FLAWLESS

Refinement Steps

Four simple steps to great lip sync

To ensure you have the best possible lip sync in your vub, take these four simple steps:

STEP ONE

Assess Your Vub

Is there anything you want to change?

STEP TWO

Interpolation Pass

Only alter the frames that need changing

STEP THREE

Scale Pass

Tweak performance size and articulation

STEP FOUR

Mouth Shape Pass

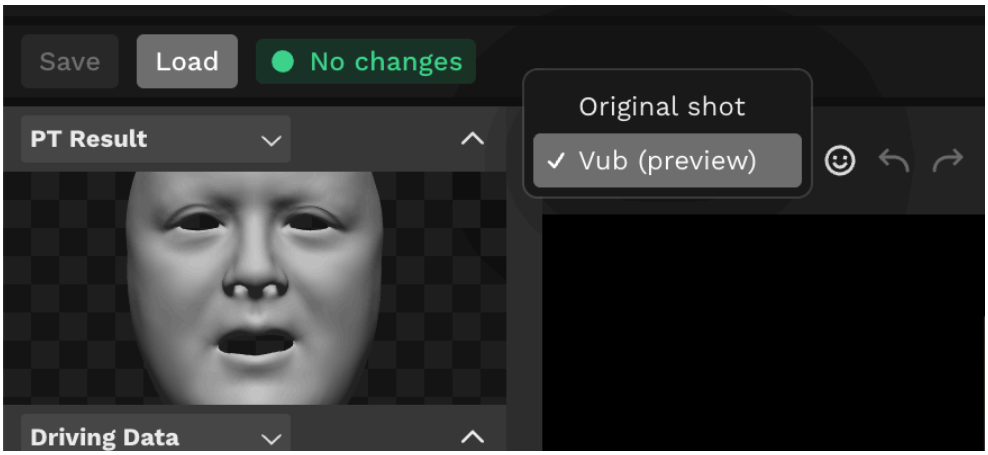
Refine mouth shapes where needed

STEP ONE

Assess Your Vub

Is there anything you want to change?

- Look at the vub – the Vub (preview):



- **Know the dialogue** that is meant to be spoken – if there's a transcript handy, check it first.

- Play the vub:
  - Did you **believe** that the character was saying the new dialogue?
  - Were there any specific moments that stood out or did something simply not **feel** right?
  - Trust your reaction from your **first viewing** – if something didn't feel right then it is likely something that can be improved. It can be harder to assess the vub honestly in subsequent viewings.
  - **Note the moments you want to improve** – you don't have to work out **what** is wrong at this stage, just that there are areas to focus on.

STEP ONE

Assess Your Vub (continued)

Is something not feeling right, but you can't quite identify the issue?

A useful technique is to start from the end of the shot and work backwards. Play the last word. If that feels OK, play the last two words. Keep working back into the vub until something doesn't feel right. Then you've found the word that isn't working.

Keep an eye on the jaw movement!

The jaw is the slowest-moving part of the mouth when talking, so sudden, sharp movements can feel unnatural. If these exist in your vub, you can use **Jaw - Open** in the **Advanced** lip sync controls to smooth them out.

STEP TWO

Interpolation Pass

Only alter the frames that need changing

The Interpolation slider allows you to define **how much** of the **new** performance (the Driving Data) is transferred to the shot. It works like this:

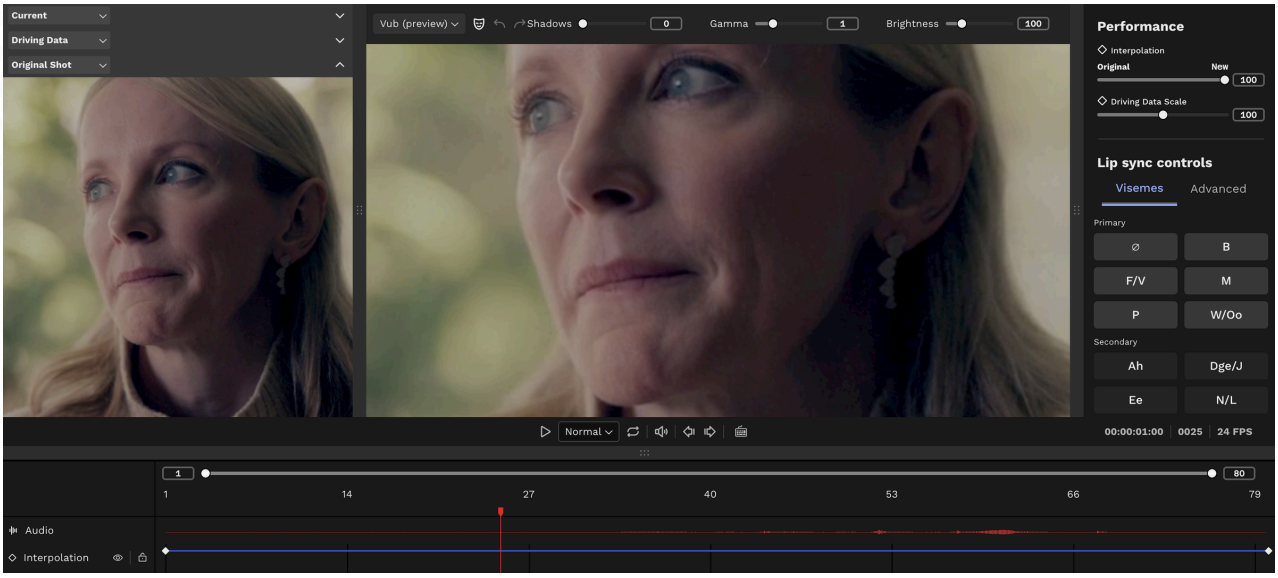
- **Interpolation = 0** gives the full **original** performance
- **Interpolation = 100** gives the full **new** performance

