

# Visionaire Basics for beginners

## Video 13 – Character Animation

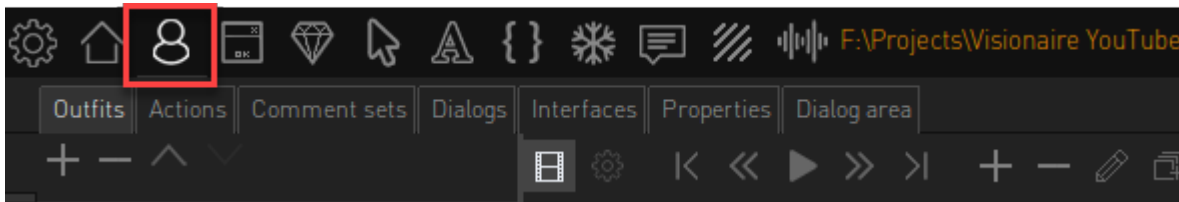
### Introduction

In this section we will discuss character animation. When we talk about character animation, we simply mean animations that play when the character walks, talks or interacts with objects in the game world.

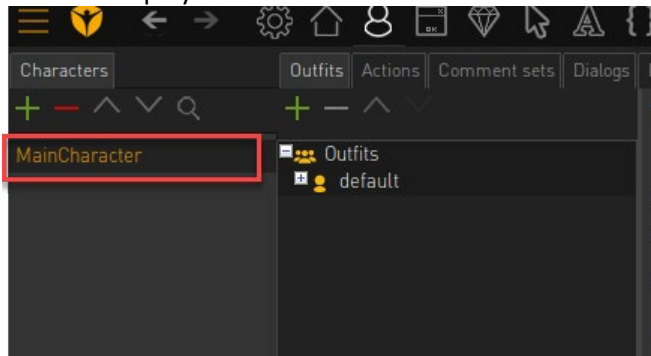
### Where do we add character animations

Character animations are added in the character area. To access this area, do the following;

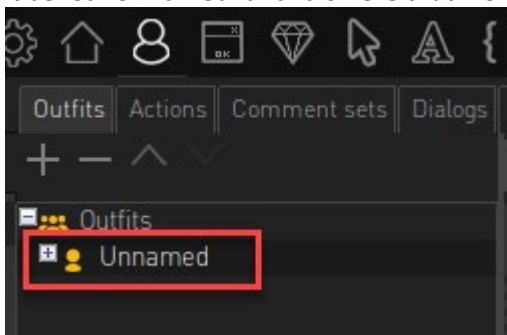
1. Click on the character area button to access.



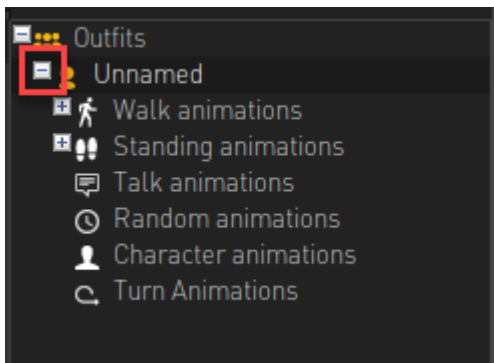
2. Choose the player character in the left most column.



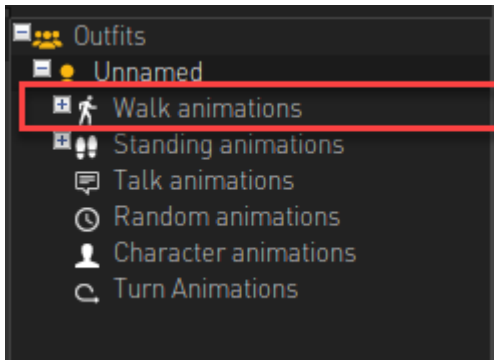
3. Next, notice the outfit area shown to the right of the selected character. Here we already have an outfit labelled 'Unnamed' and it is here that we will add our animations.



4. Click on the plus icon to un-nest the Outfit details.

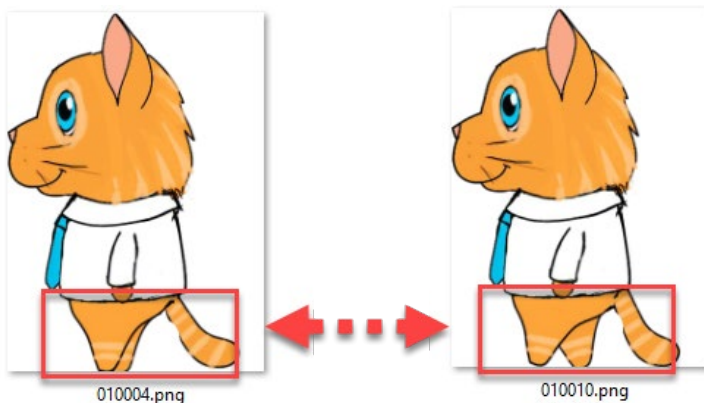


5. Now we can see all the animations area that we can add. The first focus will be the WALK ANIMATIONS.



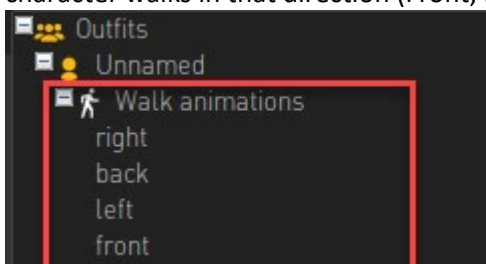
### Outfit Animation overview

Character animations are multiple images that can be viewed as frames. Each image or frame represents a specific point in the whole animation. When each frame is played in quick succession it creates the illusion of a character walking.

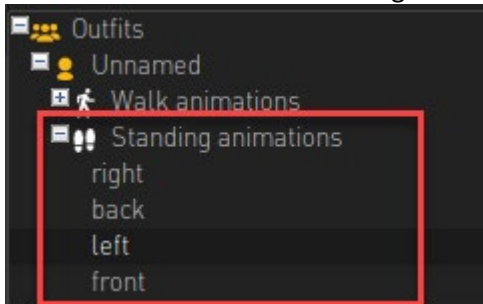


When adding our animations there are a few things to keep in mind.

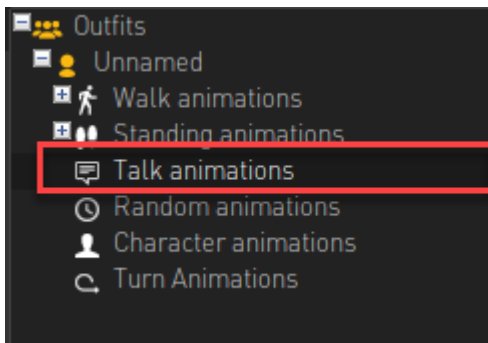
1. Our walking animations have the option add multiple directions, each of which will be displayed when the character walks in that direction (Front, Left, Right, Back)



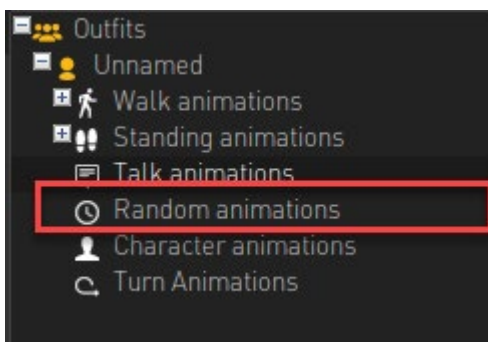
2. We also have a Standing Animation. This is the idle animation and also has multiple directions that the character can face when standing still.



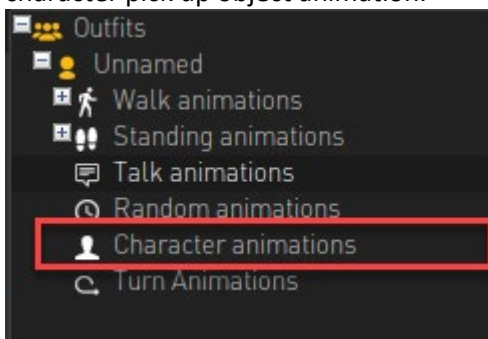
3. We have a Talking animation which will play whenever our character speaks out loud.



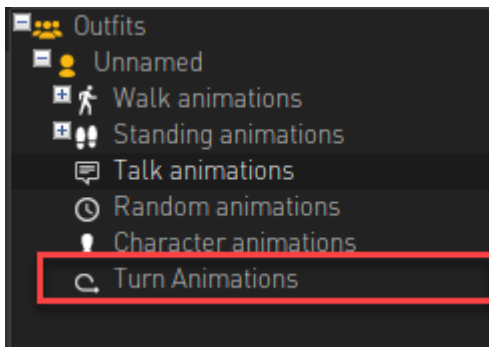
4. We have Random Animation used for animations that play automatically when the character is inactive for a certain amount of time.



5. We have Character Animations used for animations that we manually trigger. An example of this would be a character pick up object animation.



