

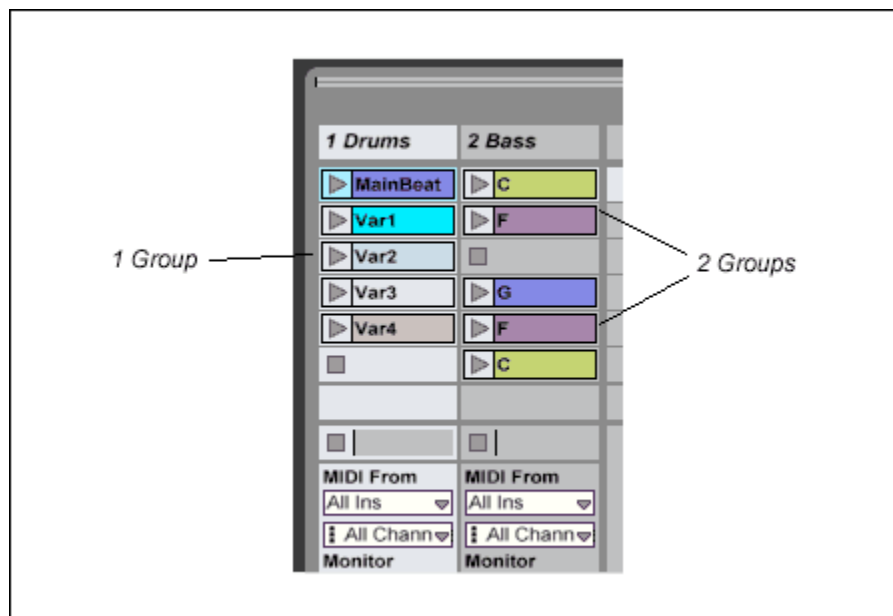
Follow Actions: Programming Your Music

By Chad Carrier

Everyone knows that one of the greatest new features in Live 4 is the addition of MIDI. Another is the enhanced routing setup, and the two instruments, Impulse and Simpler, have caused a lot of excitement as well. But with all the hype these features have received, some may have missed what I find to be one of the most amazing additions to Live of all: Follow Actions. Anyone, from novice to pro, can see how MIDI support and virtual instruments make composition a snap, but the true beauty of Follow Actions may only be apparent to those deeply familiar with the use of Live as an improvising and rearranging tool. While the use of Follow Actions can take many (infinite?) forms, the rules that Follow Actions adhere to are few and simple. This means that once you understand their parameters, you'll be able to invent all kinds of new uses for Follow Actions on your own.

The Anatomy of the Follow Action

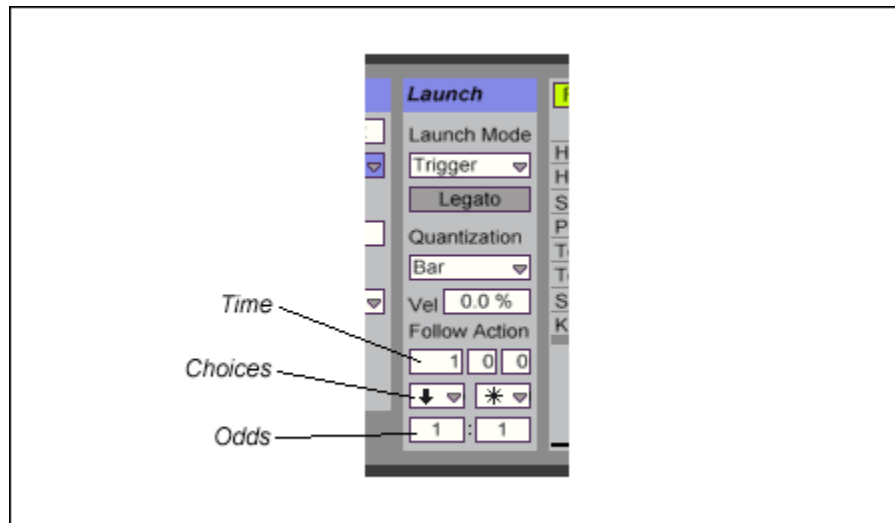
In a nutshell, a Follow Action is when one clip launches another after a predetermined amount of time. This, of course, is an oversimplified explanation, but it's a good place to start. To begin with, Follow Actions work on clips arranged as *groups*. A group is defined as a set of clips arranged directly above and below each other in one track. In the figure below, the five clips in the Drums track are in a group, while the five clips in the Bass track are in two groups.



