

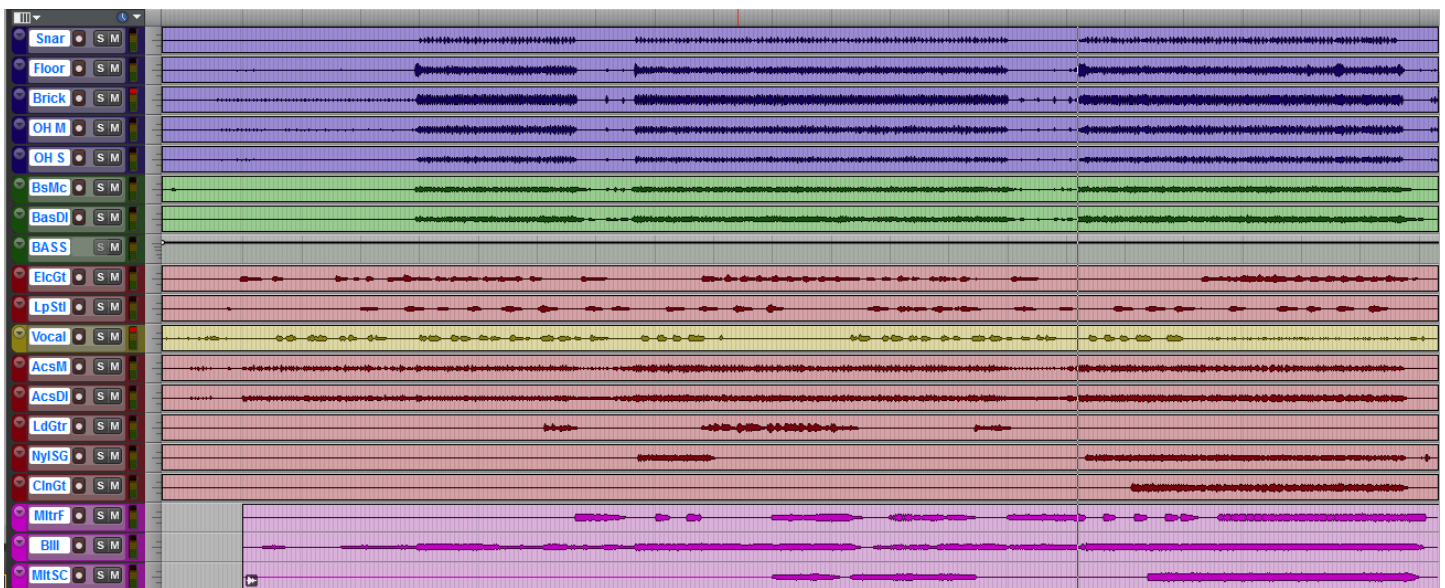
A325

Exercise #1: Rulers and Tempo

- *Using the Workspace
- *Using and Viewing Rulers
- *Creating a Tempo Map
- *Using Tab to Transient
- *Region Groups
- *Using Snap to Cursor



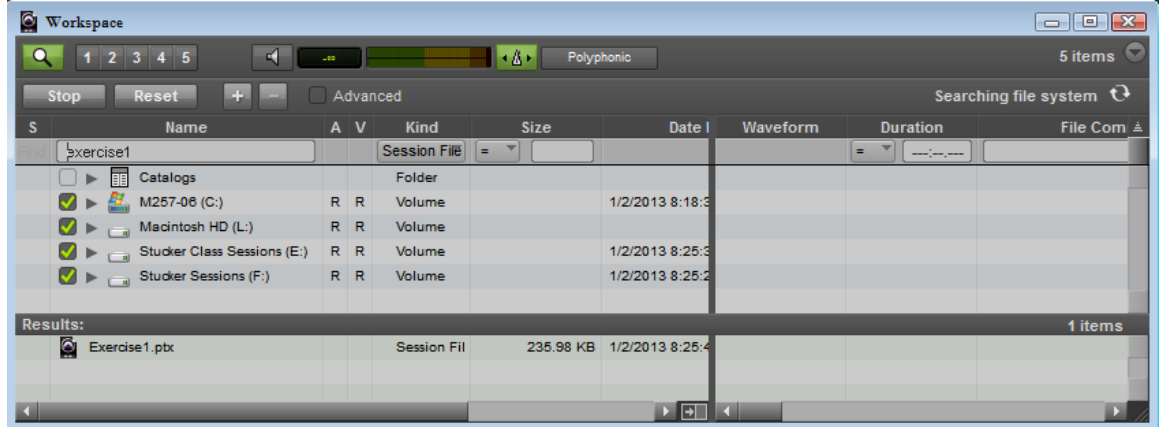
This exercise will require approximately one half hour for completion.