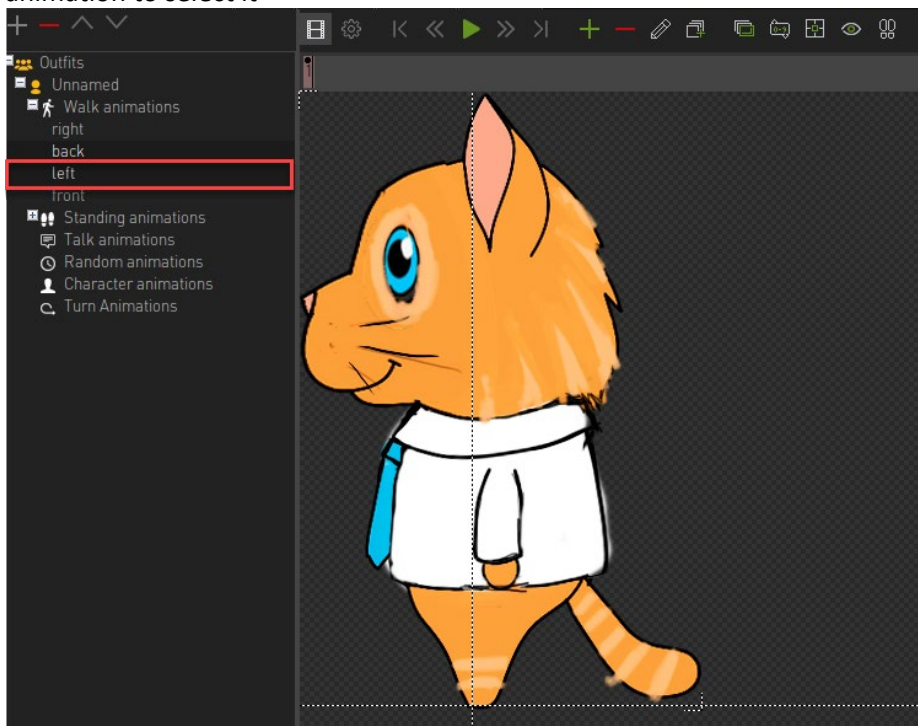
6. Lastly we have Turn Animations which smooths out the animations when the character turns from one direction to another.



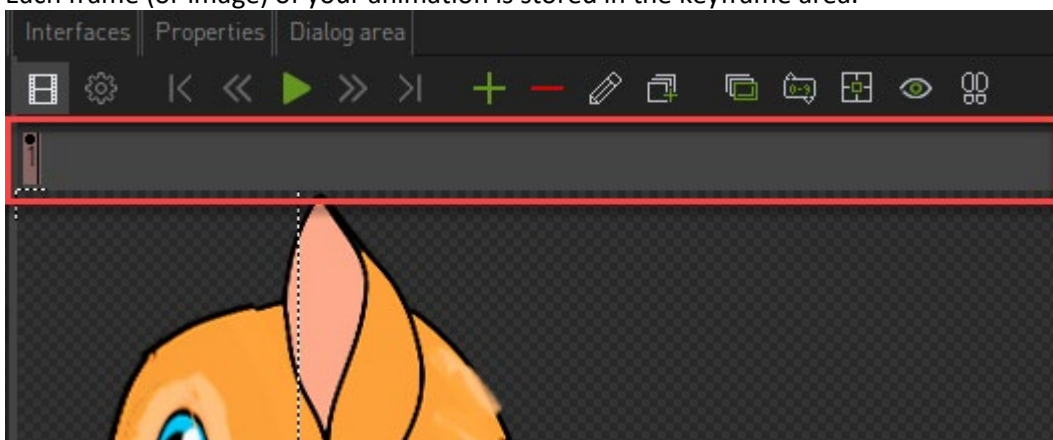
## Add your first walk cycle

To add your first walk cycle, do the following;

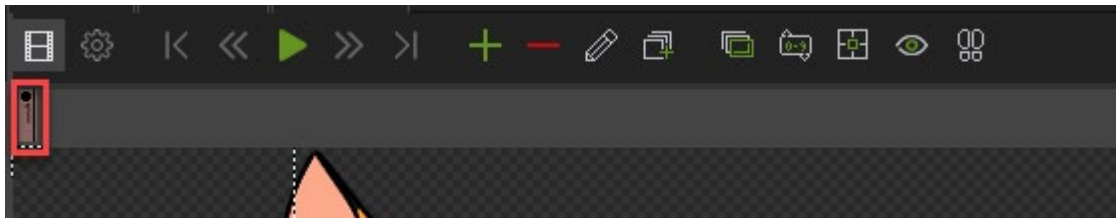
1. Identify which direction you will add first. In my example I will choose direction LEFT. Click on the LEFT animation to select it



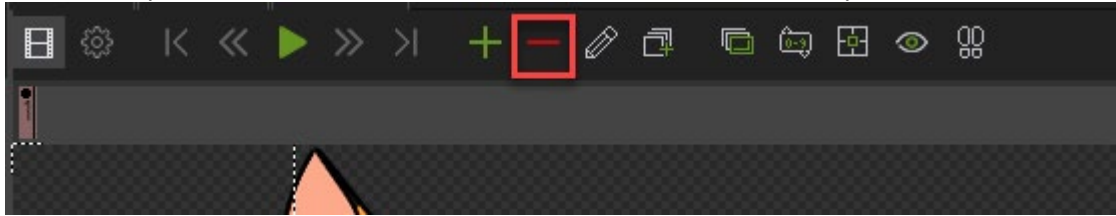
2. Each frame (or image) of your animation is stored in the keyframe area.



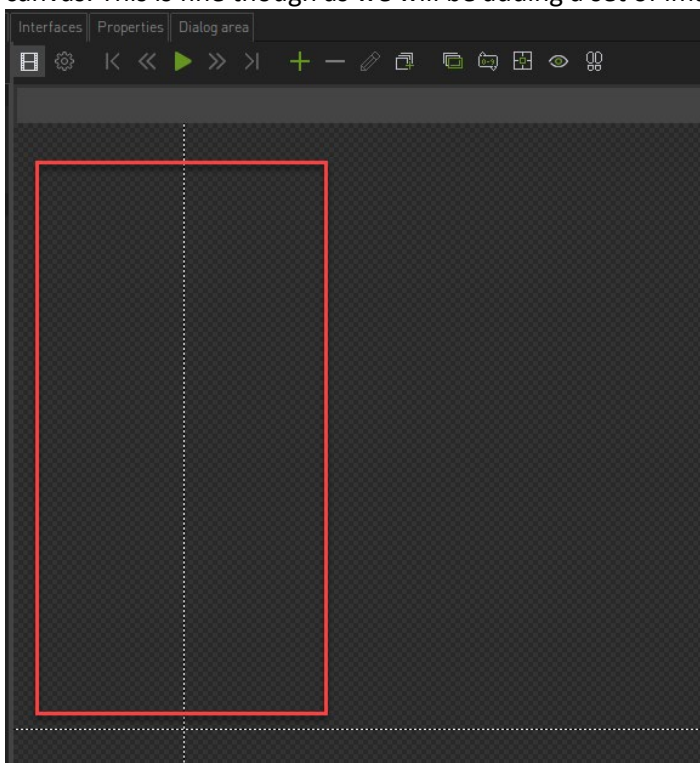
3. Notice that only one keyframe is shown here. We will remove this as we will be inserting multiple frames.
  - a. Click on the keyframe. It will turn pink once selected.



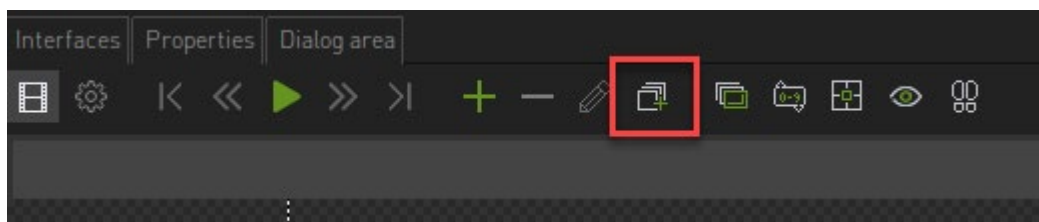
- b. With our keyframe selected, click the red minus icon to remove the keyframe



- c. Our keyframe will be removed as well as the accompanying graphic. We will be left with a blank canvas. This is fine though as we will be adding a set of images soon.