In the image above, the first clip in the Drums track is "MainBeat." This clip can launch any of the four clips below it using a Follow Action. In the next track, the first clip is "C."

This clip is only capable of launching the “F” clip immediately below it with a Follow Action, because they are the only two clips in the group. Though the other three clips on the track are only one slot down, they are a separate group and cannot be launched from the upper group.

Defining which clip another will launch is done in the Launch box of the Clip View. The Follow Action parameters are split into three groups: the time to wait before performing a Follow Action, the two potential choices for the Follow Action, and the odds for each choice.



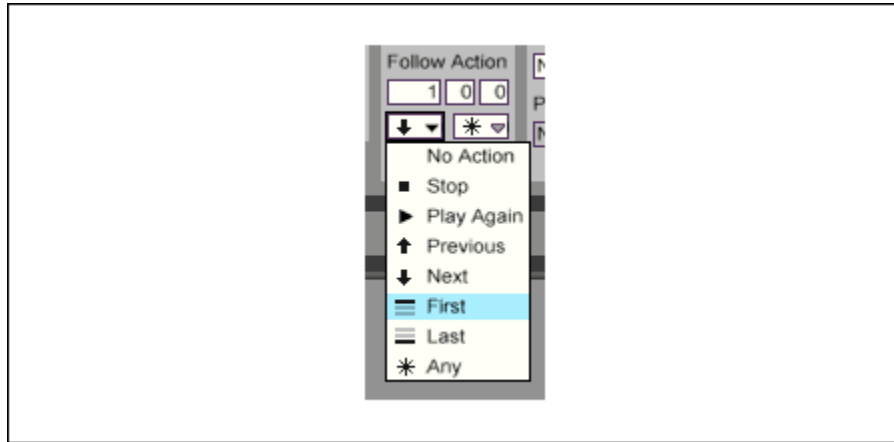
Time: This is the amount of time (in bars, beats, 16ths) that will elapse from the point when the clip is launched until the point when the Follow Action is performed. In the figure above, the clip will play for one bar (regardless of how long the clip actually is), and then the Follow Action will be performed.

Choices: The two choosers below the Follow Action Time fields are used to select the two Follow Actions for the clip. One of these Follow Actions, either the one on the right or the one on the left, will be performed after the set amount of time has elapsed.

Odds: These numbers set the odds for Live choosing one Follow Action over the other. In the figure above, the two Follow Actions are set with 1-to-1 odds. This means that there is a 50% chance of Live performing either Follow Action. The odds can be set to any number you like, from 0 to 999. A value of 0 will cause Live never to choose the associated Follow Action.

The Follow Actions

The Follow Actions themselves are selected from the two choosers below the Follow Action Time fields. The options are shown in the figure below.



No Action: This option is the default option for all clips. When Live chooses this Follow Action, nothing will happen (i.e., no other clips will be launched), and the clip will play normally.

Stop: When triggered, this Follow Action will cause the current clip to stop playing. Why would you want to do this? Perhaps you have a 1-bar loop that you want to play for 8 bars every time it is launched...

Play Again: This option re-launches the current clip. The uses for this option will be explained later.

Previous/Next: This launches the clip above or below the current clip. If Live is playing the top clip in a group and performs "Previous," it will trigger the bottom clip of the group, and vice versa.

