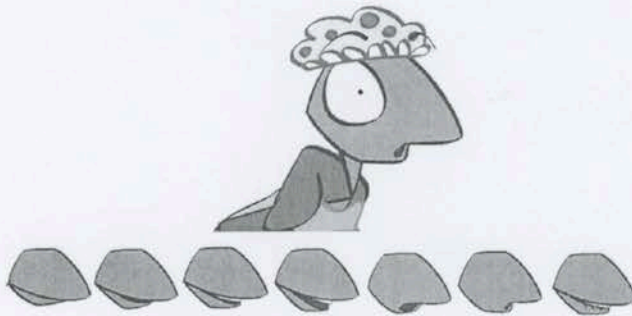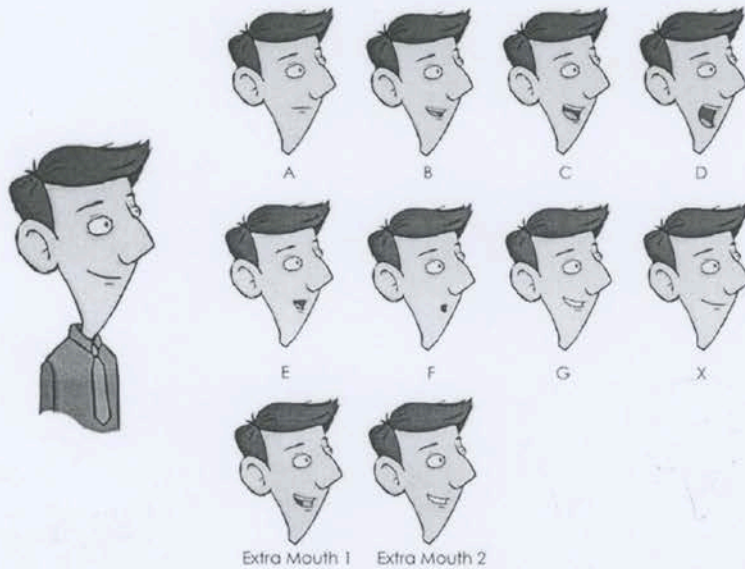# Lip-Sync

Adding a lip-sync to a project can really enhance its quality and storytelling. However, it can be difficult to shape a character's mouth so it matches the sound at the precise frame. To solve this problem, Studio provides a lip-sync feature which analyzes the content of a sound element and generates a mouth chart based (see below) on the eight animation phonemes (A, B, C, D, E, F, G, and X, which is used to represent silence). You can lip-sync the traditional way or let the Studio automatically create the basic detection.

The mouth shapes used by Studio are based on the conventional mouth chart used in the animation industry. The letters used to represent the shapes do **NOT** correspond to an actual sound.

Here is an approximation of which sound each mouth shape can produce:

Mouth Shape	Approximate sound the mouth shape matches to
A	b, m, p
B	d, h, i, j, k, s
C	a, e
D	A, E
E	o
F	oo, u
G	f, ph
X	Silence, undetermined sound

A   B   C   D

E   F   G   X
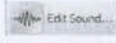
Extra Mouth 1   Extra Mouth 2

You can refer to the mouth chart positions as you draw the shape of your character's mouth.

Studio comes with a variety of mouth templates that you can play and experiment with on your characters. You can create a lip-sync and use an existing sound layer or create the lip-sync and then import the sound.

To create a lip-sync using a mouth template:

1. From the Sound toolbar, click the Lip-sync button (Top toolbar on Mac OS X).


Mouth: Lips — Displays list of drawings
Sound: T8_Sound1.wav — Displays list of sounds

2. Do one of the following to add sound:

    ‣   Click the Import Sound button. From the Open dialog box, select a sound file and click **Open**.

    ‣   From the Sound list, select a sound file you have already imported.

