

Overview of Adobe Character Animator

Adobe Character Animator CC (Beta) is a character animation application that allows you to bring expressive characters to life using your own artwork.

Character Animator allows you to import artwork from Adobe Photoshop or Adobe Illustrator, and breathe life into them (**Figure 1**). You can do so by first capturing your performance using a camera, microphone, keyboard, mouse, or touch screen. While you're performing, Character Animator tracks your facial expressions, synchronizes mouth movements to your speech, and provides complete control over all aspects of a character's movement.

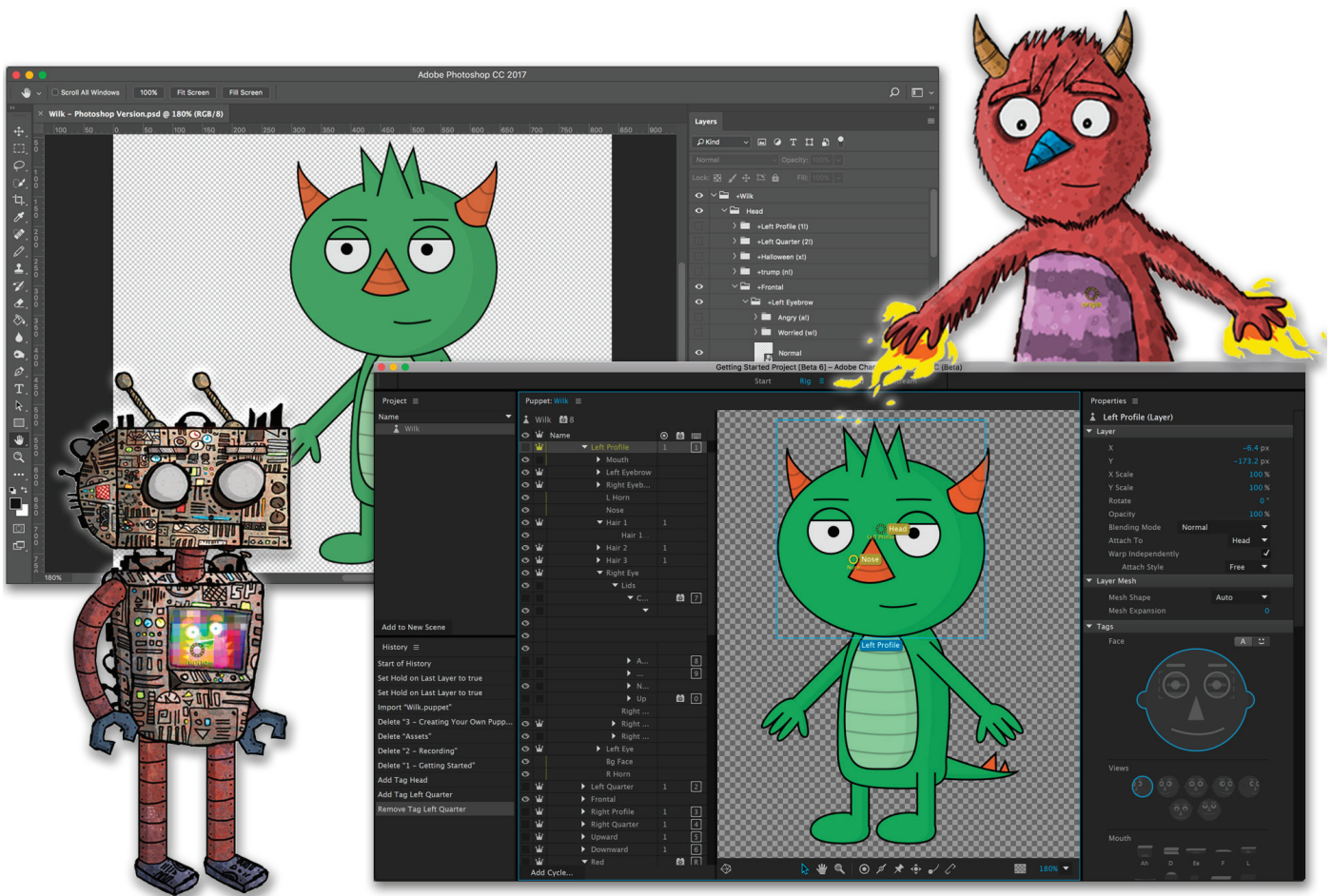


Figure 1 Wilk character design in Photoshop (top) and in Character Animator (bottom)

You can easily export and integrate your characters and scenes into an Adobe After Effects composition or Adobe Premiere Pro sequence, and still make changes in Character Animator.

