VNFrame 2.0 Tutorial for Non-Programmer

- Add Some Spices -

Introduce:

In this tutorial we will talk about how to build anime with VNFrame 2.0. Some technique will be introduce separately, not in one game. You should read the - From the Beginning - first to know how to create and save a game.

Basic Animation:

The simplest animation may be move something around, so let's start from here.

Prepare a scene which has only one cube (or anything else) and TAG it. Put it at the right-bottom corner, we will move it left, up, right then down. Just like this:
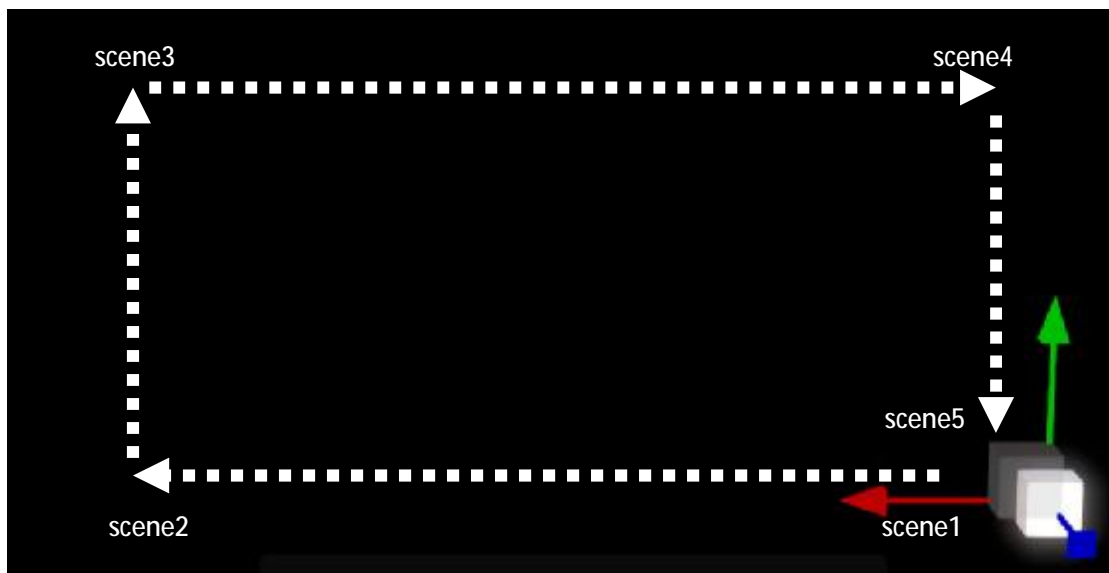
Create a game and reload it to make it ready to work. Or if you don't need this sample on disk, you can click "Rescan & Reset" in Anime Buffer, it will make the script helper gather necessary information and ready to work. Let's dump a Full status as new act for the first scene, like this:

After click "Build Script" to build 1st scene, set dump Diff as new anime, leave the anime parameter as default. Move the cube to left-bottom corner and "Build Script", move it up and "Build Script", move it right and "Build Script", finally move it down then "Build Script".

Notice some texts are inputted for every scene, they are helpful comments, they will let us know which anime clip is playing in the preview.

