Addendum: 
Peak 4.14 New Features

Introduction

Peak 4.14 is a free update for registered users. It provides new features and functionality, including:

- Supports Mac OS X v. 10.4 (“Tiger”)
- Provides a higher quality real-time sample rate converter when playing audio documents with a sample rate that is different from the supported sample rates of the audio device being played on.
- A new feature allows the loop flags in AIFF files to be turned on or off when saving.
- A new feature, “Auto Define Tracks” has been added to the list of available DSP processes.

The 4.14 update also includes a number of other enhancements – for more details, please see the included Peak 4.14 Read Me document.

Directions for using New Features

Of the new features/functionality in Peak 4.14, some are enhancements that operate behind the scenes and do not require user interaction, and some are new features that require explanation. This section goes over using the new features in version 4.14.

Auto Define Tracks

The Auto Define Tracks tool allows you to automatically split audio recordings into separate Regions, each of which will become an individual CD track when an audio CD is burned. This tool is useful for quickly editing LP and cassette recordings, and then burning them to CD.

This DSP tool works by automatically placing Region markers into an audio document based on audio level, minimum period of silence between songs, and minimum song duration. Peak analyzes the audio levels throughout a document, and places Region markers around each song. The louder parts are considered to be songs, and the quieter parts are the gaps between them.

When Auto Defining Tracks, Region markers are placed into the audio document as settings are made – this makes it easy to see if your settings are accurate.
Since some songs may contain very quiet parts that could mistakenly be interpreted as gaps between tracks, a few parameters are available to help Peak correctly distinguish between songs and the gaps between them.

**Minimum Silence Between Tracks**

This field is used to enter the minimum gap time between songs in the audio document you are working with. If a recording you are working with contains two second gaps between each song, start with the default value of “2.00” in this field. If the gaps between songs vary in length, enter the value of the shortest gap in the entire recording.

If you need to measure the gap time between songs, activate the Cursor Info overlay by selecting `Show Cursor Info (⌘ Shift-T)` from the Options menu, and then select the gap between songs in the audio waveform – the Cursor Info overlay will tell you the length of the selected area. You may also need to set your preferred Time Units to Min:Sec:ms – this can be done in the Options menu > Time Units.

**Minimum Track Duration**

Peak needs to have some information about the length of each song, in order to accurately divide a long recording into individual songs.

The Minimum Track Duration parameter tells Peak how long the shortest song in a recording is, and helps ensure that Region markers are placed in the correct location in the audio waveform – that is, a begin Region marker just before a song starts, and an end Region marker just after a song ends – even if the audio level falls below the threshold value set with the Silence is Audio Below slider (see next section). If a recording you are working with contains songs that are all approximately 4-5 minutes long, a good value to enter in this field would be 240 seconds (4 minutes).

**Silence is Audio Below slider**

This slider controls the threshold level between audio material you wish to define as a Region and the gaps between it. As this slider is moved, you will notice Region markers appearing in the audio waveform in the background, and you will also notice the value in the Number of Songs field changing. (More information on the Number of Songs field is in the next section).

For example, if you are working with a recording from a cassette, the gaps will typically contain hiss or other noise that is not completely silent, but has a significantly lower amplitude level than the program material that you are trying to isolate into tracks. By adjusting the Silence is Audio Below slider, you can make the judgment as to what should be silence, even if it does contain some low level audio such as tape hiss, or other background noise.

**Number of Songs field**

This numerical field is tied to the Silence is Audio Below slider, and displays the number of songs that Peak automatically detects in a recording, based on the settings used for Minimum Silence Between Songs, Minimum Track Duration, and Silence is Audio Below. Depending on the settings you choose, Peak will detect a different number of songs, and this field will display different numbers.

When the Silence is Audio Below slider is moved, the number of songs detected will update, and typing in a new value in the Number of Songs field will update the Silence is Audio Below slider.

Typically, the automatic number of songs detected is very accurate, provided you have entered accurate settings for the other parameters that define tracks. There may be times however, where Peak detects more or fewer songs than the recording actually contains.

You may choose to define the number of tracks using the Silence is Audio Below slider, or by typing in a known number of songs in the recording, and then fine tuning with the Silence is Audio Below slider.

Be aware that the values you enter in the Number of Songs field, and the values you set with the Silence is Audio Below slider may override each other.
To Auto Define Tracks:

1. Open a recording from a cassette or LP.
2. Select All (Ctrl-A).
3. From the DSP menu, choose Auto Define Tracks.
4. In the Minimum Silence Between Songs field, enter the shortest amount of time (gap time) between any two songs in the entire recording.
5. In the Minimum Track Duration field, enter the length of the shortest song in the recording.
6. Adjust the Silence is Audio Below slider until the Number of Songs field reflects the actual number of songs in the recording – Peak inserts Region markers for each song detected (you can visually scan the waveform of the entire recording and count the number of individual songs).
7. Click OK.