1-1. Start by launching the Pro Tools application.

1-2. Now open the Exercise1 session file using the Workspace.

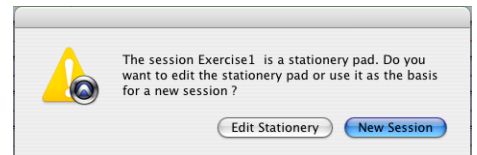
- to show the Workspace select: WINDOW→WORKSPACE or OPT +; (ALT +; for windows)
- Select Search by clicking on the magnifying glass.
- type in “exercise1” and set Kind to “Session”




- select the drives you wish to have searched and click Search
- below will be displayed the session files with “exercise1” in the filename
- double click the session you want to open

-You will see the message to the right if you are using MAC. Select “New Session”

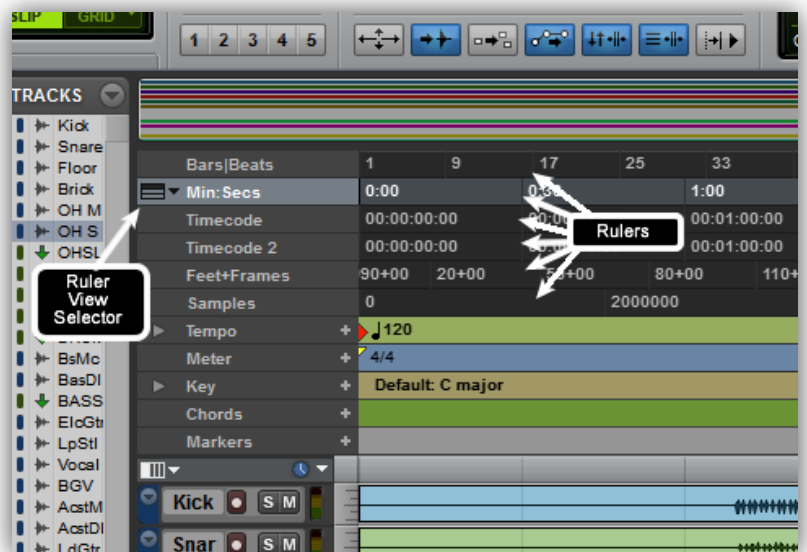
- If you are using windows, select “Save As” under the File menu
- save the session as “Exercise1_YourName”.



1-3. You should now be looking at the Edit window for “exercise1” if not, show the Edit window. Double click on the Zoom  tool to show the entire session in the window.

Just above the waveform displays you will see the Rulers.

To the left you see the Ruler View Selector. With this menu you can determine which of the rulers is displayed. This is also available under the VIEW menu. In addition rulers can be removed from view by OPT-clicking on their name. (ALT-clicking in Windows) One ruler must always be displayed however, that is the Main timeline ruler. You can also rearrange the rulers by dragging them.



The Main timeline is chosen and current time is displayed in the Main counter window. Click on the arrow to the right of the counter to select a different Main Counter.



I-4. Using the Ruler View Selector, remove the Samples and Min:Sec Rulers from view. Then OPT-click on the Tempo, Meter, and Markers rulers to remove them from view. (ALT-click in Windows) You should now only have the Bar:Beat ruler showing.

