch

Footstep

Footstep_material 4

Box Collider Footstep_MaterialSwitch ValueWwise Picker

WindowBox ColliderFirst Person ControllerColliderSwitch

"AkTriggerEnter"Ak Switch"Use Other Object"

Inspector Window

0.3 FootstepFirst Person ControllerWwise

SoundEngine

Subtitle

Unity

Delegate

AkTriggerButtonPressDelegate

AkTriggerBaseTriggerDelegate

AkTriggerBaseWwise

Component

Inspector"trigger"Ak Ambient

WAVAk AmbientInspector"Use

Callback"(
Object"Callback Function (

SubtitleDemo.cs)GameObject

Callback Flags"Marker"

SubtitleDemoCallback

MarkerCallback uIdentifier

unity_use_AkEvent_AkAmbient

Environment

StationEnvironmentZone21Box Collider
AuxBusWwise Picker

Wwise2Auxiliary BusLittle Sequence"Use game-
defined Auxiliary sends"

EnvironmentZoneWwiseAuxBus

Environment Portal23Environment PortalAuxiliary

Ak Environemnts2Box Collider1'z'RedBlue
IAk Environment Portal2

EnvironmentEnvironment Portal**AkEnvironmentAkEnvironmentPortal
Inspector (Reverb Zones)**

Timeline Demo

This station demonstrates the use of an AkEventTrack and an AkRTPCTrack within a Timeline in Unity. There are two cubes, which, when the button is pressed, are animated towards each other and stopped when they reach impact.

In order to inspect the Timeline, select Window->Timeline. Then in the Hierarchy, expand the TimelineDemo object, and then expand the Timeline Demo Button object. Then select the Button object. The Timeline editor will now show the Timeline that controls the animation and Wwise Events for the cubes. The Timeline is controlled by the Playable Director component of the Button object.

The Timeline contains two animation tracks, one for each cube. These tracks are used to animate the z position of each cube over time. The Timeline also contains an AkEventTrack and an AkRTPCTrack, marked by a white and red tab, respectively. The AkEventTrack contains two AkEventPlayable clips: the first triggers the PlayCubeMovement Wwise Event, and the next triggers the PlayImpact Wwise Event. The names of these Wwise Events are displayed in the clips. You may need to increase the size of the Timeline editor view and zoom in in order for the name to be displayed correctly. The PlayCubeMovement Wwise Event plays a sine wave source, which has an RTPC affecting its pitch. The name of this RTPC is CubeAcceleration. The AkRTPCTrack increases this RTPC over time as the cubes move towards each other. This causes the pitch of the sine wave to increase, producing a simple sound effect to indicate the acceleration of each cube towards the other.

For more information on the Timeline integration, see [Wwise Timeline Integration](#)



Wwise Unity Integration

Using UnityWwise Spatial Audio

This chapter gives an overview of how to use the Spatial Audio features of the Unity integration. It is broken down into:

- A preparation page you need to follow before going to the tutorials:
 - **Preparation for the Spatial Audio Tutorials**
 - **1. Create a Unity Project**
 - **2. Wwise Project Preparation**
 - **3. Unity Project Preparation**
- Two independent tutorials:
 - **Surface Reflectors Tutorial**
 - **Rooms and Portals Tutorial**
- And a supplementary page addressing the use of obstruction and occlusion:
 - **Obstruction and Occlusion**

Note: Completion of sections using the [Wwise Reflect plug-in](#) require the appropriate license.



Wwise Unity Integration » Using UnityWwise Spatial Audio

Preparation for the Spatial Audio Tutorials

The following steps must be followed beforehand to successfully complete the **Surface Reflectors Tutorial** and the **Rooms and Portals Tutorial** :

- **1. Create a Unity Project**
- **2. Wwise Project Preparation**
- **3. Unity Project Preparation**
 - **3.A. Environment**
 - **3.B. Character Listener**
 - **3.C. Third-Person Emitters**
 - **3.D. Scene**

1. Create a Unity Project

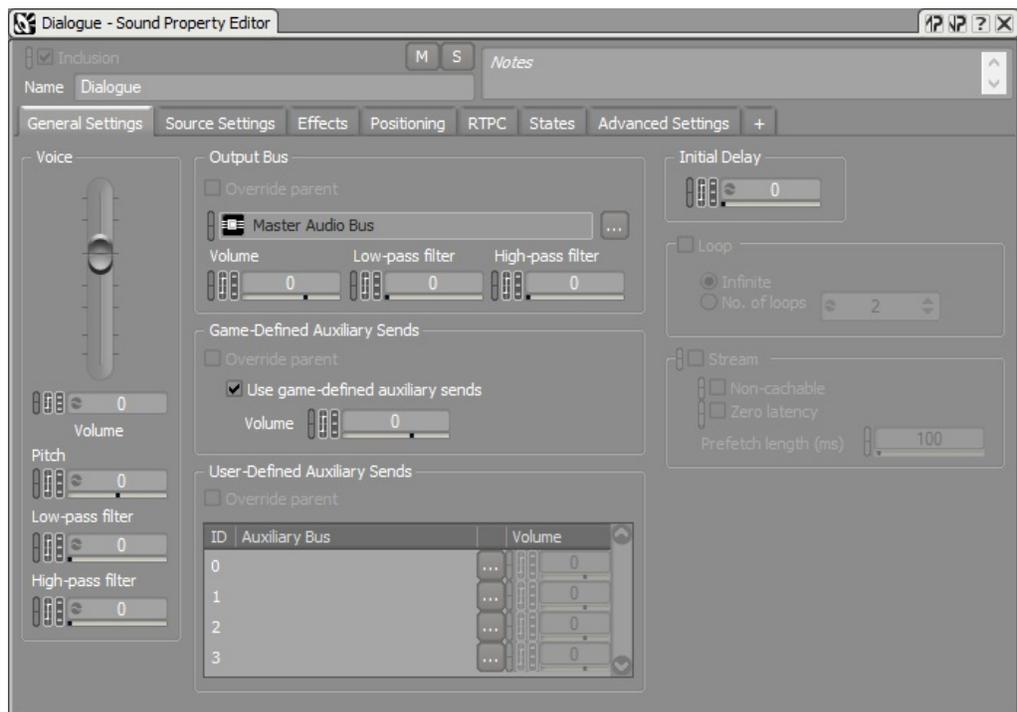
WwiseUnity

1. Launch Unity and create a new project.
2. Unity
3. Start the Wwise Launcher and [integrate Wwise into your Unity project](#).

2. Wwise Project Preparation

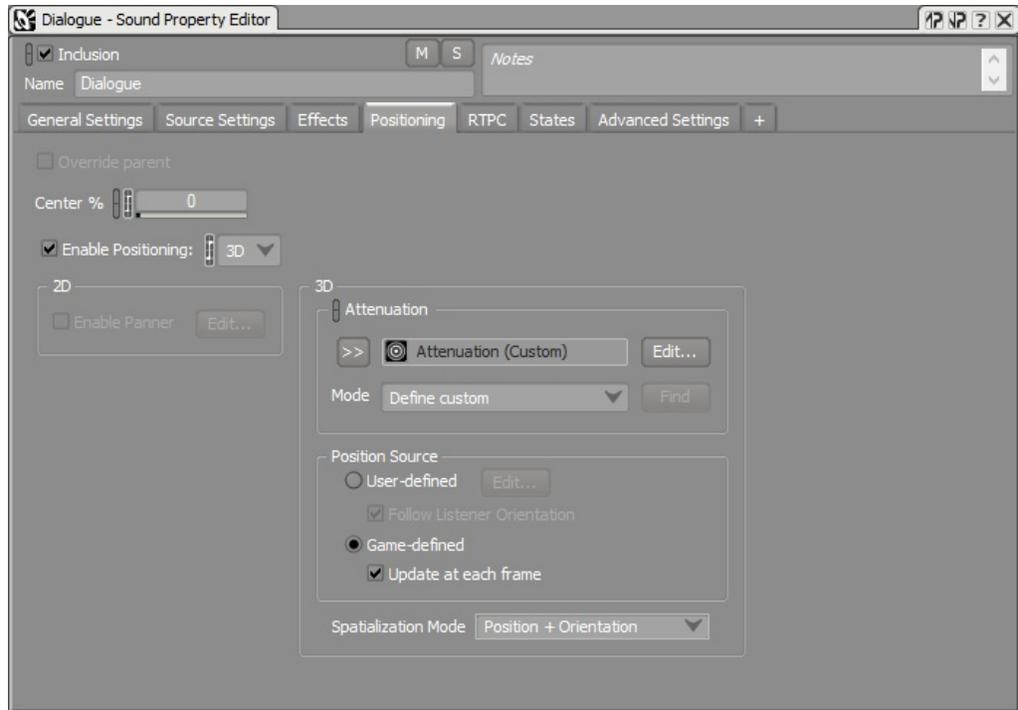
For the tutorials, you will need a Sound SFX, an Event to play it, and a SoundBank.

1. From the Launcher, open your project in Wwise.
2. Add a Sound SFX under the Actor Mixer Hierarchy's **Default Work Unit**. In the integration Wwise Project, we added a dialogue.
 1. Import a sound into it.
 2. In the Sound Property Editor's
 1. General Settings tab, enable **Use game-defined auxiliary sends**.



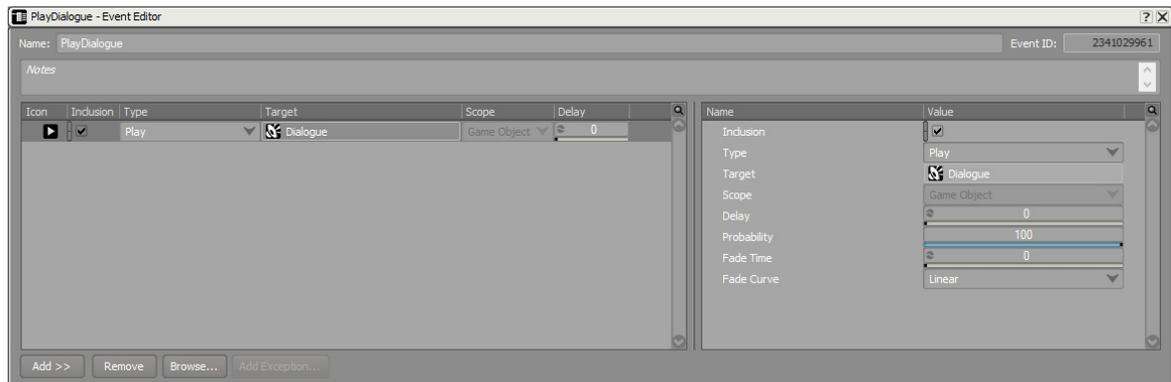
Sound Property Editor General Settings tab

2. Positioning tab, enable positioning and choose **3D**. Optionally, add an Attenuation.



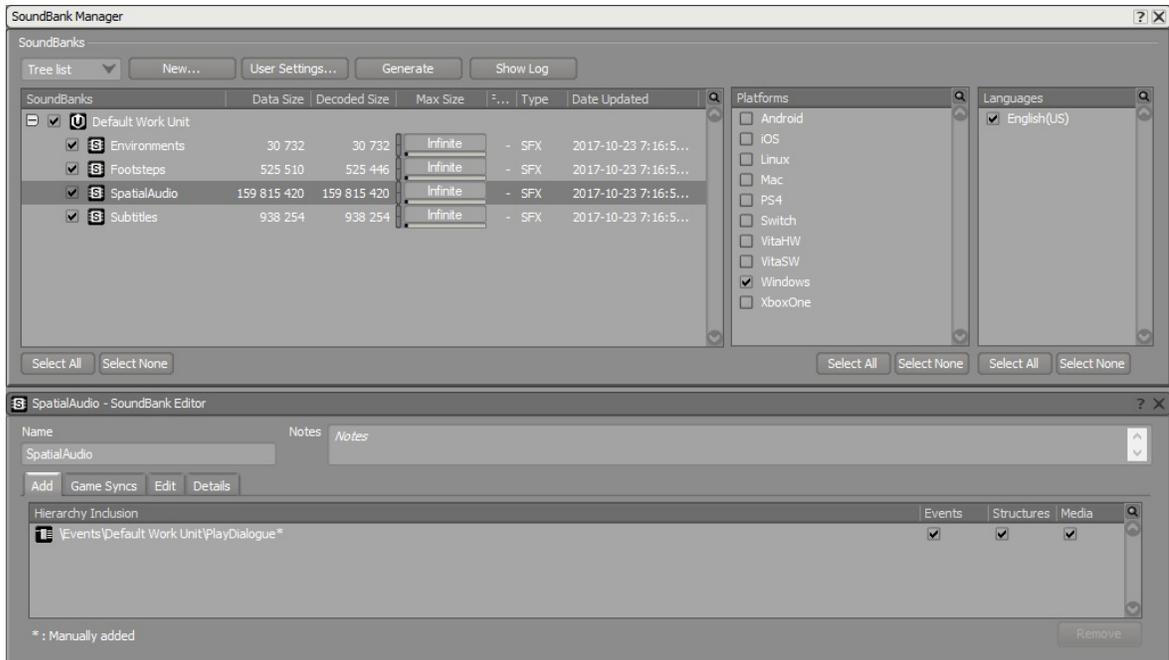
Sound Property Editor Positioning tab

3. Right-click on the Sound SFX within the Actor-Mixer Hierarchy, then select **New Event > Play**.



Event Editor

4. Go to the SoundBank layout (shortcut F7) and add a new SoundBank. Drag the Event into the new SoundBank. Here's how the SoundBank Manager should look in the integration Wwise Project:



SoundBank Manager and Editor

5. Save your project.

3. Unity Project Preparation

In this section we will create our game area and the objects in it. We will need a listener, emitters, and two rooms. From the Launcher, open your project in Unity. Open the Wwise Picker (Windows > Wwise Picker), Refresh Project, and Generate SoundBanks.



Wwise Picker

3.A. Environment

1. Create a floor, walls, and ceilings using cubes: **GameObject > 3D Object > Cube**.

Object Name	Position	Rotation	Scale
Floor	(0, 0, 0)	(0, 0, 0)	(50, 0.5, 50)
Wall Front Left	(-4.5, 3, -10)	(0, 0, 0)	(7, 6, 0.5)
Wall Front Middle	(0, 5, -10)	(0, 0, 0)	(2, 2, 0.5)
Wall Front Right	(2.5, 3, -10)	(0, 0, 0)	(3, 6, 0.5)

Wall Left Small	(-7.75, 3, -6)	(0, 0, 0)	(0.5, 6, 8)
Wall Back Small	(-2, 3, -2)	(0, 0, 0)	(12, 6, 0.5)
Ceiling Small	(-2, 5.75, -6)	(0, 0, 0)	(12, 0.5, 8)
Wall Right Small	(3.75, 3, -8)	(0, 0, 0)	(0.5, 6, 3.5)
Wall Front Large	(11.5, 3, -7.5)	(0, 0, 0)	(16, 6, 0.5)
Wall Right Large	(19.25, 3, 3.25)	(0, 0, 0)	(0.5, 6, 21.5)
Wall Middle	(3.75, 5, -4.5)	(0, 0, 0)	(0.5, 2, 3.5)
Wall Left Large	(3.75, 3, 5.625)	(0, 0, 0)	(0.5, 6, 16.75)
Wall Back Large	(11.5, 3, 14)	(0, 0, 0)	(16, 6, 0.5)
Ceiling Large	(11.5, 5.75, 3.25)	(0, 0, 0)	(16, 0.5, 22)
Barrier	(-4.5, 3, -17)	(0, 0, 0)	(7, 6, 0.5)

2. Add spotlights inside rooms (**GameObject** > **Light** > **Spotlight**).

Object Name	Position	Rotation	Scale
Spotlight Small Room	(-3, 5.75, -6)	(0, 0, 0)	(1, 1, 1)
Spotlight Large Room	(11.5, 5.75, 5)	(0, 0, 0)	(1, 1, 1)

1. In the **Light** component, change:
 1. **Range** to 30.
 2. **Spot Angle** to 179.

3.B. Character Listener

1. Create a character with the method of your choice.

Object Name	Position	Rotation	Scale
MainCharacter	(0, 1.3, -20)	(0, 0, 0)	(1, 1, 1)

1. Remove any Unity Audio Source.
2. Add an **Ak Audio Listener** component to the camera.



Ak Audio Listener component

3. Add an **Ak Spatial Audio Listener** component to the camera.



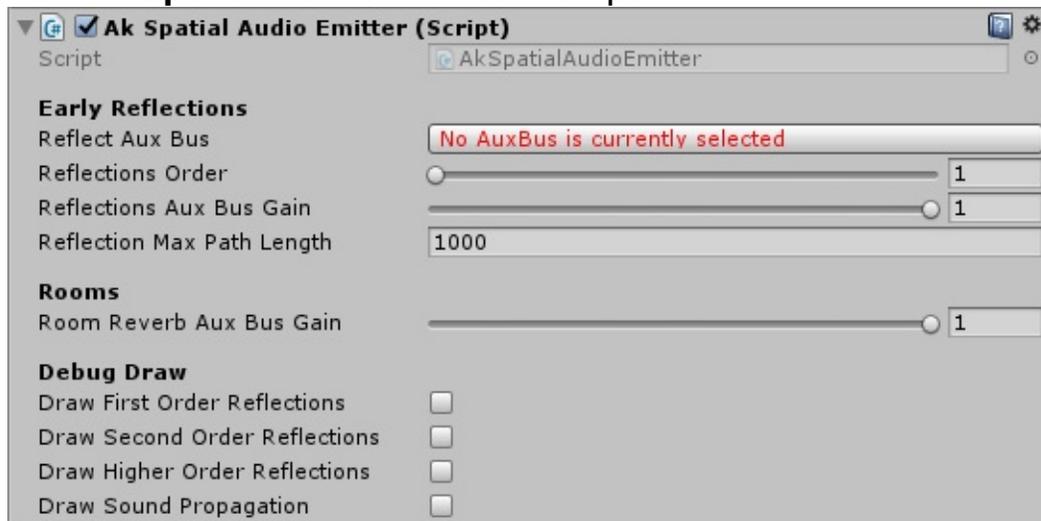
Ak Spatial Audio Listener component

3.C. Third-Person Emitters

1. Create buttons using cylinders (**GameObject > 3D Object > Cylinder**).

Object Name	Position	Rotation	Scale
Button Outside	(-3, 0.75, -15)	(0, 0, 0)	(0.15, 0.5, 0.15)
Button Small Room	(-3, 0.75, -5)	(0, 0, 0)	(0.15, 0.5, 0.15)
Button Large Room	(7.5, 0.75, 5)	(0, 0, 0)	(0.15, 0.5, 0.15)

2. Add an **Ak Spatial Audio Emitter** component.



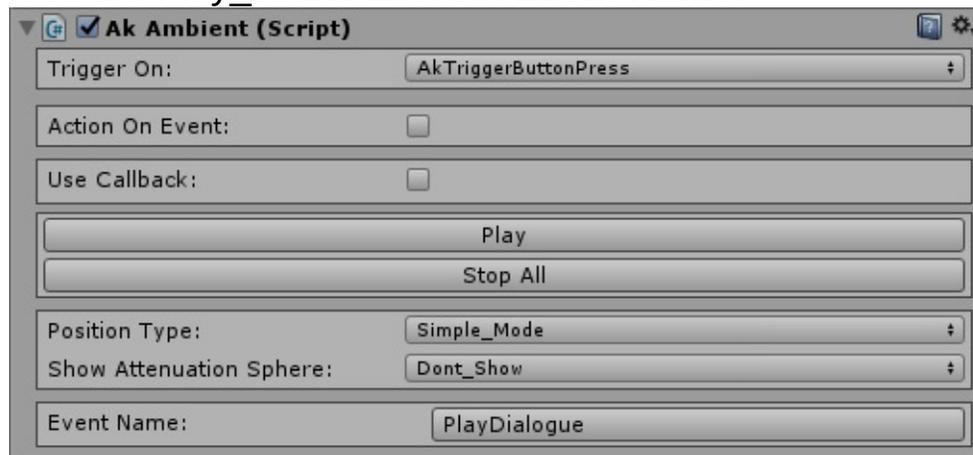
Ak Spatial Audio Emitter component

3. In the Ak Game Obj component:
 1. Enable the Environment Aware option.
 2. Enable the Use Default Listener option.



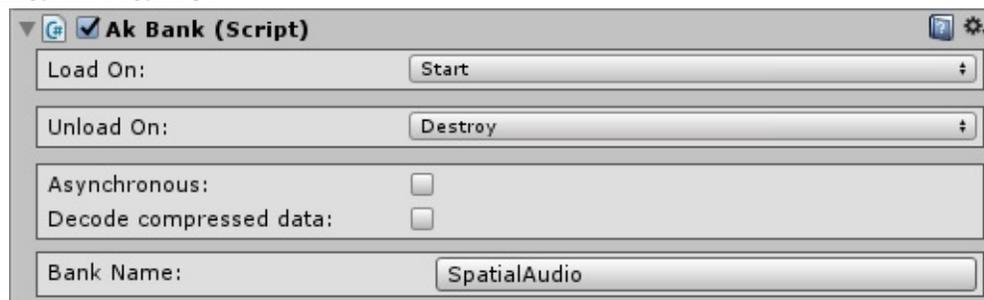
Ak Game Obj component

4. Add an **Ak Ambient** component:
 1. Choose your preferred way to start the sound in **Trigger On**.
 2. Choose the **Play_sound** Event in **Event Name**.