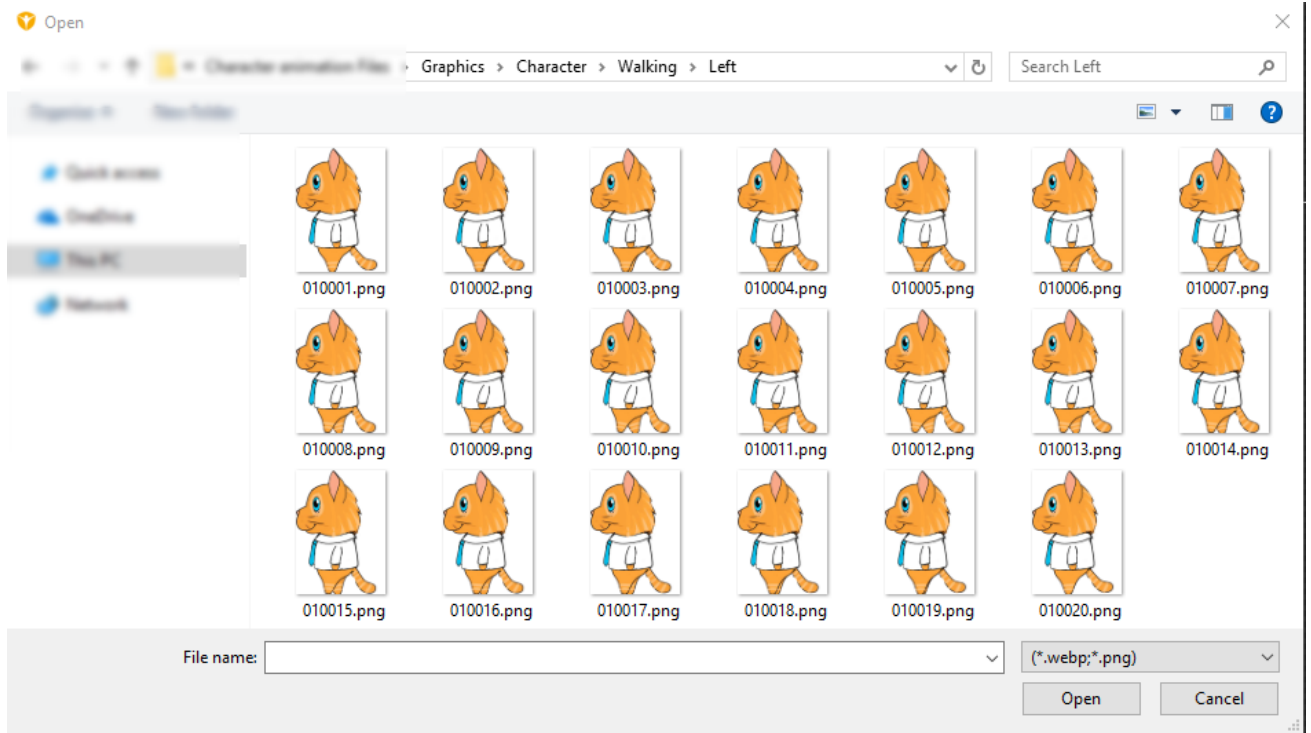


4. Now click on the ADD SEQUENCE button. Note we are choosing the ADD SEQUENCE which will load a sequence of images.



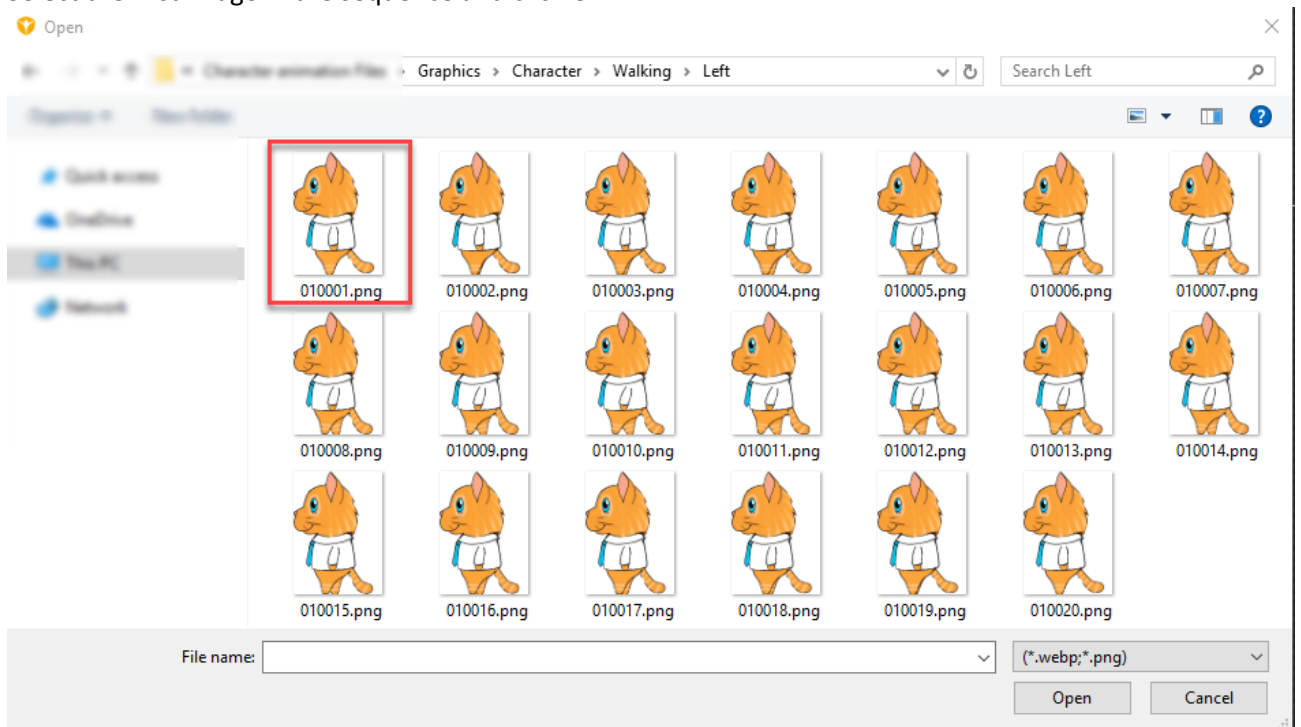
5. When clicked a new window will appear where you need to select the animation files. These example files are kept in this folder:

Graphics\Character\Walking\Left



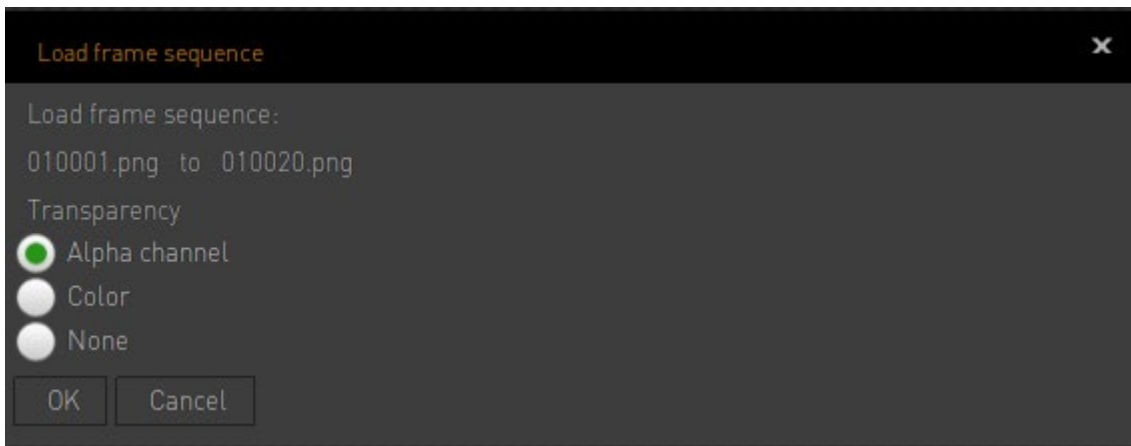
Let's quickly examine our images. Note first that the images are numbered according to the frames that they will be played in. We start with 010001.png and the numbers increment with each frame upto 010020.png. This numbering is important as this allows Visionaire to know the order in which the frames should be played.

6. Select the first image in the sequence and click OPEN.



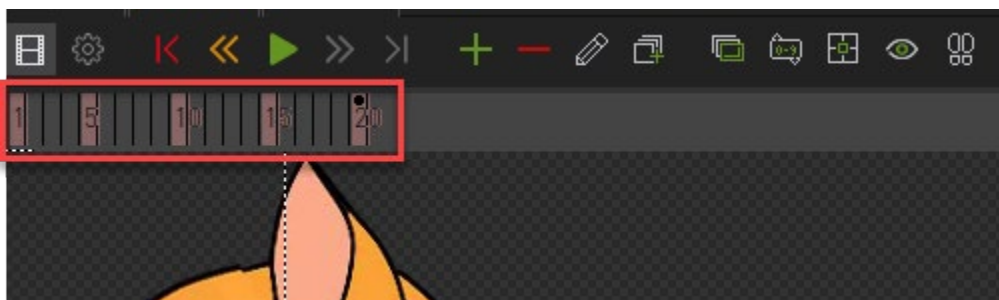
7. A new popup will appear asking us how to handle the transparency of the image (the space around our character).



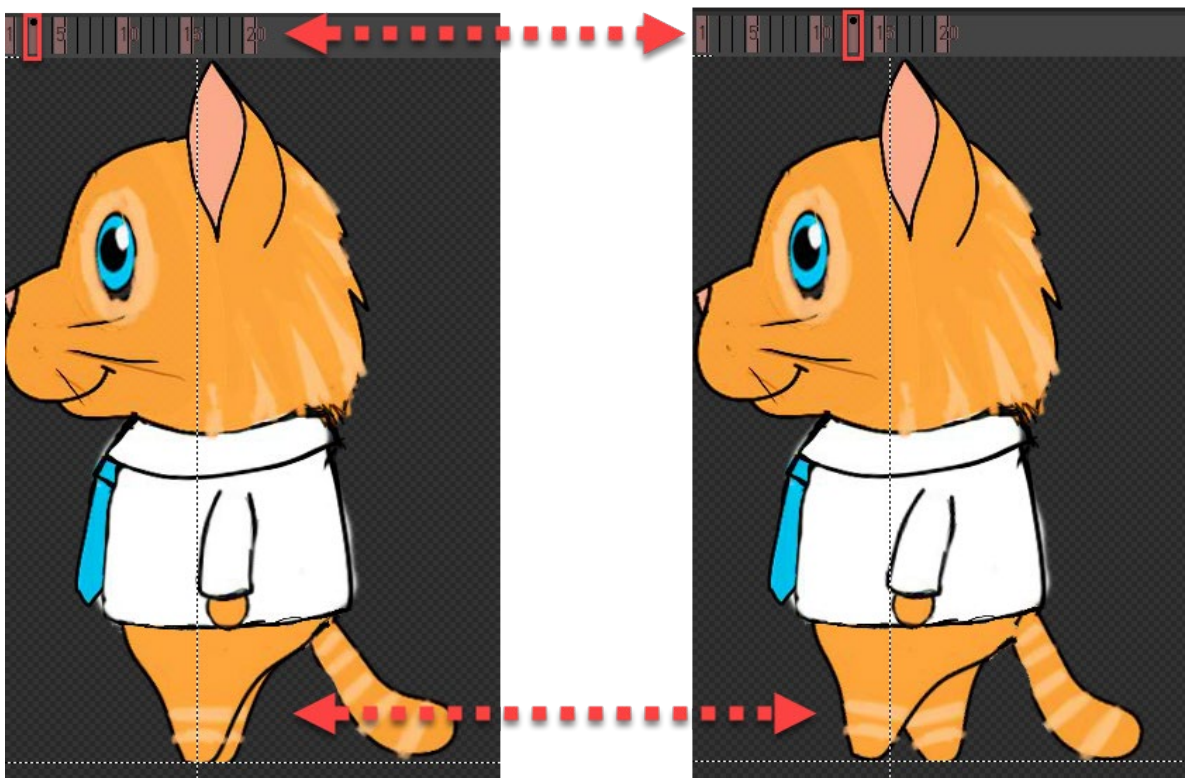


We will choose ALPHA CHANNEL as our images do contain an Alpha channel. Click OK to finalize.

