

# **DOCUMENTATION**

# THE WWISE ADVENTURE GAME



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Wwise 2021.1.0

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Wwise Adventure Game™

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## Introduction

The Wwise Adventure Game (WAG) is a third-person action-adventure game about an Adventurer who comes across Allegro Kingdom, which has recently been afflicted by an Evil Essence. The Adventurer, helped by the Blacksmith and a mighty Wwizard, will go through a journey to eradicate the plague and free the villagers.

The game's artistic direction represents a unique indie-style, and features all the usual clichés of adventure games, such as exploration, combat, and collecting quest items. The game has been built using the Unity game engine, and the provided package contains the sources for the Unity project as well as for the Wwise project. The projects are open source and made available to the Wwise community.

## Installing and Running WAG

We assume you are already familiar enough with Wwise to have it installed with the Wwise Launcher. If not, you'll want to read the <a href="Wwise Installation and Migration Guide">Wwise Installation and Migration Guide</a>, if not also the <a href="Wwise Fundamentals">Wwise Fundamentals</a> documentation, before proceeding.

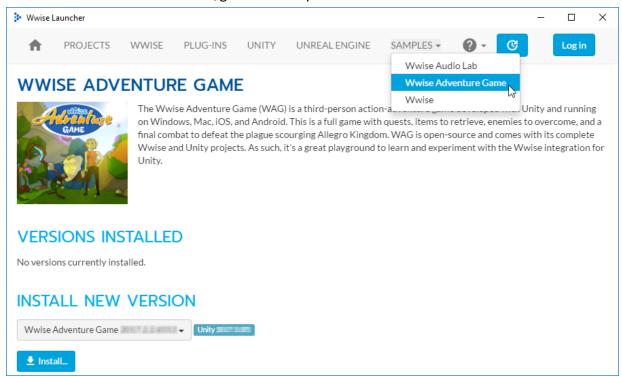
## **Prerequisites**

WAG runs on Windows and Mac, as well as on Android and iOS mobile devices. WAG is built with the Unity game engine and can also be run from the Unity source project, which limits it to the <a href="https://example.com/hardware.nd">hardware.nd</a> software requirements of Unity.

#### Downloading WAG projects

If you are reading these lines, you presumably have downloaded a WAG installation, just as you would any Wwise sample. However, let's review this process to be sure you got everything you want and need.

1. From within the Wwise Launcher, go to the Samples tab and select Wwise Adventure Game.



- 2. In the Install New Version section, choose the desired version of WAG and then click Install....
- 3. In the newly prompted page, select your packages:
  - a. Wwise Project: The WAG Wwise project is always downloaded with an installation. Please note, however, that the proper Wwise version must be installed to open it. If you do not have a version corresponding to the required major (any patch version should be fine), the Open in Wwise button will be unavailable. Remedy this by installing the needed version.

- b. Wwise Adventure Game: WAG can be installed as a precompiled, standalone program for Mac and Windows that works with the accompanying Wwise project using the Remote Connection feature. This is the preferred option for those who intend to modify only the Wwise project, not the Unity project.
- c. Unity source project: WAG can also be installed as a Unity source project. Like the standalone installation, the accompanying Wwise project offers real-time tweaking and mixing while connected to the game. This is intended for either those familiar with Unity and the Wwise Unity Integration, or the eager learners who want to delve deeper into WAG. Please note, however, that the corresponding Unity version must be installed. If not, the Open in Unity button will be unavailable.
- 4. Click Install.

Tip: What Unity and Wwise versions do you need?

Both the required Unity and Wwise versions are indicated in the Unity source project description, opened by clicking the? next to the Packages title. Additionally, the required Unity version is found in the cyan indicator to the right of the Wwise Adventure Game install list.

#### Running the Wwise Adventure Game

With either the precompiled or the uncompiled version installed, you can now run the Wwise Adventure Game. From the Wwise Launcher's SAMPLES tab, select the Wwise Adventure Game, then:

- To run the precompiled Wwise Adventure Game, click Run Wwise Adventure Game. After a short loading period, the WAG standalone version opens.
- To run the uncompiled Wwise Adventure Game, click Open in Unity. Please wait for Unity to open and load the WAG project.
  - Press Play in the Viewport.

#### Note

Whether running the standalone version or the Unity project, to modify the audio you will also need to open the associated Wwise project by clicking on the "Open in Wwise [version number]" button corresponding to the associated WAG version. Remember, if this button is unavailable, you need to install the proper Wwise version.