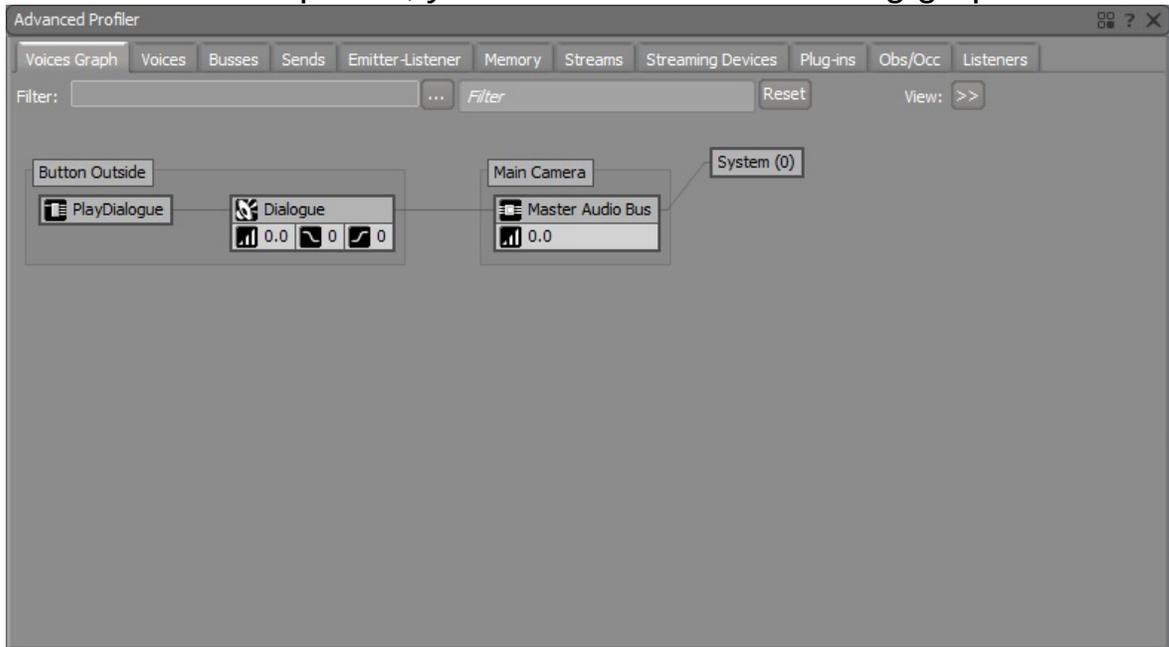
Ak Ambient component

5. Add an Ak Bank component:
 1. Add the SoundBank created in [2. Wwise Project Preparation](#) to **Bank Name**.



Ak Bank component

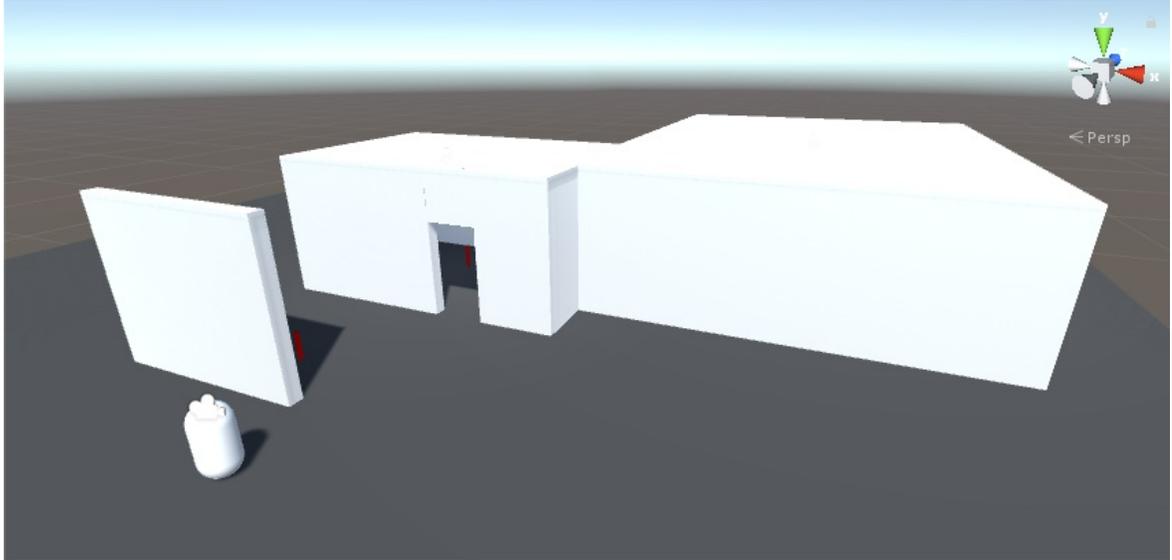
6. Start the game, connect it to Wwise, and open the Profiler layout (shortcut F6).
7. Play the sound from a button. You should hear the sound you imported in the Wwise project.
8. In the Voices Graph tab, you should see the following graph.



Button Outside Voice Graph with no Effect

3.D. Scene

1. Save your Scene to a convenient place.
2. The final look of the scene is shown in the following image. This scene is available with the Unity integration package. Colors were added to elements of the scene for convenience. A mobile first-person controller was also added.



Tutorial Unity Scene



Wwise Unity Integration » Using UnityWwise Spatial Audio

Surface Reflectors Tutorial

In the following steps, this tutorial will show you how to use the new Reflect plug-in with Spatial Audio. You will need a Reflect plug-in license to make the project work.

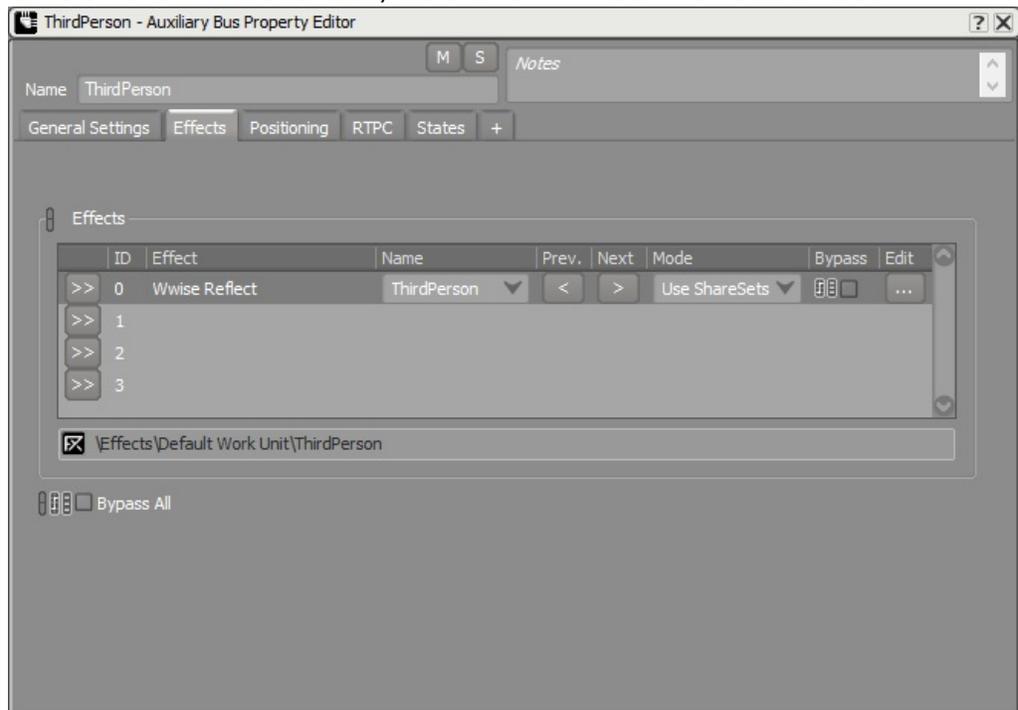
- **A. Wwise Project**
- **B. Spatial Audio Emitter**
- **C. Surface Reflector Component**
 - **C.1. Use Existing Meshes**
 - **C.2. Alternative: Create a New Volume**

Note: This tutorial presumes that you have completed the **Preparation for the Spatial Audio Tutorials**. However, it does not consider if the **Rooms and Portals Tutorial** was done; both tutorials are independent.

A. Wwise Project

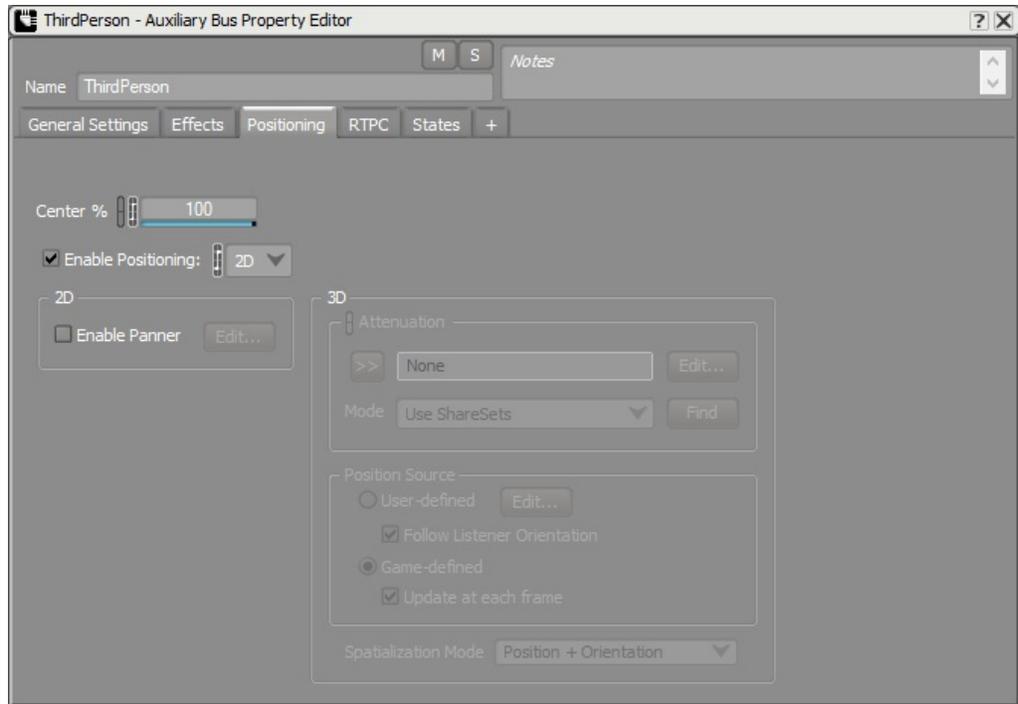
We need to update our wwise project with an Auxiliary Bus with the Reflect plug-in and Acoustic Textures.

1. Add an Auxiliary Bus under the **Master Audio Bus**.
 1. In the **Auxiliary Bus Property Editor**,
 1. Under the **Effects** tab, add the Wwise Reflect effect.



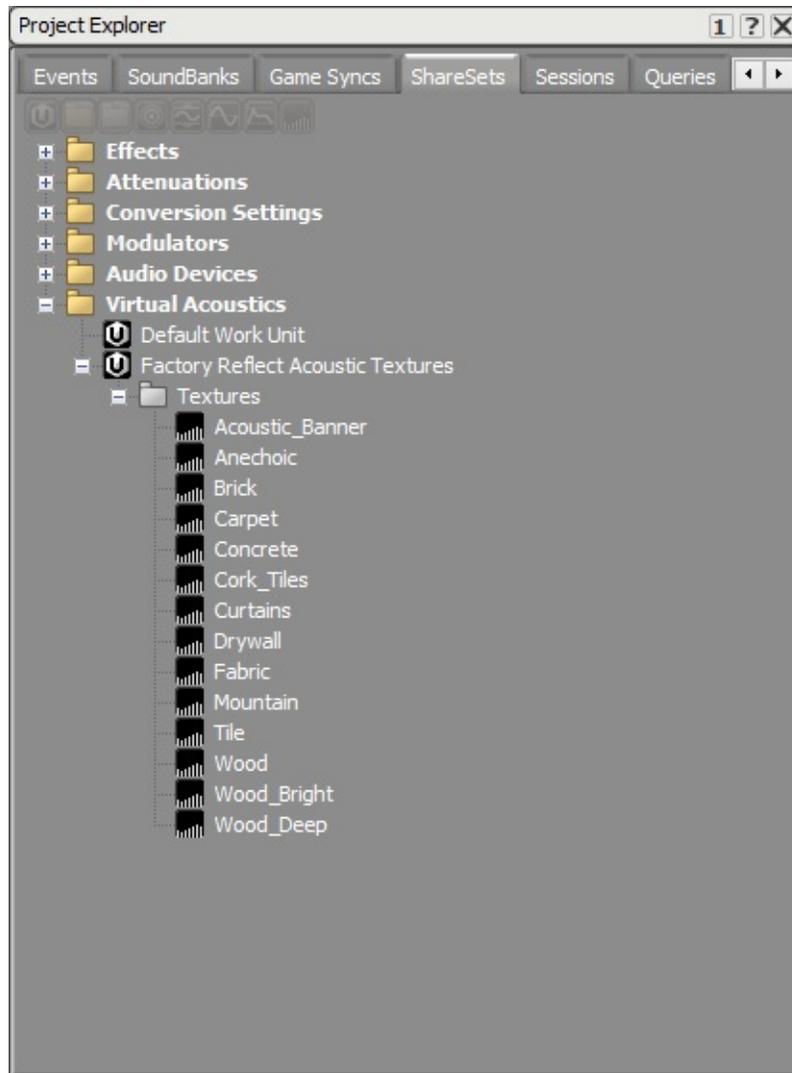
Auxiliary Bus Property Editor Effects tab for Reflect

2. Under the **Positioning** tab, enable positioning and choose 2D.



Auxiliary Bus Property Editor Positioning tab for Reflect

2. Import Reflect Acoustic Textures from: Project > Import Factory Assets...
 1. They will be added to the **Virtual Acoustics** folder in the **ShareSets** tab of the **Project Explorer** view.



Factory Reflect Acoustic Textures in the Project Explorer ShareSets tab

2. (optional) You can add custom Acoustic Textures in the **Virtual Acoustics** folder under **Default Work Unit**.
3. Save your project.

B. Spatial Audio Emitter

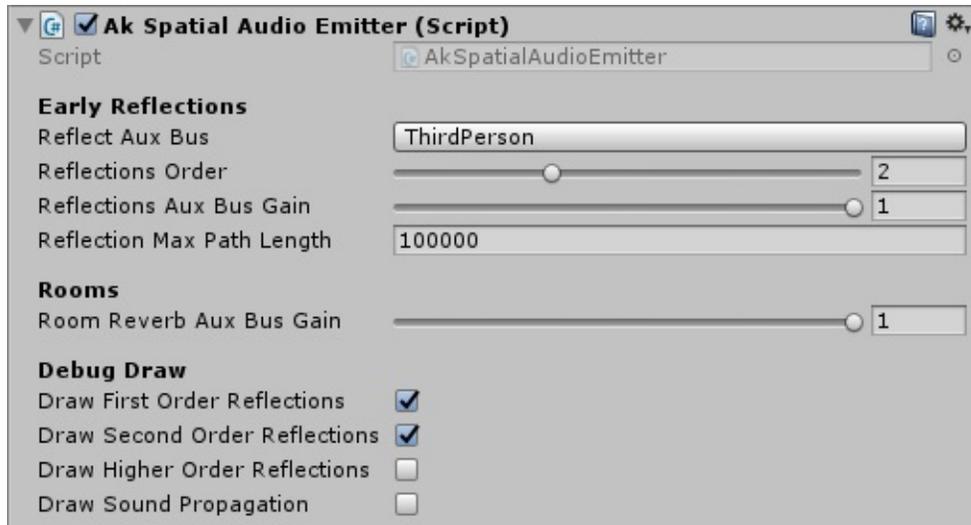
We need to modify the spatial audio emitter to use our newly created reflect aux bus.

1. Refresh your Wwise project in the Wwise Picker: Windows > Wwise Picker
 1. Generate SoundBanks



Wwise Picker

2. Modify the **Ak Spatial Audio Emitter** component of each button.
 1. Pick the Reflect Auxiliary Bus for **Reflect Aux Bus**.
 2. Choose 2 for the **Reflections Order**.
 3. Choose 1 for the **Reflections Aux Bus Gain**.
 4. Choose 100000 for the **Reflection Max Path Length**.
 5. Check the **Draw First Order Reflections** and **Draw Second Order Reflections** under **Debug Draw**.



Ak Spatial Audio Emitter for Surface Reflector

C. Surface Reflector Component

You can simulate early reflections with the **Ak Surface Reflector** component. One way to have surface reflectors is to use existing meshes of the game. If the shape is too complex, you may want to add a new object as a surface reflector.

C.1. Use Existing Meshes

The advantages of using the existing meshes are that you don't need to create new objects and each mesh can have a different acoustic texture. The disadvantages are that if you have a complex figure, you may send too much triangles to the Spatial Audio API and this could slow down your game. Also, another disadvantage is that each mesh only gets assigned one texture. In the case of the this tutorial, this means that it is not possible to have a different acoustic texture on the outside than on the inside of the rooms. In the scene provided by the unity integration, this is the method used for surface reflectors.

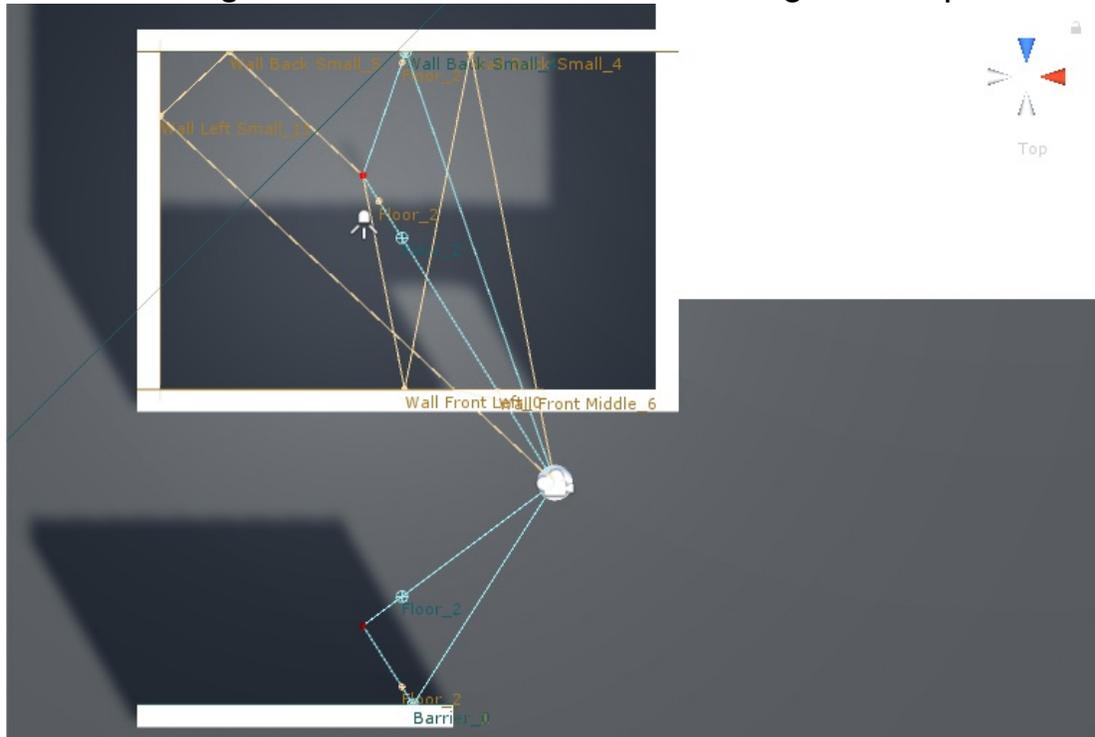
1. Select all the walls, ceiling and floor from section **3.A. Environment** and add an **Ak Surface Reflector** component.
 1. In the **Acoustic Texture** parameter, choose an acoustic texture or leave it at **None** to have an unfiltered reflection.



Ak Surface Reflector component

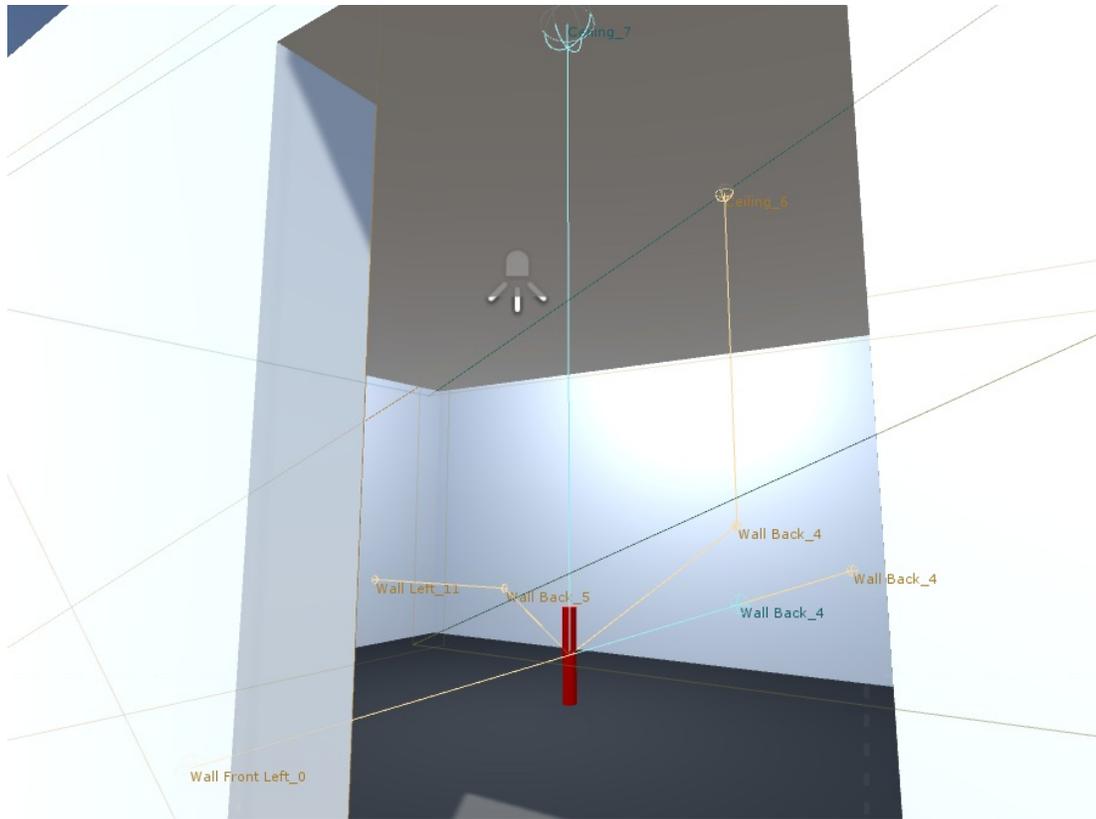
2.
 1. Since we have enabled the drawing of reflections under **Debug Draw** in section , you should see rays going from the emitter to the listener in the **Scene** window. (The ceiling was removed in the following image to see the rays clearly) The blue rays are first order reflections, i.e. they reflect from one surface before reaching the listener, and the yellow rays are second order reflections. The name of the triangles are displayed at the reflection point. A name is made up of the game object's name

and the triangle's number. A cube has 12 triangles, two per face.



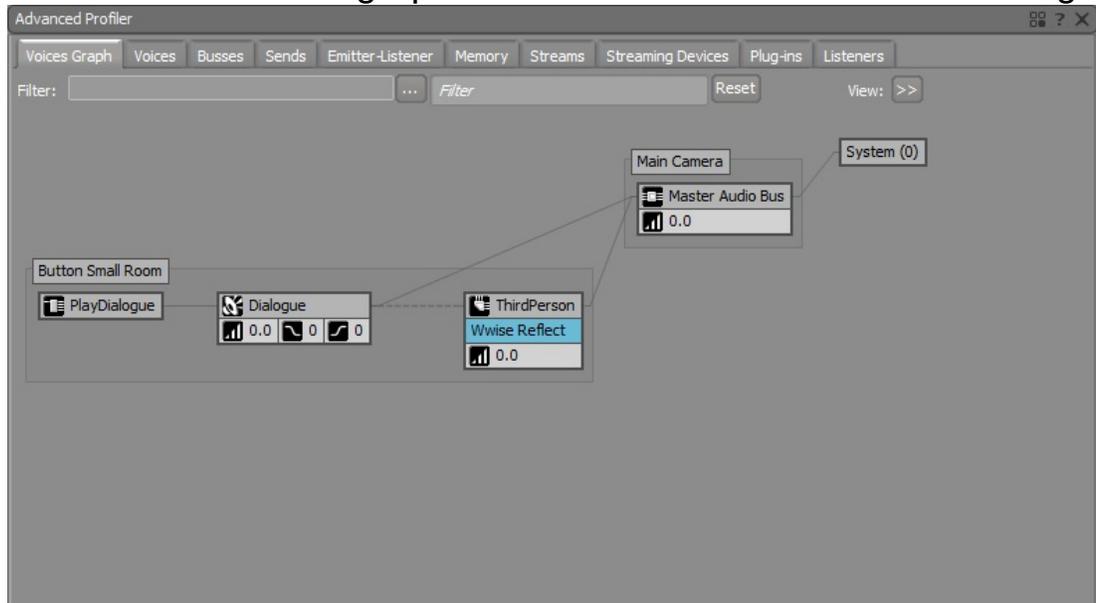
Top view of early reflection drawings for existing mesh surface reflectors

2. You can see the rays in the **Game** window by enabling **Gizmos**; as we can see in the next image. From this point of view, we can also see that the **Debug Draw** option draws the triangles of the surfaces that are being reflected on. Leaving the ceiling in this view, we can see that the sound will also reflect from the ceiling on triangles 7 and 6.