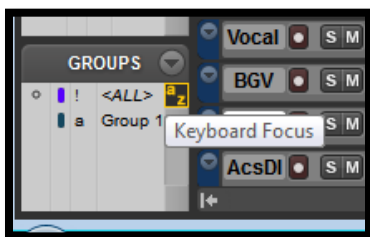
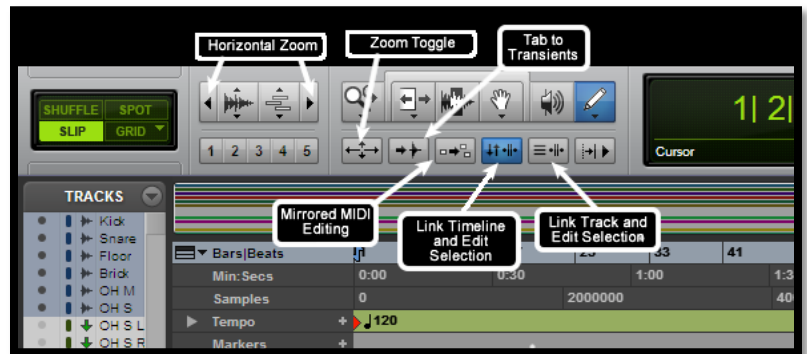
Building a Bar:Beat Ruler

This song was recorded without a click track so the Bar:Beat ruler does not match up to the music. Much of what you will do in Pro Tools is much easier if the Bar:Beat ruler does match the music, and matching them up can be quite easy.

I-5. Hit RETURN (ENTER on PC) to move the playback cursor to the start of the session. Play the session and find Beat 1 of Bar 1 of the song. As you are listening you can set your edit cursor by hitting ↓ on the keyboard. The Acoustic Guitar comes in on beat 1 (though the electric guitar comes in slightly before) so click on the Acoustic Mic track name to select that track. Notice that the edit cursor moved to that track. This is a feature called “Link Edit and Track Selection”. This can be turned on and off either in the OPTIONS menu or with the icon in the edit window. (see below)


I-6. You should now have your edit cursor on Bar 1 Beat 1 of the song. Start playback by hitting the space bar. It will start where your cursor is placed. Let’s make sure the cursor is placed correctly on Bar1:Beat1 (the Acoustic guitar entrance).

I-7. We will now zoom in to the Acoustic Mic track to exactly find beat 1. We want to

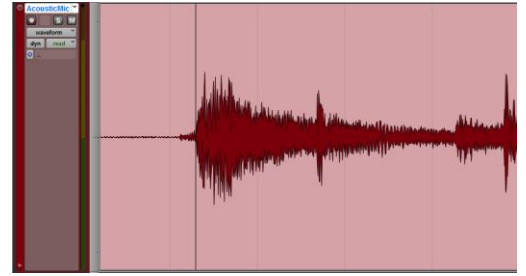


zoom into the spot where we have the cursor. Another new shortcut in the Edit window is for “Zoom Toggle”. This can also be accessed in the Keyboard Focus Mode (shortcut for this mode is shown to the left) by hitting the letter “E”. Turn Zoom Toggle on either from the edit window or the keyboard. The Acoustic Mic track should increase to “extreme” size. This was set previously in the session. If you change the settings with Zoom Toggle on, those settings will be recalled next time.

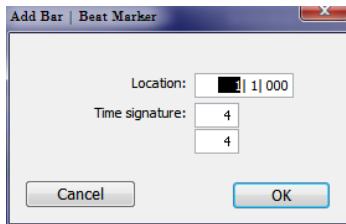
I-8. We now want to zoom in horizontally to the first Acoustic note. You will use the “Horizontal Zoom” buttons for this. Click on the right one to zoom in closer. You can also click on this button and move the mouse to the right while holding the mouse button. This will give you a continuous zoom in or out. Zoom in until you can see the beginning note clearly. No matter how far in or out you zoom, your cursor will be centered on the screen.