In this guide, you'll learn about the Character Animator workspaces and get a look at the full application workflow. You can work through the Character Animator guides using your own character designs, or use existing template puppets as a starting point. You can also download more sample puppets [here](#) and [here](#); open these files in Character Animator CC Beta.

Character Animator workspaces

Let's start with the interface: Character Animator includes four task-oriented workspaces to support important actions:

- **Start:** Get started with Character Animator with tools such as template puppets, and tutorials.
- **Rig:** Edit, add, and modify your puppet.
- **Record:** Record, playback, and tweak the performance of your puppet.
- **Stream:** Stream the performance of your puppet live.

Workspaces are accessible from the top navigation bar. Each workspace displays a set of panels for completing tasks.

Start workspace

The Start workspace is a terrific place to begin (**Figure 2**). If you're new to Character Animator, open the Interactive Tutorial to learn the basics. The Watch Video Tutorials link provides beginner to advanced walkthroughs to learn about what's possible in Character Animator. Use Template Puppets as they are, or open up a template in Photoshop or Illustrator and use the layer hierarchy to create your own puppets. You can also create and open an existing project.

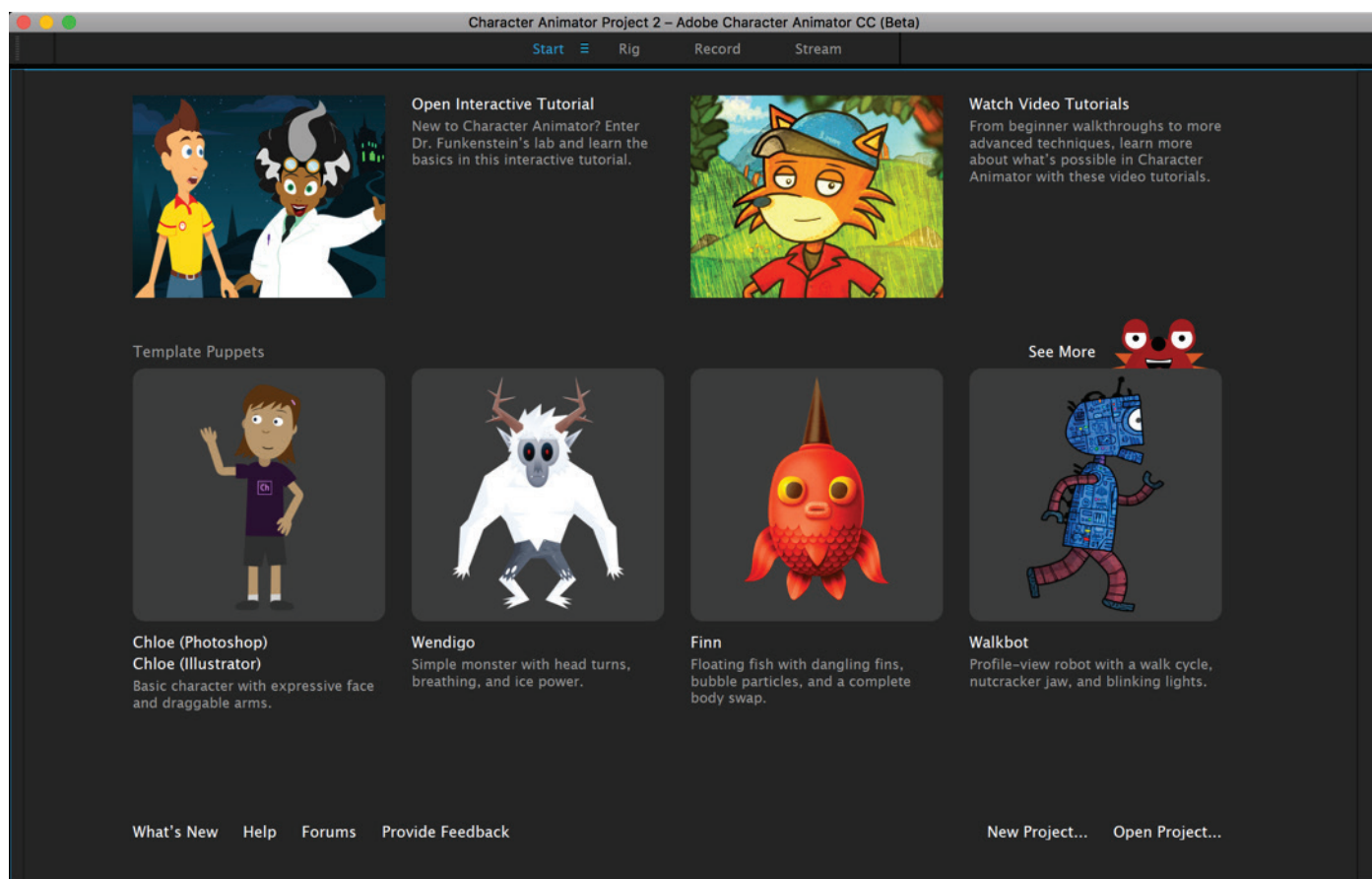


Figure 2 Character Animator Start workspace

Rig workspace

The Rig workspace allows you to edit the puppet structure (Figure 3). You can add or modify behaviors, rearrange puppet layers, add handles to a puppet, and modify keyboard triggers. The workspace includes the following panels:

- **Project:** A list of open, active puppets, scenes, and other project assets.
- **Puppet:** A puppet's component parts are organized and available in a layered panel and on an interactive canvas. The Puppet panel also contains a selection of tools for selecting, moving, pinning, dragging, and more.