Now, an anime with five clips is build into anime buffer, let's check it.
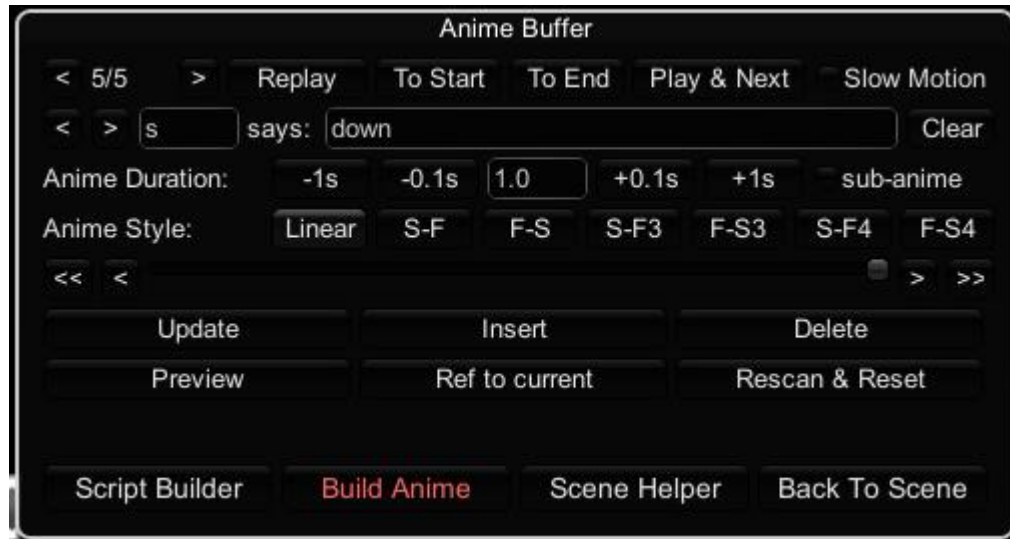
As you can see there are some parameters such as Dialogues, Anime Duration and Anime Style in anime buffer just like those in script builder. These parameters can be modified easily after build. You can adjust these parameters and use the Replay button to see the effect. Try the To Start, To End, Play & Next buttons, try the Slow Motion option, and try the progress bar. If you have trouble with drag progress bar, lock the camera in the studio.

Click the Preview button and select Preview All. The first scene is a still scene played just after preview started, it is the act scene. And then, when we click the "Next >>" button, the anime clips played one by one, with the comment text displayed mean while.

You may ready noticed, when you click "Build Script" button with dump as new anime set. The Script Helper will build a anime clip to move cube from its last position to current position. The last position is called reference scene. At start, when we load the game, the loaded state will be the reference scene for the first anime clip. When we press the "Build Script" button, it build a new clip of script into anime buffer and mean while, set the current scene as the reference scene so we can create new anime from last one. We can manually set reference scene by using "Ref to current" button or the "Rescan & Reset" button.

new anime VS sub anime:

There is another dump as option "sub anime" in script builder page. Let's try it. Oh, you don't need to rebuild a sample, let's just adjust from current anime. In the anime buffer page, select the clip 3(which move cube up), and check the sub-anime option like this:
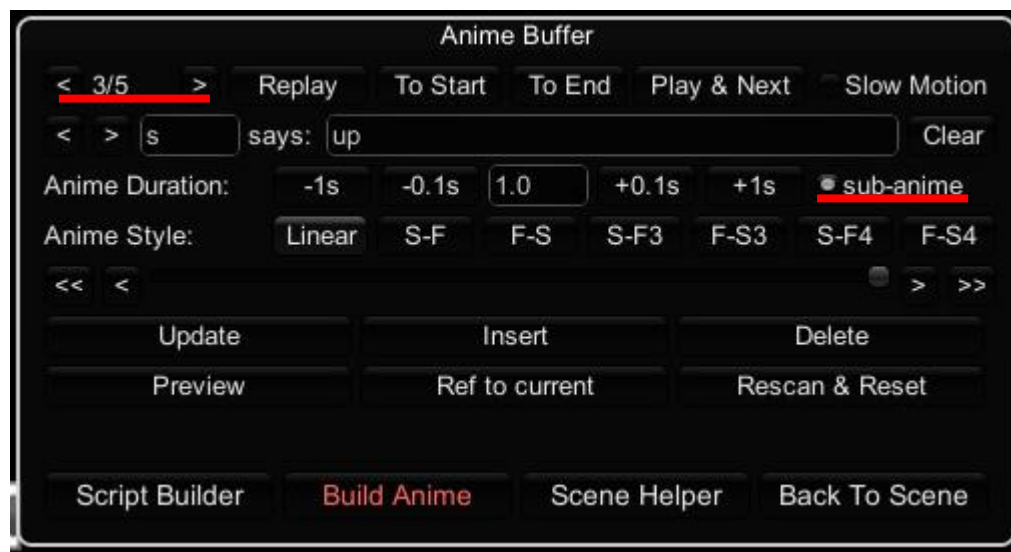

Do the same setting to clip 4(move right) and clip 5(move down), and then use the Preview to check the anime again. Now, after you click the "Next>>" of first scene, the cube goes left and then up, right, down continuously. That's the sub-anime, it will be played after the previous anime or sub anime, do not need user to click "Next >>" button. Notice that you must check it in the preview or in game, not use anime buffer's "Replay" or "Replay & Next" buttons, these button always play one clip only.