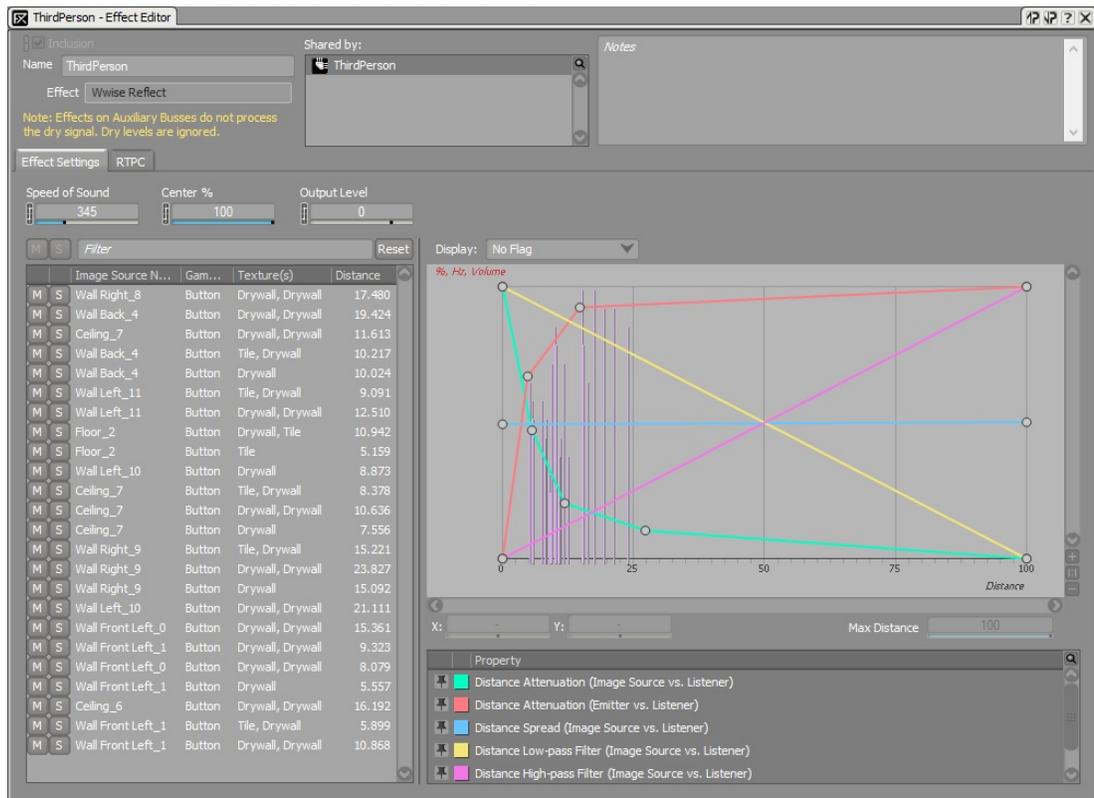
First person view of early reflection drawings for existing mesh surface reflectors

3. Connect the game in Wwise and go to the Profiler Layout. You should see a similar graph when Button Small Room is emitting.



Button Small Room Voice Graph with Reflect Effect

4. Double click on the Auxiliary Bus with the Reflect Effect in the graph. Navigate to the Effects tab and double click on the Reflect Effect. When playing the sound, you should see the current reflections in the graph and the list of the Reflect Effect Editor. In the following image, there is a Drywall acoustic texture for all the walls and the ceiling and a Tile acoustic texture for the floor. When there are two textures in the list, it means that the reflection is a second order one.



Reflect Effect Editor View

C.2. Alternative: Create a New Volume

Creating a new game object with no mesh renderer can simplify a complex shape. In this optional section, we will show you how to have a surface reflector volume for the interior of the small room. You can also mix solutions by having some meshes be Surface Reflectors and having an object with no mesh renderer as well. For example. Having each mesh be a surface reflector to have different texture per wall inside of the

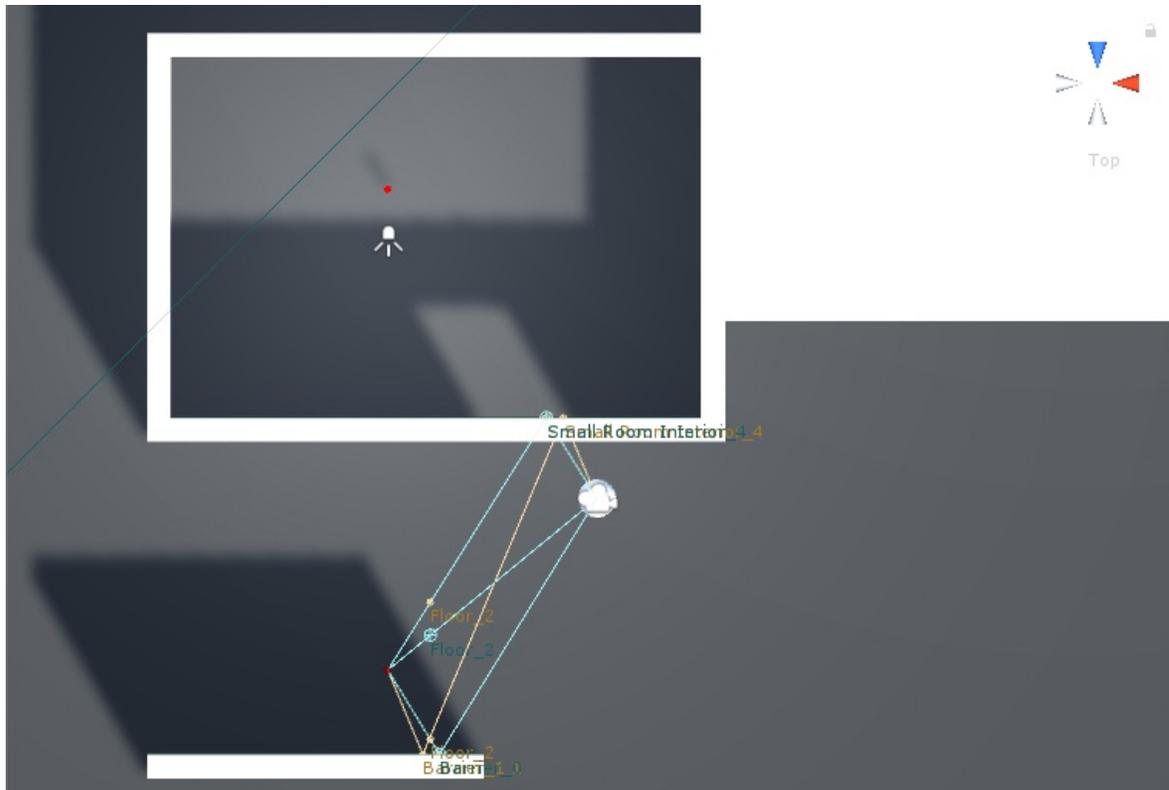
house and adding an exterior volume to have a completely different texture on the outside of the house. It is also possible to use **Quads** instead of cubes to have a different texture wherever desired. But be careful with intersections when using quads; you don't want your sound to get out of your shape.

1. Create a simpler unrendered mesh using a cube: GameObject > 3D Object > Cube

Object Name	Position	Rotation	Scale
Small Room Interior	(-2, 2.875, -6)	(0, 0, 0)	(11, 5.25, 7.5)

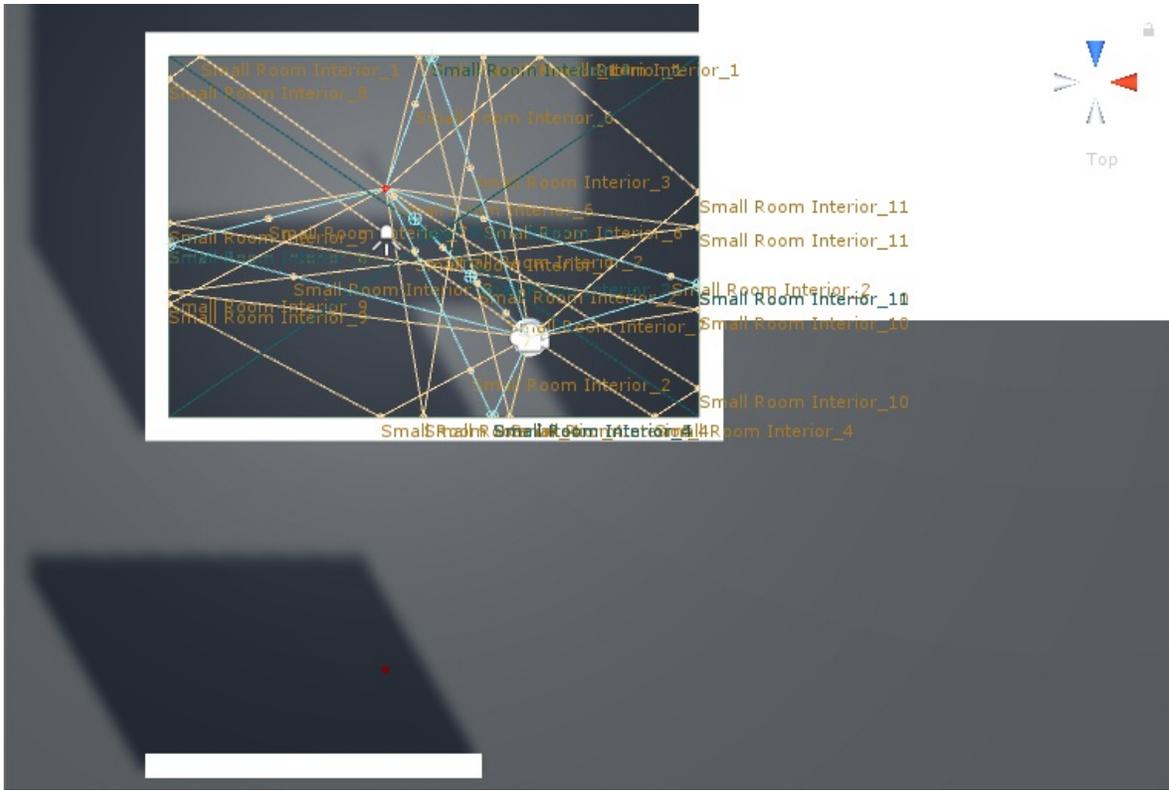
1. Remove the **Mesh Renderer** component
2. Check the **Is Trigger** in the **Box Collider** component
3. add an Ak **Surface Reflector**.

1. Since we simplified the shape of our room, the door is now part of the reflective surface. We don't have any reflections from Button Small Room if we are standing outside. We even get a reflection from Button Outside on the door opening. You may have noticed the name of the reflection point is now referencing to Small Room Interior.



Top view of early reflection drawings for a new surface reflector volume when the emitter is outside

2. Entering the small room, Button Small Room's debug drawings appear and the ones for Button Outside disappear.



Top view of early reflection drawings for a new surface reflector volume when the emitter is inside



Wwise Unity Integration » Using UnityWwise Spatial Audio

Rooms and Portals Tutorial

This tutorial will show you how to use Rooms and Portals with Spatial Audio. The following sections detail each step in the tutorial:

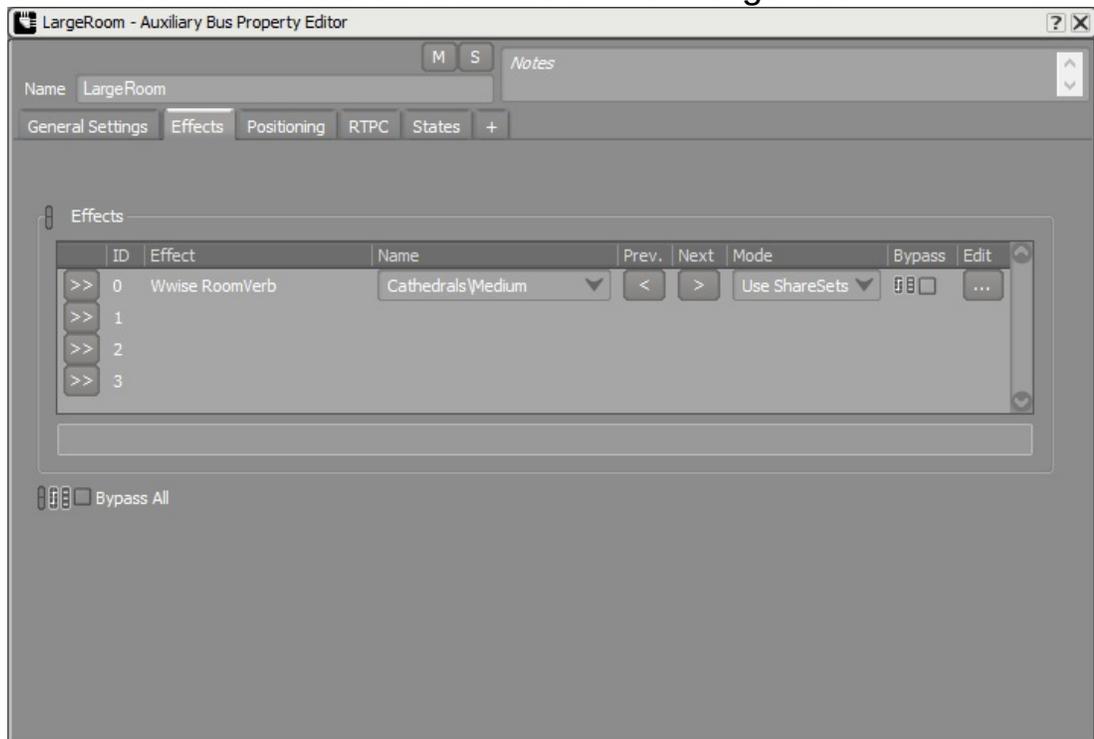
- **A. Wwise Project**
- **B. Spatial Audio Emitter**
- **C. Rooms**
- **D. Portals**
- **E. Portals and Reverb**
- **F. Surface Reflectors and Reverb**

Note: This tutorial presumes that you have completed the **Preparation for the Spatial Audio Tutorials**. However, it does not consider if the **Surface Reflectors Tutorial** was done; both tutorials are independent. If you did the **Surface Reflectors Tutorial** and wish to continue with this tutorial, you can do so without changing anything to your scene except for the optional step of **C.2. Alternative: Create a New Volume**, which should be reverted. If you wish to start anew, and you've done the **Surface Reflectors Tutorial**, you can still keep the same scene and just remove any **Ak Surface Reflector** components.

A. Wwise Project

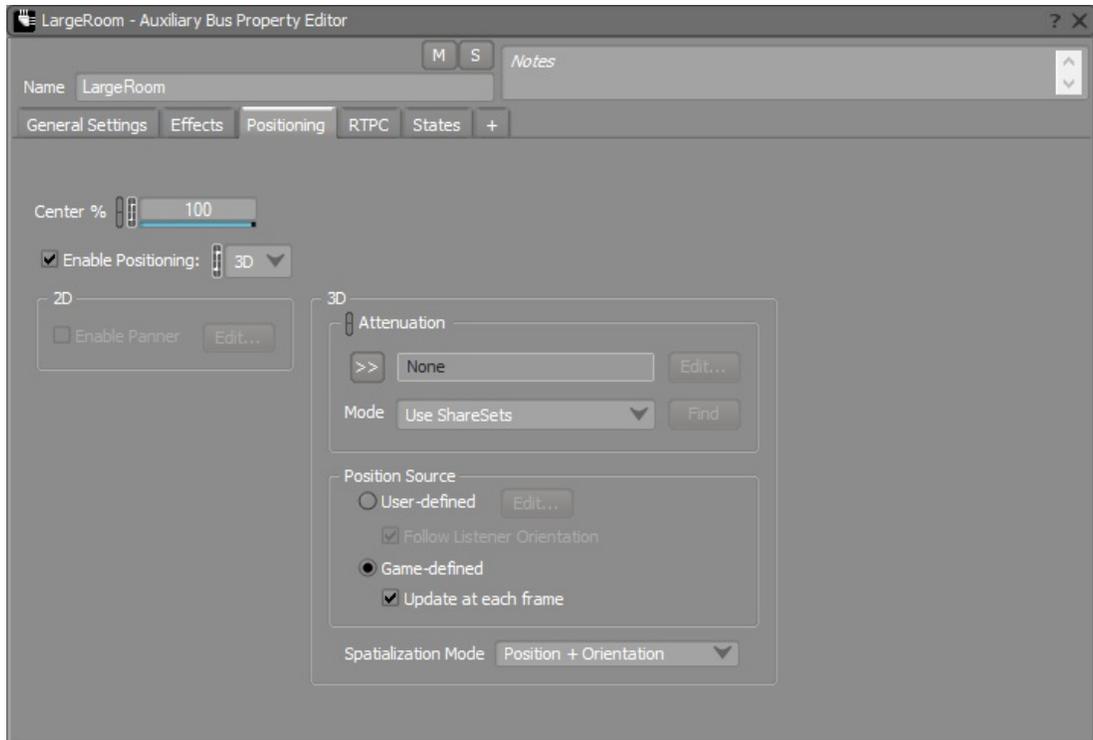
For the rooms and portals tutorial, we will need to add Reverb Effects and modify Obstruction curves to hear diffraction through a portal when losing sight of an emitter.

1. Add two Auxiliary Busses under the **Master Audio Bus** called SmallRoom and LargeRoom. In the **Auxiliary Bus Property Editor**,
 1. Under the **Effects** tab, add the Wwise RoomVerb effect. I chose two different factory presets: Rooms/Room_Medium for SmallRoom and Cathedrals/Medium for LargeRoom.



Auxiliary Bus Property Editor Effects tab for rooms

2. Under the **Positioning** tab, enable positioning and choose 3D.

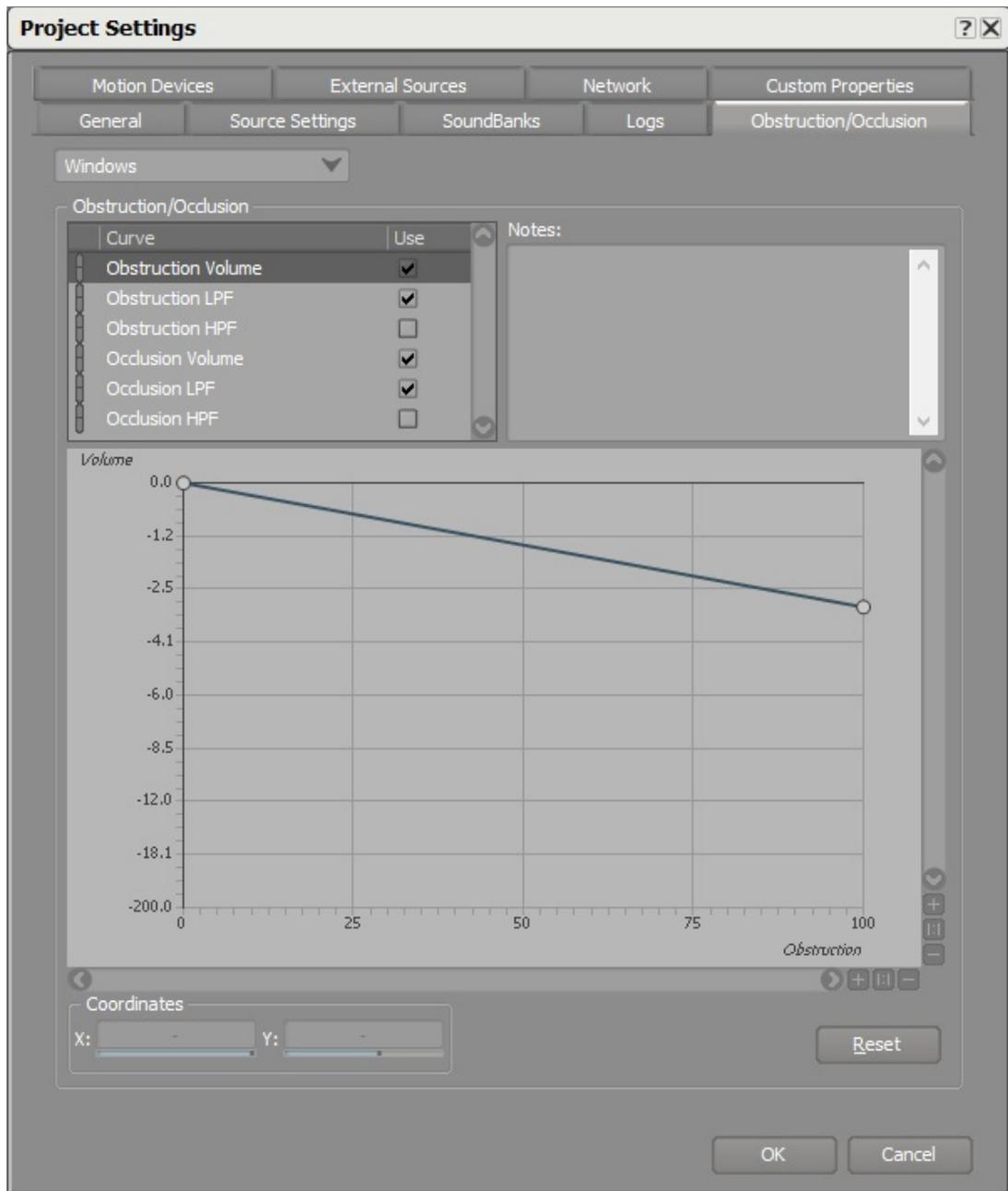


Auxiliary Bus Property Editor Positioning tab for rooms

2. Project > Project Settings > Obstruction/Occlusion
 1. Change the curves:

Curve	Point 1	
	X	Y
Obstruction Volume	0	0
Obstruction LPF	0	0

2. Here's how the Obstruction Volume curve looks like:



Obstruction/Occlusion curves in the Wwise Project Settings

3. Save your project.

B. Spatial Audio Emitter

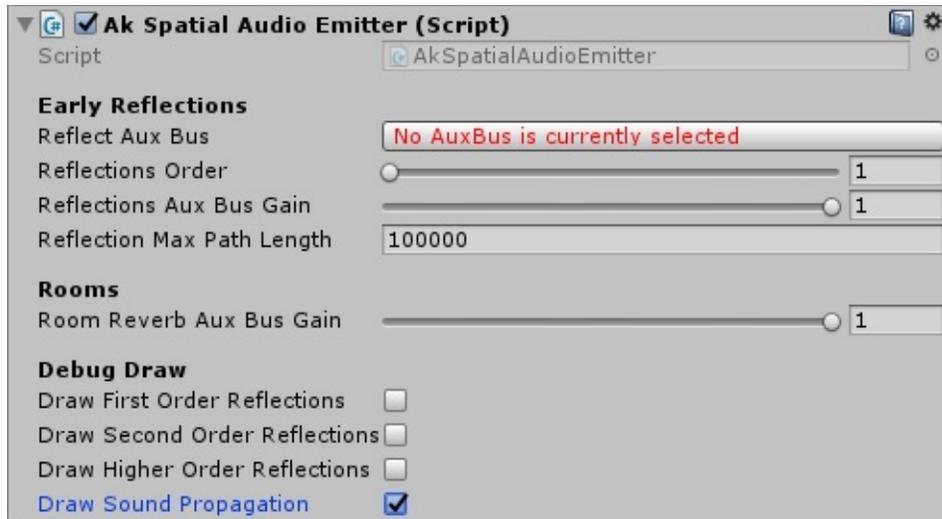
We need to modify the spatial audio emitter to use our newly created reflect aux bus.