- **Properties:** Provides detailed information about any puppet element like layers, meshes, tags, behaviors, eye gaze, and others.
- **History:** Use the History panel to jump to any recent state created during the current working session. Each time you apply a change, a new state is added to the list.



Figure 3 Character Animator Rig workspace

Record workspace

Record, playback, and fine-tune the performance of your puppet using this workspace (Figure 4). Your performance of a scene's puppets can be rehearsed, then captured during recording. Each recording of a scene is called a take. A scene has three modes:

- **Stop:** Scenes open in this mode. You can rehearse scripts and behaviors in this mode — nothing is recorded.
- **Play:** This mode plays back takes and audio. The current time indicator moves in the timeline.
- **Record:** While recording, your movements and speech are captured and applied to the puppet.

Using these modes, you can do basic recording of a performance, playback and review recorded takes, and rerecord a performance to correct mistakes — in other words, do multi-track recording of different inputs and layer several takes. You can adjust the timings of the recorded takes, and modify the behavior properties. You can add multiple puppets to the timeline from the Projects panel.

The Record workspace includes the **Project** and **History** panels listed in the last section, plus the following panels:

- **Scene:** Displays the scene to be recorded, with playback controls (Play, Stop, Go to start, and Go to Next Frame) at the bottom of the panel.
- **Properties:** Provides recording-specific details and customizable information about puppet behaviors like breathing action, dragger, eye gaze, facial expressions and more.
- **Timeline:** A scene's timeline represents each puppet instance as a selectable track item.
- **Camera & Microphone:** Previews the movement of your head in front of the webcam and displays audio levels. Use the Set Rest Pose button to establish a neutral facial expression and forward gaze. Track points appear on your face which are used to control a puppet's face.