1-9. Using the selector tool move the cursor until it is  on the attack of the Acoustic Guitar. Play after you have it set to double check the positioning.

Now that you have the cursor set at exactly Bar 1 Beat 1 musically, we will tell Pro Tools to call that point Bar 1 Beat 1.




1-10. Select “Identify Beat” from the Event Menu. You can also use the shortcut CMD-I (CTRL-I for windows). Type in 1]1]000 as the location. The time signature should remain 4/4.



Bar 1 Beat 1 is now set, but the tempo is not correct. To remedy this we will choose more points within the song and identify their beat numbers. Depending on the song you may have to do this only a few times, or many, many, many times.

1-11. The important point when identifying Bar Beats is to set them at the same point of the attack for each beat you identify. One way to help insure this is to zoom in the same amount each time. You can use the Zoom presets for this. They are the 5 numbered buttons below the Horizontal Zoom buttons. To set these, CMD-click (CTRL-click for windows) in the number and the current zoom settings will be saved to that preset. Do this now to store your current settings in zoom preset #5. Afterward you can just click the preset to recall it.

1-12. Repeat the procedure you used on Bar1:Beat1 to identify Bar5:Beat1.

1-13. Once the drums enter the song it is easier to find the beats with the Kick Drum track. Roughly find Bar 23 Beat 1 on the Kick track. Make sure that your cursor is **in front** of the kick drum hit for Beat 1. For the rest of the Beat identification we will use a feature called “Tab to Transient”. This is turned on with a shortcut  in the Edit Window. (see picture with 1-6.) When this is on (highlighted blue) hitting the Tab key will move the cursor to the next transient. Try this for Bar 23. Identify this as Bar 23 Beat 1. Repeat again for Bars 43, 51, 98, 108, and 127.

1-14. Go to the Ruler View Selector and show the Tempo Ruler. You will notice that there is an indication of each time you identified a beat. At each point you will notice a tempo change. The tempo is calculated from the points you entered.

1-15. It turns out that we could have skipped identifying Bar 5 Beat 1. Delete this by OPT-clicking on it in the Tempo Ruler (ALT-click for windows).

1-16. Now listen through the song while watching the Main counter (make sure it is set to Bar:Beat). Identify additional beats if you feel the tempo doesn't stay close enough to the music at any point. If any of the beats you did identify are off you can move them. Simply click on them in the Tempo ruler and drag them to the correct spot.

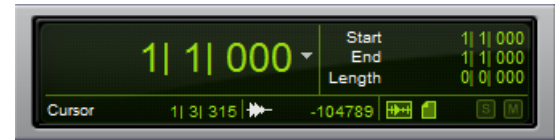
Clip Groups


Now let's explore Clip Groups. You will now add in a region group of three keyboard tracks.

1-17. Open the workspace and open the session folder for the Exercise1 session. Inside you will see a "Clip Groups" folder. Inside there is a group named "Keys for Ex1" drag this onto the last three audio tracks "Mellotron Flutes", "BIII", and "Mellotron Strings and Choir".

The regions in the three tracks appear as one region, this is the region group. Right now the key tracks are not aligned with the rest of the instruments. The region group for the key tracks starts at Bar 1 Beat 1.

1-18. One way to position a region, or region group, is to "Snap to cursor". First set the cursor to exactly Bar1:Beat1. For this instance we will do that using the selection start window. This is located to the right of the main counter. Click on the bar number of the start time and set it to 1. You **must** hit ENTER after typing in the Bar:Beat. If you do not, it will revert to the previous setting. You can now either set the End or Length. In this case set the length to 0]0]000. Again remember to hit ENTER. Your cursor is now set to Bar1:Beat1.



1-19. To align the region group to your cursor, use the Grabber  Tool and CTL-click (or START-click in windows) on the region group. The region group should now start at Bar1:Beat1. Listen and double-check that the keyboard tracks are timed correctly all the way through the song. If it does not sound correct then you likely have Bar1Beat1 identified incorrectly. Go back and re-identify it using Tab to Transient.