1. Refresh your Wwise project in the Wwise Picker: Windows > Wwise Picker
 1. Generate SoundBanks



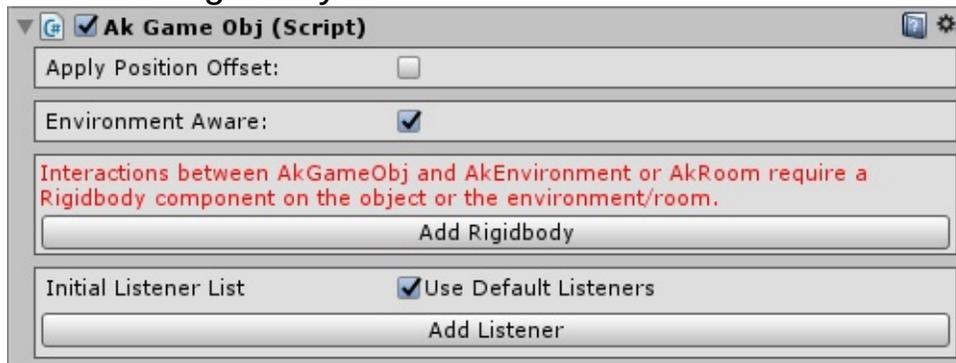
Wwise Picker

2. Modify the **Ak Spatial Audio Emitter** component of each button.
 1. Apply a gain of 1 for the **Room Reverb Aux Bus Gain** parameter.
 2. Check **Draw Sound Propagation** under **Debug Draw** and uncheck all the others.



Ak Spatial Audio Emitter for Rooms and Portals

3. We will use rooms in the next section, so we need to add a Rigidbody component to our emitter; as explained in the warning message on the Ak Game Obj component.
 1. Click on Add Rigidbody



Ak Game Obj component

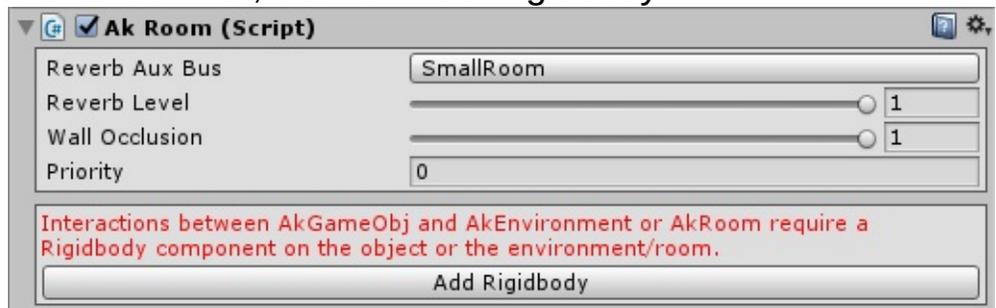
C. Rooms

Each of the rooms will have their own room reverb. To do so, we will use the Ak Room component.

1. Create unrendered meshes using cubes: GameObject > 3D Object > Cube

Object Name	Position	Rotation
Small Room Interior	(-2, 2.875, -6)	(0, 0, 0)
Large Room Interior	(11.5, 2.875, 3.25)	(0, 0, 0)

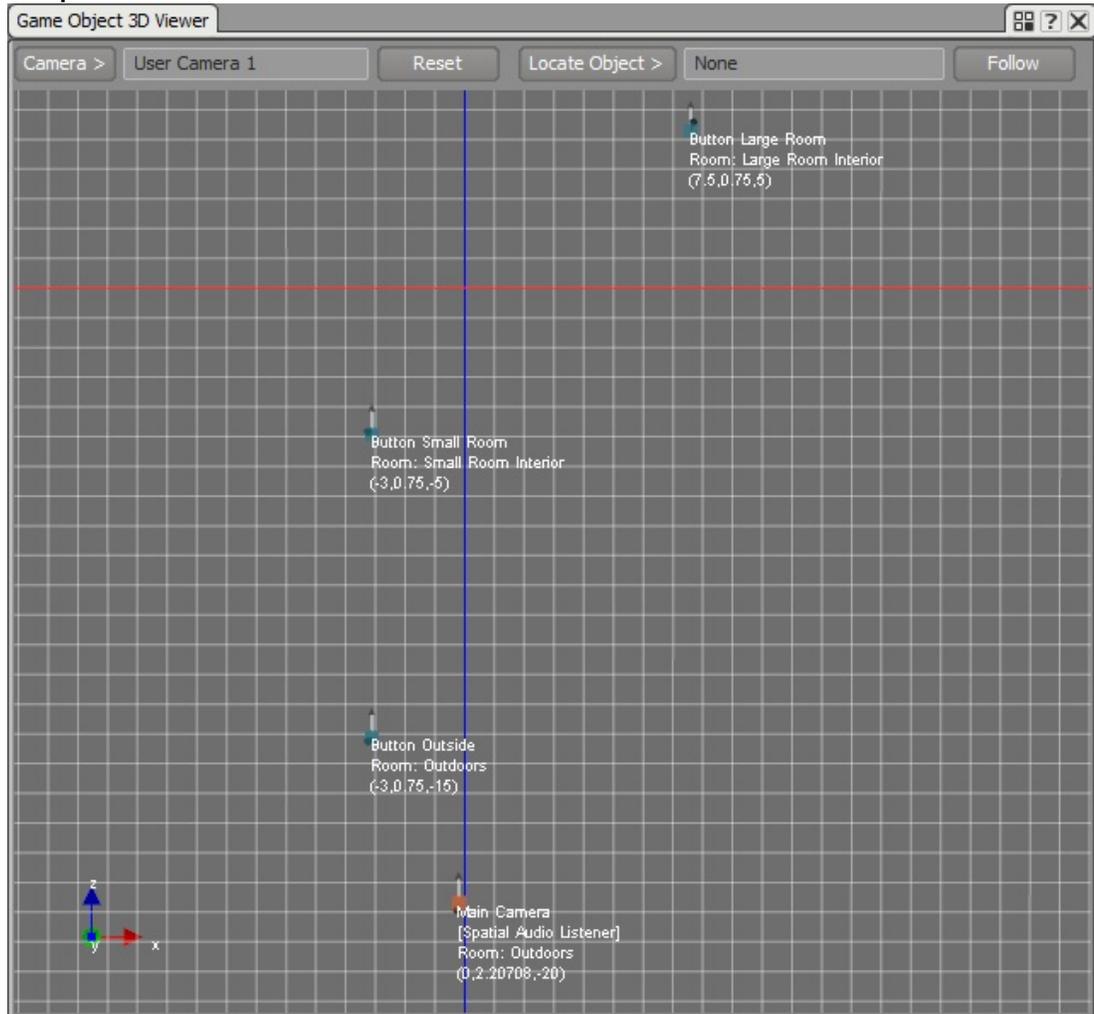
1. Remove the **Mesh Renderer** component.
2. Check the **Is Trigger** in the **Box Collider** component.
3. Add an **Ak Room** component to the Small and Large Room Interior Volumes.
 1. Pick the corresponding SmallRoom or LargeRoom Auxiliary Busses for **Reverb Aux Bus**.
 2. If you added a **Rigidbody** to your emitters, you don't need one here. If not, click on Add Rigidbody.



Ak Room component

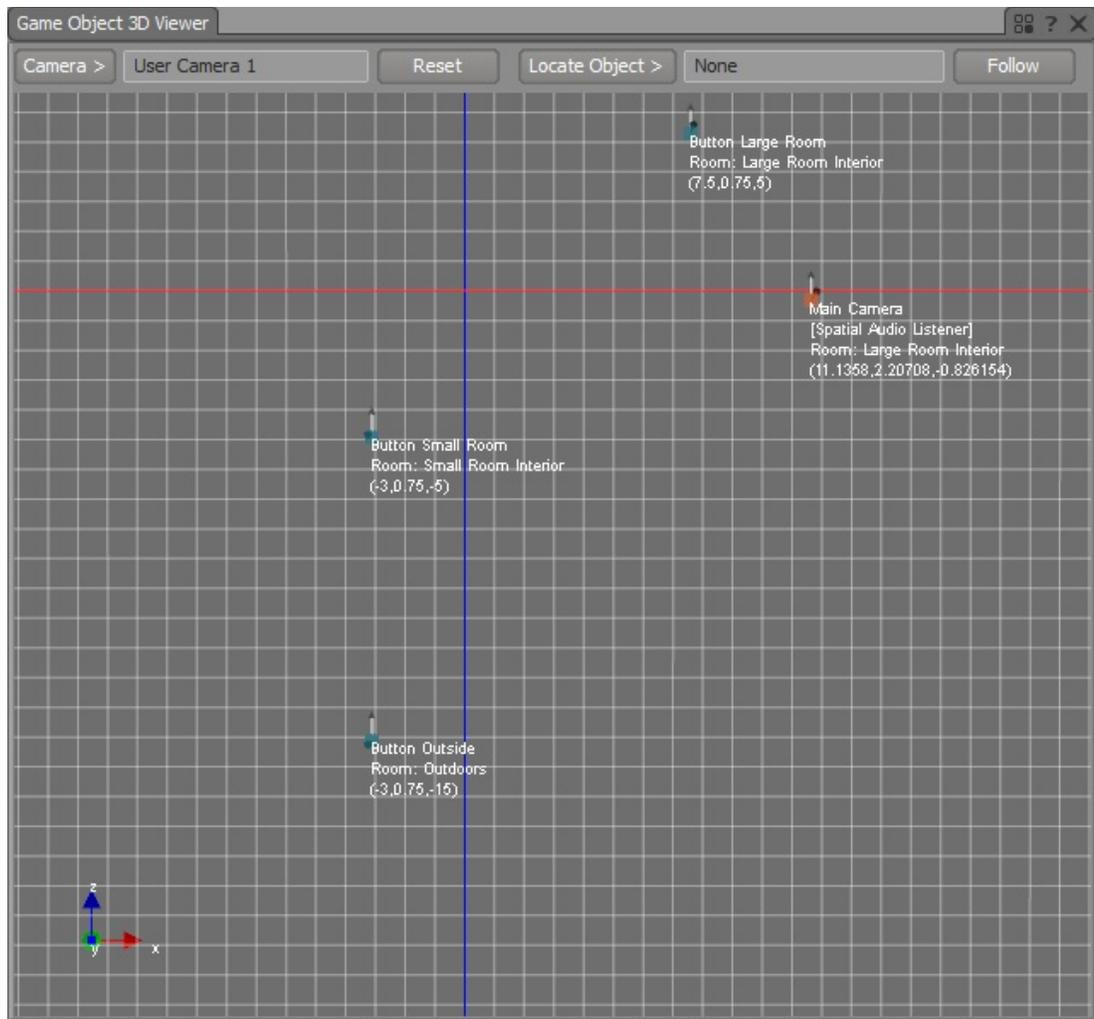
2. Start the game, connect to Wwise and go to the Game Object Profiler layout
 1. Watch all the emitters and the listener.
 2. Open a Game Object 3D Viewer view. You should see each emitter in their respective rooms. The next image is a top view of the scene. The listener and Button Outside are not in a room, so they are put by default in the "Outdoors" room. If everything is in the Outdoors room instead of their respective rooms, it means spatial audio is disabled. You must have forgotten to add

an Ak Spatial Audio Listener component to the listener. Follow step 3.B.



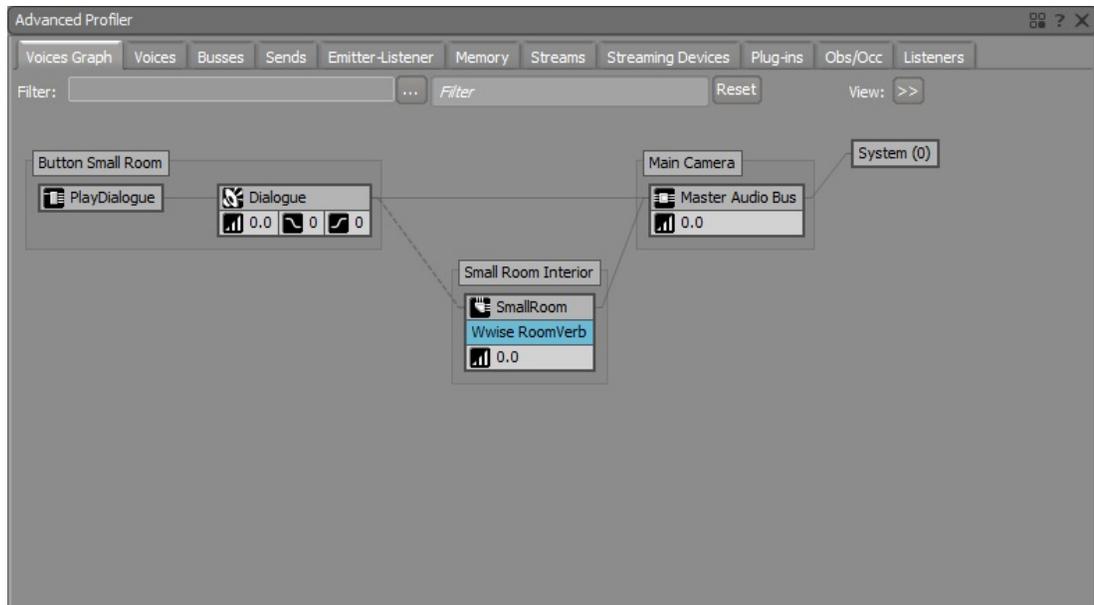
Emitters in their respective rooms and the Listener Outdoors

3. Move the listener to a room and see the room name change under your listener game object in the Game Object 3d Viewer. In the following image, the listener is in the large room.



Emitters in their respective rooms and the Listener in the Large Room Interior

3. Press the button in one of the rooms to hear the reverb.
 1. In the small room, the voice graph should look like this:



Button Small Room Voice Graph with Reverb

2. When a listener is in a different room than the emitter, the sound is completely occluded. You will need to add portals to hear the sound coming from rooms through desired openings.

Note: To add a reverb outside, add a Room around the entire area. Make sure that the Room has a lower priority than the Small Room Interior and Large Room Interior.

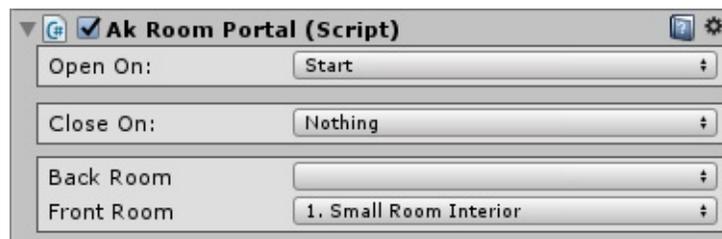
D. Portals

Each Room needs a Portal to be connected to another area. We need two Portals: one on the door between the outside area and the small Room and one between both Rooms.

1. Create two Ak Room Portal components: GameObject > Wwise > Room Portal

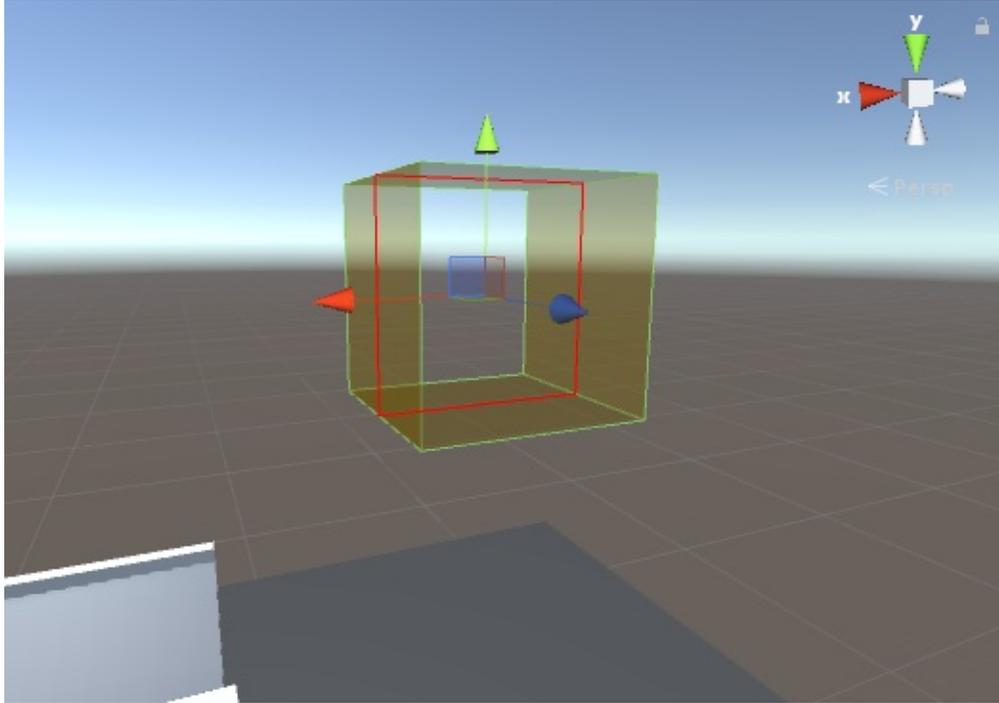
Object Name	Position	Rotation
Outside Portal	(0, 2, -10)	(0, 0, 0)
Inside Portal	(3.75, 2, -4.5)	(0, 90, 0)

2. In the Ak Room Portal component:
 1. **Open On Start.**
 2. **Close On Nothing.**
 3. Make sure that the Back Room and Front Room display the right **Ak Room** components. If not, refresh the inspector by deselecting and selecting the Portal again.
3. This is how the Inside Portal Ak Room Portal component will look like:



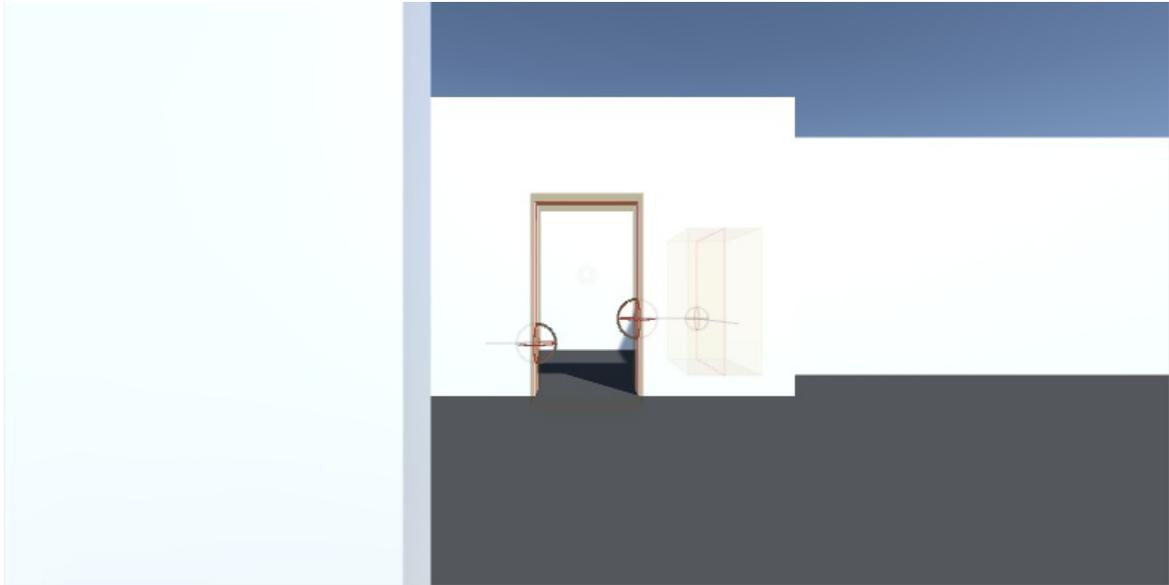
Ak Room Portal component

4. In the **Scene** window, a Portal is represented with a yellow ribbon around it indicating its size and the orientation in which it should be placed. The red line shows the separation between front and back areas of the Portal. The front is in the same direction as the local z axis.



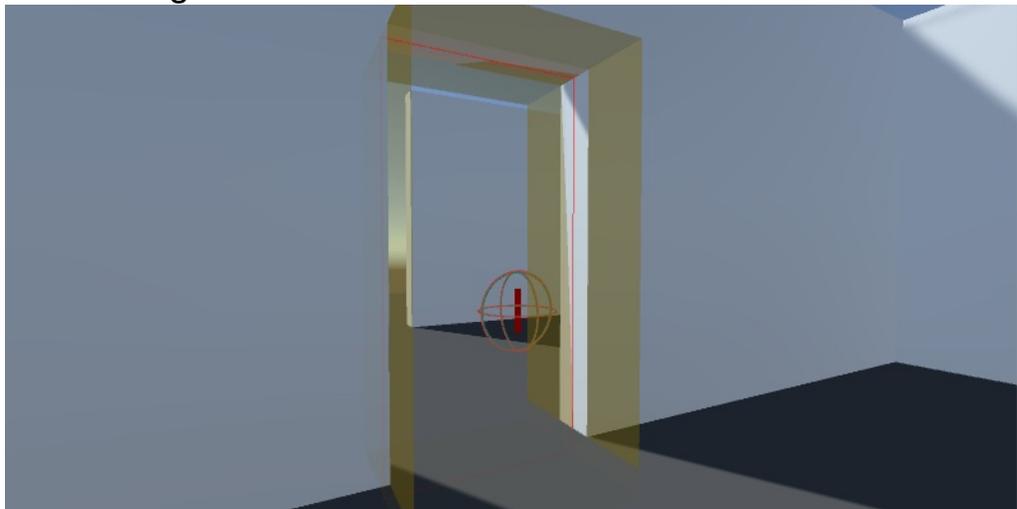
Ak Room Portal in the Scene window

5. You should already see the Draw Sound Propagation drawings indicating where the sound will be coming from through the portal. The sphere on the left comes from the small room emitter and the one on the right from the large room emitter. You can see the latter is actually coming from the Portal connecting the small and large Rooms. The sound propagation is represented by red and blue spheres that change in size depending on the wet and dry diffraction angles respectively.



Game window at Start

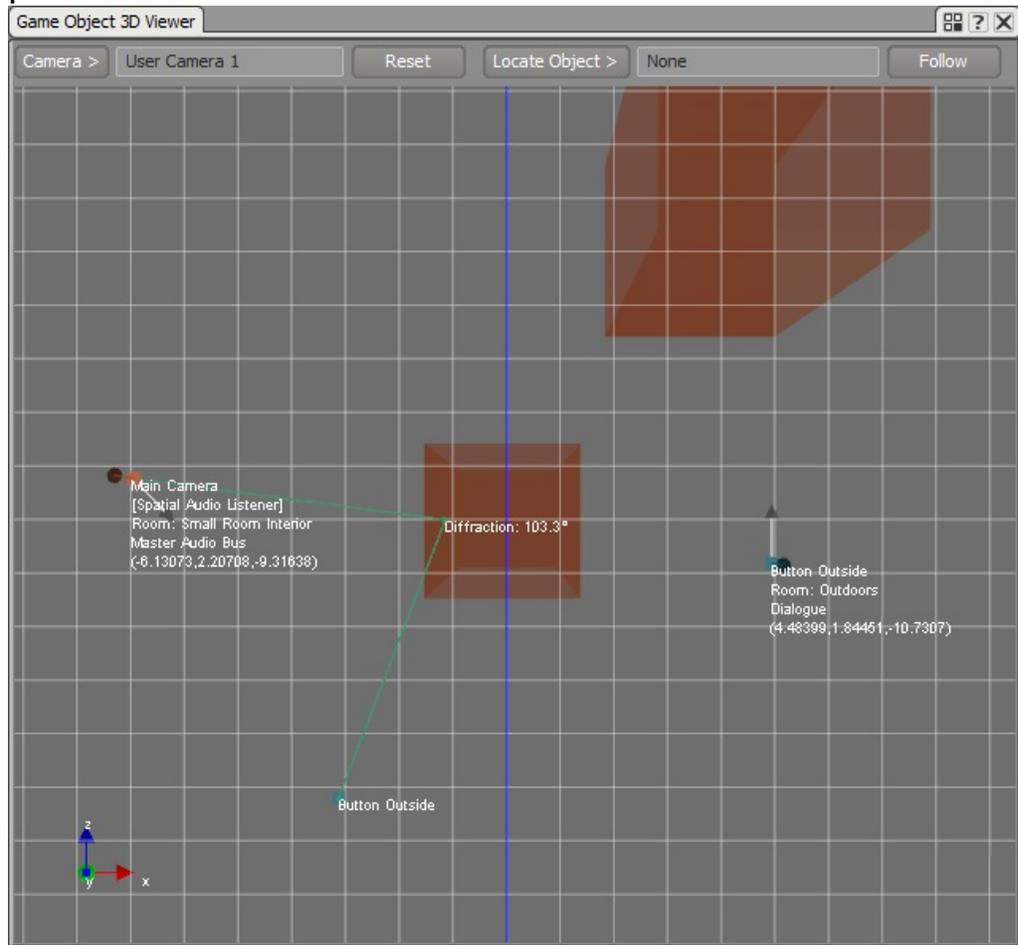
1. Wwise
2. Play the button outside and go inside the small room.
 1. You should see the same sound propagation drawings coming from the outside emitter through the portal connecting with the outside.