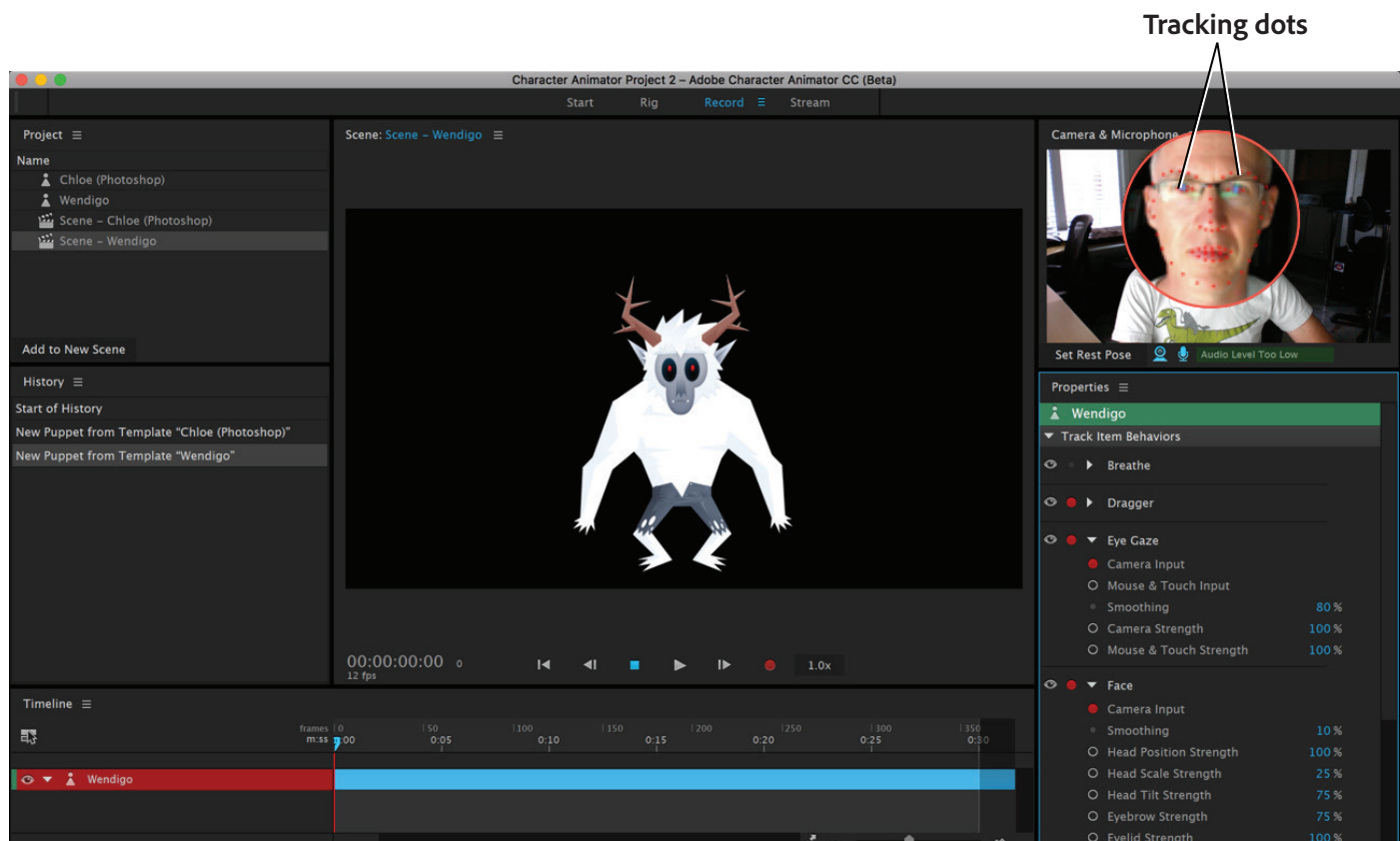


Figure 4 Character Animator Record workspace

Stream workspace

The Stream workspace is used to stream a scene live to an external device or application (Figure 5). The workspace includes the **Project**, **Properties**, **Camera & Microphone**, and **Timeline** panels with one notable difference:

- **Scene:** Displays the scene to be streamed. However, in the **Stream** workspace version of the **Scene** panel, the bottom of the panel displays a limited set of controls for focused live streaming. For example, playback controls (Play, Stop, Go to Start, Go to Previous Frame and Go to Next Frame) are not available.

