Rock Groups

Understanding the way track grouping works will help keep your Studio One projects under control.

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The subject of grouping comes up a lot when discussing DAWs, and for good reason: modern audio production commonly involves substantial numbers of sound sources. When quantity is involved at any level of a project, simply keeping everything under control becomes a primary task, and grouping is a powerful tactic for managing lots of sound sources. So, this month I'll take a more general look at grouping in Studio One than the glimpses given in previous
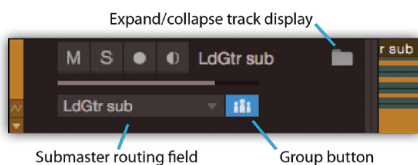
Screen 1: A track folder in the arrange view. Clicking the mute, solo, record, or input monitor buttons activates that function on all tracks in the folder.

columns, because, well, it comes up a lot. Grouping in Studio One takes place in two work areas: the arrange view and the mixer.

Grouping Basics

Studio One more or less maintains a useful old-school paradigm in which the recorder and mixer are viewed as separate components that need not correspond to each other in a one-to-one relationship. But there can be disadvantages to this separation, too.

Some DAWs have edit groups and mix groups; Studio One has a single type of group that combines features of both. Thus, when a channel fader in a group is moved, the other channel faders in the group follow, and cutting audio from one track in a group cuts the same time period from the rest of the tracks in the group.

Studio One has a quick grouping mode that is useful for short-term needs, when it's helpful to temporarily unite a set of tracks in order to conduct a small number of operations. Just select all of the tracks you want to group and press Cmd+G (Mac OS) or Ctrl+G (Windows). The tracks stay grouped until you either

press Cmd/Ctrl+Shift+G or select and group a different set of tracks. Grouping is visually obvious for tracks in the arrange view, and is indicated in mixer channels by a group icon appearing just above the channel meters and in the mixer track list.

Recording

Any time you use more than one channel to record an instrument, the idea of grouping comes up. Drum tracks are obvious candidates for grouping, but there are many others. For example, I often record lead guitar using a close capacitor mic, a close dynamic, a second capacitor mic about six feet back from the speaker cabinet, and a line out from the back of the guitar amp. These four tracks are typically grouped.

Grouping in Studio One is often used alongside a related feature: track folders. Track folders make it easy to collapse

groups of tracks, reducing visual clutter. In a typical project, I can clean up my workspace quickly just by creating track folders for drum, guitar and vocal tracks. And by clicking the group button for the track folder, I can make the tracks in the folder into a mix/edit group.

Now, I can create a new layer for another recording pass on all tracks in a folder at the same time by selecting Add Layer on any one of them. Make sure all of the tracks in the folder are selected before you do the operation; clicking on any one will select them all. I can also rename all these new layers at the same time by choosing Rename Layer for any one track and entering my new name. Applying the date-time code I typically use for naming takes to the active layer of every track in the folder, it is easy to guarantee that all tracks have the right layer active.

Grouping tracks in a folder is also vital for overdubbing and punching in, where all tracks in the group are recorded at the same time. I find myself using grouping heavily in nearly any recording scenario.

Editing

Grouping tracks ensures that edits stay in sync across them in several ways. First, edits are sample-accurate across grouped tracks. Second, start and end times can be trimmed simultaneously and identically

Screen 2: The full drum configuration. In the arrange view the tracks contained in each track folder and routing for each track folder are shown. With the mixer in 'thin fader' mode you can't see that the snare, tom and stereo pair submasters are all routed to the drums sub, as are the channels not in track folders. The yellow fader on the right is the close mics 'VCA' channel; the assignments to this channel can be seen just below the 'snare sub' and 'tom sub' channel faders.
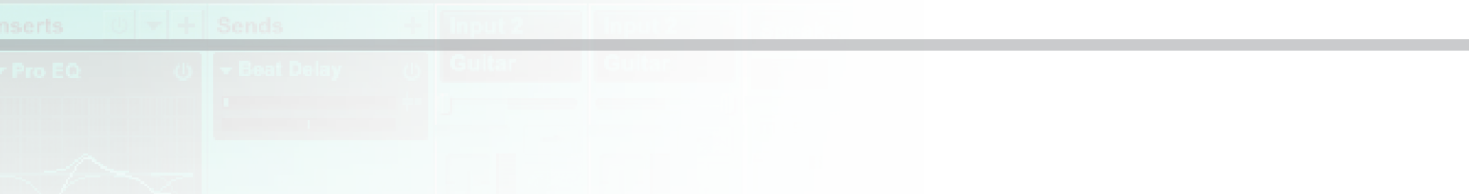
Screen 3: Linking a bus channel in the mixer with tracks in a folder. The 'gtr delay' channel would not act together with the other guitar tracks in the mixer without the automation track at the bottom of the arrange view. Linking the bus channel this way links its fader, mute and solo with the other tracks in the folder, and if the folder is moved in the arrange view the bus channel will travel with the rest of the tracks. Note that automation is not even enabled on the automation track: the mere presence of the volume parameter for the submaster accomplishes the link.

for events across all grouped tracks. Third, if you put separate record passes on different layers, as I do, grouping ensures that all tracks change layers together when comparing record passes.