Sound Propagation drawings from Button Outside when the listener is inside Small Room Interior

2. Move in and out of sight to hear the diffraction applied on the sound. You will hear more or less diffraction depending

on the angle of the listener vs. the portal. In the next image, we are watching the listener and Button Outside. You can see a top view of the scene in the Game Object 3D Viewer. In dark red, we can see the portals. The one in the middle is the Outside Portal, the area on top of the Portal is the Small Room Interior and the area on the bottom is the outside. The Listener is in the Small Room Interior and the playing emitter is Button Outside. On the image, you can see the sound propagation in green between the listener and the emitter. The Diffraction angle is 103.3. Also, you can see the virtual position of the Button Outside emitter on the right. That's where the sound you hear will go through the portal.

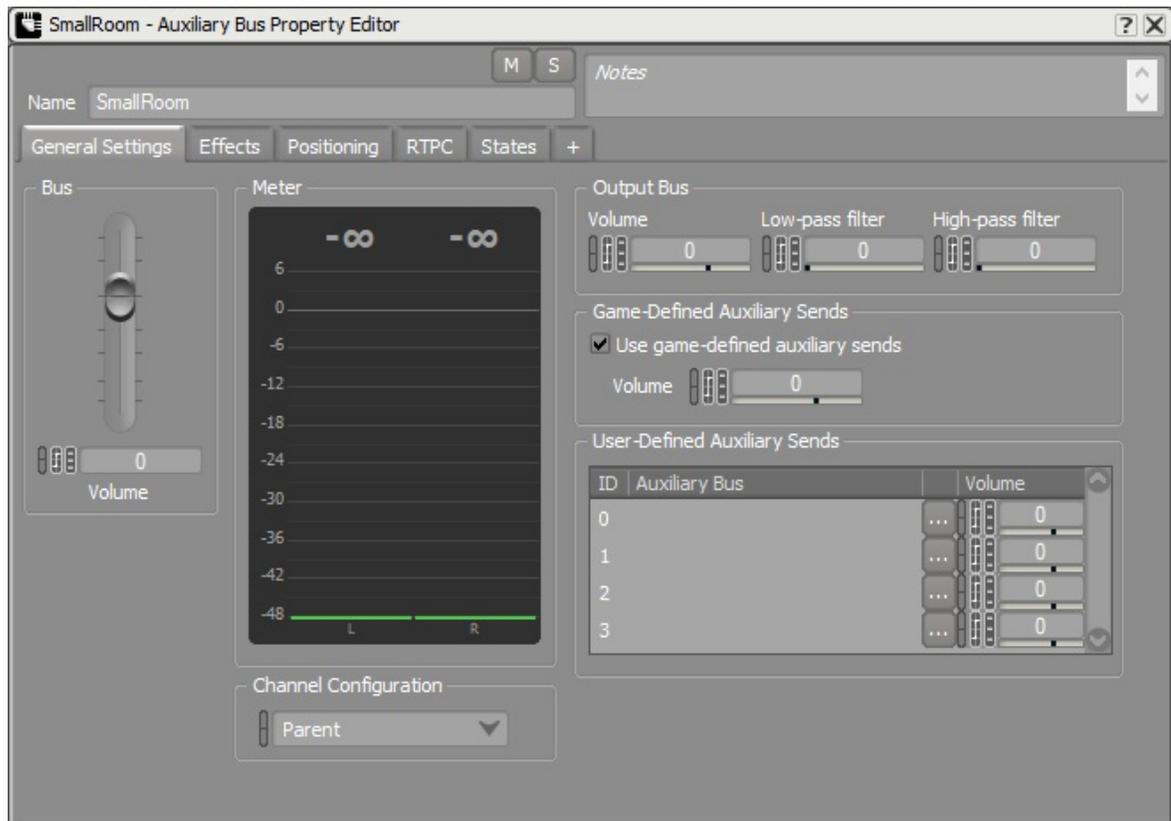


Portal diffraction angle on Game Object 3D Viewer

E. Portals and Reverb

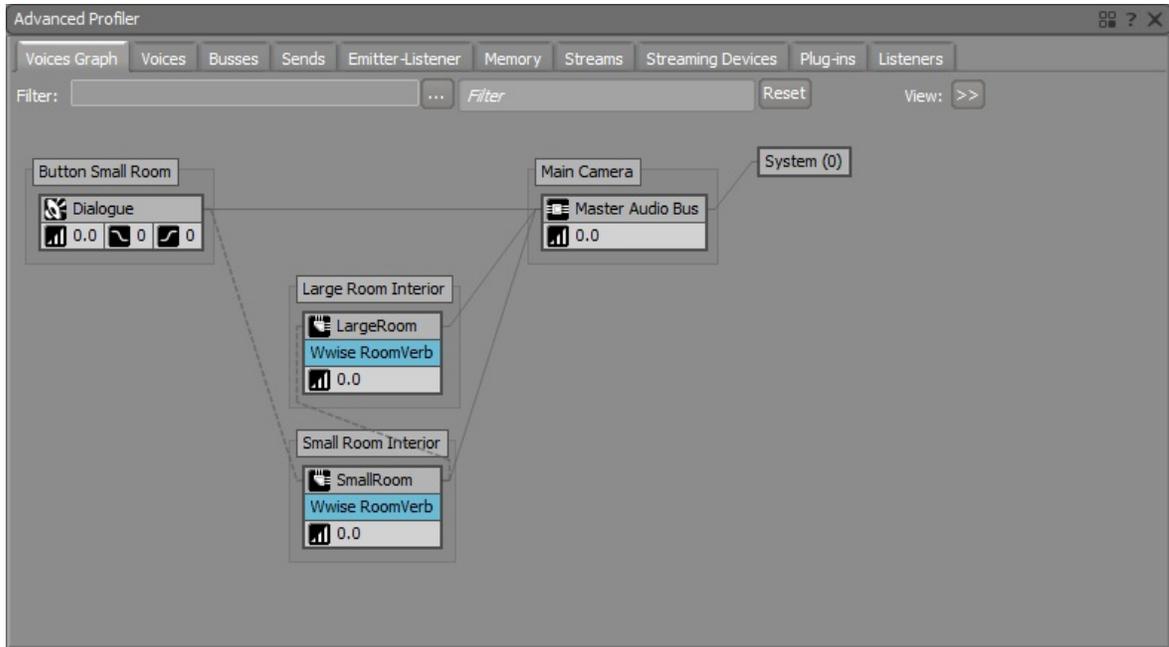
Sound emitted through Portals can also use the reverb from the current Room the listener is in.

1. Open the SmallRoom Auxiliary Bus Property Editor and check **Use game-defined auxiliary sends** in the General Settings tab. This will send the small Room reverb to other reverbs in the scene.



Auxiliary Bus Property Editor General Settings tab to send room reverb to other reverbs

2. When playing the small room emitter, and going into the large room, you will see the small room's reverb feeding into the large room's reverb.

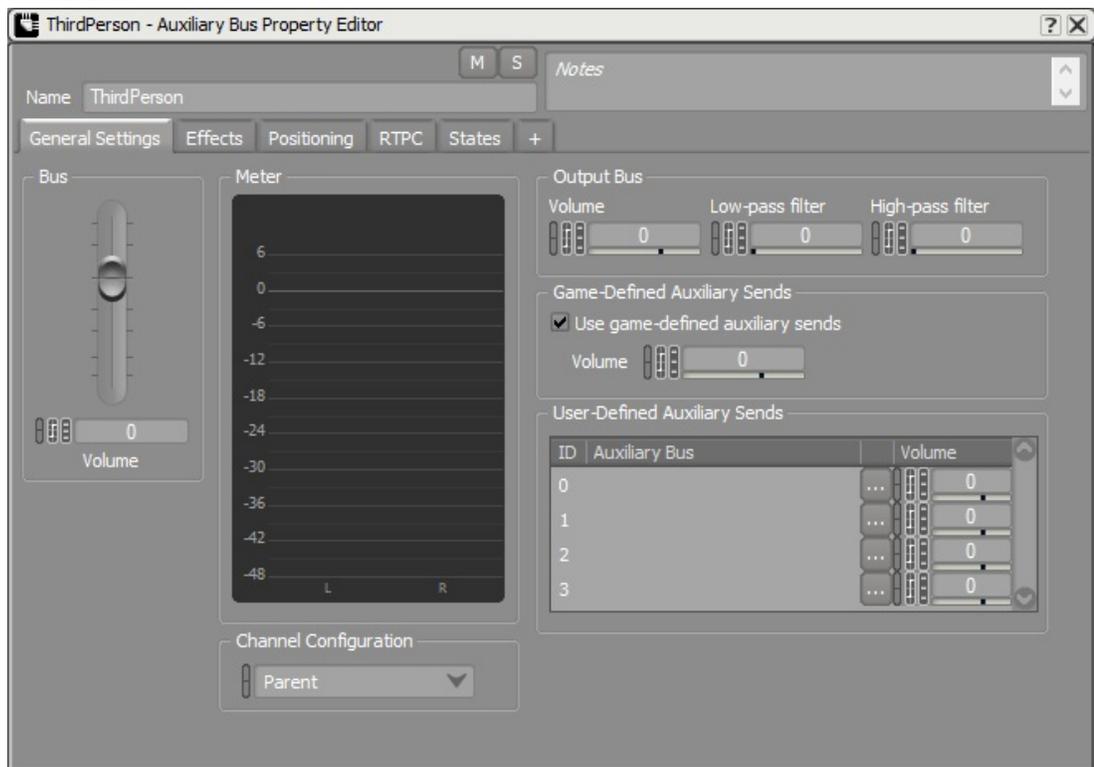


Button Small Room reverb sending to Large Room Interior room's reverb on the Voices Graph

F. Surface Reflectors and Reverb

It is also possible to feed early reflections into the reverb of a Room. Let's add surface reflectors in our scene.

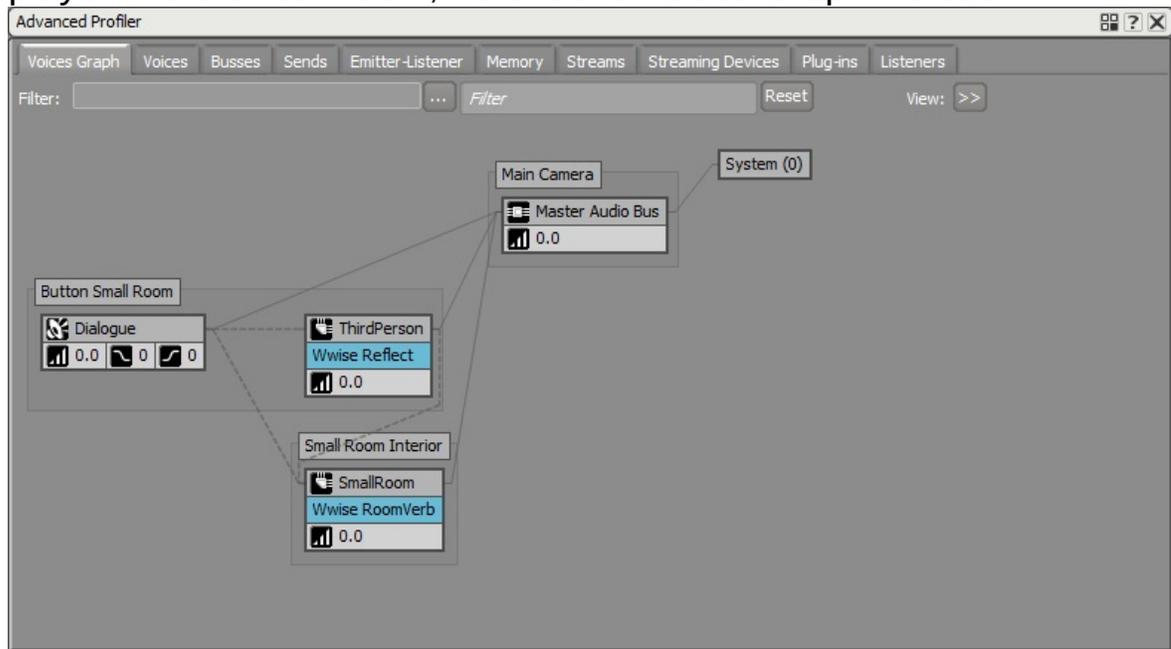
1. Following section [Surface Reflectors Tutorial](#),
 1. Add an Auxiliary Bus with the Reflect Effect.
 2. Link each **Ak Spatial Audio Emitter** to the new Reflect Auxiliary Bus.
 3. Add **Ak Surface Reflector** components on all the walls and the floor.
2. In the Wwise project, open the Auxiliary Bus with the Reflect Effect applied to it.
 1. In the General Settings tab, check **Use game-defined auxiliary sends**.



Auxiliary Bus Property Editor General Settings tab to send early reflection to the room reverb

3. Play the scene and press the button in the small Room. With the

player in the small Room, here is the Voices Graph we see:



Early reflections in the small room are sent to the small room's reverb in the Voices Graph



Wwise Unity Integration » Using UnityWwise Spatial Audio

Obstruction and Occlusion

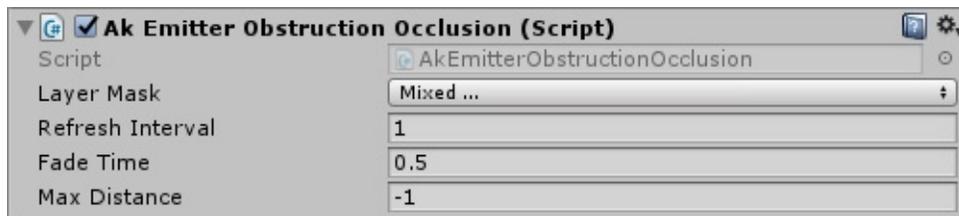
It is possible to obstruct or occlude sounds in Unity. See the following sections for details:

- **A. Emitter Obstruction/Occlusion**
- **B. Portal Obstruction**

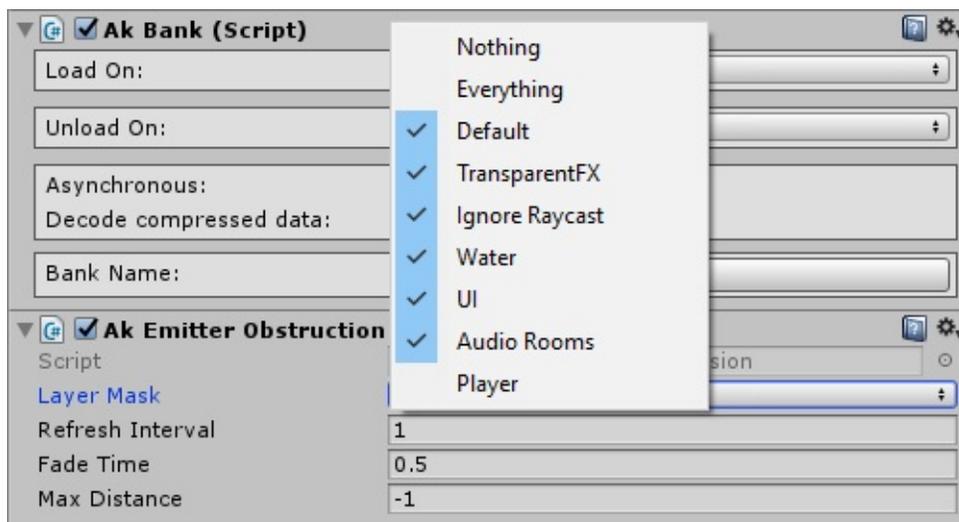
A. Emitter Obstruction/Occlusion

An emitter can be obstructed or occluded in Unity when the **Ak Emitter Obstruction Occlusion** component is added to its GameObject. When your map doesn't use spatial audio, that is it doesn't have any **Ak Room** components, the **Ak Emitter Obstruction Occlusion** component will only use occlusion. In a spatial audio scene, this same component will use obstruction with the spatial audio listener only; the GameObject with the **Ak Spatial Audio Listener** component. Emitter obstruction is applied to emitters that are in the same room as the spatial audio listener.

1. Add an **Ak Emitter Obstruction Occlusion** component to Button Outside.
 1. In **Layer Mask**, select layers that would block audio. In the SpatialAudioTutorial scene provided with the integration, we have put the first person character on a user created layer called "Player". This layer is not selected in the **Layer Mask** option.



Ak Emitter Obstruction Occlusion component



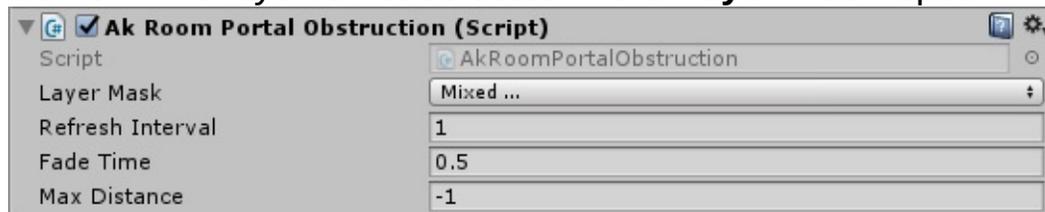
Layer Mask options for the Ak Emitter Obstruction Occlusion component

2. Play the scene.
 1. Play Button Outside.
 2. Go behind the Barrier GameObject to hear it occluded or obstructed depending on the presence of any GameObjects with the **Ak Room** component in your scene.

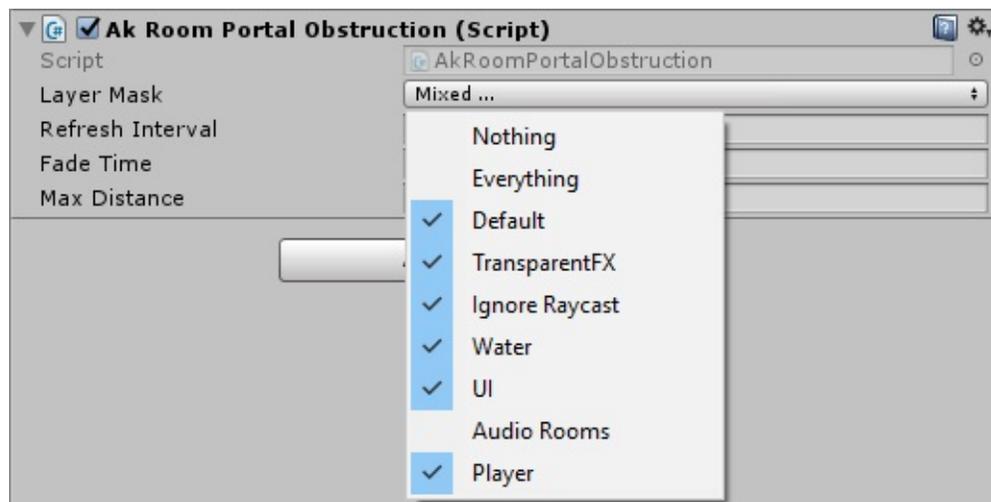
B. Portal Obstruction

Sound emitted through portals can also be obstructed. Use the **Ak Room Portal Obstruction** component on a game object with an **Ak Room Portal** component to do so. See section [Rooms and Portals Tutorial](#) to add rooms and portals to your scene, if not done already.

1. Add an **Ak Room Portal Obstruction** component to Outside Portal.
 1. In **Layer Mask**, select layers that would block audio. In the SpatialAudioTutorial scene provided with the integration, we have put the rooms on a user created layer called "Audio Rooms". This layer is not selected in the **Layer Mask** option.



Ak Room Portal Obstruction component



Layer Mask options for the Ak Room Portal Obstruction component

2. Play the scene.
 1. Play Button Small Room.
 2. Go behind the Barrier GameObject to obstruct the portal.



Wwise Unity Integration

-
- **UnityDllNotFoundException console**
-
- **Wwise Profiler**
- **Error during installation - Unity**
- **Wwise for MacSoundBank - Wwise_IDs.h**
- **Error: Plugin**
- **MacUnity Console"Multiple plugins with the same name"**
- **Xbox One"Failed to initialize the sound engine"-in**

Wwise2013.2.8

UNITY_PROJECT_ROOT\Assets\Wwise\Deployment\Examples Components
Examples

UnityPackageorms.

UnityDllNotFoundException console

WindowsAkSoundEngineDllNotFoundExceptionUnity2

- DirectX
- Wwise-Unity IntegrationDebug
2010 Debug Redistributables

Microsoft Visual Studio

:

- WindowsMacEditorEditor
- SoundBankUnityEditorWwiseGenerated
SoundbanksSoundBank1StreamingAssetsWwise
SoundBank
Target Platform
- Sound EngineScript Execution Order (menu
Edit > Project Settings > Script Execution Order)AkInitializer
AkTerminator
- Unity...
- Wwise ProfilerWwiseF7Capture Log
- Wwise ProfilerSoundBankProfiling Settings (Alt-G)
SoundBankAkBank

- Wwise ProfilerCapture LogEventSoundBank
AkEvent, AkAmbient

Wwise Profiler

Windows

- background Run Unity (menu **File > Build Settings > Player Settings**)
- port 24024Wwise
- Wwise-Unity Plug-in Debug Profile
- Task Manager"adb.exe"AndroidTCPAndroid AndroidGoogle

- WwiseRemote Connection Connect To IP IP
- port 24024

Error during installation - Unity

*Wwise: Error during installation: Access to the path is denied*Unity

:

- Plug-in (Debug, Profile, Release) **Assets > Wwise > Install Plugins**
 - Unity Integrationwwise Setup
 - Unity EditorScene
- UnityPlug-in (Debug, Profile, Release)

Wwise for MacSoundBank - Wwise_IDs.h

Wwise for MacSoundBankWwise_IDs.h:

- Wwise Project
- Project SettingsSoundBanks
- Header file pathSoundBanks

Error: Plugin

WwiseAkSoundEngine

MacUnity Console"Multiple plugins with the same name"

Mac Unity IntegrationUnity Console

Multiple plug-ins with the same name 'aksoundengine' (found at 'Assets/Wwise/Deployment/Plugins/Mac/Release/AkSoundEngine.bu and 'Assets/Wwise/Deployment/Plugins/Mac/Debug/AkSoundEngine.bun Editor11Editor

Xbox One"Failed to initialize the sound engine"-in

Xbox OneUnityWwiseAssets >
Project Settings > Audio"Disable audio"

Unity 5.0.2"Disable audio"
AkInitializer.cs:

```
AkPlatformInitSettings platformSettings = new AkPlatformInitSettings();
    AkSoundEngine.GetDefaultPlatformInitSettings(platformSettings);
    platformSettings.uLEngineDefaultPoolSize = (uint)lowerPoolSize * 1024;
    platformSettings.fLEngineDefaultPoolRatioThreshold = memoryCutoffThreshold;
```

```
AkPlatformInitSettings platformSettings = new AkPlatformInitSettings();
    AkSoundEngine.GetDefaultPlatformInitSettings(platformSettings);
    platformSettings.uLEngineDefaultPoolSize = (uint)lowerPoolSize * 1024;
    platformSettings.fLEngineDefaultPoolRatioThreshold = memoryCutoffThreshold;
#if UNITY_XBOXONE && !UNITY_EDITOR
    platformSettings.uMaxXMAVoices = 0;
#endif
```

XMA

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



UnityIntegration

Unity

Scripting Define Symbols:

Platform, Architecture	Custom Preprocessor	Default Architecture
Vita, SW	AK_ARCH_VITA_SW	Default
Vita, HW	AK_ARCH_VITA_HW	NO

**Build Settings > Player Settings... > Other Settings >
Scripting Define Symbols Enter**



Note:



AK::Wwise::AcousticTexture

AK::Wwise::AuxBus

AK::Wwise::Bank

AK::Wwise::BaseGroupType

AK::Wwise::BaseType

AK::Wwise::CallbackFlags

AK::Wwise::Event

AK::Wwise::RTPC

AK::Wwise::State

AK::Wwise::Switch

AK::Wwise::Trigger

AkAmbient

AkAudioListener

AkBank

AkCallbackManager

AkEmitterObstructionOcclusion

AkEnvironment

AkEnvironment::AkEnvironment_CompareBySelectionAlgorithm

AkEnvironmentPortal

AkEvent

AkEventCallbackMsg

AkGameObj

AkInitializer

AkMemBankLoader

AkRoom

AkRoomPortal

AkRoomPortalObstruction

AkSpatialAudioEmitter

AkSpatialAudioListener

AkState

AkSurfaceReflector

AkSwitch

AkTerminator

AkTriggerBase

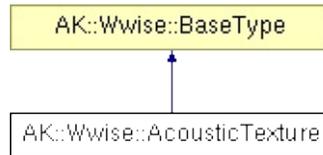


AK::Wwise::AcousticTexture

AK::Wwise::AcousticTexture

This type represents an Acoustic Texture. [\[\]](#)

AK::Wwise::AcousticTexture



This type represents an Acoustic Texture.

