Editor Animation Viewer

Welcome!

Thank you for choosing the Editor Animation Viewer! I hope it'll help streamline your Unity Animation workflow, just as it has mine!

In this documentation, you'll find everything you need to get started, from installation to feature explanations and usage tips

Let's dive in!

Why The Editor Animation Viewer?

Previewing animations in Unity can often be clunky, requiring many clicks and forcing you to step away from your Scene View. This disrupts your workflow and makes fine-tuning difficult. Additionally, Unity's built-in tools don't provide easy access to some features available in the Editor Animation Viewer, such as viewing blends and transitions directly in the scene.

The Editor Animation Viewer aims to solve these issues by offering a 1-click solution for viewing animations directly within the Unity Editor. Here are some standout features that make it an essential tool for animators:

- **1-Click Animation Preview:** Instantly play animations in your scene without entering Play Mode or navigating through menus, speeding up iteration and efficiency.
- **View Blend Trees and Transitions:** Easily preview and adjust Blend Trees, Transitions and Avatar Masks for smooth and accurate results.
- **Pose Characters in Scene:** Directly manipulate character poses using animations, allowing for quick testing, set-dressing, and storytelling.
- **Timeline Navigation:** Scrub through animations using a timeline interface for precise control over playback.
- **Usability-Focused UI:** Enjoy a clean and organised interface with layered animations, search filtering, and keyboard shortcuts to streamline your workflow.
- **Preview Animations from the Inspector:** Use the `[EditorAnimationViewer]` attribute to turn your AnimationClip variable into a full animation previewer.

Installation

Not much to say here! Simply import the asset from the Package Manager, and you'll gain immediate access to the Animation Viewer window and the `[EditorAnimationViewer]` attribute! The Folder can be found under External/TelePresent/Editor Animation Viewer

How To Use

Animation Viewer Window

Once installed, you should find the Animation Viewer Window in the Window tab at the top of the Unity Editor. Click on "Animation Viewer" to open the window.