Sub anime can be set when you build script, or by check the sub-anime option in anime buffer. So this setting can be toggle easily. What if we set the clip 2(move cube left) as sub-anime? Will it start to play at the beginning of preview? No, it will not. Actually nothing changes. A sub-anime can only be auto played after a anime or another sub-anime. If the previous clip is an act, or the sub-anime is the first clip in buffer, it will be update to a new anime.

So, new act and new anime need user to click the "Next >>" button to play, sub-anime will be played after a new anime or sub-anime. All of them can set some texts to play with.

Modify Clip in Buffer:

Continue with the above example, let's learn about how to modify clip in the buffer. Suppose we are not satisfied with the trace of cube, and want to modify it like this:
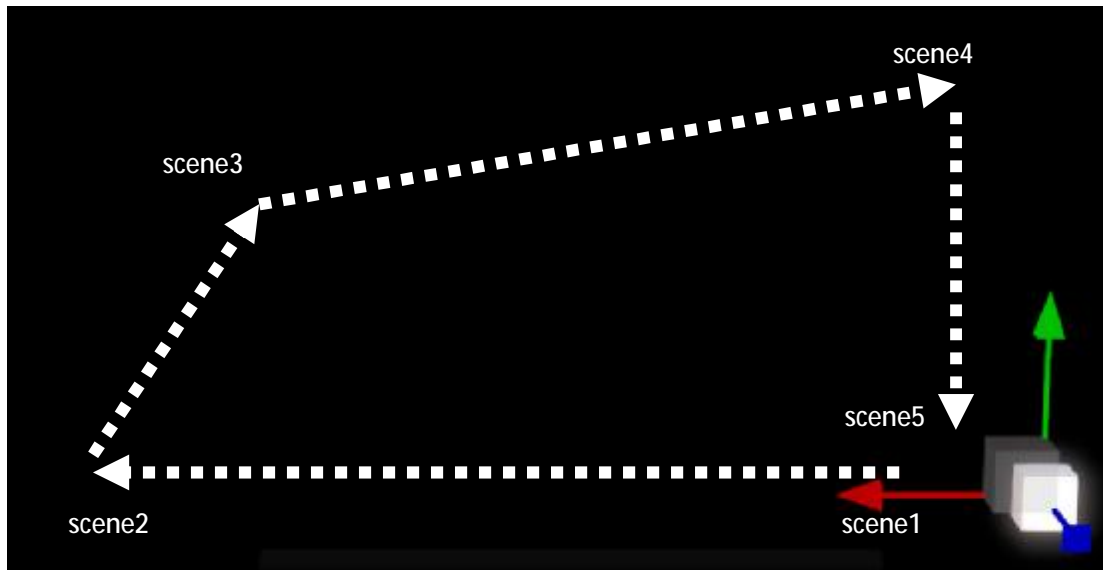
For this case, what we should do is Update the scene clip 3. Select the clip 3 in anime buffer, set the cube to new position, and click the "Update" button. In the prompt page, you can choose "Update" or "Rebuild", the difference between these two is if we want to change the build settings (such as include camera and camera anime parameters) or not. "Update" will use the old setting for new scene, only the position changes. "Rebuild" will use the current setting in script builder for new scene, so you need confirm the settings in script builder page. In master mode, the prompt will be omitted and "Update" button always works as "Rebuild".

The update will not only change clip 3 to stop at new position, but also change clip 4 to start at new position. In another word, the clip after current clip (if existed) will be updated too, and always use its old setting.