Only change the frames that need changing – retain as much of the original performance as possible – this could be when:

- There is dialogue that **hasn't changed**
- There are **gaps** before/after/between lines where the actor is **not talking**

Ramp in and out of the new performance using the interpolation slider. To do this:

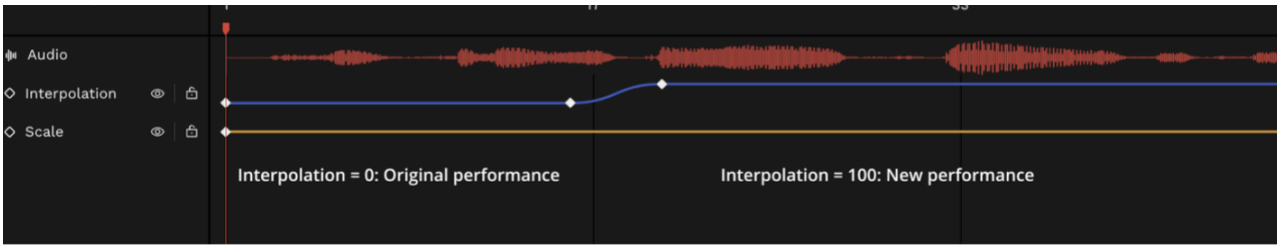
- Expand your **Original Shot** window so you can clearly see the original performance alongside your vub (minimize the 'Current' and 'Driving Data' gray face windows to help).



STEP TWO

Interpolation Pass (continued)

- Work your way through the shot and identify areas of the **original** performance you would like to use.
- Whenever you find these areas, add Interpolation ramps **down to 0** then go **back up to 100** when you want to return to the **new** performance.



- Ensure that the ramps are **long enough** to **transition smoothly**. Typically 4-6 frames produce good results.
- Once you've done your interpolation pass, **render** your shot and review your changes.

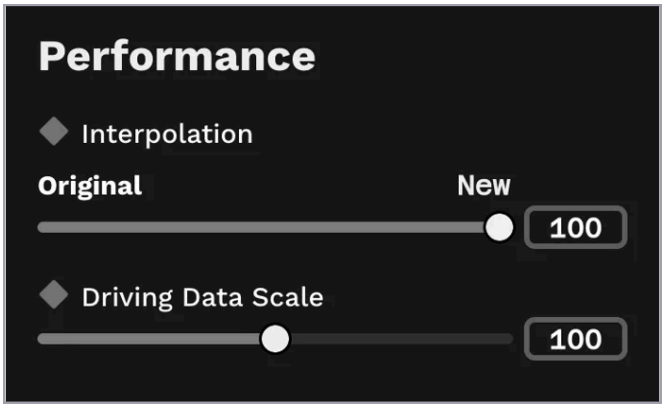
- **Note** that in the Refinement tool, frames with **zero** interpolation will show a **neural render** of the original performance.
- However, when you create an **Export**, the compositing step will transition to the **exact original frames** in these areas. This ensures the best image quality possible.

STEP THREE

Scale Pass

Tweak performance size and articulation

The **Driving Data Scale** slider is found underneath the Interpolation slider.



The slider effectively acts as a 'multiplier' of the articulation from the Driving Data. There are two main actions:

- **Increase / decrease** the scale to exaggerate or soften the performance size / articulation:
  - Occasionally, you'll run into a situation where the performance size in a vub does not quite match the perceived performance size in the audio. Tweak the Scale to refine this.
- **Mute** the performance by setting the Scale to zero:
  - This will **remove the speech movements** while retaining the **average emotional expression** for the shot. This is an alternative method of removing the delivery of a word or words if you don't want to edit the audio.

Tip

It is important that, if you decide to increase Scale, then you use it **minimally** as too much exaggeration can be detrimental to the result.

STEP FOUR

Mouth Shape Pass

Refine mouth shapes where needed

In the real world, not **every** sound is visibly articulated. It's easy to try to make every sound clearly defined, but this is not the way people talk. Concentrate on the **key sounds** with a focus on making sure the mouth shapes obey the ground rules for being **physically able** to form them.

1. Check and correct the **Primary** mouth shapes across the **whole shot** to make sure they are formed correctly. Render and review your shot.

2. Check any remaining problem areas for the **Secondary** mouth shapes to identify and refine outstanding issues.

PRIMARY Mouth Shapes

B / M / P
F / V
W / Oo

SECONDARY Mouth Shapes

S / Z / T / D
Th
Ch / Sh / Dge / J
R
N / L
Ah
Ee
Oh