#### The Game

The Wwise Adventure Game quickly loads and opens to the Title screen.

#### Title Screen

The Title screen presents three options:

- Start Game to start a new game.
- Credits to view the game's credits. Press the Menu key to return to the Title screen.
- Exit to close the game.

#### Intro sequence

The game starts with an intro sequence presenting an aerial view of the village and its surroundings. Read the instructions at the bottom of the screen to get some cues about how to play the game on the current platform.

#### Game Menu

The game menu can be accessed at any point during the game by pressing the Menu key, depending on the selected device and controller (see <u>Controller Settings</u> or <u>Touch Screen Controls</u>). The player can return to the game by pressing the Menu key again.

Each of the game options apply to all supported platforms and controllers.

- Advanced Settings consists of two buttons that open to detailed panels:
  - Graphics: Graphics options can be lowered to get a smoother framerate on weaker devices or augmented for better graphics rendering on more powerful devices.
    - Render Distance: A slider to adjust the game's LOD. Reduce it to improve the performance of the game on slower devices.
      - Range: 50-250
    - Resolution: The width by height, in pixels, of the display. The game automatically sets the graphic display resolution according to the resolution of the device. On weaker devices, it can be reduced to improve framerates.
    - Lock to 30 FPS to Preserve Battery (mobile only): When enabled, the game framerate is locked to 30 FPS, which helps preserve battery life.
      - On/Off (Default: On)
    - Ambient Occlusion: A shading and rendering technique that makes the image sharper. It can be disabled to improve the performance of the game on slower devices.
      - On/Off (Default: Off)
    - Depth of Field (DOF): A post-processing effect simulating lens focus. It can be disabled to improve performance on slower devices.

- On/Off (Default: Off)
- Simulated Glow: A game effect that produces fringes of light extending from the borders of bright areas in an image, contributing to the illusion of an extremely bright light overwhelming the camera or eye capturing the scene. It can be disabled to improve the performance of the game on slower devices.
  - On/Off (Default: On)
- Back: Click to close the Graphics panel and return to the game menu.
- Audio: A variety of audio settings can be adjusted to your preference.
  - Master Volume: Main volume control of all audio assets in the game.
    - 0-100 (Default: 100)
  - Music Volume: Volume control for theme and ambiance music.
    - 0-100 (Default: 100)
  - Low Pass In Menu: Controls Low Pass when opening the menu. Can be disabled to test Spatial Audio Features.
    - On/Off (Default On)
  - Spatial Audio: When enabled, the *Dungeon Scene Spatial Audio* will be loaded when entering the dungeon area.
    - On/Off (Default On)
    - Early Reflections: Controls the order of reflections.
      - a. 0, 1, 2, 3 or 4 (Default: 1)
    - Hotkey: When enabled, the key inputs 0-4 change the order of reflections outside the menu.
      - a. On/Off (Default On)
  - Late Reverb: Controls whether late reverbs will be audible.
    - On/Off (Default On)
  - Radio: When enabled, any number of Radios can be spawned.
    - On/Off (Default On)
    - Add (+)
- Language: Spoken dialogue in WAG is only available in English. The WAG subtitles and menus, however, can be chosen from among the following options in the list:
  - English (Default)
  - French
- Teleport: A list of game locations where you can move to instantaneously. Teleporting does not impact the status of the quests. Available locations to teleport to are:
  - Village
  - Woodlands
  - Cave
  - Pine Forest
  - Desert
  - o Dungeon
  - Library
  - Forge
  - Core
  - Training Area

- Mouse sensitivity: A slider to adjust how the player controls the camera movements. Lower sensitivity values result in slower camera movements, while higher sensitivity values lead to faster movements.
- Time of Day: A slider to adjust the current time of the day during gameplay, ranging from midnight through a 24 hour period. In-game sunlight changes according to the time of day.
- Cheats: The following four options can be enabled:
  - o God Mode: The player cannot be killed by enemies.
  - o Big Head: Character and enemy heads are enlarged.
  - Slow-Mo: Gameplay, including audio and visuals, slows substantially.
  - Pause AI: Pauses the animation sequences of the enemies to prevent them from attacking.
- Quit Game: This button prompts a confirmation dialog to terminate the game.
- Resume: Exits the game menu and returns to the game.

#### Controller Settings (Desktop)

The controller settings are displayed, as seen below, as an in-game legend to the left of the game menu.