Wwise Unity Integration Mon Jan 8 10:46:18 2018  1.6.3

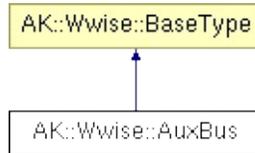


AK::Wwise::AuxBus

AK::Wwise::AuxBus

This type represents an auxiliary send in the Master-Mixer Hierarchy. []

AK::Wwise::AuxBus



This type represents an auxiliary send in the Master-Mixer Hierarchy.

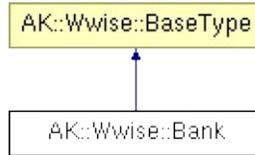


AK::Wwise::Bank

AK::Wwise::Bank

This type can be used to load/unload SoundBanks. [\[\]](#)

AK::Wwise::Bank



This type can be used to load/unload SoundBanks.

Wwise Unity Integration Mon Jan 8 10:46:18 2018  1.6.3

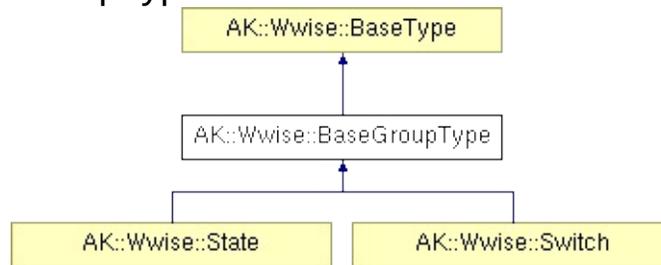


AK::Wwise::BaseGroupType

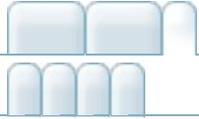
AK::Wwise::BaseGroupType

This type represents the base for all Wwise Types that also require a group GUID, such as **State** and **Switch**. []

AK::Wwise::BaseGroupType



This type represents the base for all Wwise Types that also require a group GUID, such as **State** and **Switch**.



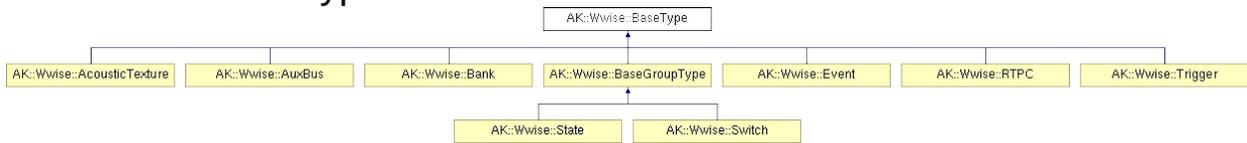
AK::Wwise::BaseType

AK::Wwise::BaseType

This type represents the base for all Wwise Types that require a GUID.



AK::Wwise::BaseType



This type represents the base for all Wwise Types that require a GUID.



AK::Wwise::CallbackFlags

AK::Wwise::CallbackFlags

This type represents the values of the flags used when posting an **Event** with a callback. [\[\]](#)

This type represents the values of the flags used when posting an **Event** with a callback.

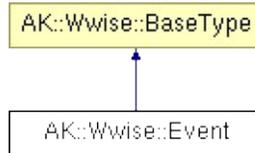


AK::Wwise::Event

AK::Wwise::Event

This type can be used to post Events to the sound engine. [\[\]](#)

AK::Wwise::Event



Public

uint	Post (GameObject gameObject) Posts this Event on a GameObject.
uint	Post (GameObject gameObject, CallbackFlags flags, AkCallbackManager.EventCallback callback, object cookie=null) Posts this Event on a GameObject.
uint	Post (GameObject gameObject, uint flags, AkCallbackManager.EventCallback callback, object cookie=null) Posts this Event on a GameObject.
void	ExecuteAction (GameObject gameObject, AkActionOnEventType actionOnEventType, int transitionDuration, AkCurveInterpolation curveInterpolation) Executes various actions on this event associated with a GameObject.
void	PostMIDI (GameObject gameObject, AkMIDIPostArray array) Posts MIDI Events on this Event associated with a GameObject.
void	PostMIDI (GameObject gameObject, AkMIDIPostArray array, int count) Posts MIDI Events on this Event associated with a GameObject.
void	StopMIDI (GameObject gameObject) Stops MIDI Events on this Event associated with a GameObject.
void	StopMIDI () Stops all MIDI Events on this Event .

This type can be used to post Events to the sound engine.

Wwise Unity Integration Mon Jan 8 10:46:18 2018  1.6.3

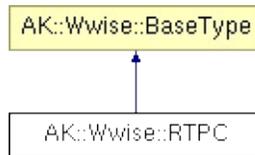


AK::Wwise::RTPC

AK::Wwise::RTPC

This type can be used to set game parameter values to the sound engine. [\[\]](#)

AK::Wwise::RTPC



This type can be used to set game parameter values to the sound engine.

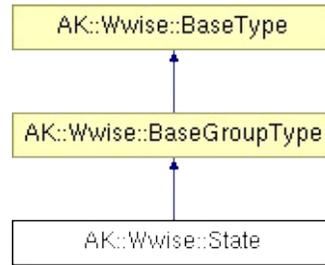


AK::Wwise::State

AK::Wwise::State

This type can be used to set Wwise States. [\[\]](#)

AK::Wwise::State



This type can be used to set Wwise States.

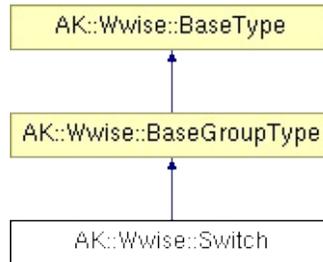


AK::Wwise::Switch

AK::Wwise::Switch

This type can be used to set **Switch** values on gameobjects. []

AK::Wwise::Switch



This type can be used to set **Switch** values on gameobjects.

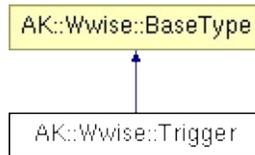


AK::Wwise::Trigger

AK::Wwise::Trigger

This type can be used to post triggers to the sound engine. [\[\]](#)

AK::Wwise::Trigger



This type can be used to post triggers to the sound engine.

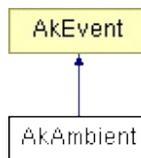
Wwise Unity Integration Mon Jan 8 10:46:18 2018  1.6.3



AkAmbient

Use this component to attach a Wwise Event to any object in a scene. The sound can be started at various moments, dependent on the selected Unity trigger. This component is more useful for ambient sounds (sounds related to scene-bound objects) but could also be used for other purposes. Since **AkAmbient** has **AkEvent** as its base class, it features the play/stop, play multiple, stop multiple and stop all buttons for previewing the associated Wwise event. []

AkAmbient



Public

int	eventID = 0
	ID of the Event as found in the WwiseID.cs file.
GameObject	soundEmitterObject = null
	Game object onto which the Event will be posted. By default, when empty, it is posted on the same object on which the component was added.
bool	enableActionOnEvent = false
	Enables additional options to reuse existing events. Use it to transform a Play event into a Stop event without having to define one in the Wwise Project.
AkActionOnEventType	actionOnEventType = AkActionOnEventType.AkActionOnEventType_Replace
	Replacement action. See AK::SoundEngine::ExecuteEventOnAction().
AkCurveInterpolation	curveInterpolation = AkCurveInterpolation.AkCurveInterpolation_Linear
	Fade curve to use with the new Action. See AK::SoundEngine::ExecuteEventOnAction().
float	transitionDuration = 0.0f
	Duration of the fade. See AK::SoundEngine::ExecuteEventOnAction().
const int	MAX_NB_TRIGGERS = 32
	Since our mask is a 32 bits integer, we can't have more than 32 triggers.
List< int >	triggerList = new List<int>() { START_TRIGGER_ID }
	List containing the enabled triggers.
bool	useOtherObject = false
	This property is useful only when used with colliders. When enabled, the target of the action

will be the other colliding object. When disabled,
will be the current object.

Static Public

static Dictionary< uint, string >	triggerTypes = AkTriggerBase.GetAllDerivedTypes ()
	Will contain the types of all the triggers derived from AkTriggerBase at runtime.

Use this component to attach a Wwise Event to any object in a scene. The sound can be started at various moments, dependent on the selected Unity trigger. This component is more useful for ambient sounds (sounds related to scene-bound objects) but could also be used for other purposes. Since **AkAmbient** has **AkEvent** as its base class, it features the play/stop, play multiple, stop multiple and stop all buttons for previewing the associated Wwise event.

:

- **AkAmbientInspector**
- **AkGameObj**
- **AkEvent**
- **Integration Details - Events** (Note: This is described in the Wwise SDK documentation.)



AkAudioListener

Add this script on the game object that represent a listener. This is normally added to the Camera object or the Player object, but can be added to any game object when implementing 3D busses.

`isDefaultListener` determines whether the game object will be considered a default listener - a listener that automatically listens to all game objects that do not have listeners attached to their

`AkGameObjListenerList`'s. [▶](#)

Add this script on the game object that represent a listener. This is normally added to the Camera object or the Player object, but can be added to any game object when implementing 3D busses.

`isDefaultListener` determines whether the game object will be considered a default listener - a listener that automatically listens to all game objects that do not have listeners attached to their `AkGameObjListenerList`'s.

:

- [Integrating Listeners](#) (Note: This is described in the Wwise SDK documentation.)



AkBank

Loads and unloads a SoundBank at a specified moment. Vorbis sounds can be decompressed at a specified moment using the decode compressed data option. In that case, the SoundBank will be prepared.

□

AkUnityEventHandler

Public

override void	HandleEvent (GameObject in_gameObject) Loads the SoundBank.
void	UnloadBank (GameObject in_gameObject) Unloads a SoundBank.

Public

string	bankName = ""
	Name of the SoundBank, as specified in the Wwise project.
bool	loadAsynchronous = false
	Check this to load the SoundBank in the background. Be careful, if Events are triggered and the SoundBank hasn't finished loading, you'll have "Event not found" errors.
bool	decodeBank = false
	Decode this SoundBank upon load.
bool	saveDecodedBank = false
	Save the decoded SoundBank to disk for faster loads in the future.
List< int >	unloadTriggerList = new List<int>() {AkUnityEventHandler.DESTROY_TRIGGER_ID }
	Reserved.
const int	MAX_NB_TRIGGERS = 32
	Since our mask is a 32 bits integer, we can't have more than 32 triggers.
List< int >	triggerList = new List<int>() { START_TRIGGER_ID }
	List containing the enabled triggers.
bool	useOtherObject = false
	This property is usefull only when used with colliders. When enabled, the target of the action will be the other colliding object. When disabled, it will be the current object.

Static Public

static Dictionary< uint, string >	triggerTypes = AkTriggerBase.GetAllDerivedTypes ()
	Will contain the types of all the triggers derived from AkTriggerBase at runtime.

Loads and unloads a SoundBank at a specified moment. Vorbis sounds can be decompressed at a specified moment using the decode compressed data option. In that case, the SoundBank will be prepared.



AkCallbackManager

This class manages the callback queue. All callbacks from the native Wwise SDK go through this queue. The queue needs to be driven by regular calls to **PostCallbacks()**. This is currently done in AkInitializer.cs, in LateUpdate(). [□](#)

Static Public

static void	SetMonitoringCallback (AK.Monitor.ErrorLevel in _Level, MonitoringCallback in _CB)
	Call this to set a function to call whenever Wwise prints a message (warnings or errors).
static void	SetBGMCallback (BGMCallback in _CB, object in _cookie)
static int	PostCallbacks ()

This class manages the callback queue. All callbacks from the native Wwise SDK go through this queue. The queue needs to be driven by regular calls to **PostCallbacks()**. This is currently done in AkInitializer.cs, in LateUpdate().



AkEmitterObstructionOcclusion

Obstructs/Occludes the emitter of the current game object from its listeners if at least one object is between them. [\[\]](#)

AkObstructionOcclusion

Public

LayerMask	LayerMask = -1
	Indicates which layers act as obstructers/occluders.
float	refreshInterval = 1
	The number of seconds between obstruction/occlusion checks.
float	fadeTime = 0.5f
	The number of seconds for fade ins and fade outs.
float	maxDistance = -1.0f
	The maximum distance at which to perform obstruction/occlusion. A negative value will be interpreted as infinite distance.

Obstructs/Occludes the emitter of the current game object from its listeners if at least one object is between them.

The current implementation does not support occlusion.



AkEnvironment

Use this component to define a reverb zone. This needs to be added to a collider object to work properly. [AkEnvironmentAkEnvironmentPortalInspector \(Reverb Zones\)](#) . 

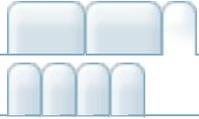
```
class AkEnvironment_CompareBySelectionAlgorithm
```

Use this component to define a reverb zone. This needs to be added to a collider object to work properly. **AkEnvironmentAkEnvironmentPortalInspector (Reverb Zones)** .

This component can be attached to any collider. You can specify a roll-off to fade-in/out of the reverb. The reverb parameters will be defined in the Wwise project, by the sound designer. All **AkGameObj** that are "environment"-aware will receive a send value when entering the attached collider.

:

- **AkEnvironmentAkEnvironmentPortalInspector (Reverb Zones)**
- **Integrating Environments and Game-defined Auxiliary Sends** (Note: This is described in the Wwise SDK documentation.)
- **AK::SoundEngine::SetGameObjectAuxSendValues** (Note: This is described in the Wwise SDK documentation.)



AkEnvironment::AkEnvironment_CompareBySelectionAlgorithm

AkEnvironment::AkEnvironment_CompareBySel

AkEnvironment::AkEnvironment_CompareByPriority

The selection algorithm is as follow:

1. Environments have priorities.
2. Environments have a "Default" flag. This flag effectively says that this environment will be bumped out if any other is present.
3. Environments have an "Exclude Other" flag. This flag will tell that this env is not overlappable with others. So, only one (the highest priority) should be selected.



AkEnvironmentPortal

Use this component to define an area that straddles two different AkEnvironments zones and allow mixing between both zones.

AkEnvironmentAkEnvironmentPortalInspector (Reverb Zones) . []

Public

float	GetAuxSendValueForPosition (Vector3 in_position, int index)
	The axis used to find the contribution of each environment.

Public

```
Vector3 axis = new Vector3(1,0,0)
```

Use this component to define an area that straddles two different AkEnvironments zones and allow mixing between both zones.

AkEnvironmentAkEnvironmentPortalInspector (Reverb Zones) .

Wwise Unity Integration Mon Jan 8 10:46:17 2018

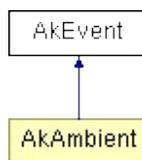
 1.6.3



AkEvent

Helper class that knows a Wwise Event and when to trigger it in Unity. As of 2017.2.0, the **AkEvent** inspector has buttons for play/stop, play multiple, stop multiple, and stop all. Play/Stop will play or stop the event such that it can be previewed both in edit mode and play mode. When multiple objects are selected, Play Multiple and Stop Multiple will play or stop the associated **AkEvent** for each object. []

AkEvent



Public

int	eventID = 0
	ID of the Event as found in the WwiseID.cs file.
GameObject	soundEmitterObject = null
	Game object onto which the Event will be posted. By default, when empty, it is posted on the same object on which the component was added.
bool	enableActionOnEvent = false
	Enables additional options to reuse existing events. Use it to transform a Play event into a Stop event without having to define one in the Wwise Project.
AkActionOnEventType	actionOnEventType = AkActionOnEventType.AkActionOnEventType_Replace
	Replacement action. See AK::SoundEngine::ExecuteEventOnAction().
AkCurveInterpolation	curveInterpolation = AkCurveInterpolation.AkCurveInterpolation_Linear
	Fade curve to use with the new Action. See AK::SoundEngine::ExecuteEventOnAction().
float	transitionDuration = 0.0f
	Duration of the fade. See AK::SoundEngine::ExecuteEventOnAction().
const int	MAX_NB_TRIGGERS = 32
	Since our mask is a 32 bits integer, we can't have more than 32 triggers.
List< int >	triggerList = new List<int>() { START_TRIGGER_ID }
	List containing the enabled triggers.
bool	useOtherObject = false
	This property is useful only when used with colliders. When enabled, the target of the action

will be the other colliding object. When disabled,
will be the current object.

Static Public

static Dictionary< uint, string >	triggerTypes = AkTriggerBase.GetAllDerivedTypes ()
	Will contain the types of all the triggers derived from AkTriggerBase at runtime.

Helper class that knows a Wwise Event and when to trigger it in Unity. As of 2017.2.0, the **AkEvent** inspector has buttons for play/stop, play multiple, stop multiple, and stop all. Play/Stop will play or stop the event such that it can be previewed both in edit mode and play mode. When multiple objects are selected, Play Multiple and Stop Multiple will play or stop the associated **AkEvent** for each object.

:

- **Edit Mode**
- **AkAmbientInspector**
- **Integration Details - Events** (Note: This is described in the Wwise SDK documentation.)



AkEventCallbackMsg

Event callback information. Event callback functions can receive this structure as a parameter. [\[\]](#)

Public

GameObject	sender
	AkSoundEngine.PostEvent callback flags. See the AkCallbackType enumeration for a list of all callbacks.
AkCallbackInfo	info
	GameObject from whom the callback function was called.

Event callback information. Event callback functions can receive this structure as a parameter.



AkGameObj

This component represents a sound object in your scene tracking its position and other game syncs such as Switches, RTPC and environment values. You can add this to any object that will emit sound, and it will be added to any object that an **AkAudioListener** is attached to. Note that if it is not present, Wwise will add it automatically, with the default values, to any Unity Game Object that is passed to Wwise. [▶](#)

Public

bool	AddListener (AkAudioListener listener)
	Adds an AkAudioListener to the container of listeners listening to this gameobject.
bool	RemoveListener (AkAudioListener listener)
	Removes an AkAudioListener from the container of listeners listening to this gameobject.
virtual Vector3	GetPosition ()
virtual Vector3	GetForward ()
virtual Vector3	GetUpward ()

Public

AkGameObjPositionOffsetData	m_positionOffsetData = null
	When not set to null, the position will be offset relative to the Game Object position by the Position Offset.
bool	isEnvironmentAware = true
	Is this object affected by Environment changes? Set to false if not affected in order to save some useless calls. Default is true.

This component represents a sound object in your scene tracking its position and other game syncs such as Switches, RTPC and environment values. You can add this to any object that will emit sound, and it will be added to any object that an **AkAudioListener** is attached to. Note that if it is not present, Wwise will add it automatically, with the default values, to any Unity Game Object that is passed to Wwise.

:

- [Integration Details - Game Objects](#) (Note: This is described in the Wwise SDK documentation.)
- [Integration Details - Events](#) (Note: This is described in the Wwise SDK documentation.)
- [Integrating Listeners](#) (Note: This is described in the Wwise SDK documentation.)
- [Integration Details - Switches](#) (Note: This is described in the Wwise SDK documentation.)
- [Integration Details - States](#) (Note: This is described in the Wwise SDK documentation.)
- [Integration Details - Environments and Game-defined Auxiliary Sends](#) (Note: This is described in the Wwise SDK documentation.)



AkInitializer

Public

string	basePath = AkSoundEngineController.s_DefaultBas Path for the soundbanks. This must contain one sub per platform, with the same as in the Wwise project.
string	language = AkSoundEngineController.s_Language Language sub-folder.
int	defaultPoolSize = AkSoundEngineController.s_DefaultPoolSize Default Pool size. This contains the meta data for yo project. Default size is 4 MB, but you should adjust fo needs.
int	lowerPoolSize = AkSoundEngineController.s_Lowe Lower Pool size. This contains the audio processing and DSP data. Default size is 2 MB, but you should a for your needs.
int	streamingPoolSize = AkSoundEngineController.s_StreamingPoolSize Streaming Pool size. This contains the streaming bu Default size is 1 MB, but you should adjust for your r
int	preparePoolSize = AkSoundEngineController.s_PreparePoolSize Prepare Pool size. This contains the banks loaded u PrepareBank (Banks decoded on load use this). Def is 0 MB, but you should adjust for your needs.
float	memoryCutoffThreshold = AkSoundEngineController.s_MemoryCutoffThreshold This setting will trigger the killing of sounds when the memory is reaching 95% of capacity. Lowest priority are killed.
int	monitorPoolSize = AkSoundEngineController.s_MonitorPoolSize Monitor Pool size. Size of the monitoring pool, in byt parameter is not used in Release build.

int	monitorQueuePoolSize = AkSoundEngineController.s_MonitorQueuePoolSize Monitor Queue Pool size. Size of the monitoring queue in bytes. This parameter is not used in Release build
int	callbackManagerBufferSize = AkSoundEngineController.s_CallbackManagerBuffer CallbackManager buffer size. The size of the buffer used per-frame to transfer callback data. Default size is 4 you should increase this, if required.
int	spatialAudioPoolSize = AkSoundEngineController.s_SpatialAudioPoolSize Spatial Audio Lower Pool size. Default size is 4 MB, should adjust for your needs.
uint	maxSoundPropagationDepth = AkSoundEngine.AK_MAX_SOUND_PROPAGATION Spatial Audio Max Sound Propagation Depth. Maximum number of rooms that sound can propagate through; less than or equal to AK_MAX_SOUND_PROPAGATION_DEPTH.
AkDiffractionFlags	diffractionFlags = AkDiffractionFlags.DefaultDiffractionFlags Enable or disable specific diffraction features. See AkDiffractionFlags.
bool	engineLogging = AkSoundEngineController.s_EngineLogging Enable Wwise engine logging. Option to turn on/off the logging of the Wwise engine.