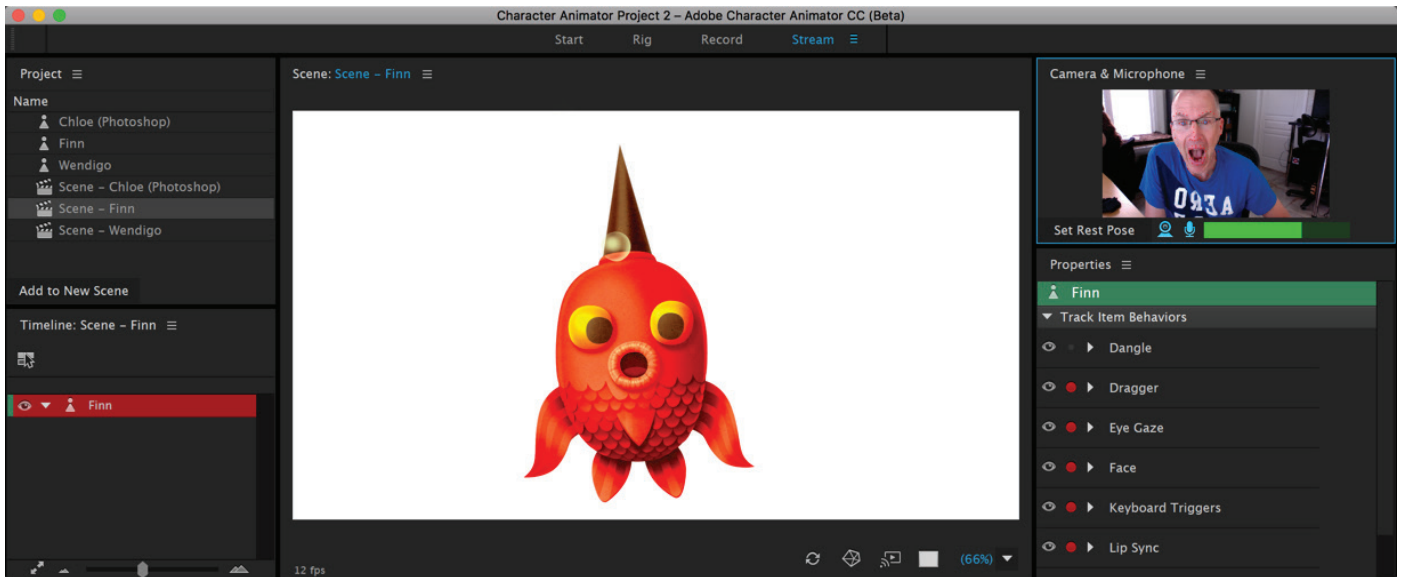


Figure 5 Character Animator Stream workspace

Character Animator workflow

Character Animator is a performance capture animation tool that speeds up your animation projects by eliminating keyframes and time-consuming dialog matching. This section shows a complete end-to-end workflow, from drawing the character all the way to a final export.



Create a Character Animator Project



Create your first character



Control puppet with your webcam, mic, and mouse



Adjust the behavior of your puppet



Record and refine your performance



Export your recorded scene



Use your scene in other applications

Create your Character Animator project

You can install Character Animator as a standalone application from your Creative Cloud for Desktop, or as part of After Effects.

Open Character Animator from Creative Cloud for Desktop (**Figure 6**), its icon is in the Applications folder (on Mac) or Start menu (on Windows). If you are an After Effects user, open the app and choose File > Open Adobe Character Animator.

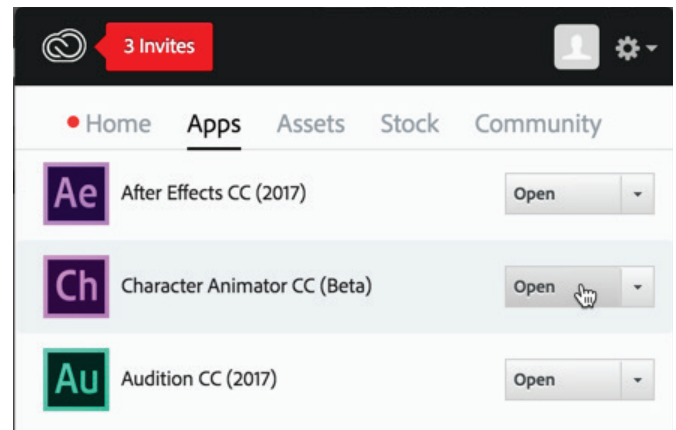


Figure 6 Open Character Animator from Creative Cloud

Create your first character

One of the best ways to get familiar with Character Animator is to use the templates available from the Start workspace. These templates are great to help understand how a puppet is built. Character Animator can import layered Photoshop (**Figure 7**) and Illustrator files showing the puppet structure and pieces (head, eyes, mouth, etc.).