#### Touch Screen Controls (Mobile)

When played on a mobile device, WAG uses touch controls combined with a "Gamer Stance" positioning, where the player is holding the device in landscape mode with both hands and using both thumbs as controllers. This control scheme emulates the controllers typically used with gaming consoles.

#### Mobile controls:

- 1. Hamburger button (Top-Right)
  - Tap to access the game menu.
  - Tap again to return to the game.
- 2. Attack button [ | (Bottom-Right)
  - Tap to swing weapon and attack enemy.
    - Tap to pick-up objects and interact with characters.
    - Swipe up from attack button to access weapon inventory
- 3. Left touch-control: Speed
  - Swipe up and hold to move the Adventurer, then release to make her stop.
  - Speed is controlled by the swiping distance; swipe further to make the character sprint.
- 4. Right touch-control: Direction
  - Swipe in the desired direction to set the character's course.

#### Quests

In WAG, the Adventurer is tasked with a series of quests to execute in order to save Allegro Kingdom and its inhabitants. Here is a summary of the quest objectives:

- 1. Find the Wwizard
  - a. Talk to the Wwizard
- 2. Grab the book of Evil Mysteries
  - a. Collect the book
  - b. Return to the Wwizard
- 3. Retrieve the sword & collect the Evil Essence
  - a. Collect the sword from the Blacksmith
  - b. Collect the Evil Essence from the Evil Spit Plants
  - c. Return to the Wwizard
- 4. Retrieve the pickaxe and collect the spell ingredients
  - a. Collect the pickaxe from the Blacksmith
  - b. Collect ingredients for the spell
  - c. Collect the Dungeon key
  - d. Return to the Wwizard
- 5. Venturing to the Dungeon
  - a. Find the Wwizard in the Desert
  - b. Open the door to the Dungeon
  - c. Enter the Dungeon
- 6. Find the Ancient Scroll
  - a. Collect the hammer
  - b. Destroy the barricade to the Library
  - c. Collect the Ancient Scroll
- 7. Find the Core
  - a. Find the Forge
  - b. Find the source of the corruption
- 8. Destroy the lair of the enemy
  - a. Destroy the shield protecting the Core
  - b. Destroy the Core

#### **Quest Navigation**

The Quest Navigation panel is displayed to the right of the <u>game menu</u>. It allows the player to jump between quests, automatically loading all the appropriate weapons and assets for the Adventurer. However, the player still has to navigate or teleport to the right location for the new quest. This panel is particularly useful when WAG is used in conjunction with the Wwise certification material.

#### **Quest Icons**

Each listed quest can be clicked to be started, thereby marking the preceding quests as completed. Otherwise, to complete a quest, it is necessary to complete each of its subquests.

The following icons are used to indicate the state of each quest item.

$\bigcirc$	Quest item not started
$\odot$	Quest item in progress
	Quest item completed

#### **Spatial Audio Features**

With WAG 2019.2.5 and newer, you have the option of enabling Spatial Audio features, including the <a href="Wwise Reflect">Wwise Reflect</a> plug-in. Note, these features are only available in the dungeon area. To enable Spatial Audio, follow these steps.

- 1. Ensure you are outside the dungeon area and that the dungeon scene is unloaded. (You cannot load the Spatial Audio Dungeon scene while the Non-Spatial Audio dungeon scene is loaded.)
- 2. Press the Menu key to open the game menu.
- 3. Select the Audio panel, and then enable Spatial Audio.



4. Select Back, and then teleport to the Dungeon, Library, Forge, or Core.

To better evaluate Spatial Audio features, you have the option of spawning a Radio. To spawn a Radio, do the following.

1. Press the Menu key to open the game menu.

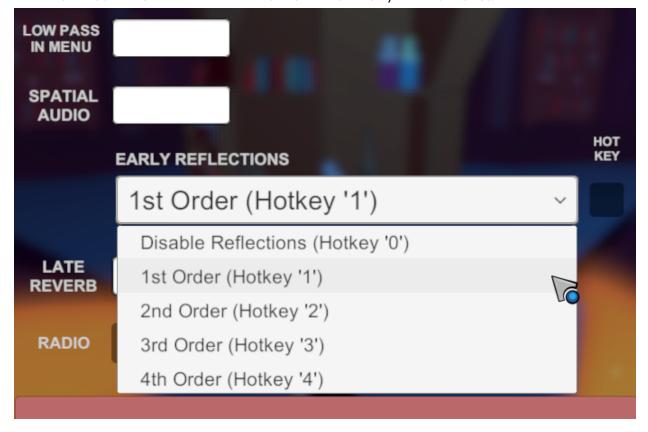
2. Select the Audio panel, then enable Radio and click add (+).