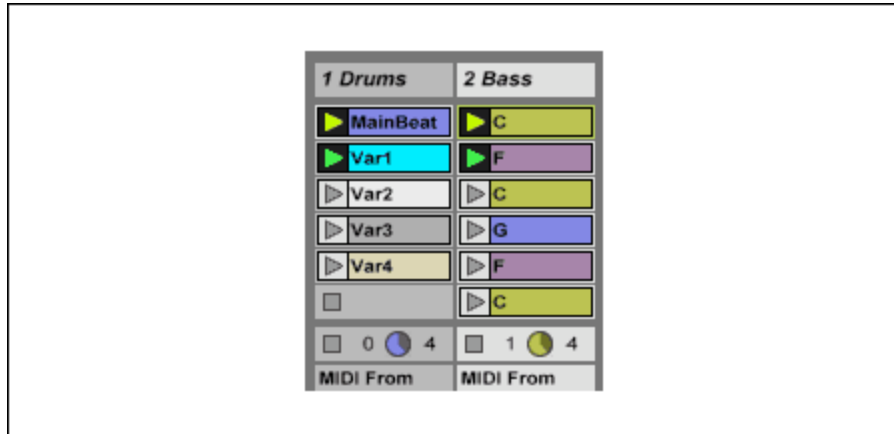
First/Last: This launches the top or bottom clip of a group. If the top clip is playing and "First" is performed, the clip will be re-launched.

Any: This Follow Action will launch any clip in the group, including (possibly) the clip that is currently playing.

In our current example, you can see that our clip is set up with two possible Follow Actions, "Next" and "Any." The odds that one of these Follow Actions will occur are 1:1. This means that one bar after the clip is triggered, there is a 50% chance that the clip directly below it will be launched. The other half of the time, a random clip will be launched.

Guitar Practice Example

Please download the Live Set for this section [here](#). It is a small Set (MIDI only) that illustrates how Follow Actions can automate the Session View. After opening the Set, launch the first scene (labeled "Start").



This Set contains two tracks, "Drums" and "Bass." The clips in the Drums track are being launched randomly, while the Bass track's clips are being launched in sequence. Double-click the "MainBeat" clip. You'll see that this is the clip from our earlier example. Stop Live and re-launch Scene 1. One bar after Live starts, you should see another clip in the Drums track start playing. This is a result of the Follow Action set up for the first clip. Look at the settings of the other clips in the Drums track. You'll see that they all trigger the top clip of the group half of the time while, triggering a randomly chosen clip the other half of the time. The result is a slowly changing, less repetitive drum part that sounds a little more "natural." You'll hear how there are extra snare and kick notes added to the beat from time to time.

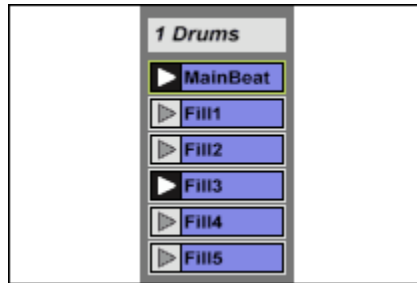
The second track also uses Follow Actions but with different results. Each clip in this track has odds of 1:0, which force Live to choose the left-hand Follow Action every time. Since this Follow Action is "Next," each clip triggers the one below it, with the bottom clip launching the top clip and effectively restarting the cycle. It's interesting to note that all the clips in the Bass track are 1 bar long, but some play for longer than one bar. This is because the Follow Action Time has been increased for these clips. Look through the settings of each clip to see if you can find them.

The combination of these two tracks playing together results in a simple blues progression, useful as a background for practicing guitar. The bass progression will repeat itself while the drums naturally groove along. Adding more variant clips to the Drums track will result in a more random sound, as Live will have more choices while "jamming."