Tips for using Auto Define Tracks

Before Auto Defining Tracks

When recording cassettes and LPs, you will be working with fairly long audio documents, and there are a few things you can do to get the most accurate results with the Auto Define Tracks tool.

- Zoom out all the way, so you can see the entire recording from beginning to end. This way, when you are setting parameters in the Auto Define Tracks dialog, you will be able to see where Region markers are being placed in the audio waveform.
- Delete excess silence – if you have recorded excess silence at the beginning or end of the audio document, or recorded a long pause when “flipping” a cassette or LP, it’s a good idea to edit this out before attempting to use the Auto Define Tracks tool.
- Excess silence at the beginning of a recording should be deleted

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Excess silence in the middle of a recording should be deleted – this space was created when recording a cassette, when flipping the cassette to record side 2

Excess silence at the end of a recording should be deleted

Zooming out all the way gives the best view of the entire recording, and lets you see individual songs/tracks in the waveform

- You may want to apply noise reduction for clicks, crackles, pops, broadband noise, and hum before auto-defining tracks. These types of noise are reflected in the audio waveform and may interfere with accurate placement of markers. Some of Peak’s built-in tools can help reduce/remove certain kinds of unwanted noise, but for the best
results, BIAS recommends using SoundSoap or SoundSoap Pro. More information is available at:
http://www.bias-inc.com/products/soundsoap/
http://www.bias-inc.com/products/soundsoappro/

- Get an idea of the length of songs and gap times between songs — this will give the most accurate results in placing Region markers/creating tracks. From the Options menu, choose Show Cursor Info (⌘-Shift-T), this will show you the duration of the selected portion of the waveform.

- Visually scan the audio waveform, while looking for:
  - The number of songs in the recording — you should be able to see how many individual songs there are by counting the number of high amplitude areas.
  - The shortest song — select the shortest song from beginning to end, and then turn on Cursor Info, which will show the length of the selected part of the waveform. You may need to zoom in to make a more accurate selection.
  - The shortest gap time between songs — select the gap between songs and measure using the Cursor Info overlay.

**After Auto Defining Tracks**

There may be times when an anomaly in the audio waveform, or a less than ideal setting causes a track/Region marker to be placed in the wrong location.

The end of Track 4 and the beginning of Track 5 is not in quite the right place...

In some cases, when most of the tracks have been identified correctly, but one or two have not, it may be easiest to simply adjust the markers that are in the wrong position.

Turning on Peak’s Vertical Lock mode allows the end of Track 4 and beginning of Track 5 to be moved at the same time...

Region markers may be moved by clicking and dragging the triangular base to the left or right. Also, by engaging Peak’s Vertical Lock mode, you may move the end of one song/Region and the beginning of the next at the same time.

Now they are in the right place, so Track 5 starts just before the audio starts to fade in.

This technique is especially useful when working with live recordings or DJ mixes, where it’s important to preserve the overall duration and timing — but a track index needs to be adjusted into the correct position.
Nudging Markers

If all the Region markers placed into an audio document are incorrectly placed, but are off by a small amount, you may wish to use the Nudge feature to adjust them all simultaneously. To nudge a group of markers, select the portion of the audio waveform that contains the markers you wish to nudge, and then choose Nudge from the Action menu.

Now that you know a bit about Peak’s Auto Define Tracks tool, give it a try! This feature can save lots of time, and the more you use it, and get a feel for how the various parameters need to be set, the faster it will work.

Turn Loop Flag On/Off on Save

This feature allows the loop flag in AIFF files to be turned on or off when saving a file. The state of this loop flag when a file is saved determines the file’s playback behavior when loaded into Peak again, or into another application capable of reading embedded loop flags.

The loop flag is now toggled on or off when saving, depending on the state of the Loop Playback setting in Peak.

To Save an AIFF File with the Loop Flag On:

1. From the Options menu, choose Use Loop in Playback (⌘-L), or click the Use Loop in Playback button in the Transport. A check next to the menu item, or an illuminated button in the Transport indicates the loop flag is turned on.

2. Save the AIFF file – the loop flag is saved in the on position.

To Save an AIFF File with the Loop Flag Off:

1. From the Options menu, choose Use Loop in Playback (⌘-L), or click the Use Loop in Playback button in the Transport. The absence of a check next to the menu item, or a non-illuminated button in the Transport indicates the loop flag is turned on.

2. Save the AIFF file – the loop flag is saved in the off position.

Conclusion

We hope you enjoy the new updated features and functionality in Peak 4.14.

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