3. If needed, edit the sound by clicking the Edit Sound button and making any adjustments in the Sound Element Editor.

4. Click the Import Template button.

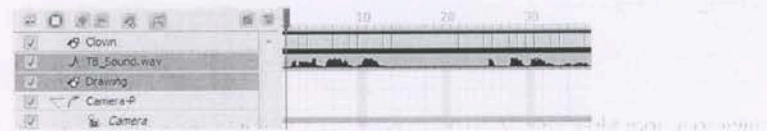   The template dialog box opens to display the mouth templates.
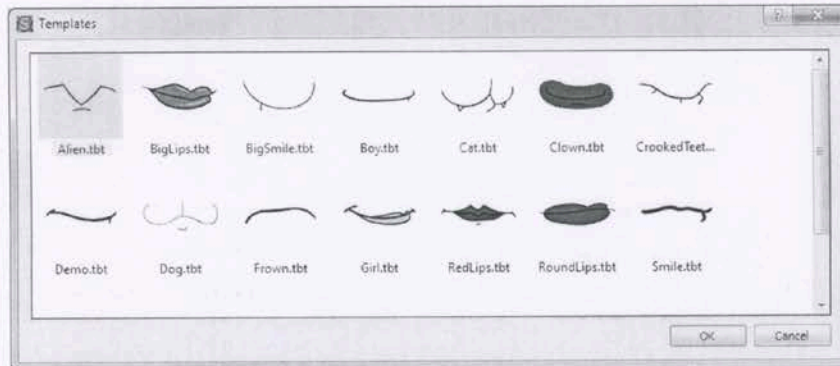
5. Select a mouth template and click OK.

   In the Timeline view, a Drawing layer is created containing eight mouth drawings.
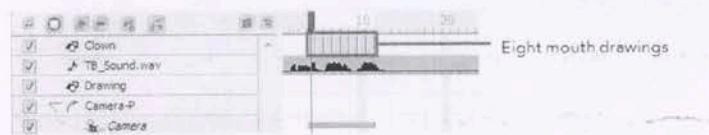
6. Click **Apply** to generate the lip-sync with the sound file.

   The mouth shapes are synced with the sound file.

7. In the Drawing view, use the Select tool [icon] in the Animation Tools toolbar to scale the mouth drawings

   on the layer.

8. In the Camera view, place the mouth at the correction location on your character.

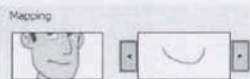You can use your own drawings to generate a lip-sync.

To create a lip-sync using your own drawings:

1. In the Timeline view, select the drawing layer that contains your eight mouth drawings.

2. From the Sound Editor toolbar, click the Lip-sync [icon] button.

   The Lip-sync view displays. Your eight mouth drawings are automatically mapped with the animation phonemes.

Your eight mouth drawings
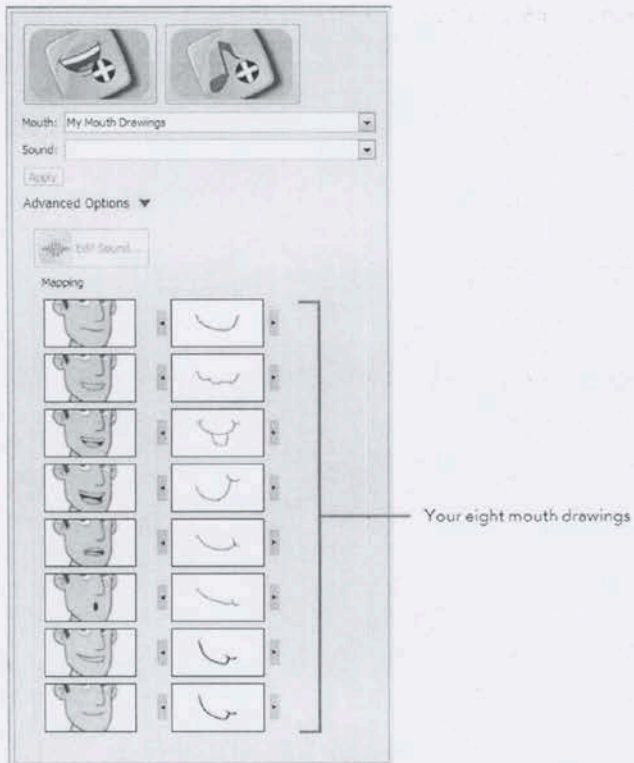
3. Do one of the following to add sound:

   ‣ Click the Import Sound button. From the Open dialog box, select a sound file and click **Open**.

   ‣ From the Sound list, select a sound file you have previously imported.

4. If needed, edit the sound by clicking the Edit Sound button and making any adjustments in the Sound Element Editor.

5. If needed, you can adjust the mouth mapping by clicking the Previous Drawing and Next Drawing arrows beside any of the mouths.

6. Click **Apply** to generate the lip-sync with the sound file.

   The mouth shapes are synced with the sound file.