- Your images will then be loaded into the animation as keyframes. We can see this by the keyframes being populated in the keyframe area.



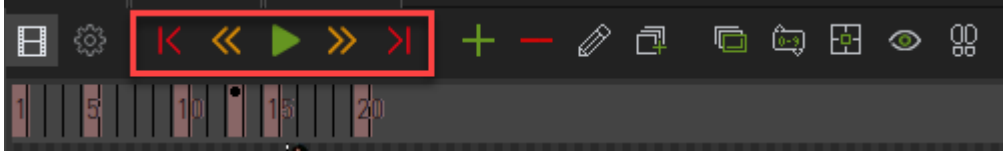
When you click on individual frames notice how your canvas area updates to show that specific image saved on that frame.



**Play our animation**

Let's play our animation to test how it looks.

1. In the animation area we have access to controls to preview our animation.



2. Click the PLAY button to play our animation

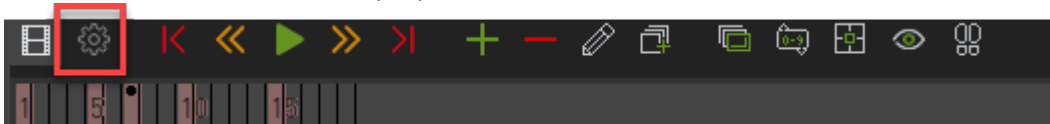


3. The animation seems a bit fast so let's look at the animation settings.

## Animation settings

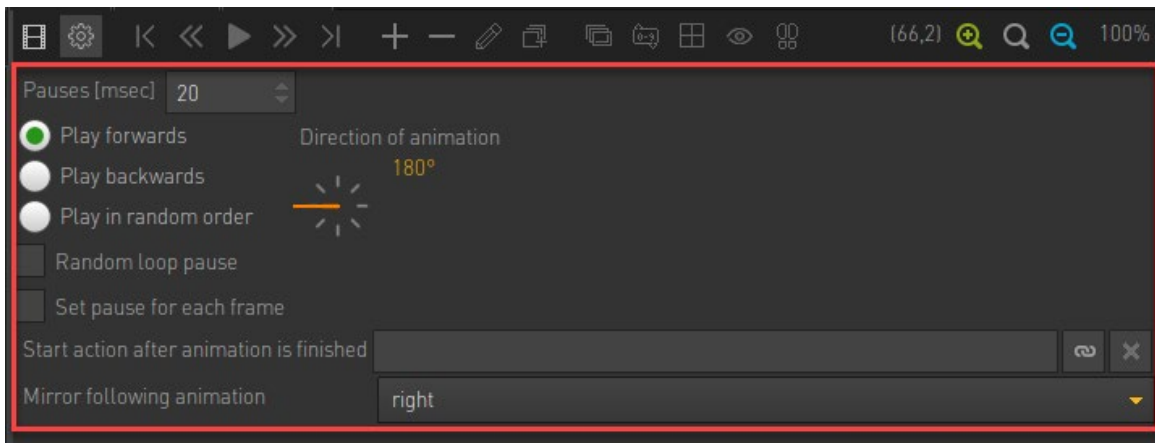
We can set several options for each animation including how quickly our animation will be played.

1. To access this area click on the properties icon

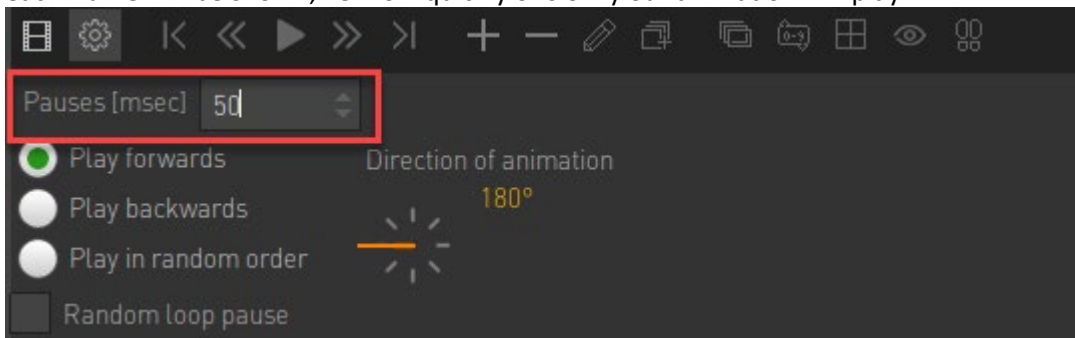


2. Here we set the properties for our animation.

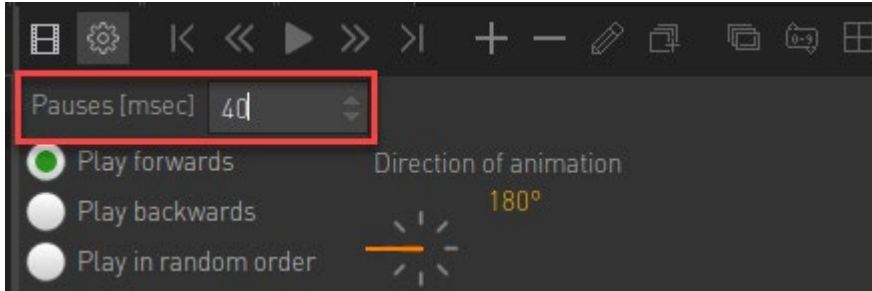




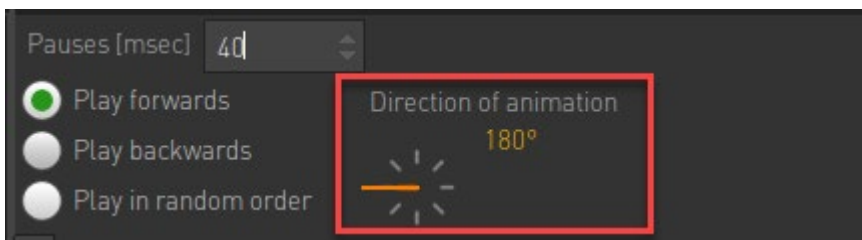
3. The options available to us vary but we want to focus on the Pauses [msec] property. This defines how long each frame will be shown, i.e. how quickly or slowly our animation will play.



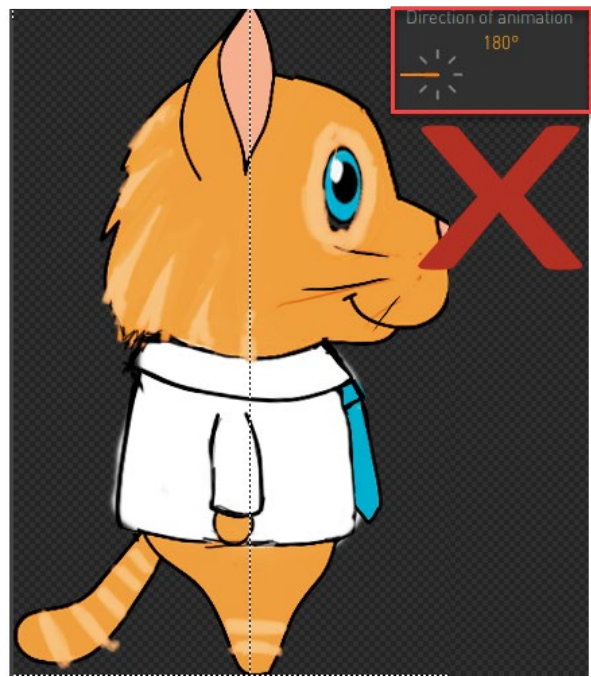
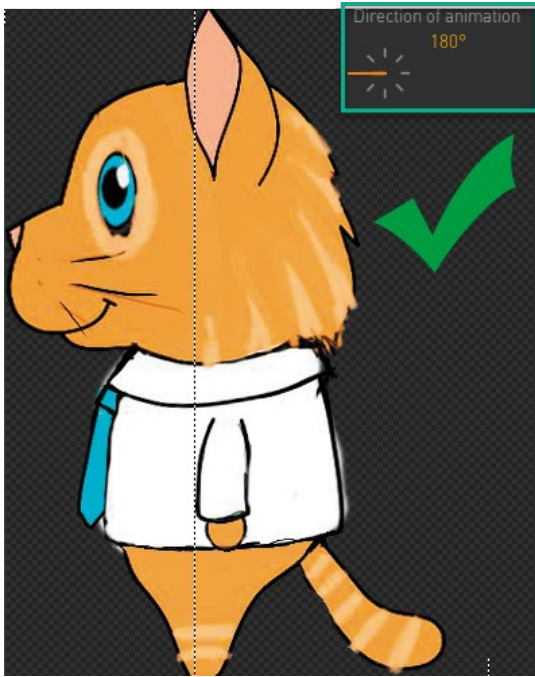
4. Let's set this to 40 and then test the animation by playing our animation.



