

Exporting

Now that you've created the best animation ever, the next step is to export it for all of your friends to see. From the animation screen, press the button at the top of the screen and then select 'Export Animation'. Animation Pro will then display its export options.

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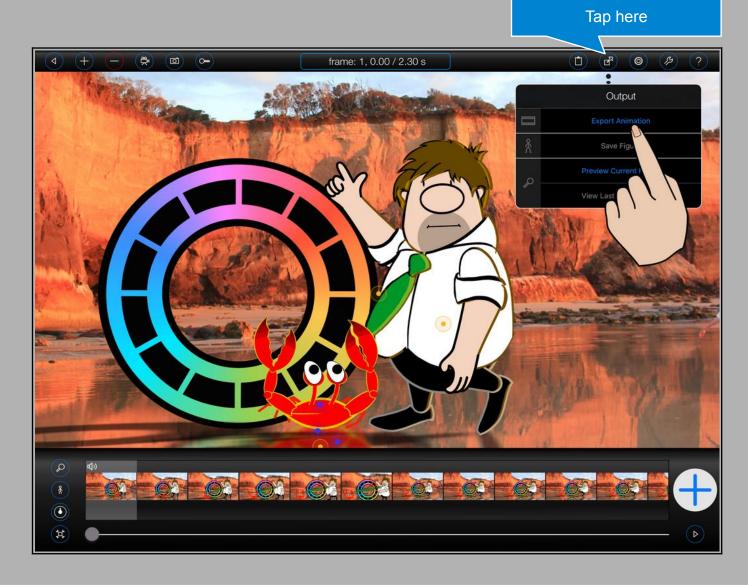
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Export Options Overview



Resolution

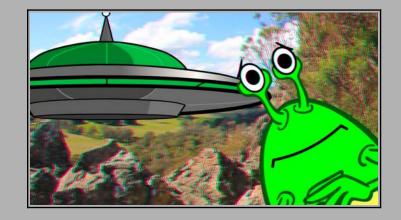
Animation Pro can produce output in a number of different resolutions based upon the aspect ratio selected when creating a project. A 16:9 aspect ratio, for example, produces output where the width of the output is 1.778 larger than the height. Animation Pro can thus produce 16:9 output at the resolutions shown below:

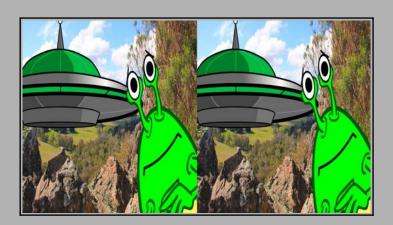


Generally speaking, the larger the resolution, the greater the files sizes (video or images) will be. So, if you need to send someone a video over a mobile/cellular connection, or via email, then a lower resolution may be more appropriate. Of course, lower resolution animations will look pretty ordinary when viewed on large screens.

3D

Animation Pro can export animations in both anaglyph and side-by-side 3D formats:





Select:



To export images or video in 2D only.



To export images in the 3D analyph format – to view these videos correctly, the left lens of the 3D glasses should be blue and the right should be red (when looking at the front of the glasses).



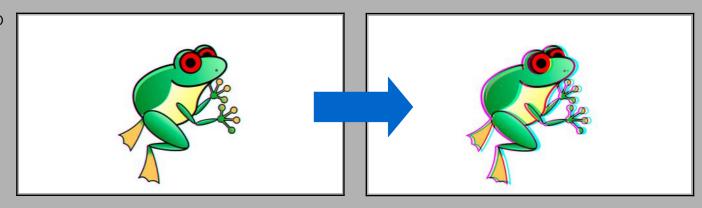
To export images in the 3D anaglyph format – to view these videos correctly, the left lens of the 3D glasses should be red and the right should be blue (when looking at the front of the glasses).





Select one of these options to produce 3D images or video in the side-by-side format. L/R vs R/L is largely dependant upon the device you intend to display the images or video on.

Depth: Rotate the Depth dial to the left to increase the 3D effect.



Frame Rate

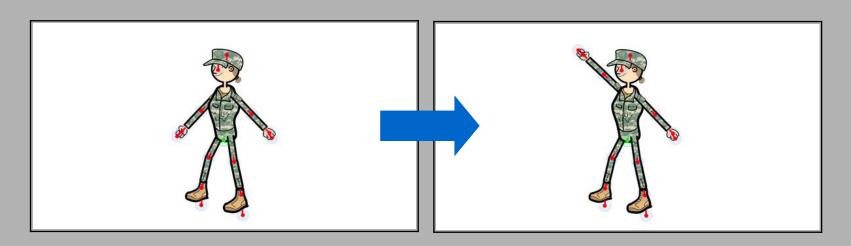
Animation Pro can produce video up to 60 frames per second. The chances are, however, that you won't want to animate at such a high frame rate as 5 seconds of footage would require you to create 300 frames on the animation screen!