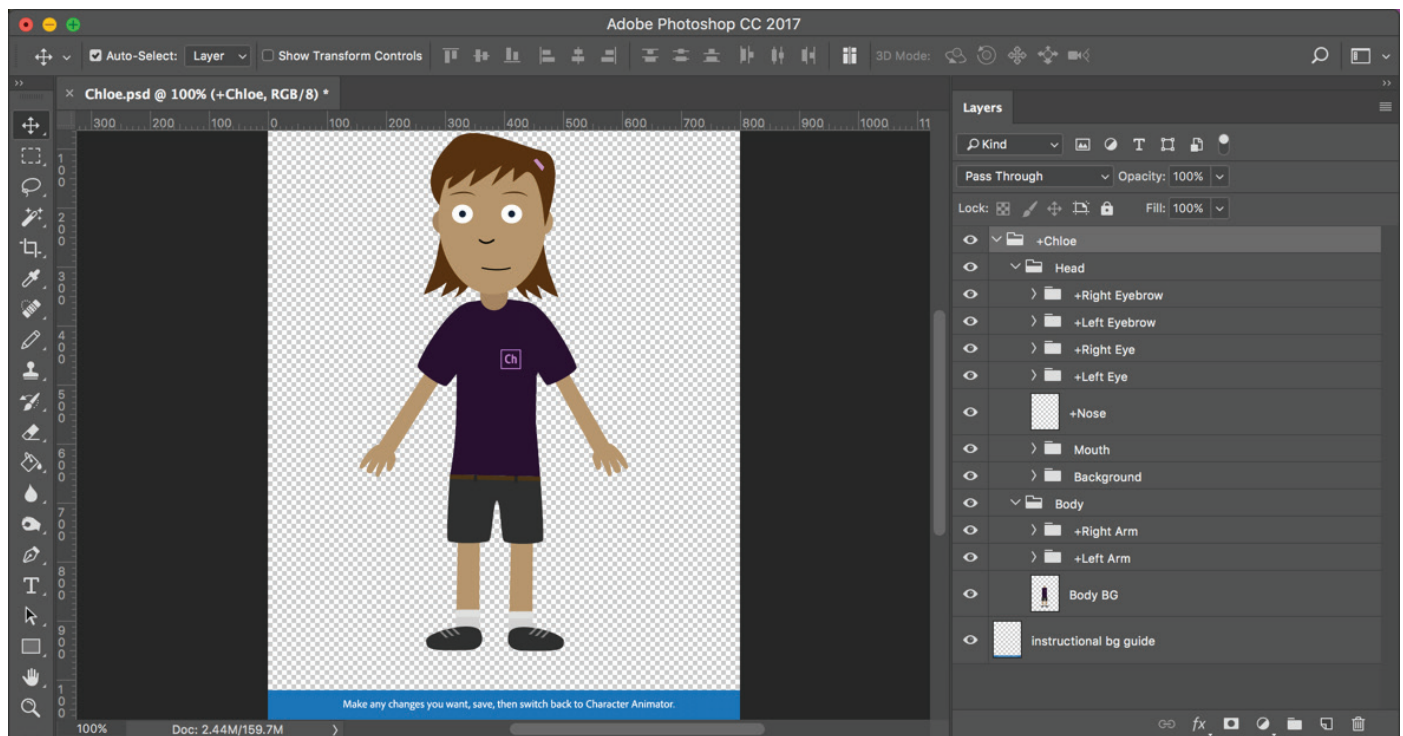


Figure 7 Chloe puppet in Photoshop

The hierarchy of the sample Photoshop and Illustrator files are important; it sets up the rigging for your character in Character Animator. To understand how to name and structure a file, you can open a provided template and use it as is, or modify it to suit your own character style and inspiration.

You'll learn how to create a new project, how to create a puppet from a template and from scratch, and how to export and share your puppet in the *How to create a character* guide .

Control the puppet using your webcam, microphone, and mouse

When you add a puppet to a scene in Character Animator, you enable performance capture animation actions that let you control a puppet's movement, appearance, and expressions. These behaviors react to your external controls via a webcam, audio, and/or mouse inputs. It is these behaviors that allow for expressive, dynamic control of previously static artwork.

Setting up control of your puppet is very easy. Simply look in the center of the Scene panel, place your face at a comfortable distance from the webcam (but big enough within the circle shown in the Camera & Microphone panel) (**Figure 8**), make a neutral facial expression, then click Set Rest Pose button. Red tracking dots appear on your face. Try moving and rotating your head from side to side, making different facial features, blinking, and talking. That's it! You have activated the performance capture animation features of Character Animator.



Figure 8 Camera & Microphone panel

Adjust the behavior of your puppet

Puppets have a wide range of variable expressions and behaviors. Face tracking is an example of a behavior, and so is the automatic wiggling of artwork pieces like hair or limbs. You can fine-tune and adjust these behavior to be more or less responsive to how the puppet moves, appears, and reacts to you.