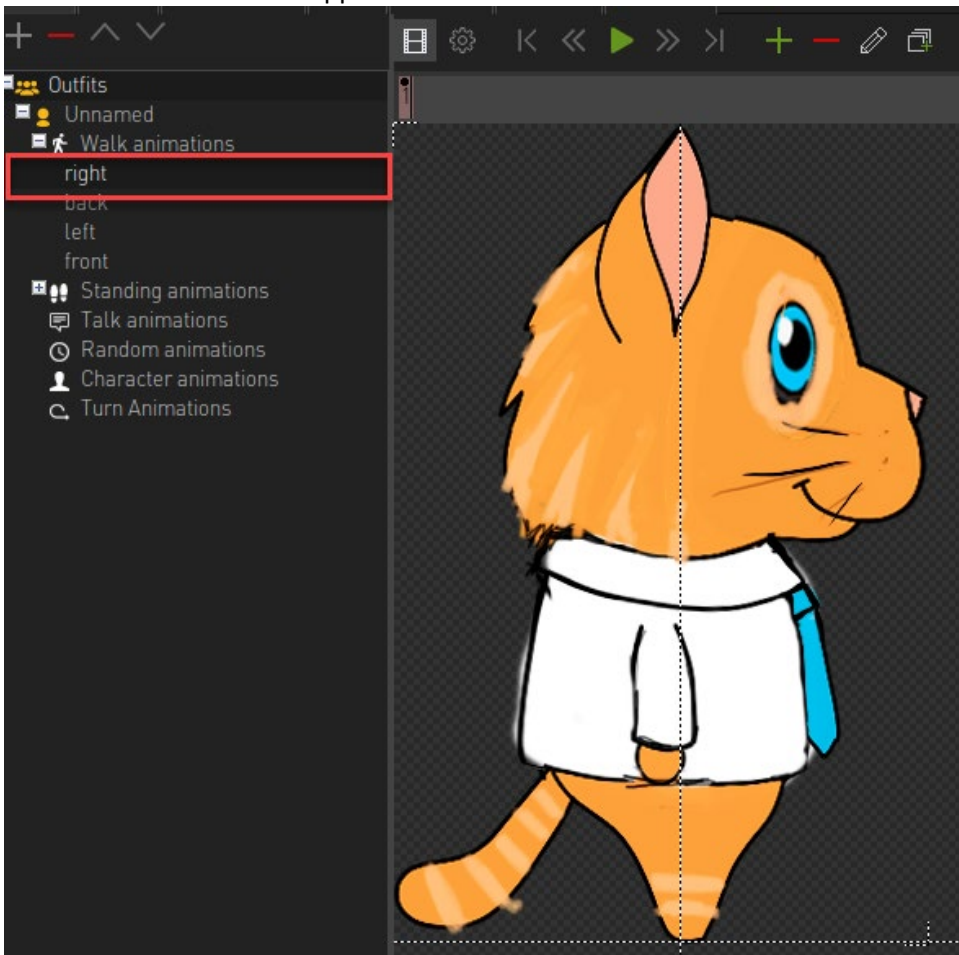
5. Another area of importance is the DIRECTION OF ANIMATION.



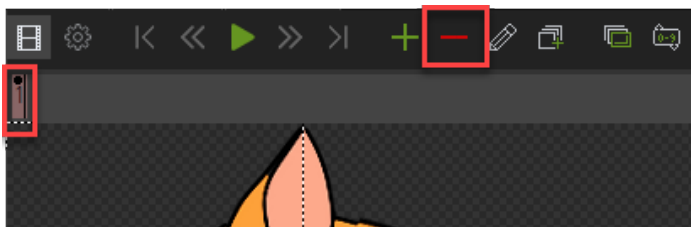
The direction is used by Visionaire to determine which animation is shown. The animation which best matches the character direction is selected (e.g. if there are four animations for 0, 90, 180 and 270 degrees and the character is aligned to 100 degrees, the animation for direction 90° is shown). Take note that the image itself is independent of this setting so always ensure that the image loaded has the correct direction that matches the above setting.



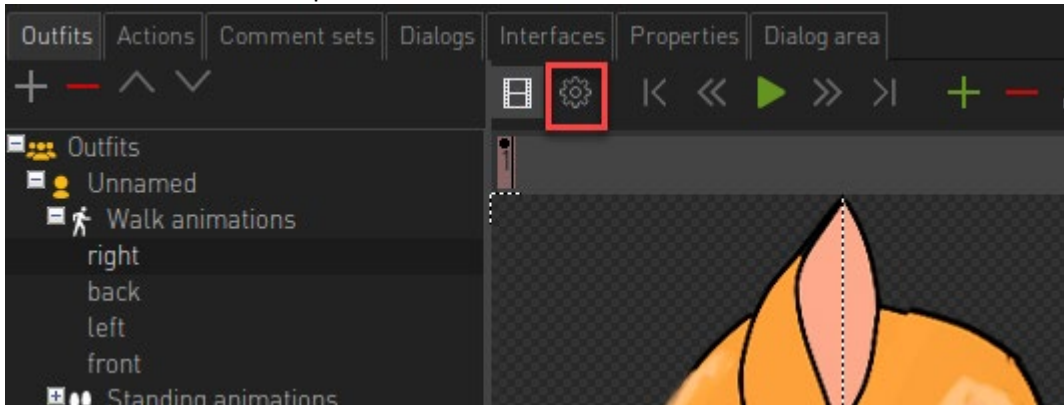
6. Let's do the same for the opposite direction labelled RIGHT. Click on the animation direction as per below.



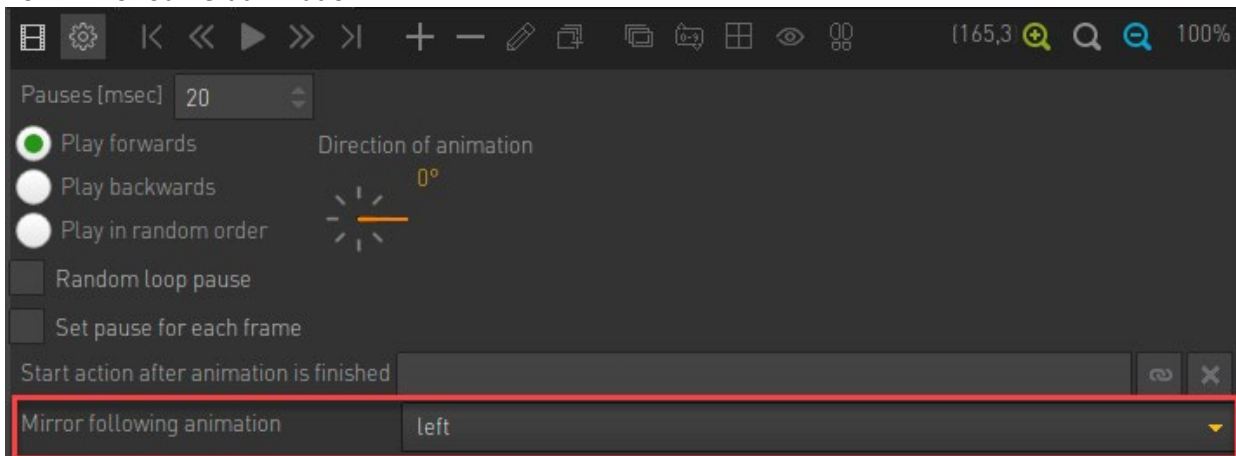
7. Delete the frame that already exists by clicking the red minus icon.



8. Now that we have an empty canvas, we could follow all previous steps but there is a quicker way. Instead of doing all that work, let's simply mirror the LEFT animation we already entered.
9. To do this click on the Properties



10. Here we have an option called MIRROR FOLLOWING ANIMATION. Choose left from the dropdown. This will now mirror our left animation.



11. Play your scene and note that your character now walks sideways.

## Harmonizing animations

Sometimes it may occur that our animations do not align up correctly with each another. We'll use the FRONT animation as an example.

Following the steps shown above, add in the Front walking animations. This can be found here;  
**Graphics\Character\Walking\Front**

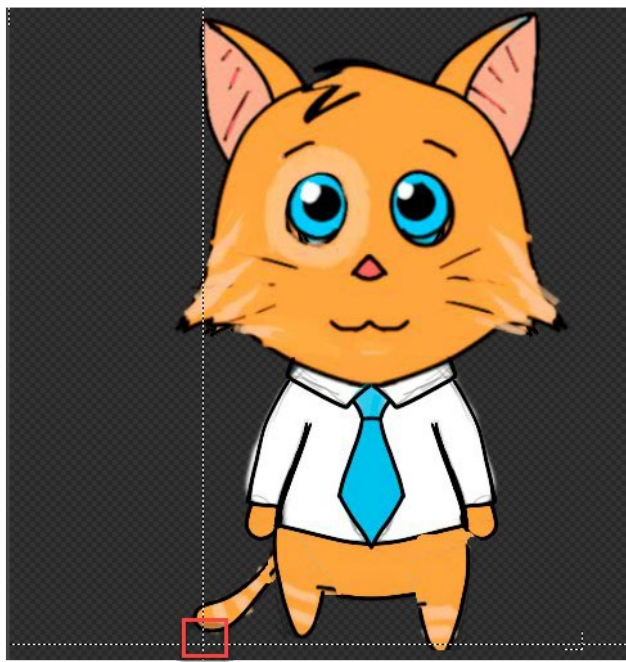
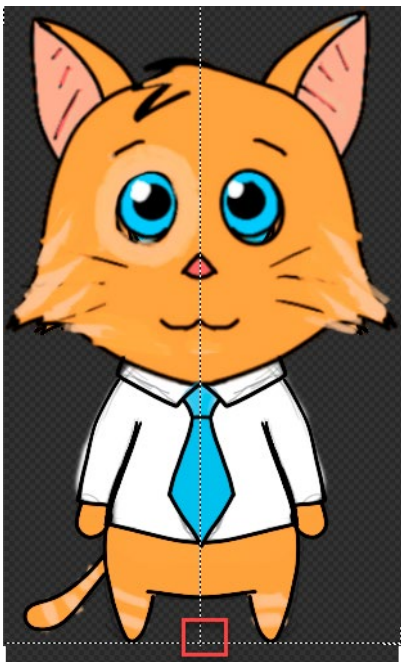
Add in the sequence, test the animation and set the Pause speed under properties.