About Tweens

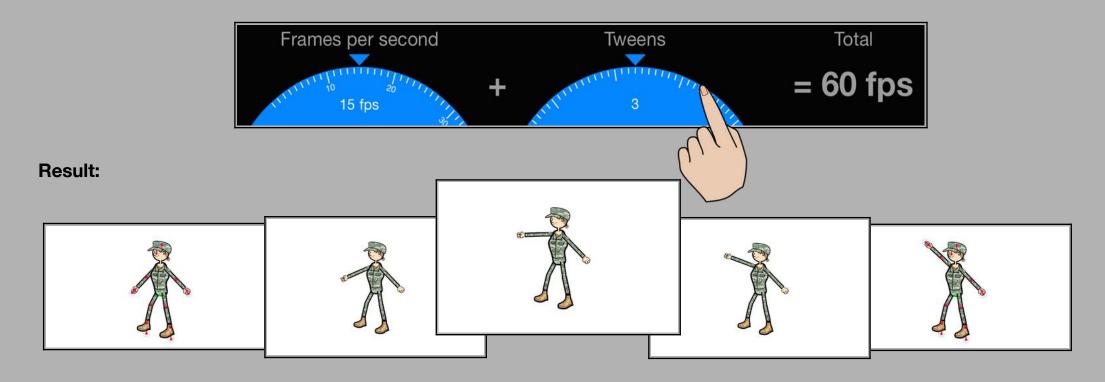
I generally create my animations with a frame rate between 10 to 15 frames per second. Of course, the lower the frame rate, the more 'jerky' my animations become. But that's where 'tweens' come in. Animation Pro can automatically insert additional frames, known as 'tweens', between each of my frames to effectively increase the frame rate and thus produce a much smoother result.

Consider the following two frames:



The figure's arm will move abruptly from the first position to the next.

By setting the number of tweens to 3, Animation Pro will automatically create 3 intermediate frames to smooth out the movement of the figure's arm:



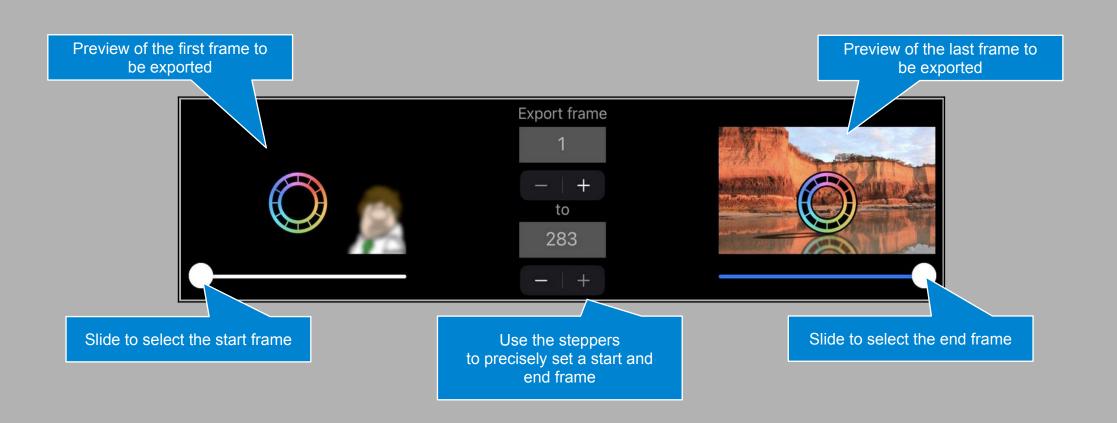
In this example, the frame rate is effectively increased from 15 to 60 frames per second. The speed of the characters movements, however, will remain unchanged – they'll just look a whole lot smoother!

PLEASE NOTE:

- If you move a figure's limb, for example, more that 180 degrees in a clockwise direction, Animation Pro will assume that the limb actually moved in a counter-clockwise direction when creating the tweens i.e. it will base its calculations on the smallest possible movement.
- The 'Tweens' dial will be unavailable where 'user tweens' exist in your animation. Please see the 'Tweening' topic (left) for more information.