Suppose we are not satisfied yet. We want to make it moves like this:
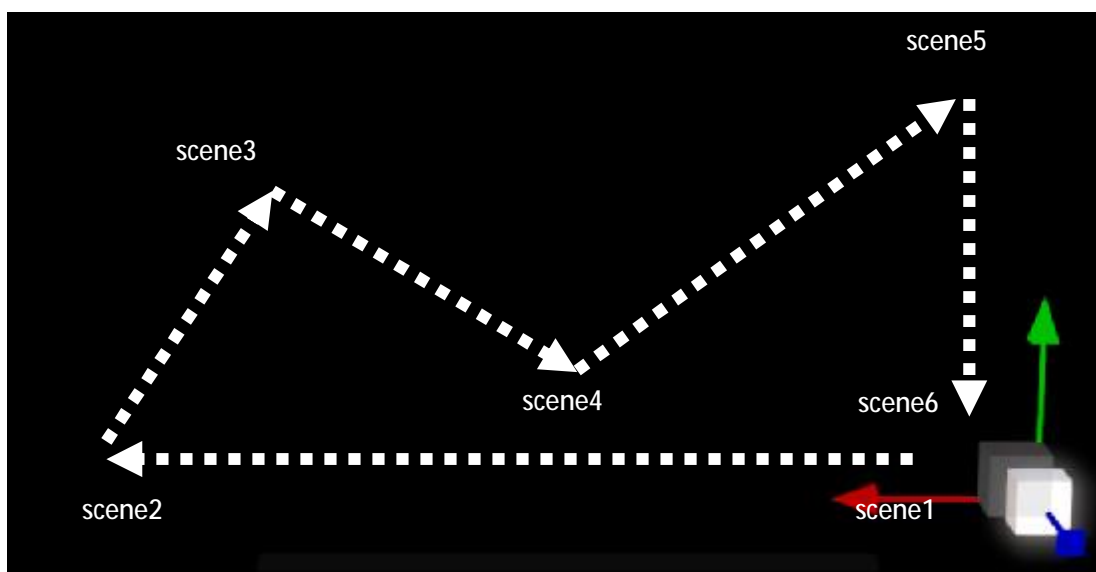
For this case, we need to insert a new clip at the position of clip 4. Select clip 4 in the anime buffer, set the cube to the new scene 4 position and then click the "Insert" button. As the update, in the prompt page, you can choose "Insert" or "Build & Insert", which decides using old setting of clip 4 or using new setting in script builder. In master mode, the prompt will be omitted and "Insert" button always works as "Build & Insert".

After insert a new clip 4, old clip 4 will become clip 5 and start from new position to old clip 4's end position, and old clip 5 become clip 6 but nothing changes.

The last function in anime buffer is "Delete", which is much easy to understand. If we deleted clip 4 in the above example, it will turn back to the status before insert, like this:
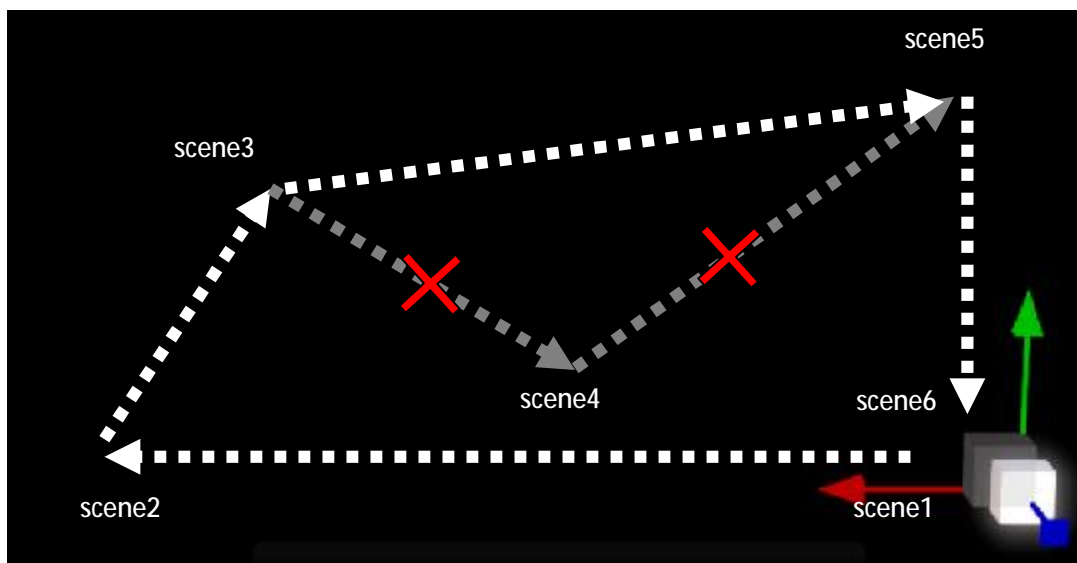
If not in master mode, there are another choice in the prompt page calls "Roll Back". Roll back will delete clip 4 and the following clip 5 and 6, then set the reference scene to the end of scene 3. So you can build new scene from scene 3 after roll back.