A Radio, playing quotes of the Blacksmith on loop, will be created in front of the player. You can create as many Radios as you want. When you disable Radio, all Radios will be removed from the scene.

With Wwise Reflect, you can change the order of reflections during runtime. This is the number of times a sound can reflect off surfaces.

Select the desired order of reflections from the Early Reflections list.



Tip: When changing the order of reflections, it is recommended to either disable Low Pass in Menu, or enable hotkey commands and exit the menu. This ensures the sound will not be affected by menu sound effects.

## Further Help and Learning Resources

To learn more about Wwise, please refer to:

- The Wwise Knowledge Base at: https://www.audiokinetic.com/learn/knowledge-base/#start.
- The Wwise video tutorials at: <a href="https://www.audiokinetic.com/resources/videos/">https://www.audiokinetic.com/resources/videos/</a>.
- The Wwise help at: https://www.audiokinetic.com/library/edge/?source=Help&id=welcome to wwise.

If you want to learn more about Wwise by looking at different approaches on game audio implementation, we suggest you take a look at the following resources:

- Wwise Certification Program (<a href="https://www.audiokinetic.com/learn/certifications/">https://www.audiokinetic.com/learn/certifications/</a>) The Wwise Certification Program online course gets you through the main components and workflow of Wwise. Note that the Certifications 101 and 201 uses Cube as the platform of choice for teaching Wwise while the certification 251 and 301 are using the Wwise Adventure Game.
- Limbo Also available from the Wwise Launcher on Windows, you can install Limbo, the multi-award game developed by Playdead with the full Wwise project. Limbo might be more suited for more advanced Wwise users because some sound hierarchies might appear quite complex to newcomers. Limbo is not available to install from the Wwise Launcher on a Mac.

## Special Thanks

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# Mads Maretty Sønderup - Maretty Productions and Jacob Lynggaard Olsen - MFYG

Game design, graphics, animation, scripting, and music.

We'd like to thank Mads and Jacob for the enthusiasm and devotion they put into this project. They went above and beyond our expectations so many times during the development of this project, which is now available to thousands of people seeking to expand their interactive audio skills through Wwise and Unity.

#### Damian Kastbauer - Lost Chocolate Lab

#### Sound design supervision

Thanks for coordinating the sound design production with Bay Area Sound. Also, an immense thank you for the initial work back in 2012 with the Wwise Project Adventure Handbook. This book has been the inspiration for WAG and an invaluable tool, the last six years, to many schools around the world.

#### Julian Kwasneski - Bay Area Sound

#### Sound design

A big thank you to Julian and his team that created the original content of the Wwise Project Adventure Handbook and their commitment in making the sound of WAG six years later. It's been a much more involved mandate than first anticipated, but you guys just nailed it!

#### The Audiokinetic Team

Thanks to everybody at Audiokinetic who made this project possible, especially the Quality Assurance and Game Integration teams that assisted Mads and Jacob throughout the development.

#### Play Testers

Mads and Jacob started the development of the game during the last year of their Master's degree and created an alternate version of the game to test game music as a provider of information, such as musical hints of an enemy you'll encounter. Two-hundred and twenty-four people tested this iteration, which helped them complete their Master's thesis!

Aaron Brown, Adrian Talens, Akash Thakkar, Alec Galambos, Alex Mars, Alex Swan, Alexander Laurell, Alexandre Mattucci, Alexis Matton, Anders Jakobsen Hosten, Andrea Monopoli, Andreas Heinz, Andreas Simmelkiær, Andreas Wulff-Jensen, Andrew Mushel, Anize Amestoy, Anthony Paton, Antoine Grelet, Antonis Tsoukatos, Arles Estes, Armando Di Stefano, Artemy Makeev, Axel Hélie-Fontaine, Barney Oram, Benjamin Gallagher, Benoit Santerre, Bernard Rodrigue, Bjarke Larsen, Bob Andrews, Brent Silk, Brian Phraner, Bruno Gonçalves, Camilo Camargo, Can Sarac, Carlos Romeral, Carmelo Motolese, Caroline Hessner Filbert, Castagnone Davide, Cezar Floroiu, Charles Pateman, Chase Steele, Chris Click, Chris

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