When I need to adjust one track in a group differently from the rest, I can hold down the Option/Alt key and change a channel's fader or mute and solo buttons independently of the group, but to edit a channel separately one must ungroup the tracks. Stay alert, though: forgetting to regroup the tracks again before executing an edit can get you into some sticky situations.

In The Mixer

Track folders can be nested, which is useful in mixing, where more organisation can be even more important than it is during recording. A single folder for all drum tracks may be sufficient for recording, but snare, tom and stereo pair track folders nested inside the drums track folder can be more visually and/or functionally convenient for editing and mixing. Likewise, it might be helpful to create separate track folders for acoustic and electric guitar tracks within a master guitar tracks folder.

But the greatest benefit of grouping within the mixer is that it allows you to control, automate and process all the grouped tracks at once. Quick grouping provides a fast way to raise or lower a bunch of channels together. Add automation and a master fader to that idea and you get the ganged-gain controls anachronistically called 'VCA faders'. VCA faders are particularly useful for ganged level control of channels that are otherwise configured and/or routed differently from one another. Bus channels provide an alternative approach, in which signals in the group are mixed, rather than kept separate, enabling bus processing, such as stereo compression on a tom submix, or sending a snare submix to a snare reverb.

Track folders work hand in hand with submixing, as they have a field that routes all tracks in the folder to a selected bus channel (shown in Screen 1). My snare track folder is routed to the snare sub bus channel, the toms track folder to

the toms sub bus channel, then both submasters are routed to the main drum bus. Let's look at my earlier example of drum tracks and see how all of this fits together. In Screen 2, I have snare top and bottom tracks, plus a heavily squashed version of the snare for parallel compression, all routed to the snare sub bus channel. Rack tom high, rack tom low and floor tom are all routed to 'tom sub', and overhead and 'underhead' (a pair placed low) stereo pairs to the 'Stereo Pairs' bus channel.

The basic drum sound comes from the stereo pairs, seasoned to taste with the close mics. I want separate snare and tom groups, but also control over the overall balance of close mics against stereo pairs, so I assign the snare and tom submasters (bus channels) to a VCA fader. With this setup, I can apply separate bus processing to snare, toms and stereo pairs, and control the balance between the close mics and the stereo pairs. Then, when the drums are gloriously tweaked out, I can visually collapse the whole mess into the drums track folder so it doesn't dominate the whole screen. Nice.

Follow Me!

Screen layout is an important area we have not yet considered. If tracks and channels do not correspond one-to-one, how do grouped tracks and channels relate to each other? How do track folders, which exist only in the arrange view, impact the mixer? Simply put, tracks gathered in a folder travel together in the mixer. If you move the track folder in the arrange view, mixer channels corresponding directly to tracks will all move as a group.

For example, suppose I have four lead guitar tracks in a track folder, and I also have a bus channel with effects for the guitar in the mixer. Since there is no effects

return track to put in the folder, I cannot make that effects return travel with the rest of the guitar channels in the mixer when I move the folder in the arrange view. Fortunately, there is a simple and fairly intuitive workaround, as shown in Screen 3, which is to create such a linkage by making a new automation track and assigning it to control volume (or some other parameter) on the effects return bus channel. Now you have a track you can put in the folder, and the effects return in the mixer will move with the rest of the tracks if you move the track folder around.

But the layout relationship between the arrange and mixer views gets tricky. Deleting the automation track we just made also deletes the bus channel in the mixer. When a folder track is routed to a bus channel submix, the bus channel appears to the left of the grouped channels in the mixer. It can't be moved to the right, and moving the grouped channels to the left removes them from the track folder. It is sometimes impossible to attain desired layouts in the mixer and arrange view at the same time.

Conclusion

Track counts easily get high, and even a song with only 16 tracks can be bulky to work with. Grouping is essential to handling quantity, and Studio One offers a strong set of grouping features. The key is in understanding the available grouping features and choosing well how to apply or combine them to improve management of tracks and channels in your song. ◢◢◢