Drum Fills and Variations

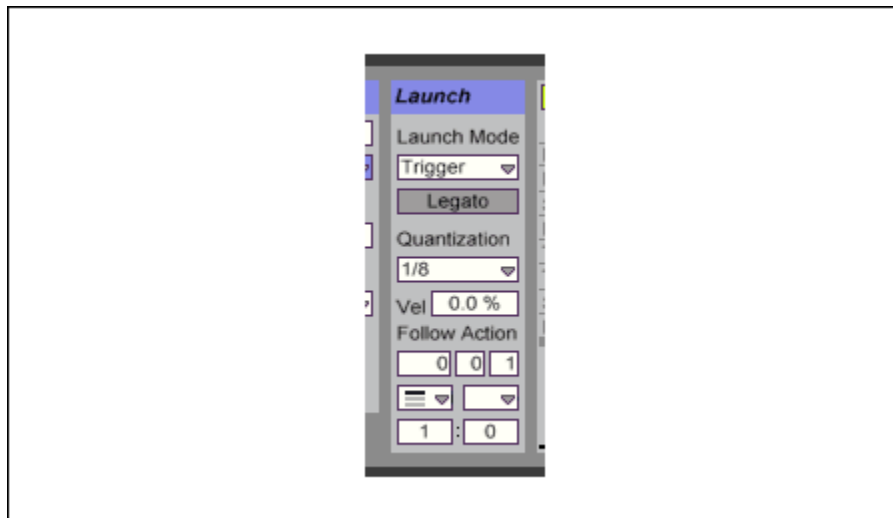
One of my favorite applications for Follow Actions is the drum fill. I have had numerous drum fill clips in my songs, but I was always annoyed that I had to re-launch the main beat after I launched the fill. Why can't the beat start again automatically like it does on a Casio portable keyboard? With Follow Actions, it can.

Download the Drum Fill Set, located [here](#). Load the Set and launch the top scene.



This Set is composed of one drum track. By launching the top scene, you start the "MainBeat" clip, which is now set to loop infinitely. Try pressing the Q, W, E, R, and T keys on your keyboard: You'll see that each key is assigned to one of the fill clips in the group. By pressing a key, you launch the fill, which then re-launches the MainBeat again after playing. Try it. No matter when you trigger any of the fills, the MainBeat will always start again at the beginning of the bar. If you launch a fill after the downbeat of the bar, it will only play a portion of the fill before returning to the main beat.

The reason this works is contained in the Launch box for each of the five fill clips, as shown below.



First off, the Launch Quantization has been set to 1/8, allowing us to trigger the fills from within a bar, not just on the downbeat. Secondly, the Follow Action Time has been lowered to one sixteenth note. This means that the Follow Action is performed one sixteenth note after the clip is launched. In this case, the only Follow Action is "First," which re-triggers the main beat.

So, why does the main beat always start on the downbeat, even though the Follow Action that triggers it is set to a sixteenth note? Because the MainBeat clip has its Launch Quantization set to "Bar," and even though the Follow Action triggers MainBeat before the downbeat, MainBeat obeys its own Launch Quantization setting.

If MainBeat was set up with a 2-bar Launch Quantization, it would wait until the downbeat of every other measure to re-launch after a fill. (The only exception to this is the Global Quantization setting. When selected, a clip will begin playing immediately when launched with a Follow Action, but will still wait for the Global Quantization setting when launched by hand.)

As you can see, Follow Actions breath new life into Live's Session View, offering methods for automating your performance while maintaining control. With such a simple tool, the applications are nearly endless. How many other uses for Follow Actions can you think of?

For more Follow Action ideas, see the Live reference manual, which can be opened via the program's Help menu.

Chad Carrier is a Product Manager at M-Audio in California and has just completed a book called Ableton Live 4 Power! with Ableton's own Dave Hill, Jr. The book is loaded with tips, tricks and insights, as well as an in-depth explanation of all the new features in Live 4. It will be available from Thomson Course Technology (www.courseptr.com) on December 21, 2004.