After opening the window, select a game object with an Animator Component attached and an Animator Controller assigned within that component.
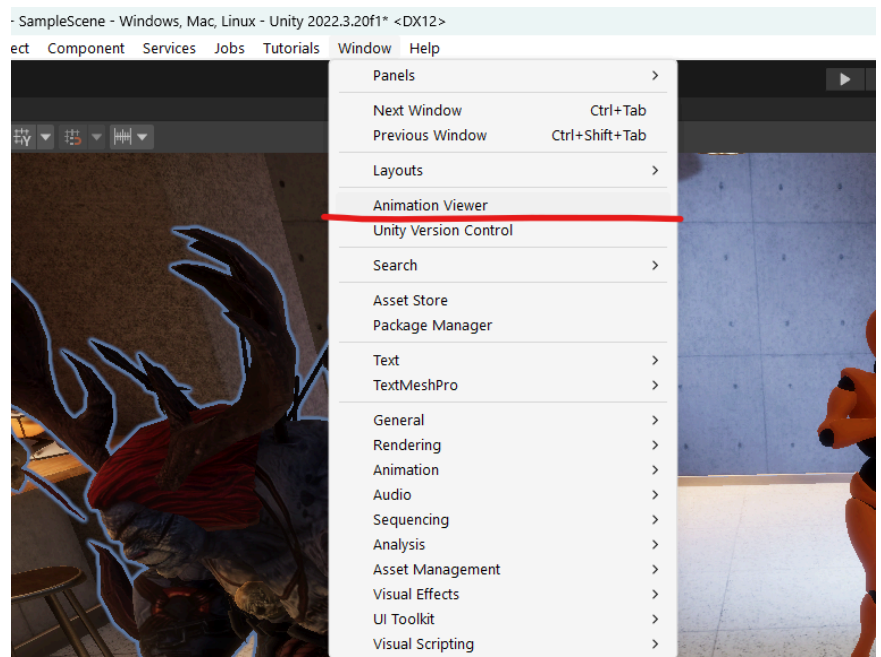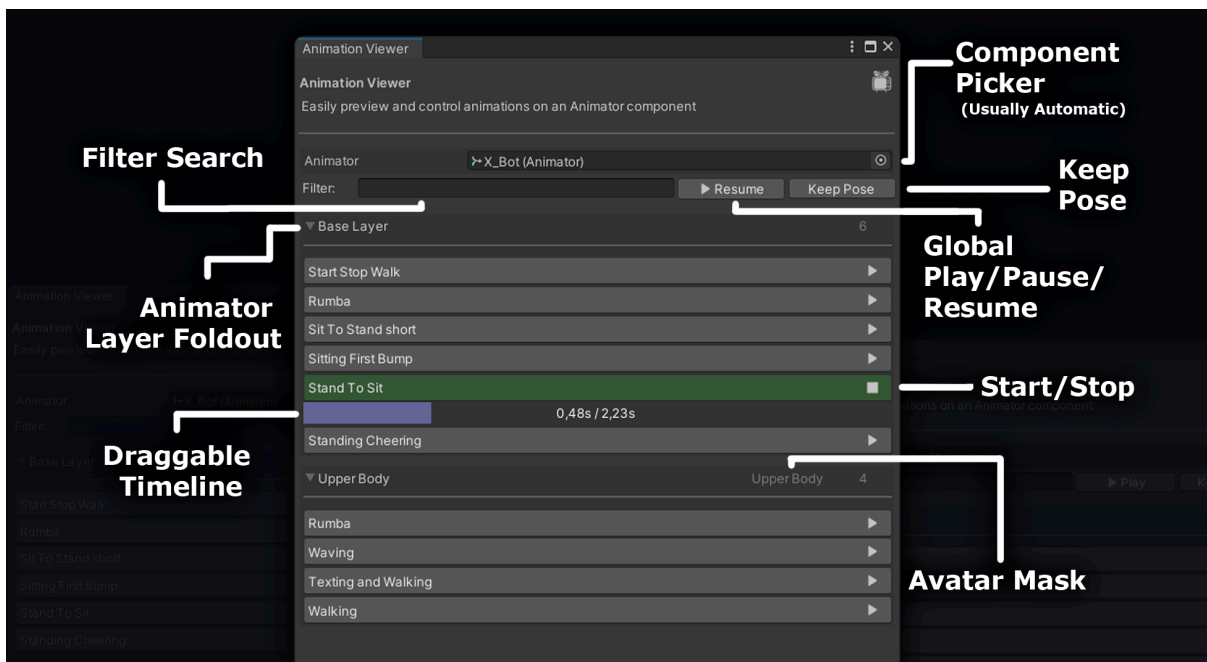
Once a character is selected, the Animation Viewer should automatically assign the Animator Component and populate the window. If this doesn't happen, you can manually assign the Animator Component using the Object Picker.
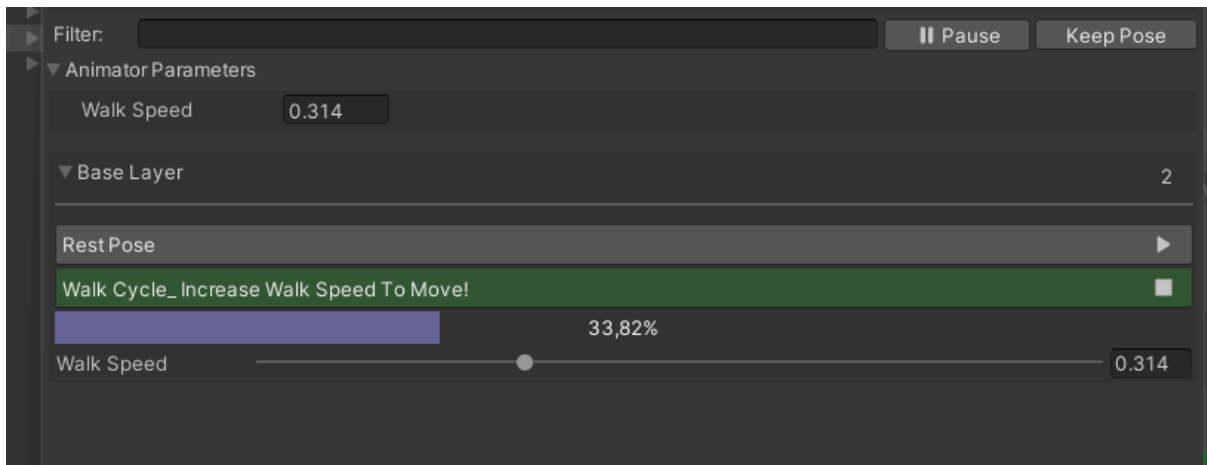
Animation Viewer UI

The Animation Viewer Window displays a full list of Animation States present in your Animator Component, excluding currently unsupported types like Blend Trees. The Animation Viewer organises the states in a column, with groups corresponding to your animation layers. Each group can have one animation playing at a time.