Range

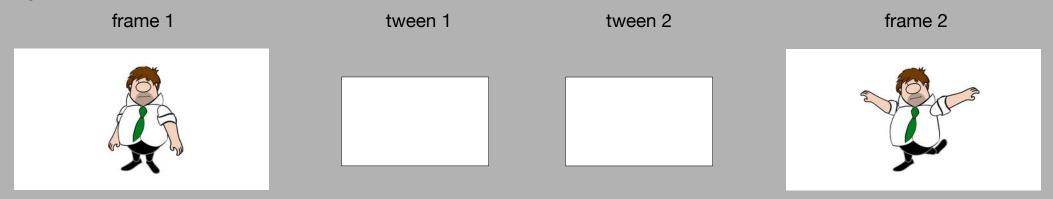
Exporting an animation can take a while depending upon its complexity. 3D animations for example, take 3 times longer to produce as both a left and right image need to be created and then combined to produce the analyph or side-by-side result. So it can be useful to export part of an animation, especially where you need to quickly review changes to only a handful of frames within a large and complex animation.



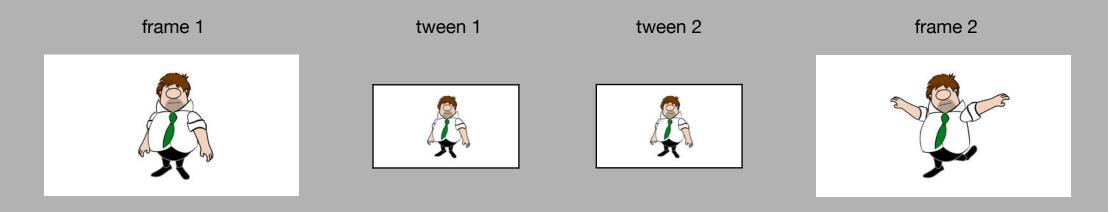
Tweens

Retaining Deleted Figures Through Tweens

Consider the situation where you've replaced a figure, on frame 2, with a completely different figure (i.e. a figure that is not a substitute) that is meant to be continuation of the first. Let's call the first figure 'Figure A' and, because I've got absolutely no imagination, the second figure 'Figure B'. Now, because 'Figure A' was deleted on the second frame (i.e. and then added as 'Figure B'), it only really exists on the first. So, by default, any tweens created between the first and second frames will be empty:



By turning on the 'Retain deleted figures through tweens' switch, however, you can force Animation Pro to include 'Figure A' in the tweens:



This will help to prevent 'gaps' in your animations where replaced figures flicker out of existence briefly in-between frames.

The downside is that 'Figure A' has nothing to tween to in frame 2, so it will remain motionless in the tweens.

Please note:

In Animation Pro, the correct way to handle this sort of situation is to use either:

1. Figure substitutes (for more information, please see the 'Substitutions' help topic, left)

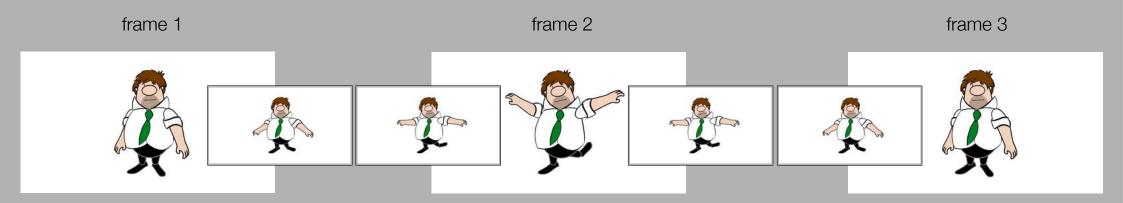
or

2. Create 'user tweens' between frame 1 and 2 and place an appropriate figure in them (for more information on 'user Tweens', please see the 'Tweening' topic, left).

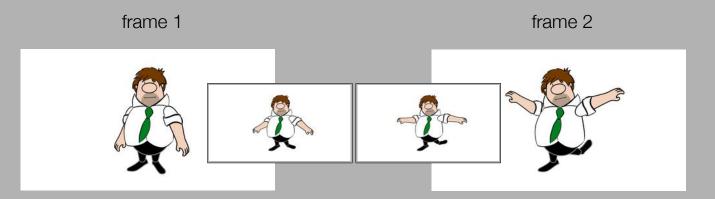
But turning on this switch may produce an acceptable result if you're doing something quickly.

Including Tweens After the Final Frame

Please consider the following animation consisting of 3 frames with 2 tweens between each frame:

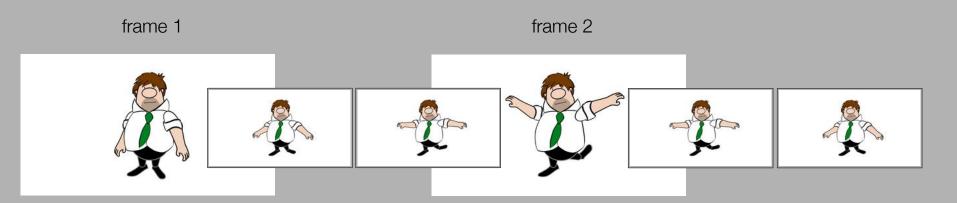


If our requirement is to ultimately display a looping video such that the figure's arms keep moving up and down (i.e. without any pauses), then we really don't want frame 3. Under normal circumstances, however, this would still produce the following undesirable result:



That is, if this video were made to loop, there'd now be an abrupt transition between frame 2 and frame 1!