This script deals with initialization, and frame updates of the Wwise audio engine. It is marked as `DontDestroyOnLoad` so it stays active for the life of the game, not only one scene. You can, and probably should, modify this script to change the initialization parameters for the sound engine. A few are already exposed in the property inspector. It must be present on one Game Object at the beginning of the game to initialize the audio properly. It must be executed BEFORE any other MonoBehaviors that use `AkSoundEngine`.

:

- [Initialize the Different Modules of the Sound Engine](#) (Note: This is described in the Wwise SDK documentation.)
- [AK::SoundEngine::Init\(\)](#) (Note: This is described in the Wwise SDK documentation.)
- [AK::SoundEngine::Term\(\)](#) (Note: This is described in the Wwise SDK documentation.)
- [AkCallbackManager](#)



AkMemBankLoader

Public

void	LoadNonLocalizedBank (string in_bankFilename)
	Load a sound bank from WWW object.
void	LoadLocalizedBank (string in_bankFilename)
	Load a language-specific bank from WWW object.

Public

string	bankName = ""
	Name of the bank to load.
bool	isLocalizedBank = false
	Is the bank localized (situated in the language specific folders).

This class is an example of how to load banks in Wwise, if the bank data was preloaded in memory. This would be useful for situations where you use the WWW class



AkRoom

An **AkRoom** is an enclosed environment that can only communicate to the outside/other rooms with AkRoomPortals. []

Public

ulong	GetID ()
	Access the room's ID.

Public

AK.Wwise.AuxBus	reverbAuxBus
	The reverb auxiliary bus.
float	reverbLevel = 1
	The reverb control value for the send to the reverb aux bus.
float	wallOcclusion = 1
	Occlusion level modeling transmission through walls.
int	priority = 0

An **AkRoom** is an enclosed environment that can only communicate to the outside/other rooms with AkRoomPortals.

Wwise Unity Integration Mon Jan 8 10:46:18 2018  1.6.3



AkRoomPortal

An **AkRoomPortal** can connect two **AkRoom** components together. [
]

AkUnityEventHandler

Public

ulong	GetID ()
	Access the portal's ID.
override void	HandleEvent (GameObject in_gameObject)
	Opens the portal on trigger event.
void	ClosePortal (GameObject in_gameObject)
	Closes the portal on trigger event.

Public

const int	MAX_ROOMS_PER_PORTAL = 2
	AkRoomPortals can only connect a maximum of 2 rooms.
AkRoom[]	rooms = new AkRoom[MAX_ROOMS_PER_PORTAL]
const int	MAX_NB_TRIGGERS = 32
	Since our mask is a 32 bits integer, we can't have more than 32 triggers.
List< int >	triggerList = new List<int>() { START_TRIGGER_ID }
	List containing the enabled triggers.
bool	useOtherObject = false
	This property is usefull only when used with colliders. When enabled, the target of the action will be the other colliding object. When disabled, it will be the current object.

Static Public

static Dictionary< uint, string >	triggerTypes = AkTriggerBase.GetAllDerivedTypes ()
	Will contain the types of all the triggers derived from AkTriggerBase at runtime.

An **AkRoomPortal** can connect two **AkRoom** components together.

Wwise Unity Integration Mon Jan 8 10:46:18 2018  1.6.3



AkRoomPortalObstruction

Obstructs/Occludes the spatial audio portal of the current game object from the spatial audio listener if at least one object is between them. [▶](#)

AkObstructionOcclusion

Public

LayerMask	LayerMask = -1
	Indicates which layers act as obstructers/occluders.
float	refreshInterval = 1
	The number of seconds between obstruction/occlusion checks.
float	fadeTime = 0.5f
	The number of seconds for fade ins and fade outs.
float	maxDistance = -1.0f
	The maximum distance at which to perform obstruction/occlusion. A negative value will be interpreted as infinite distance.

Obstructs/Occludes the spatial audio portal of the current game object from the spatial audio listener if at least one object is between them.

If no spatial audio listener has been registered, there will be no obstruction.



AkSpatialAudioEmitter

Add this script on the GameObject which represents an emitter that uses the Spatial Audio API. [\[\]](#)

AkSpatialAudioBase

Public

AK.Wwise.AuxBus	reflectAuxBus
	The Auxiliary Bus with a Reflect plug-in Effect applied.
uint	reflectionsOrder = 1
float	reflectionsAuxBusGain = 1
	The gain [0, 1] applied to the reflect auxiliary bus.
float	reflectionMaxPathLength = 1000
	The maximum path length a sound path can have from the emitter to the listener after reflecting on surfaces.
float	roomReverbAuxBusGain = 1
	Send gain (0.f-1.f) that is applied when sending to the aux bus associated with the room that the emitter is in.

Add this script on the GameObject which represents an emitter that uses the Spatial Audio API.

Wwise Unity Integration Mon Jan 8 10:46:18 2018  1.6.3



AkSpatialAudioListener

Add this script on the game object that represent a listener. This is normally added to the Camera object or the Player object, but can be added to any game object when implementing 3D busses.

`isDefaultListener` determines whether the game object will be considered a default listener - a listener that automatically listens to all game objects that do not have listeners attached to their `AkGameObjListenerList`'s. [▶](#)

AkSpatialAudioBase

Add this script on the game object that represent a listener. This is normally added to the Camera object or the Player object, but can be added to any game object when implementing 3D busses.

`isDefaultListener` determines whether the game object will be considered a default listener - a listener that automatically listens to all game objects that do not have listeners attached to their `AkGameObjListenerList`'s.

:

- [Integrating Listeners](#) (Note: This is described in the Wwise SDK documentation.)



AkState

This will call `AkSoundEngine.SetState()` whenever the selected Unity event is triggered. For example this component could be set on a Unity collider to trigger when an object enters it. [▶](#)

AkUnityEventHandler

Public

int	groupID
	State Group ID, as defined in WwiseID.cs.
int	valueID
	State Value ID, as defined in WwiseID.cs.
const int	MAX_NB_TRIGGERS = 32
	Since our mask is a 32 bits integer, we can't have more than 32 triggers.
List< int >	triggerList = new List<int>() { START_TRIGGER_ID }
	List containing the enabled triggers.
bool	useOtherObject = false
	This property is usefull only when used with colliders. When enabled, the target of the action will be the other colliding object. When disabled, it will be the current object.

Static Public

static Dictionary< uint, string >	triggerTypes = AkTriggerBase.GetAllDerivedTypes ()
	Will contain the types of all the triggers derived from AkTriggerBase at runtime.

This will call `AkSoundEngine.SetState()` whenever the selected Unity event is triggered. For example this component could be set on a Unity collider to trigger when an object enters it.

:

- [Integration Details - States](#) (Note: This is described in the Wwise SDK documentation.)



AkSurfaceReflector

This component will convert the triangles of the GameObject's geometry into sound reflective surfaces. [▶](#)

Static Public

static void	AddGeometrySet (AK.Wwise.AcousticTexture acousticTexture, MeshFilter meshFilter)
	Sends the mesh filter's triangles and their acoustic texture to Spatial Audio.
static void	RemoveGeometrySet (MeshFilter meshFilter)
	Remove the corresponding mesh filter's geometry from Spatial Audio.

Public

AK.Wwise.AcousticTexture	AcousticTexture
	All triangles of the component's mesh will be applied with this texture. The texture will change the filter parameters of the sound reflected from this component.

This component will convert the triangles of the GameObject's geometry into sound reflective surfaces.

This component requires a Mesh Filter component. The triangles of the mesh will be sent to the Spatial Audio wrapper by calling `SpatialAudio::AddGeometrySet()`. The triangles will reflect the sound emitted from **AkSpatialAudioEmitter** components.



AkSwitch

This will call `AkSoundEngine.SetSwitch()` whenever the selected Unity event is triggered. For example this component could be set on a Unity collider to trigger when an object enters it. [▶](#)

AkUnityEventHandler

Public

int	groupID
	Switch Group ID, as defined in WwiseID.cs.
int	valueID
	Switch Value ID, as defined in WwiseID.cs.
const int	MAX_NB_TRIGGERS = 32
	Since our mask is a 32 bits integer, we can't have more than 32 triggers.
List< int >	triggerList = new List<int>() { START_TRIGGER_ID }
	List containing the enabled triggers.
bool	useOtherObject = false
	This property is usefull only when used with colliders. When enabled, the target of the action will be the other colliding object. When disabled, it will be the current object.

Static Public

static Dictionary< uint, string >	triggerTypes = AkTriggerBase.GetAllDerivedTypes ()
	Will contain the types of all the triggers derived from AkTriggerBase at runtime.

This will call `AkSoundEngine.SetSwitch()` whenever the selected Unity event is triggered. For example this component could be set on a Unity collider to trigger when an object enters it.

:

- [Integration Details - Switches](#) (Note: This is described in the Wwise SDK documentation.)



AkTerminator

This script deals with termination of the Wwise audio engine. It must be present on one Game Object that gets destroyed last in the game. It must be executed AFTER any other monoBehaviors that use AkSoundEngine.

:

- [Terminate the Different Modules of the Sound Engine](#) (Note: This is described in the Wwise SDK documentation.)
- [AK::SoundEngine::Term\(\)](#) (Note: This is described in the Wwise SDK documentation.)



AkTriggerBase

AkTriggerCollisionEnter, AkTriggerCollisionExit, AkTriggerDisable,
AkTriggerEnable, AkTriggerEnter, AkTriggerExit, AkTriggerMouseDown,
AkTriggerMouseEnter, AkTriggerMouseExit, AkTriggerMouseUp

Public

delegate void	Trigger (GameObject in_gameObject)
	Delegate declaration for all Wwise Triggers.

Public

Trigger	triggerDelegate = null
	All components reacting to the trigger will be registered in this delegate.

Base class for the generic triggering mechanism for Wwise Integration.
All Wwise components will use this mechanism to drive their behavior.
Derive from this class to add your own triggering condition, as described in
[Adding New Triggers for Wwise Events](#)

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



- **AK::Wwise::BaseType**
 - **AK::Wwise::AcousticTexture**
 - **AK::Wwise::AuxBus**
 - **AK::Wwise::Bank**
 - **AK::Wwise::BaseGroupType**
 - **AK::Wwise::State**
 - **AK::Wwise::Switch**
 - **AK::Wwise::Event**
 - **AK::Wwise::RTPC**
 - **AK::Wwise::Trigger**
- **AK::Wwise::CallbackFlags**
- **AkAudioListener**
- **AkBank**
- **AkCallbackManager**
- **AkEmitterObstructionOcclusion**
- **AkEnvironment**
- **AkEnvironment::AkEnvironment_CompareBySelectionAlgorithr**
- **AkEnvironmentPortal**
- **AkEvent**
 - **AkAmbient**
- **AkEventCallbackMsg**
- **AkGameObj**
- **AkInitializer**
- **AkMemBankLoader**
- **AkRoom**
- **AkRoomPortal**
- **AkRoomPortalObstruction**
- **AkSpatialAudioEmitter**
- **AkSpatialAudioListener**
- **AkState**
- **AkSurfaceReflector**
- **AkSwitch**
- **AkTerminator**
- **AkTriggerBase**



- a -

- AcousticTexture : **AkSurfaceReflector**
- actionOnEventType : **AkEvent**
- AddGeometrySet() : **AkSurfaceReflector**
- AddListener() : **AkGameObj**
- axis : **AkEnvironmentPortal**

- b -

- bankName : **AkBank** , **AkMemBankLoader**
- basePath : **AkInitializer**

- c -

- callbackManagerBufferSize : **AkInitializer**
- ClosePortal() : **AkRoomPortal**
- curveInterpolation : **AkEvent**

- d -

- decodeBank : **AkBank**
- defaultPoolSize : **AkInitializer**
- diffractionFlags : **AkInitializer**

- e -

- enableActionOnEvent : **AkEvent**
- engineLogging : **AkInitializer**
- eventID : **AkEvent**

- ExecuteAction() : **AK::Wwise::Event**

- g -

- GetAuxSendValueForPosition() : **AkEnvironmentPortal**
- GetForward() : **AkGameObj**
- GetID() : **AkRoomPortal** , **AkRoom**
- GetPosition() : **AkGameObj**
- GetUpward() : **AkGameObj**
- groupID : **AkSwitch** , **AkState**

- h -

- HandleEvent() : **AkBank** , **AkRoomPortal**

- i -

- info : **AkEventCallbackMsg**
- isEnvironmentAware : **AkGameObj**
- isLocalizedBank : **AkMemBankLoader**

- l -

- language : **AkInitializer**
- loadAsynchronous : **AkBank**
- LoadLocalizedBank() : **AkMemBankLoader**
- LoadNonLocalizedBank() : **AkMemBankLoader**
- lowerPoolSize : **AkInitializer**

- m -

- m_positionOffsetData : **AkGameObj**
- MAX_ROOMS_PER_PORTAL : **AkRoomPortal**
- maxSoundPropagationDepth : **AkInitializer**
- memoryCutoffThreshold : **AkInitializer**
- monitorPoolSize : **AkInitializer**
- monitorQueuePoolSize : **AkInitializer**

- p -

- Post() : **AK::Wwise::Event**
- PostCallbacks() : **AkCallbackManager**
- PostMIDI() : **AK::Wwise::Event**
- preparePoolSize : **AkInitializer**
- priority : **AkRoom**

- r -

- reflectAuxBus : **AkSpatialAudioEmitter**
- reflectionMaxPathLength : **AkSpatialAudioEmitter**
- reflectionsAuxBusGain : **AkSpatialAudioEmitter**
- reflectionsOrder : **AkSpatialAudioEmitter**
- RemoveGeometrySet() : **AkSurfaceReflector**
- RemoveListener() : **AkGameObj**
- reverbAuxBus : **AkRoom**
- reverbLevel : **AkRoom**
- roomReverbAuxBusGain : **AkSpatialAudioEmitter**
- rooms : **AkRoomPortal**

- S -

- saveDecodedBank : **AkBank**
- sender : **AkEventCallbackMsg**
- SetBGMCallback() : **AkCallbackManager**
- SetMonitoringCallback() : **AkCallbackManager**
- soundEmitterObject : **AkEvent**
- spatialAudioPoolSize : **AkInitializer**
- StopMIDI() : **AK::Wwise::Event**
- streamingPoolSize : **AkInitializer**

- t -

- transitionDuration : **AkEvent**
- Trigger() : **AkTriggerBase**
- triggerDelegate : **AkTriggerBase**

- U -

- UnloadBank() : **AkBank**
- unloadTriggerList : **AkBank**

- V -

- valueID : **AkState** , **AkSwitch**

- W -

- wallOcclusion : **AkRoom**



•



AK::Wwise::Event

ExecuteAction

Post

Post

Post

PostMIDI

PostMIDI

StopMIDI

StopMIDI

uint AK::Wwise::Event::Post (GameObject **game**

Posts this **Event** on a GameObject.

:

gameObject The GameObject

:

Returns the playing ID.



AK::Wwise::Event

ExecuteAction

Post

Post

Post

PostMIDI

PostMIDI

StopMIDI

StopMIDI

```
void AK::Wwise::Event::PostMIDI ( GameObject  
                                AkMIDIPostAr  
                                )
```

Posts MIDI Events on this **Event** associated with a G

:

gameObject The GameObject

array The array of AkMIDIPost that are p



AkInitializer

basePath

callbackManagerBufferSize
defaultPoolSize
diffractionFlags
engineLogging
language
lowerPoolSize
maxSoundPropagationDepth
memoryCutoffThreshold
monitorPoolSize
monitorQueuePoolSize
preparePoolSize
spatialAudioPoolSize
streamingPoolSize

```
string AkInitializer::basePath = AkS
```

Path for the soundbanks. This must be the same as in the Wwise project.



AkCallbackManager

PostCallbacks
SetBGMCallback
SetMonitoringCallback

static void AkCallbackManager::SetMoni

Call this to set a function to call whenever W



AkMemBankLoader

bankName
isLocalizedBank
LoadLocalizedBank
LoadNonLocalizedBank

void AkMemBankLoader::LoadNonLocal

Load a sound bank from WWW object.



AkCallbackManager

PostCallbacks

SetBGMCallback

SetMonitoringCallback

static void AkCallbackManager::SetBGM

Call this to set a iOS callback interruption fur



A | B | C | E | R | S | T

A

A

AcousticTexture (AK::Wwise)

AkAmbient

A

AkAudioListener

AkBank

AkCallbackManager

AkEmitterObstructionOcclusion

AkEnvironment

AkEnvironment::AkEnvironment_CompareBySelectionAlgorithm

A | B | C | E | R | S | T



AkCallbackManager

PostCallbacks
SetBGMCallback
SetMonitoringCallback

static int AkCallbackManager::PostCallba

This function dispatches all the accumulated sound engine. It must be called regularly. By AkInitializer.cs.



AK::Wwise::AcousticTexture

AK::Wwise::AcousticTexture

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AK::Wwise::AuxBus

AK::Wwise::AuxBus

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AK::Wwise::Bank

AK::Wwise::Bank

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AK::Wwise::BaseGroupType

AK::Wwise::BaseGroupType

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AK::Wwise::BaseType

AK::Wwise::BaseType

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AK::Wwise::CallbackFlags

AK::Wwise::CallbackFlags

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AK::Wwise::Event

AK::Wwise::Event

ExecuteAction (GameObject gameObject, AkActionOnEventType actionOnEventType, int transitionDuration, AkCurveInterpolation curveInterpolation)	AK::Wwise::Event [inline]	
Post (GameObject gameObject)	AK::Wwise::Event [inline]	
Post (GameObject gameObject, CallbackFlags flags, AkCallbackManager.EventCallback callback, object cookie=null)	AK::Wwise::Event [inline]	
Post (GameObject gameObject, uint flags, AkCallbackManager.EventCallback callback, object cookie=null)	AK::Wwise::Event [inline]	
PostMIDI (GameObject gameObject, AkMIDIPostArray array)	AK::Wwise::Event [inline]	
PostMIDI (GameObject gameObject, AkMIDIPostArray array, int count)	AK::Wwise::Event [inline]	
StopMIDI (GameObject gameObject)	AK::Wwise::Event [inline]	
StopMIDI ()	AK::Wwise::Event [inline]	



AK::Wwise::Event

ExecuteAction
Post
Post
Post
PostMIDI
PostMIDI
StopMIDI
StopMIDI

```
uint AK::Wwise::Event::Post ( GameObject  
                             CallbackFlags  
                             AkCallbackManage  
                             object  
                             )
```

Posts this **Event** on a GameObject.

```
:  
    gameObject The GameObject  
    flags  
    callback  
    cookie      Optional cookie received by the ca
```

```
:  
    Returns the playing ID.
```



AK::Wwise::Event

ExecuteAction
Post
Post
Post
PostMIDI
PostMIDI
StopMIDI
StopMIDI

```
uint AK::Wwise::Event::Post ( GameObject  
                               uint  
                               AkCallbackManage  
                               object  
                               )
```

Posts this **Event** on a GameObject.

```
:  
    gameObject The GameObject  
    flags  
    callback  
    cookie Optional cookie received by the ca
```

```
:  
    Returns the playing ID.
```



AK::Wwise::Event

ExecuteAction

Post

Post

Post

PostMIDI

PostMIDI

StopMIDI

StopMIDI

```
void AK::Wwise::Event::ExecuteAction ( GameObject  
                                       AkAction  
                                       int  
                                       AkCurve  
                                       )
```

Executes various actions on this event associated with

```
:  
   gameObject           The GameObject  
   actionOnEventType  
   transitionDuration  
   curveInterpolation
```



AK::Wwise::Event

ExecuteAction

Post

Post

Post

PostMIDI

PostMIDI

StopMIDI

StopMIDI

```
void AK::Wwise::Event::PostMIDI ( GameObject  
                                AkMIDIPostAr  
                                int  
                                )
```

Posts MIDI Events on this **Event** associated with a G

:

gameObject The GameObject

array The array of AkMIDIPost that are p

count The number of elements from the a



AK::Wwise::Event

ExecuteAction

Post

Post

Post

PostMIDI

PostMIDI

StopMIDI

StopMIDI

```
void AK::Wwise::Event::StopMIDI ( GameObject )
```

Stops MIDI Events on this **Event** associated with a G

:

gameObject The GameObject



AK::Wwise::Event

ExecuteAction

Post

Post

Post

PostMIDI

PostMIDI

StopMIDI

StopMIDI

```
void AK::Wwise::Event::StopMIDI ( ) [inline]
```

Stops all MIDI Events on this **Event**.



AK::Wwise::RTPC

AK::Wwise::RTPC

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AK::Wwise::State

AK::Wwise::State

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AK::Wwise::Switch

AK::Wwise::Switch

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AK::Wwise::Trigger

AK::Wwise::Trigger

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AkAmbient

AkAmbient

actionOnEventType	AkEvent
curveInterpolation	AkEvent
enableActionOnEvent	AkEvent
eventID	AkEvent
soundEmitterObject	AkEvent
transitionDuration	AkEvent



AkEvent

actionOnEventType
curveInterpolation
enableActionOnEvent
eventID
soundEmitterObject
transitionDuration

int AkEvent::eventID = 0

ID of the Event as found in the WwiseID.cs file.



AkEvent

actionOnEventType
curveInterpolation
enableActionOnEvent
eventID
soundEmitterObject
transitionDuration

GameObject AkEvent::soundEmitterObject

Game object onto which the Event will be posted. By default, when empty, it is posted on the same GameObject on which the component was added.



AkEvent

actionOnEventType
curveInterpolation
enableActionOnEvent
eventID
soundEmitterObject
transitionDuration

bool AkEvent::enableActionOnEvent = false

Enables additional options to reuse existing events. Use it to transform a Play event into a Stop event without having to define one in the Wwise Project.



AkEvent

actionOnEventType
curveInterpolation
enableActionOnEvent
eventID
soundEmitterObject
transitionDuration

AkActionOnEventType AkEvent::actionOr

Replacement action. See AK::SoundEngine::!



AkEvent

actionOnEventType
curveInterpolation
enableActionOnEvent
eventID
soundEmitterObject
transitionDuration

AkCurveInterpolation AkEvent::curveInter

Fade curve to use with the new Action. See A



AkEvent

actionOnEventType
curveInterpolation
enableActionOnEvent
eventID
soundEmitterObject
transitionDuration

float AkEvent::transitionDuration = 0.0f

Duration of the fade. See
AK::SoundEngine::ExecuteEventOnAction().



AkSwitch

groupID
valueID

```
const int AkUnityEventHandler::MAX_NB_TRIGGERS =
```

Since our mask is a 32 bits integer, we can't have more than



AkSwitch

groupID
valueID

List<int> AkUnityEventHandler::triggerList = new List<i

List containing the enabled triggers.



AkSwitch

groupID
valueID

bool AkUnityEventHandler::useOtherObject = false [int]

This property is usefull only when used with colliders. When enabled, the target of the action will be the other colliding ob
When disabled, it will be the current object.



AkSwitch

groupID
valueID

Dictionary<uint, string> AkUnityEventHandler::triggerTy

Will contain the types of all the triggers derived from **AkTrigg**



AkAudioListener

AkAudioListener

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



AkBank

AkBank

bankName	AkBank	
decodeBank	AkBank	
HandleEvent (GameObject in_gameObject)	AkBank	[inline]
loadAsynchronous	AkBank	
saveDecodedBank	AkBank	
UnloadBank (GameObject in_gameObject)	AkBank	[inline]
unloadTriggerList	AkBank	



AkBank

bankName
decodeBank
HandleEvent
loadAsynchronous
saveDecodedBank
UnloadBank
unloadTriggerList

override void AkBank::HandleEvent (GameO

Loads the SoundBank.



AkBank

bankName
decodeBank
HandleEvent
loadAsynchronous
saveDecodedBank
UnloadBank
unloadTriggerList

```
void AkBank::UnloadBank ( GameObject in_
```

Unloads a SoundBank.