New in Version 1.1:
Animator Parameters:

Editor Animation Viewer now support Blend Trees! This is particularly exciting, as you can now test and tweak how your animations blend directly in the scene. Simply press an Animator State that holds a Blend Tree, and you'll have direct access to the floats through sliders.

Additionally, in the Animator Parameter Foldout, you'll find your floats, ints, bools, and Triggers, which you can manipulate directly in the Animation Viewer Window!

Using the Animation Viewer

With the Animator Component set and the list populated, you should now be able to play your animations! Press any Animation Button, and you should see the character start animating.

Here's a quick overview of the window features:

Global Play/Pause/Resume Button: This button will play, pause, or resume all currently selected animations.

- **Keyboard Shortcut:** Space Bar

Filter Search: Use the search bar to sort through your animations!

Keep Pose: When toggled on, this button will maintain the pose of any animated object you're viewing, allowing you to keep the pose once the window is closed. When switched off, the character will revert to its original position from before the Viewer was opened or since the last pose was saved.

> **Note!**
> **When "Keep Pose" is off, characters may still appear to adopt new poses while the window is open. However, they will fully reset once the window is closed or switched to a different Animator.**

Play/Stop: This button is found on the Animation Buttons themselves. It starts or stops individual animations on the list.

**Draggable Timelines:** When an animation is playing or paused, you can drag the timelines to scrub through the entire animation.

Stop All Animations: You can stop all playing animations at any point.

- **Keyboard Shortcut: Escape**

You can switch the Animation Viewer to a different character anytime! Simply select another game object with an Animator or manually assign it from the Object picker.

Inspector Animation View
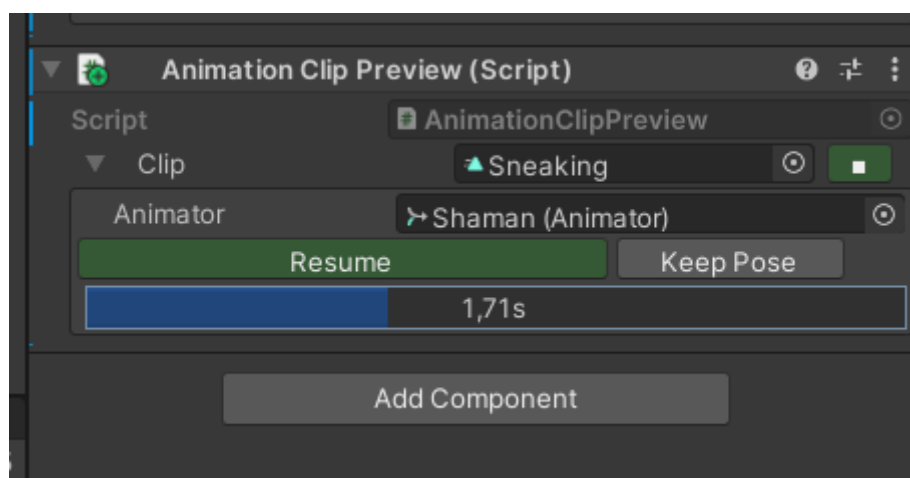
The Editor Animation Viewer also allows you to preview animations directly from your Inspector! All you have to do is create a script, add a public reference to an AnimationClip, and then add the `[EditorAnimationViewer]` attribute above it, like this:

```
using UnityEngine;
using TelePresent.EditorAnimationViewer;
        Unity Script (2 asset references) | 0 references
    public class SceneAnimationViewerShowcase : MonoBehaviour
    {
        [EditorAnimationViewer]
        public AnimationClip clip;

    }
```

This will grant you additional controls in your Inspector window, allowing you to preview, scrub, and pose characters without even using the Animation Window 😁.