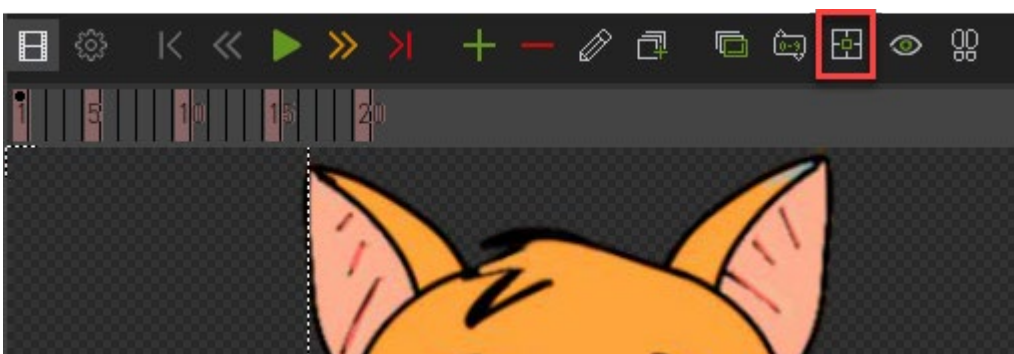
Now play your game. Notice that it is not ok when you move forward. The image seems to jump.

The reason is that our front walking animation and our front standing animation is not the same image width size. This then means that our animation centre for each item is not correct.

We can clearly see this if we compare the animation centre for the FRONT WALK and FRONT STANDING.

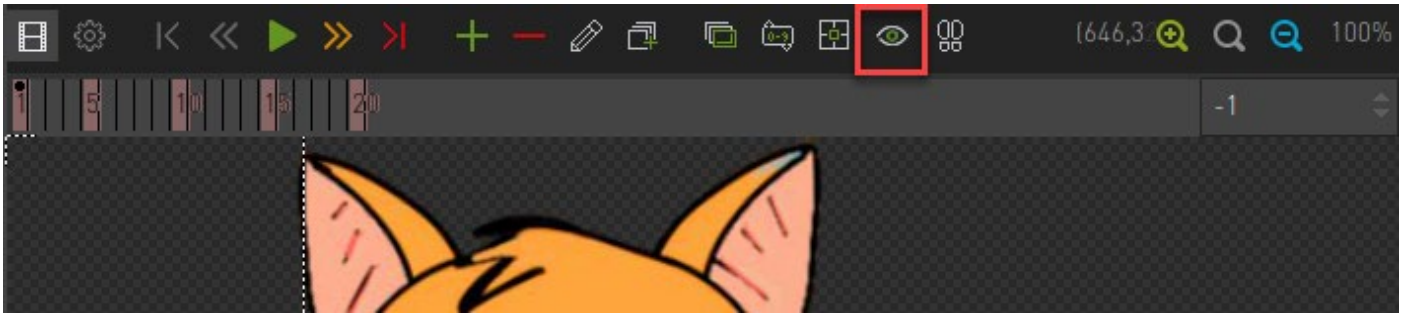


To fix this we can manually set the animation centre using the SET ANIMATION CENTRE button but there is a more accurate way of doing this.



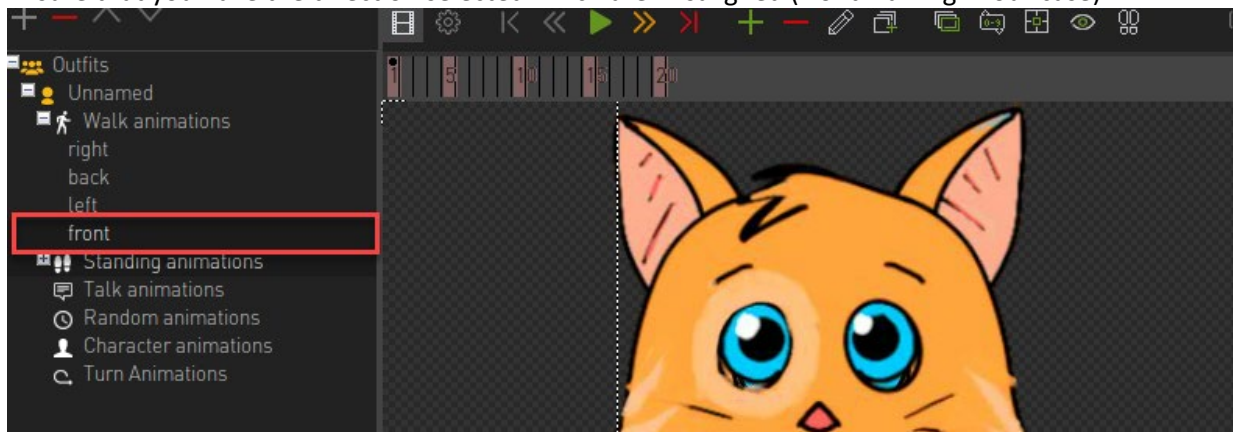


To accurately align the images, we can use the option called Animation Centre (Harmonize animations).

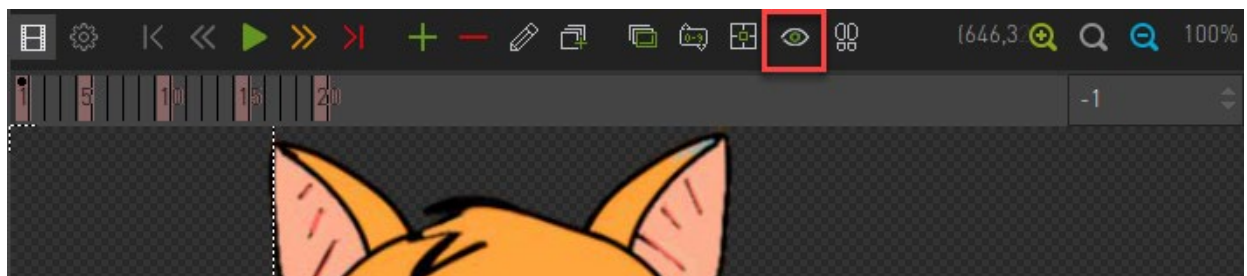


To use this do the following;

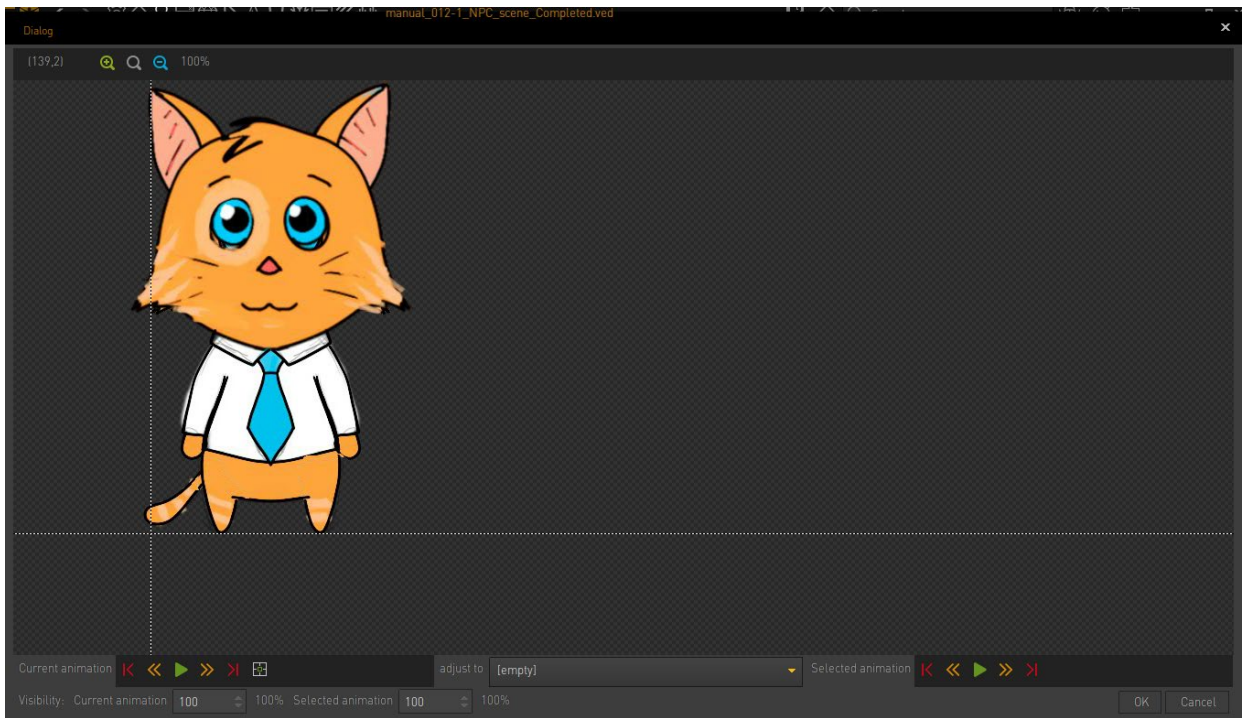
1. Ensure that you have the direction selected which are misaligned (front walking in our case)