Use the update/insert/delete, we can modify the anime after build them into the anime buffer. That's helpful for create a long animation, you should master these operations.

Some notes:

l   For those setting both in script builder page and anime buffer page, you can adjust them directly, and they will take effects immediately, no need to update.

l   If you include camera anime use camera timer and want to adjust it, you need to use the Rebuild in Update.

l   You can change the duration of scene anime. But beware, if the anime is dumped with duration >0, don't set it to 0 in anime buffer. And if the anime is dumped with duration =0, don't set it to >0. Because if a anime has duration =0, it will be dumped into an act-like format. You must use the Rebuild in Update to change between act and anime.

l   Almost all setting for an actor is supported, but not all of them can do anime. Those ON/OFF settings and flag settings cannot be animated. Don't worry, script helper knows about that and will set those non-animated settings for you *before* the anime start. ("Tear level" setting can be animated in PlayHome, but not in StudioNeo and CharaStudio. So for compatibility it is mark as non-anime in PlayHome too.)

From a pose to another:

Play with cube is boring. Let's do something more interesting. In the -From the Beginning- we build a game just like "Demo: simple game", and when the girl introduce herself we change the anime for her to take another pose. But that was dump as new act, so she just jumps to new pose. Here we will make her move to new pose by anime. For example:

That needs some steps.

1. Select the girl, set FK refer to anime then enable FK, ensure we enabled FK for neck and body.

2. In script builder, dump current scene as new act.

3. Disable the FK, so you can change the pose by setting another anime. After you set a new pose, set FK refer to it then enable FK again.

4. In script builder, dump current scene as new anime.
Now check the anime, you should see the girl changed pose by anime. Here we used FK, you can try to use IK to do the same thing.
The key point of make FK/IK anime is: The reference scene (start scene) and end scene must have the same kinematic setting. Means both are IK or FK and with the same parts enabled.

Make a new anime:

Maybe you have already figured it out, you can change the IK target or FK bone rotation to make your own anime. Let's make the girl bow after her introduce. This time we use IK anime.
1. Select the girl, set IK refer to anime then enable IK for every parts.
2. In script builder, dump current scene as new act.
3. Now change the IK target to make a bow pose. like this:

4. In script builder, dump current scene as new anime.

5. Disable IK, so the girl should go back to standing pose, then set IK refer to anime, and enable IK again.

6. In script builder, dump current scene as sub anime.

Now preview your anime, change some duration setting and style setting to make it looks more natural.

Notes and tips for IK/FK animation:

1. Most important thing first: The reference scene (start scene) and end scene must have the same kinematic setting. You can't make anime from non-kinematic to IK, or from IK to FK. And the parts enabled in IK/FK setting must stay the same too.

2. But you can use the technique of anime and sub anime, for example, build a new anime with duration =0 instead of new act, then build a sub anime which contents the IK/FK animation, that will looks like your actor move from non-IK to IK anime. Also, you can add sub anime with duration =0 to change between kinematic modes in one click of "Next>>" button.

3. Sometimes, when you try to change a pose to another, some bones may rotate in a strange way. For example, a bone need to rotate from 100 to -100, maybe it should rotate from 100 to 360, then to -100. But the script helper always interpolates from start to end, so it will be 100 to 0, then to -100. In this case, you have to update the end value to 260 to make it rotate in correct direction.

4. For character's change pose animation, Fast-Slow style should looks more natural. Sometimes, hands will go though body, and it is your job to correct those issue. Script helper can't help you about this.

Wish this tutorial helps!