Note!
If you get errors implementing the attribute, it might be because of the TelePresent.EditorAnimationViewer namespace not being set in the top of the script.

In the Inspector View, the Play/Pause and Keep Pose buttons behave the same as they do in the Animation Viewer.

Tip!

With the Inspector, you can keep the animation running while you edit other things.

Press the Stop Animation button in the upper left corner at any time. However, be aware that animation buttons may stack if you choose to play multiple animations in the scene simultaneously :P
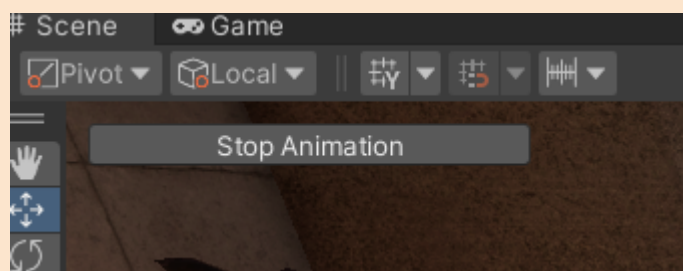
Troubleshooting

Issue 1: My animated object gets displaced or warped in the scene after closing the Animation Viewer Window.

This may have different causes:

1. **Animator Component Placement:** Is the Animator Component placed deep in a nested hierarchy? It's possible the Animation Viewer was unable to fetch all the transforms of your character, as it primarily attempts to gather children of the Animator Component.
Possible Resolution: Try placing the Animator Component at the top of your character/animated object's hierarchy (i.e., not as a child). This might resolve the issue the next time you use the Animation Viewer.
2. **Root Motion Usage:** Is your animation using Root Motion? The Animation Viewer may not always properly counter Root Motion for its transforms. If possible, see if disabling Root Motion on your animation fixes the issue. Feel free to reach out to me for more help.

Issue 2: My character doesn't reset to the original pose after shutting the Animation Viewer Window.

1. **Persistent Issue:** Does the issue persist after closing the Animation Viewer Window or swapping it to another Animator? There is currently an issue where characters don't properly reset while the Animation Viewer Window is open, though it should be resolved once the window is closed or focused on another Animator.

Issue 3: My animation timeline is going nuts!

1. **Rendering Issue:** Is your object currently rendered on screen? When an animated object is off-screen, the animator might struggle with the timeline.

Issue 4: My selected game object has an Animator, but the Animation Viewer List isn't being Populated!

1. **Animation State Type:** Is your animation on a Sub-State machine, a Blend Tree or other? Please reach out if this is the case, as it may be fixable in a future update 🙂
2. **Animation Controller:** Does your Animator Component have an Animation Controller assigned? This is vital, as it contains your animation states.
3. **Is an Animator Component assigned in the Object Picker?** Please ensure the Animator Component is set to your desired one.

> **Possible Resolution:** Does using the "Refresh Animations" button work in populating the list?.

If the issue persists, please reach out to me, it would be a shame if the system didn't work for you.

If you encounter any other issue, please reach out to me. I'll get back to you as soon as I can :)

Thank You for Using the Editor Animation Viewer!

I hope this tool makes it more fun and smooth for you to work with animations in your project! This is my first asset published on the Asset Store, so feedback is especially valued.

If you have any questions, feedback, or run into any issues, please don't hesitate to reach out at **TelePresentGames@gmail.com**. Your input is invaluable.

Happy developing!

Kind regards,
Martin

Changelog:

Version 1.1.1:

Fixes:

- Addressed issue where the animation reference in the demo Controller went missing on certain Unity versions or pipelines. Let me know if any issues persist :)

Version 1.1:

- **New Features:**
- Added support for Blend Trees.
- Added support for Animation Sub-State Machines.
- **Fixes:**
- Animations now resets to default if no animation is playing, rather than playing an empty animation, which was causing issues.
- Using the Inspector Animation Preview now disables Root Motion while the animation is playing, as some Root motion configurations would cause character's to teleport.
- Now animations listed in Sub-State Machines appear in the Animation list.

Original Release:

- Original release. Thank you to everyone who wrote and suggested new features for 1.1!