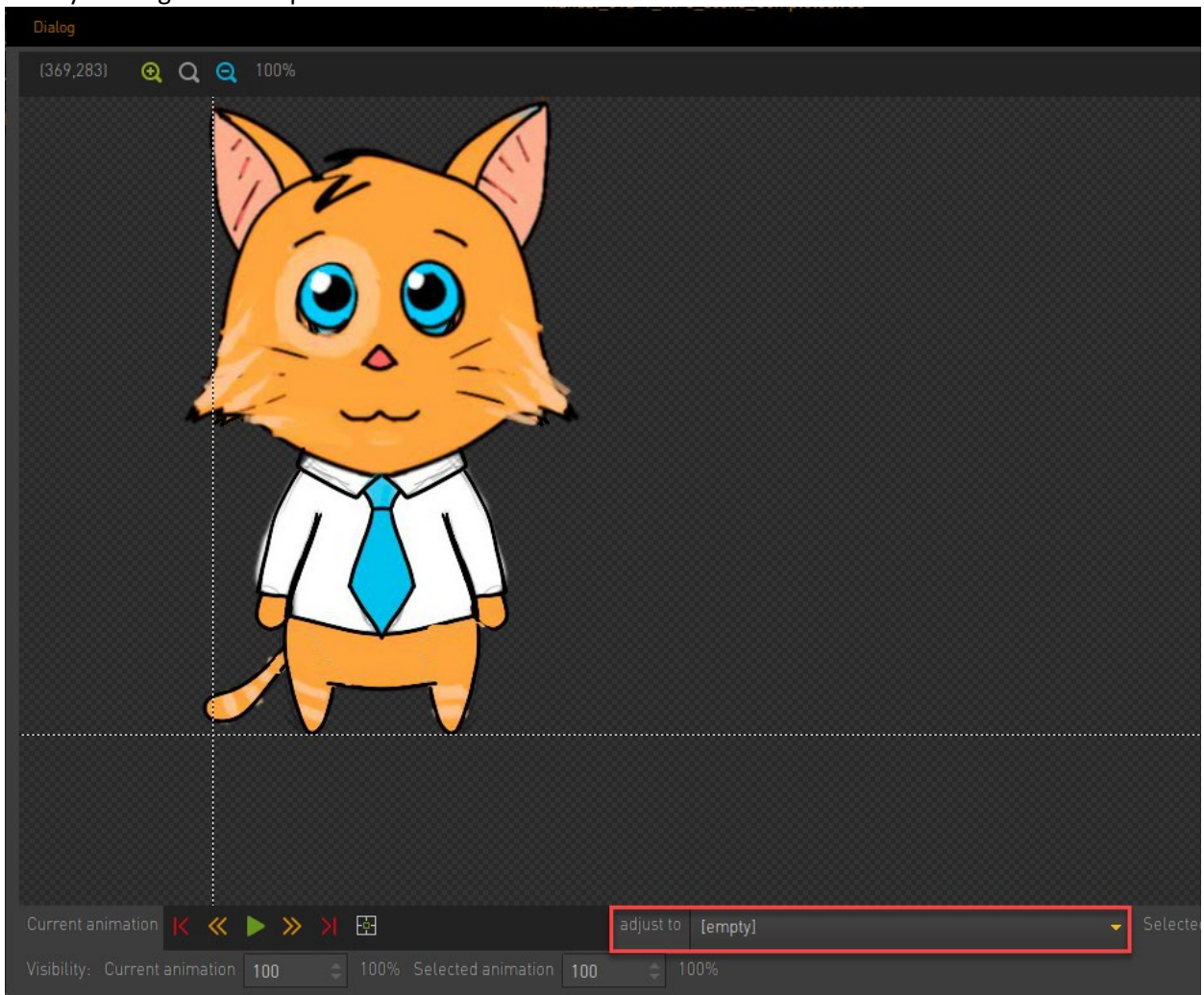
2. Click on the harmonize button.



3. This will open new window where we will do the harmonization.

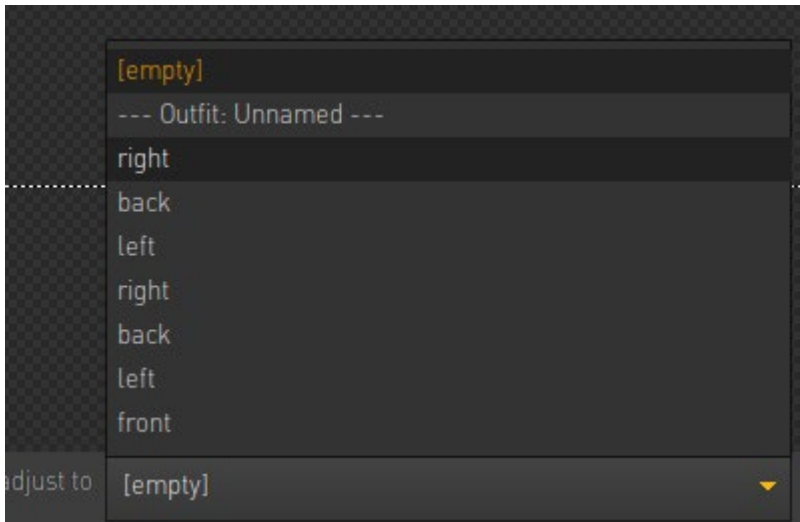


4. We have the image onscreen we wish to align but now we want to select the image to compare against. Do this by clicking in the dropdown ADJUST TO.



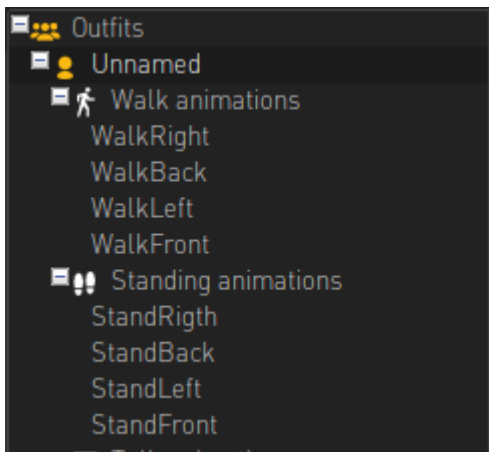
5. Notice that the dropdown contains the same labelled directions.



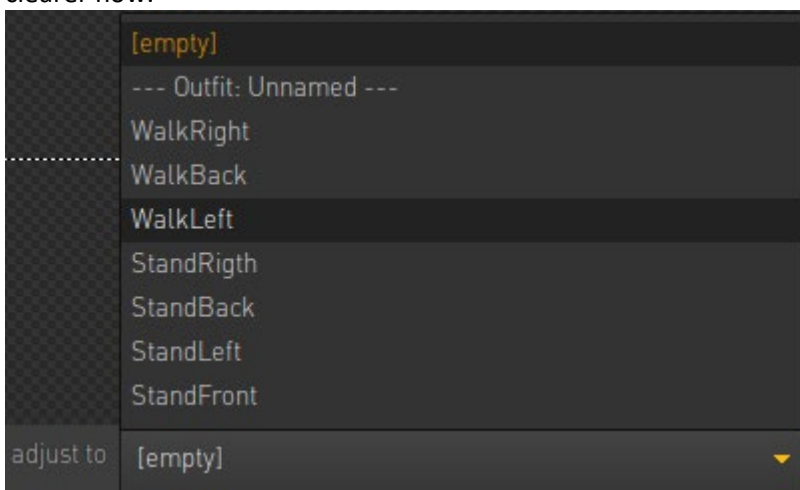


This is because we did not give exact descriptions to our directions when we imported our animations. It is always a good idea to rename directions to show the animation parent. So instead of just naming items 'left, right, back, front', rename items 'WalkRight, WalkLeft, WalkBack, WalkFront, StandLeft, StandRight, StandLeft, StandRight'

For ease of use let's close the harmonization area and rename the directions appropriately. Select the animations and press F2 on your keyboard to rename the direction. You should have something similar to the below.



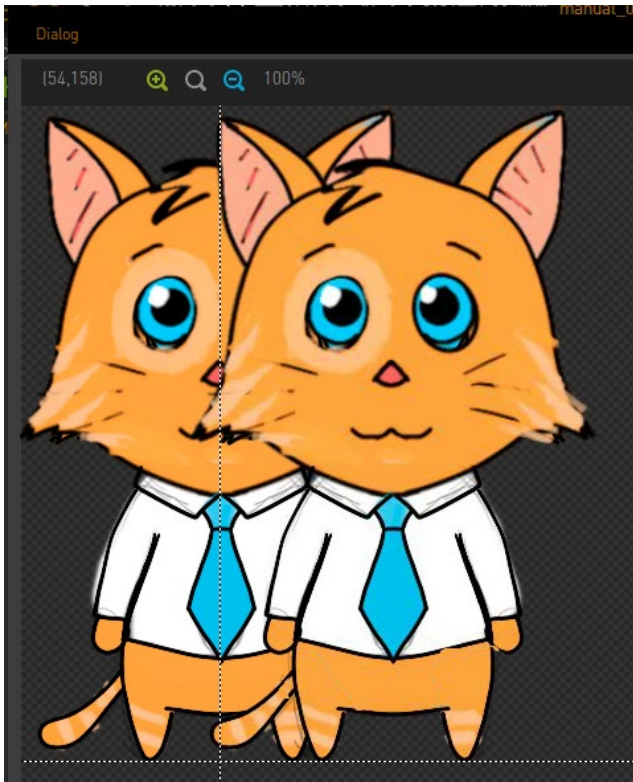
6. Reopen the harmonization tool and let's click on the ADJUST TO field again. Notice that items are much clearer now.