New puppets automatically get the following behaviors: Dangle, Dragger, Eye Gaze, Face, Keyboard Triggers, Lip Sync, and Transform. You can add and remove behaviors as needed. Most behaviors have settings that let you customize the results. The puppet settings appear in the Properties panel, with slightly different controls depending if you are in the Rig workspace, or the Record or Stream workspaces (**Figure 9**).

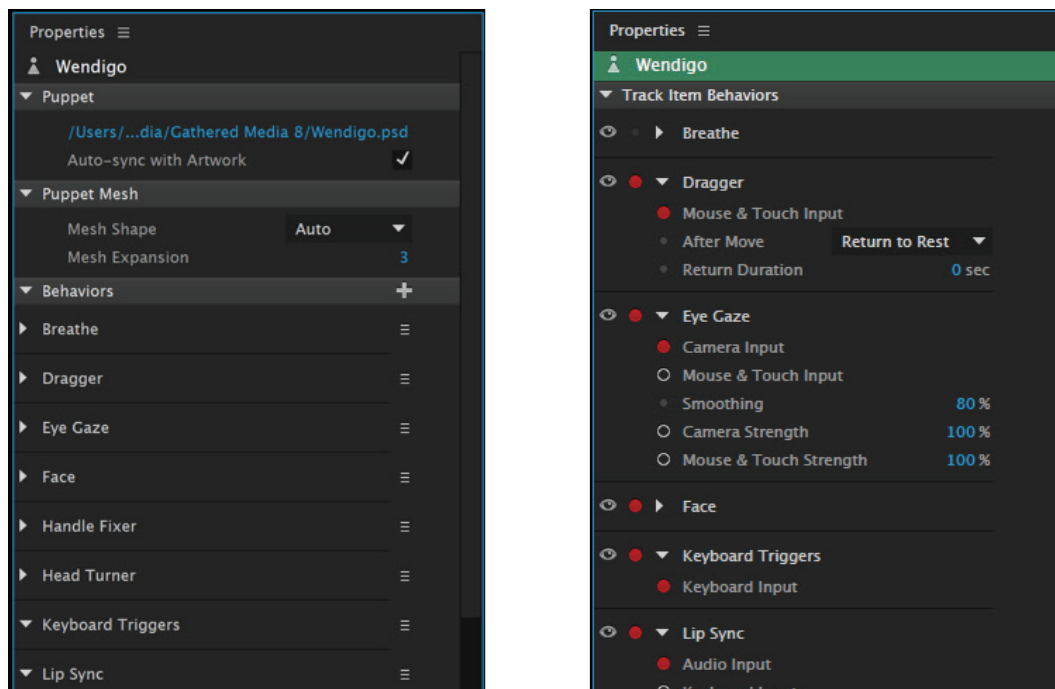


Figure 9 Properties panel in Rig workspace (left) and Record workspace (right)

Record and refine your performance

Performance capture animation of a scene's puppets is done during recording. Each recording of a scene is called a take, and multiple takes can be edited together to create a final, polished project. A scene is the combination of its puppets that you can control live, plus takes, and any other background, musical, sound effects or assets used in a production. Use the Record workspace to build, rehearse, record, and refine your puppet scenes (Figure 10).



Figure 10 Rehearsing a scene in the Record workspace

You'll go into more detail about how to control a puppet, adjust its behavior, and record a performance in the *How to animate and refine a character* guide.

Export the recorded scene

After you have recorded the scene the way you want, you can export it to a movie format using Adobe Media Encoder (Figure 11) that you can then play back outside of Character Animator and import into other applications.

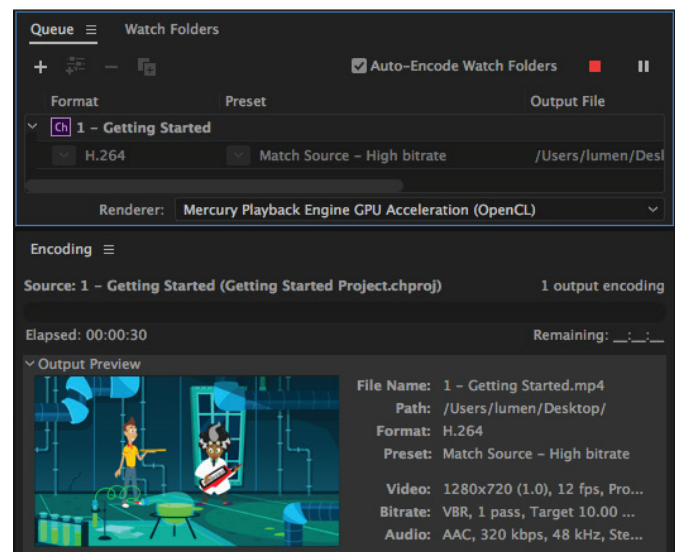


Figure 11 Adobe Media Encoder

Use your scene in other applications

You can integrate your scene into an After Effects composition or Premiere Pro sequence, and still make changes in Character Animator, by importing the Character Animator project into After Effects (**Figure 12**) or Premiere Pro and selecting the scene. You can also broadcast a scene live to external devices or other applications.