By turning on the 'Include tweens after the final frame' switch, Animation Pro will produce the following results when frames 1 through 2 are exported:



And the results will look a lot better when looped!

Please note:

If you leave this switch on and export to the very last frame in your animation, there won't actually be any tweens to include. Under these circumstances, Animation Pro will simply repeat the last frame in the output (once for each missing tween).

Include

The export process can take some time if you've included a lot of effects, such as tints, blurs or camera depth-of-field etc., in your animations. Sometimes that can really test your patience when you'd just trying to do a quick export to see how the timing of your figure movements, for example, are progressing. So Animation Pro allows various effects to be turned off when exporting to speed things up.



Format

Animation Pro can produce either a video (.mov, .m4v or .mp4), a sequence of images (Images) or a sequence of images with transparency (Images - alpha). Images will be written straight to the iOS photo album/camera roll.



Please note:

The HEVC and HEVC + Alpha export codecs are only available on devices that have an A10 chip or later. The 'HECV (mov)' and 'HEVC + Alpha (mov)' format selections will only be displayed on devices that have an A10 chip or later.

The 'HEVC + Alpha' format can be used to produce videos with transparent backgrounds (i.e. if you don't include a background image in your animations). Such videos can be easily overlaid upon other videos in video editing packages that support the HEVC codec, such as Lumafusion and Final Cut Pro.

HEVC AIRDROP WARNING

In all likelihood Apple will automatically convert HEVC videos back to the H.264 format (without an alpha channel) when you attempt to AirDrop them to a Mac or PC. If this occurs, please go to the 'Settings' App on your iPad, open the 'Photo' settings and make sure that 'Keep Originals' is selected for 'TRANSFER TO MAC OR PC'. Please note that this setting may be in a different location for different versions of iOS.

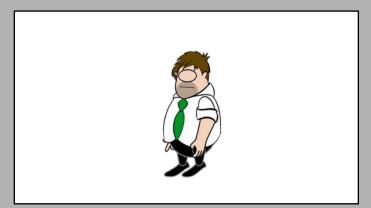
Alpha Image Trimming

When exporting images with an alpha channel (transparency), it is possible to specify how those images should be cropped:

1. Do not trim

Do not trim	Trim individually	Trim to common size
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When this option is selected, Animation Pro will export images at the resolution specified (no trimming will occur):







1. Trim individually

Do not trim Trim individually Trim to common size

When this option is selected, Animation Pro will trim the blank pixels from around the figures in each image which may produce images of varying sizes:







1. Trim to common size

Do not trim Trim individually Trim to common size

When this option is selected, Animation Pro will determine the minimum trimmed size that satisfies all of the images:







Please note:

- H.264 video exports are available on all devices
- HEVC video exports require devices with an Apple A10 chip or later
- mov files will contain 2 stereo channels at 44100 Hz (AAC)
- m4v and mp4 files will contain 2 stereo channels at 48000 Hz (AAC)
- mov is the default format
- m4v and mp4 files may work better with other devices
- Some Apps may automatically transcode videos i.e. the video formats described above may be modified by other Apps when sharing

Starting and Stopping an Export

Once you've made all of your selections, press the volume button to begin the export process.



The button may be pressed to cancel an export. Please note that it may take Animation Pro a little time to finish what it is doing when the button is pressed.

Export Time

The length of time taken to complete an export will be based upon a number of factors, including:

- The number of frames in your animation
- The number of tweens selected
- The number and complexity of the figures in each frame
- The number of sound effects in the animation and the amount of lip-synching
- The use of background images
- The use of colours/tints, highlights/accents or glows/outlines
- The use of motion blur
- The use of effects such as distortions, blurs or camera depth-of-field
- Whether the animation is exported in 2D or 3D (3D animations will take nearly 3 times longer to export)
- Whether the animation is exported as a video or a sequence of images
- The resolution of the exported animation

So if your animation is long and complex, and your battery is low, you may wish to put your iPad on the charger whilst exporting.

PLEASE NOTE:

- The iPad's screen will remain on during exports.
- If the iPad is put to sleep or another App is launched, Animation Pro will terminate any active exports.