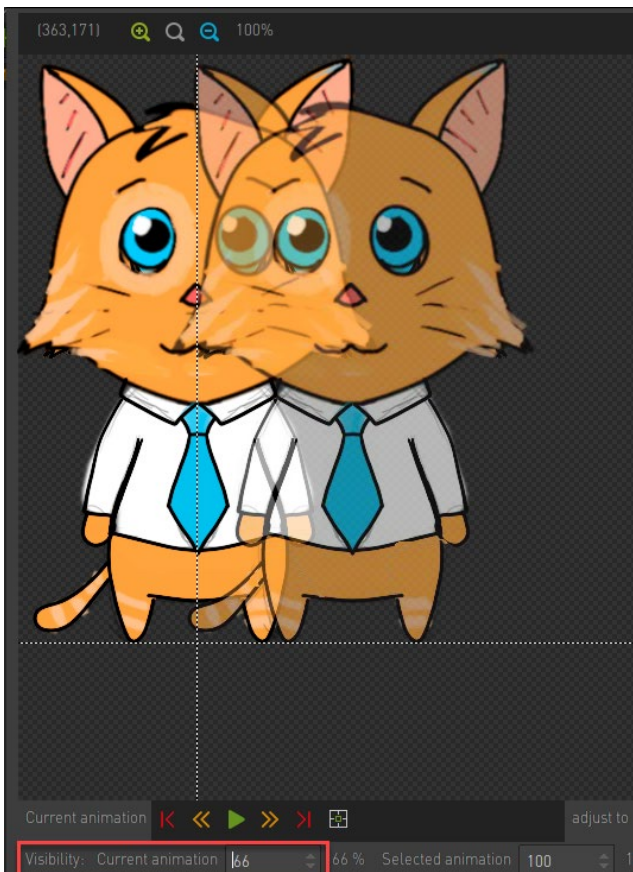
7. So we know our WalkFront images are not correct and we want to compare it to our StandFront image. This means we need to select the StandFront option here.

adjust to StandFront

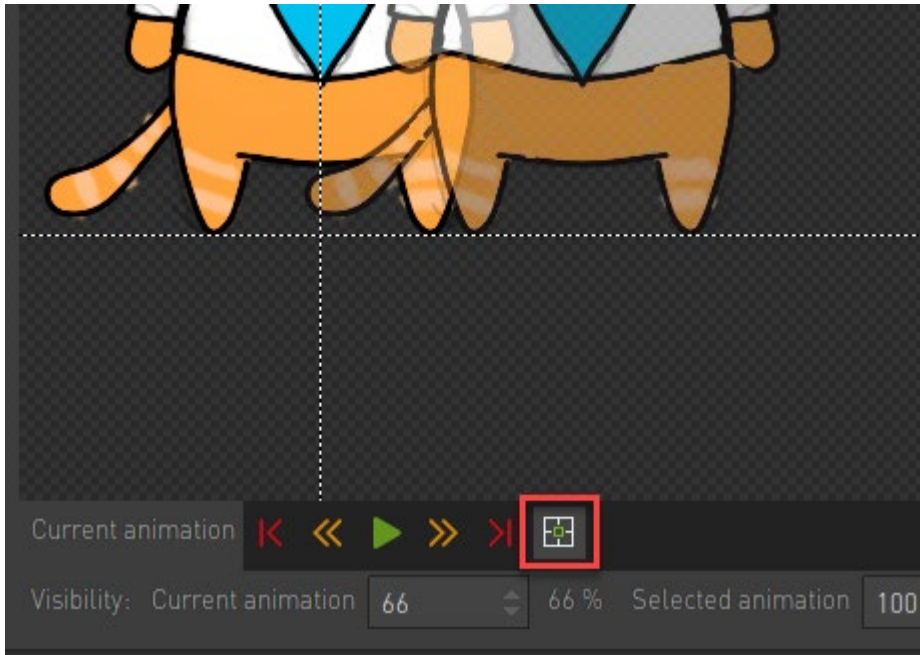
8. As soon as we do this the StandFront image has appeared.



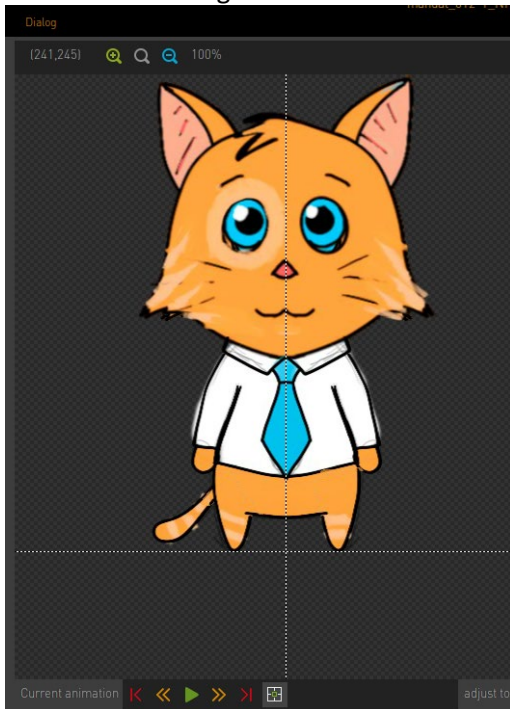
9. To properly align let's reduce the transparency of our WalkFront animation. Reduce the transparency here. Set the value to 60.



10. We are now ready to align the images. To align click on the ANIMATION CENTRE button



11. Now click and drag the animation centre until both images are exactly aligned.



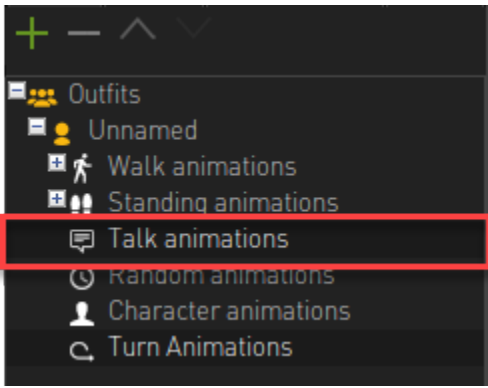
12. Now save and run your game.

13. All should now work as expected.

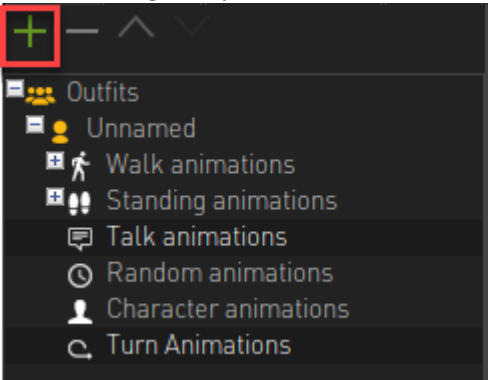
## Talking animations

The talking animations are simple to add if you follow the above steps.

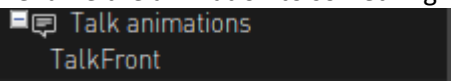
1. Click on the TALK ANIMATIONS in your outfit.



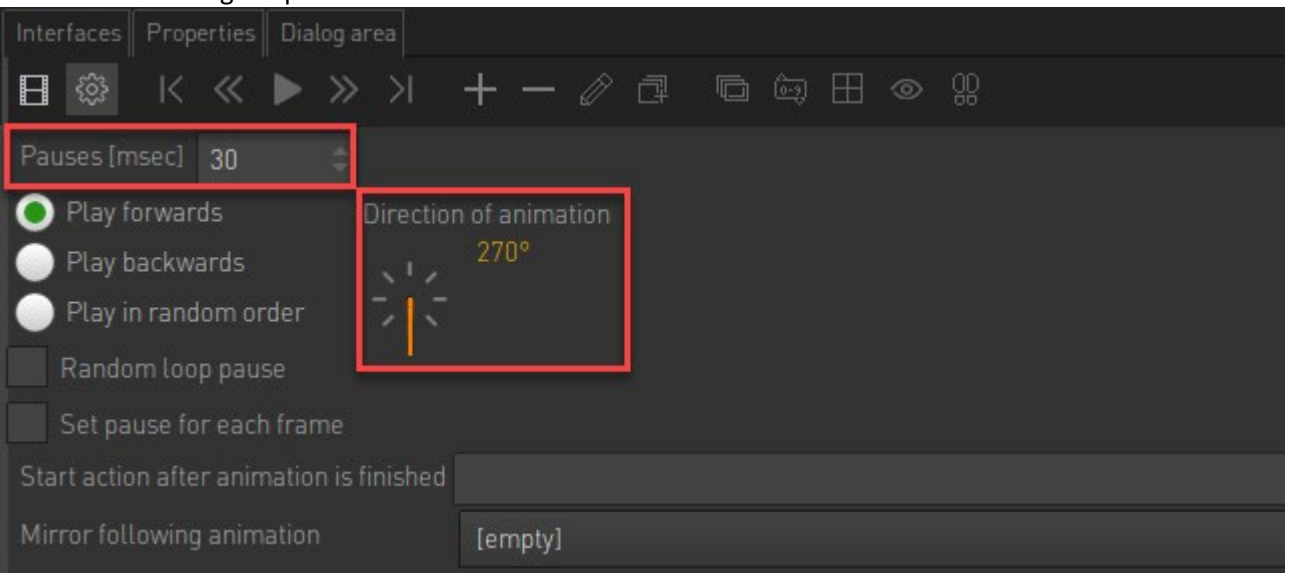
2. Click on the green plus icon to add a new talking animation.



3. Rename the animation to something more appropriate i.e. TalkFront



4. Now add the talking animations found here; Graphics\Character\Talking
5. Set the animation centre by harmonizing the animation as discussed before.
6. Next set the settings as per below



7. Now play your scene.