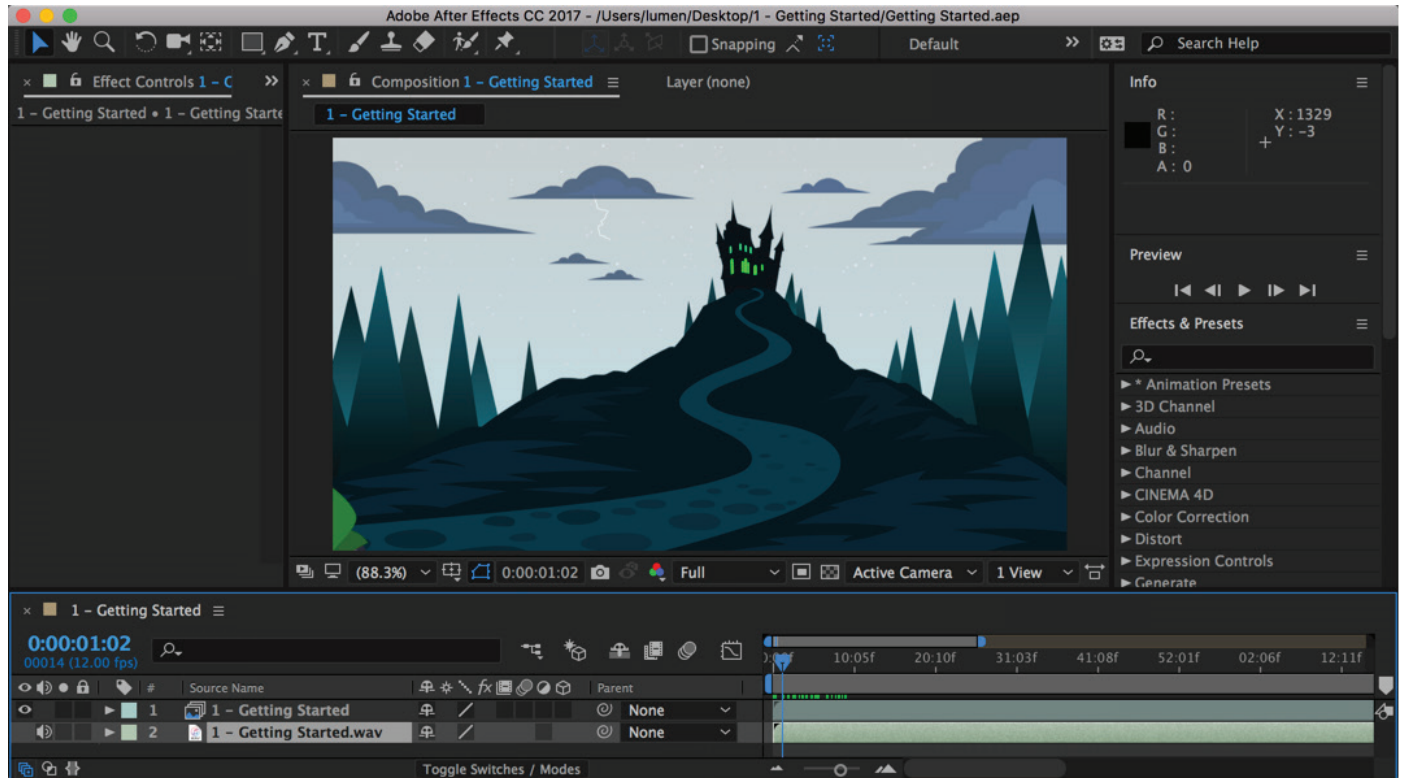


Figure 12 Imported Character Animator scene in After Effects

You'll learn how to export a recorded scene, and use it in other applications in the *How to export a project* guide.

For more information

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