AkBank

bankName

decodeBank

HandleEvent

loadAsynchronous

saveDecodedBank

UnloadBank

unloadTriggerList

```
string AkBank::bankName = ""
```

Name of the SoundBank, as specified in the Wwise project.



AkBank

bankName
decodeBank
HandleEvent
loadAsynchronous
saveDecodedBank
UnloadBank
unloadTriggerList

bool AkBank::loadAsynchronous = false

Check this to load the SoundBank in the background. Be careful, if Events are triggered and the SoundBank hasn't finished loading, you'll have "Event not found" errors.



AkBank

bankName
decodeBank
HandleEvent
loadAsynchronous
saveDecodedBank
UnloadBank
unloadTriggerList

bool AkBank::decodeBank = false

Decode this SoundBank upon load.



AkBank

bankName
decodeBank
HandleEvent
loadAsynchronous
saveDecodedBank
UnloadBank
unloadTriggerList

bool AkBank::saveDecodedBank = false

Save the decoded SoundBank to disk for faster loads in the future.



AkBank

bankName
decodeBank
HandleEvent
loadAsynchronous
saveDecodedBank
UnloadBank
unloadTriggerList

```
List<int> AkBank::unloadTriggerList = new L
```

Reserved.



AkCallbackManager

AkCallbackManager

PostCallbacks()	AkCallbackManager	[in. sta
SetBGMCallback (BGMCallback in_CB, object in_cookie)	AkCallbackManager	[in. sta
SetMonitoringCallback (AK.Monitor.ErrorLevel in_Level, MonitoringCallback in_CB)	AkCallbackManager	[in. sta



AkEmitterObstructionOcclusion

AkEmitterObstructionOcclusion

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



AkRoomPortalObstruction

LayerMask AkObstructionOcclusion::LayerMask = -1 [inherited]



Indicates which layers act as obstructers/occluders.



AkRoomPortalObstruction

float AkObstructionOcclusion::refreshInterval = 1 [inherited]



The number of seconds between obstruction/occlusion checks.



AkRoomPortalObstruction

float AkObstructionOcclusion::fadeTime = 0.5f [inherited]

- ▣ The number of seconds for fade ins and fade outs.



AkRoomPortalObstruction

float AkObstructionOcclusion::maxDistance = -1.0f [inherited]

- The maximum distance at which to perform obstruction/occlusion. A negative value will be interpreted as infinite distance.



AkEnvironment

AkEnvironment

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



AkEnvironment::AkEnvironment_CompareBySel

AkEnvironment::AkEnvironment_CompareBySelectionAlgorithm

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



AkEnvironmentPortal

AkEnvironmentPortal

axis	AkEnvironmentPortal	
GetAuxSendValueForPosition (Vector3 in_position, int index)	AkEnvironmentPortal [inline]	

Wwise Unity Integration Mon Jan 8 10:46:17 2018

 1.6.3



AkEnvironmentPortal

axis

GetAuxSendValueForPosition

float AkEnvironmentPortal::GetAux

The axis used to find the contribution



AkEnvironmentPortal

axis

GetAuxSendValueForPosition

Vector3 AkEnvironmentPortal::axis

The array is already sorted by position. The first element is on the negative side of the portal (center of the chosen axis). The second element is on the positive side of the portal.



AkEvent

AkEvent

actionOnEventType	AkEvent
curveInterpolation	AkEvent
enableActionOnEvent	AkEvent
eventID	AkEvent
soundEmitterObject	AkEvent
transitionDuration	AkEvent



AkEventCallbackMsg

AkEventCallbackMsg

info AkEventCallbackMsg

sender AkEventCallbackMsg

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AkEventCallbackMsg

GameObject AkEventCallbackMsg::sender

info
sender

AkSoundEngine.PostEvent callback flags. See the AkCallbackType enumeration for a list of all callbacks.



AkEventCallbackMsg

info
sender

AkCallbackInfo AkEventCallbackMsg::info

GameObject from whom the callback function was called.



AkGameObj

AkGameObj

AddListener (AkAudioListener listener)	AkGameObj	[inline]
GetForward ()	AkGameObj	[inline, virtual]
GetPosition ()	AkGameObj	[inline, virtual]
GetUpward ()	AkGameObj	[inline, virtual]
isEnvironmentAware	AkGameObj	
m_positionOffsetData	AkGameObj	
RemoveListener (AkAudioListener listener)	AkGameObj	[inline]



AkGameObj

AddListener

GetForward

GetPosition

GetUpward

isEnvironmentAware

m_positionOffsetData

RemoveListener

bool AkGameObj::AddListener (AkAudioL

Adds an **AkAudioListener** to the container of gameobject.

:

listener

:

Returns true if the listener was not previously added, otherwise.



AkGameObj

AddListener
GetForward
GetPosition
GetUpward
isEnvironmentAware
m_positionOffsetData
RemoveListener

bool AkGameObj::RemoveListener (AkAu

Removes an **AkAudioListener** from the cont
gameobject.

:
listener

:
Returns true if the listener was previously



AkGameObj

[AddListener](#)
[GetForward](#)
[GetPosition](#)
[GetUpward](#)
[isEnvironmentAware](#)
[m_positionOffsetData](#)
[RemoveListener](#)

virtual Vector3 AkGameObj::GetPosition (

Gets the position including the position offset, applyPositionOffset is enabled. User can also to calculate an arbitrary position.

:

The position.



AkGameObj

AddListener

GetForward

GetPosition

GetUpward

isEnvironmentAware

m_positionOffsetData

RemoveListener

virtual Vector3 AkGameObj::GetForward (

Gets the orientation forward vector. User can method to calculate an arbitrary vector.

:

The forward vector of orientation.



AkGameObj

AddListener
GetForward
GetPosition
GetUpward
isEnvironmentAware
m_positionOffsetData
RemoveListener

virtual Vector3 AkGameObj::GetUpward (

Gets the orientation upward vector. User can method to calculate an arbitrary vector.

:
The upward vector of orientation.



AkGameObj

AddListener
GetForward
GetPosition
GetUpward
isEnvironmentAware
m_positionOffsetData
RemoveListener

AkGameObjPositionOffsetData AkGameO

When not set to null, the position will be offset from the position by the Position Offset.



AkGameObj

AddListener
GetForward
GetPosition
GetUpward
isEnvironmentAware
m_positionOffsetData
RemoveListener

bool AkGameObj::isEnvironmentAware =

Is this object affected by Environment change
Set to false if not affected in order to save some
useless calls. Default is true.



AkInitializer

AkInitializer

basePath	AkInitializer
callbackManagerBufferSize	AkInitializer
defaultPoolSize	AkInitializer
diffractionFlags	AkInitializer
engineLogging	AkInitializer
language	AkInitializer
lowerPoolSize	AkInitializer
maxSoundPropagationDepth	AkInitializer
memoryCutoffThreshold	AkInitializer
monitorPoolSize	AkInitializer
monitorQueuePoolSize	AkInitializer
preparePoolSize	AkInitializer
spatialAudioPoolSize	AkInitializer
streamingPoolSize	AkInitializer



AkInitializer

basePath
callbackManagerBufferSize
defaultPoolSize
diffractionFlags
engineLogging
language
lowerPoolSize
maxSoundPropagationDepth
memoryCutoffThreshold
monitorPoolSize
monitorQueuePoolSize
preparePoolSize
spatialAudioPoolSize
streamingPoolSize

```
string AkInitializer::language = AkS
```

Language sub-folder.



AkInitializer

basePath
callbackManagerBufferSize
defaultPoolSize
diffractionFlags
engineLogging
language
lowerPoolSize
maxSoundPropagationDepth
memoryCutoffThreshold
monitorPoolSize
monitorQueuePoolSize
preparePoolSize
spatialAudioPoolSize
streamingPoolSize

int AkInitializer::defaultPoolSize =

Default Pool size. This contains the m
MB, but you should adjust for your ne



AkInitializer

basePath
callbackManagerBufferSize
defaultPoolSize
diffractionFlags
engineLogging
language
lowerPoolSize
maxSoundPropagationDepth
memoryCutoffThreshold
monitorPoolSize
monitorQueuePoolSize
preparePoolSize
spatialAudioPoolSize
streamingPoolSize

int AkInitializer::lowerPoolSize = A

Lower Pool size. This contains the au
size is 2 MB, but you should adjust fo



AkInitializer

basePath
callbackManagerBufferSize
defaultPoolSize
diffractionFlags
engineLogging
language
lowerPoolSize
maxSoundPropagationDepth
memoryCutoffThreshold
monitorPoolSize
monitorQueuePoolSize
preparePoolSize
spatialAudioPoolSize
streamingPoolSize

int AkInitializer::streamingPoolSize

Streaming Pool size. This contains the
should adjust for your needs.



AkInitializer

basePath
callbackManagerBufferSize
defaultPoolSize
diffractionFlags
engineLogging
language
lowerPoolSize
maxSoundPropagationDepth
memoryCutoffThreshold
monitorPoolSize
monitorQueuePoolSize
preparePoolSize
spatialAudioPoolSize
streamingPoolSize

int AkInitializer::preparePoolSize =

Prepare Pool size. This contains the k
on load use this). Default size is 0 MB



AkInitializer

basePath
callbackManagerBufferSize
defaultPoolSize
diffractionFlags
engineLogging
language
lowerPoolSize
maxSoundPropagationDepth
memoryCutoffThreshold
monitorPoolSize
monitorQueuePoolSize
preparePoolSize
spatialAudioPoolSize
streamingPoolSize

float AkInitializer::memoryCutoffTh

This setting will trigger the killing of so
sounds are killed.



AkInitializer

basePath
callbackManagerBufferSize
defaultPoolSize
diffractionFlags
engineLogging
language
lowerPoolSize
maxSoundPropagationDepth
memoryCutoffThreshold
monitorPoolSize
monitorQueuePoolSize
preparePoolSize
spatialAudioPoolSize
streamingPoolSize

int AkInitializer::monitorPoolSize =

Monitor Pool size. Size of the monitor
Release build.



AkInitializer

basePath
callbackManagerBufferSize
defaultPoolSize
diffractionFlags
engineLogging
language
lowerPoolSize
maxSoundPropagationDepth
memoryCutoffThreshold
monitorPoolSize
monitorQueuePoolSize
preparePoolSize
spatialAudioPoolSize
streamingPoolSize

int AkInitializer::monitorQueuePoolSize

Monitor Queue Pool size. Size of the pool in the Release build.



AkInitializer

basePath
callbackManagerBufferSize
defaultPoolSize
diffractionFlags
engineLogging
language
lowerPoolSize
maxSoundPropagationDepth
memoryCutoffThreshold
monitorPoolSize
monitorQueuePoolSize
preparePoolSize
spatialAudioPoolSize
streamingPoolSize

int AkInitializer::callbackManagerB

CallbackManager buffer size. The size
KB, but you should increase this, if re



AkInitializer

basePath
callbackManagerBufferSize
defaultPoolSize
diffractionFlags
engineLogging
language
lowerPoolSize
maxSoundPropagationDepth
memoryCutoffThreshold
monitorPoolSize
monitorQueuePoolSize
preparePoolSize
spatialAudioPoolSize
streamingPoolSize

int AkInitializer::spatialAudioPoolS

Spatial Audio Lower Pool size. Defaul



AkInitializer

basePath
callbackManagerBufferSize
defaultPoolSize
diffractionFlags
engineLogging
language
lowerPoolSize
maxSoundPropagationDepth
memoryCutoffThreshold
monitorPoolSize
monitorQueuePoolSize
preparePoolSize
spatialAudioPoolSize
streamingPoolSize

uint AkInitializer::maxSoundPropa

Spatial Audio Max Sound Propagation
be less than or equal to AK_MAX_SC



AkInitializer

basePath
callbackManagerBufferSize
defaultPoolSize
diffractionFlags
engineLogging
language
lowerPoolSize
maxSoundPropagationDepth
memoryCutoffThreshold
monitorPoolSize
monitorQueuePoolSize
preparePoolSize
spatialAudioPoolSize
streamingPoolSize

AkDiffractionFlags AkInitializer::di

Enable or disable specific diffraction f



AkInitializer

basePath
callbackManagerBufferSize
defaultPoolSize
diffractionFlags
engineLogging
language
lowerPoolSize
maxSoundPropagationDepth
memoryCutoffThreshold
monitorPoolSize
monitorQueuePoolSize
preparePoolSize
spatialAudioPoolSize
streamingPoolSize

bool AkInitializer::engineLogging =

Enable Wwise engine logging. Option



AkMemBankLoader

AkMemBankLoader

bankName	AkMemBankLoader	
isLocalizedBank	AkMemBankLoader	
LoadLocalizedBank (string in_bankFilename)	AkMemBankLoader	[inline]
LoadNonLocalizedBank (string in_bankFilename)	AkMemBankLoader	[inline]



AkMemBankLoader

bankName
isLocalizedBank
LoadLocalizedBank
LoadNonLocalizedBank

void AkMemBankLoader::LoadLocalized

Load a language-specific bank from WWW



AkMemBankLoader

bankName

isLocalizedBank

LoadLocalizedBank

LoadNonLocalizedBank

string AkMemBankLoader::bankName =

Name of the bank to load.



AkMemBankLoader

bankName

isLocalizedBank

LoadLocalizedBank

LoadNonLocalizedBank

bool AkMemBankLoader::isLocalizedBank

Is the bank localized (situated in the language specific folders).



AkRoom

AkRoom

GetID()	AkRoom	[inline]
priority	AkRoom	
reverbAuxBus	AkRoom	
reverbLevel	AkRoom	
wallOcclusion	AkRoom	



AkRoom

GetID

priority
reverbAuxBus
reverbLevel
wallOcclusion

```
ulong AkRoom::GetID ( ) [inline]
```

Access the room's ID.



AkRoom

GetID
priority
reverbAuxBus
reverbLevel
wallOcclusion

AK.Wwise.AuxBus AkRoom::reverbAuxBus

The reverb auxiliary bus.



AkRoom

GetID
priority
reverbAuxBus
reverbLevel
wallOcclusion

float AkRoom::reverbLevel = 1

The reverb control value for the send to the reverb aux bus.



AkRoom

GetID
priority
reverbAuxBus
reverbLevel
wallOcclusion

float AkRoom::wallOcclusion = 1

Occlusion level modeling transmission through walls.



AkRoom

GetID

priority

reverbAuxBus

reverbLevel

wallOcclusion

int AkRoom::priority = 0

In cases where a game object is in an area with two rooms, the higher priority room will be chosen for `AK::SpatialAudio::SetGameObjectInRoom()`. The higher the priority number, the higher the priority of a room.



AkRoomPortal

AkRoomPortal

ClosePortal (GameObject in_gameObject)	AkRoomPortal	[inline]
GetID ()	AkRoomPortal	[inline]
HandleEvent (GameObject in_gameObject)	AkRoomPortal	[inline]
MAX_ROOMS_PER_PORTAL	AkRoomPortal	
rooms	AkRoomPortal	



AkRoomPortal

ClosePortal

GetID

HandleEvent

MAX_ROOMS_PER_PORTAL
rooms

ulong AkRoomPortal::GetID () [i

Access the portal's ID.



AkRoomPortal

ClosePortal

GetID

HandleEvent

MAX_ROOMS_PER_PORTAL

rooms

override void AkRoomPortal::HandleEvent

Opens the portal on trigger event.



AkRoomPortal

ClosePortal

GetID

HandleEvent

MAX_ROOMS_PER_PORTAL

rooms

void AkRoomPortal::ClosePortal (

Closes the portal on trigger event.



AkRoomPortal

ClosePortal

GetID

HandleEvent

MAX_ROOMS_PER_PORTAL

rooms

```
const int AkRoomPortal::MAX_RO
```

AkRoomPortals can only connect a m



AkRoomPortal

ClosePortal
GetID
HandleEvent
MAX_ROOMS_PER_PORTAL
rooms

AkRoom [] AkRoomPortal::rooms :

The front and back rooms connected side of the portal(opposite to the direction of the positive side of the portal).



AkRoomPortalObstruction

AkRoomPortalObstruction

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AkSpatialAudioEmitter

AkSpatialAudioEmitter

reflectAuxBus	AkSpatialAudioEmitter
reflectionMaxPathLength	AkSpatialAudioEmitter
reflectionsAuxBusGain	AkSpatialAudioEmitter
reflectionsOrder	AkSpatialAudioEmitter
roomReverbAuxBusGain	AkSpatialAudioEmitter



AkSpatialAudioEmitter

reflectAuxBus

reflectionMaxPathLength

reflectionsAuxBusGain

reflectionsOrder

roomReverbAuxBusGain

AK.Wwise.AuxBus AkSpatialAudioEmi

The Auxiliary Bus with a Reflect plug-in Ef



AkSpatialAudioEmitter

reflectAuxBus
reflectionMaxPathLength
reflectionsAuxBusGain
reflectionsOrder
roomReverbAuxBusGain

uint AkSpatialAudioEmitter::reflections

The maximum number of reflections that will be processed for a sound path before it reaches the listener. Reflection processing grows exponentially with the order of reflections, so this number should be kept low. Valid range: 1-4.



AkSpatialAudioEmitter

reflectAuxBus
reflectionMaxPathLength
reflectionsAuxBusGain
reflectionsOrder
roomReverbAuxBusGain

float AkSpatialAudioEmitter::reflection

The gain [0, 1] applied to the reflect auxilia



AkSpatialAudioEmitter

reflectAuxBus
reflectionMaxPathLength
reflectionsAuxBusGain
reflectionsOrder
roomReverbAuxBusGain

float AkSpatialAudioEmitter::reflection

The maximum path length a sound path can travel to the listener after reflecting on surfaces.



AkSpatialAudioEmitter

reflectAuxBus
reflectionMaxPathLength
reflectionsAuxBusGain
reflectionsOrder
roomReverbAuxBusGain

float AkSpatialAudioEmitter::roomRev

Send gain (0.f-1.f) that is applied when se
associated with the room that the emitter i



AkSpatialAudioListener

AkSpatialAudioListener

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AkState

AkState

groupID AkState

valueID AkState

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AkState

groupID
valueID

int AkState::groupID

State Group ID, as defined in WwiseID.cs.



AkState

groupID
valueID

int AkState::valueID

State Value ID, as defined in WwiseID.cs.



AkSurfaceReflector

AkSurfaceReflector

AcousticTexture	AkSurfaceReflector	
AddGeometrySet (AK.Wwise.AcousticTexture acousticTexture, MeshFilter meshFilter)	AkSurfaceReflector	[inli stati
RemoveGeometrySet (MeshFilter meshFilter)	AkSurfaceReflector	[inli stati



AkSurfaceReflector

AcousticTexture
AddGeometrySet
RemoveGeometrySet

static void AkSurfaceReflector::AddGeom

Sends the mesh filter's triangles and their acou

:

acousticTexture
meshFilter



AkSurfaceReflector

AcousticTexture
AddGeometrySet
RemoveGeometrySet

static void AkSurfaceReflector::RemoveG

Remove the corresponding mesh filter's geom

:

meshFilter



AkSurfaceReflector

AcousticTexture
AddGeometrySet
RemoveGeometrySet

AK.Wwise.AcousticTexture AkSurfaceRefl

All triangles of the component's mesh will be a
The texture will change the filter parameters o
from this component.



AkSwitch

AkSwitch

groupID AkSwitch

valueID AkSwitch

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AkSwitch

groupID
valueID

int AkSwitch::groupID

Switch Group ID, as defined in WwiseID.cs.



AkSwitch

groupID
valueID

int AkSwitch::valueID

Switch Value ID, as defined in WwiseID.cs.



AkTerminator

AkTerminator

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AkTriggerBase

AkTriggerBase

Trigger(GameObject in_gameObject)	AkTriggerBase
triggerDelegate	AkTriggerBase

Wwise Unity Integration Mon Jan 8 10:46:18 2018

 1.6.3



AkTriggerBase

```
delegate void AkTriggerBase::Trigger ( GameObject
```

Delegate declaration for all Wwise Triggers.

Trigger
triggerDelegate

:

in_gameObject is used to pass
in_gameObject when Colliders are used. Some
option "Use other object", this i

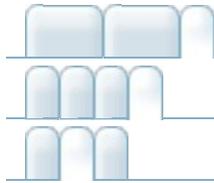


AkTriggerBase

Trigger
triggerDelegate

Trigger AkTriggerBase::triggerDelegate = null

All components reacting to the trigger will be registered in this delegate.



- AddGeometrySet() : **AkSurfaceReflector**
- AddListener() : **AkGameObj**
- ClosePortal() : **AkRoomPortal**
- ExecuteAction() : **AK::Wwise::Event**
- GetAuxSendValueForPosition() : **AkEnvironmentPortal**
- GetForward() : **AkGameObj**
- GetID() : **AkRoomPortal** , **AkRoom**
- GetPosition() : **AkGameObj**
- GetUpward() : **AkGameObj**
- HandleEvent() : **AkBank** , **AkRoomPortal**
- LoadLocalizedBank() : **AkMemBankLoader**
- LoadNonLocalizedBank() : **AkMemBankLoader**
- Post() : **AK::Wwise::Event**
- PostCallbacks() : **AkCallbackManager**
- PostMIDI() : **AK::Wwise::Event**
- RemoveGeometrySet() : **AkSurfaceReflector**
- RemoveListener() : **AkGameObj**
- SetBGMCallback() : **AkCallbackManager**
- SetMonitoringCallback() : **AkCallbackManager**
- StopMIDI() : **AK::Wwise::Event**
- Trigger() : **AkTriggerBase**
- UnloadBank() : **AkBank**



- a -

- AcousticTexture : **AkSurfaceReflector**
- actionOnEventType : **AkEvent**
- axis : **AkEnvironmentPortal**

- b -

- bankName : **AkBank** , **AkMemBankLoader**
- basePath : **AkInitializer**

- c -

- callbackManagerBufferSize : **AkInitializer**
- curveInterpolation : **AkEvent**

- d -

- decodeBank : **AkBank**
- defaultPoolSize : **AkInitializer**
- diffractionFlags : **AkInitializer**

- e -

- enableActionOnEvent : **AkEvent**
- engineLogging : **AkInitializer**
- eventID : **AkEvent**

- g -

- groupId : **AkState** , **AkSwitch**

- i -

- info : **AkEventCallbackMsg**
- isEnvironmentAware : **AkGameObj**
- isLocalizedBank : **AkMemBankLoader**

- l -

- language : **AkInitializer**
- loadAsynchronous : **AkBank**
- lowerPoolSize : **AkInitializer**

- m -

- m_positionOffsetData : **AkGameObj**
- MAX_ROOMS_PER_PORTAL : **AkRoomPortal**
- maxSoundPropagationDepth : **AkInitializer**
- memoryCutoffThreshold : **AkInitializer**
- monitorPoolSize : **AkInitializer**
- monitorQueuePoolSize : **AkInitializer**

- p -

- preparePoolSize : **AkInitializer**
- priority : **AkRoom**

- r -

- reflectAuxBus : **AkSpatialAudioEmitter**
- reflectionMaxPathLength : **AkSpatialAudioEmitter**
- reflectionsAuxBusGain : **AkSpatialAudioEmitter**
- reflectionsOrder : **AkSpatialAudioEmitter**
- reverbAuxBus : **AkRoom**
- reverbLevel : **AkRoom**
- roomReverbAuxBusGain : **AkSpatialAudioEmitter**
- rooms : **AkRoomPortal**

- S -

- saveDecodedBank : **AkBank**
- sender : **AkEventCallbackMsg**
- soundEmitterObject : **AkEvent**
- spatialAudioPoolSize : **AkInitializer**
- streamingPoolSize : **AkInitializer**

- t -

- transitionDuration : **AkEvent**
- triggerDelegate : **AkTriggerBase**

- u -

- unloadTriggerList : **AkBank**

- v -

- valueID : **AkState** , **AkSwitch**

- w -

- wallOcclusion : **AkRoom**