

# Cakewalk Sonar 3 Producer Edition

Long-time supporters of the Windows PC way of doing MIDI and audio, Cakewalk has made considerable recent progress towards the DAW ideal while retaining its individual identity. **ROB JAMES** says that it's serious and deserves wider recognition.



**THE MAJOR PLAYERS** in the software audio workstation arena all began life as MIDI sequencers or as hard disk audio recorder/editors. Whatever their roots, these heavyweights soon embraced software instruments and plug-in effects. When Cakewalk introduced Sonar, a new category was born. Here we have a software package combining serious MIDI sequencing with audio recording and editing together with automatic time-stretch and pitch changing of 'Acidized' WAV files. This facilitated the integration of loop-based composition with the familiar MIDI and audio functions. Sonar remains probably the most complete package encompassing all three disciplines.

Now in its third major incarnation, many of the early limitations have been addressed and Sonar has a considerable established following among sequencer workstation users.

This version of Sonar brings some radical changes. These are most noticeable in the Track View and Console View user interfaces. Under the surface there is a new audio engine and there are some profound changes to the bussing structure, greatly improving flexibility. One major criticism of earlier versions has been addressed. Previously there was no visual indication of audio recording. Now, Sonar provides the option of drawing a waveform while recording proceeds, giving instant confidence feedback. If this uses too much CPU time, there is also the option to have Sonar just draw a red bar.

Borrowing from its rivals (imitation is after all, the sincerest form of flattery) the Track/Bus Inspector, just to the left of the Track pane gives greatly expanded access to, and information about, the currently selected track or bus controls. At US\$719 Sonar Producer Edition adds a four-band EQ per track by default and there is now automatic delay compensation when effects are inserted.

The Track and Console views will be pretty intuitive to anyone with experience of other sequencers. Although it took me a while to find the show/hide Track/Bus Inspector toggle. (It's on the Track View, View menu or you can hit the 'I' key on the keyboard. Easy, once you know.) Excellent use is made of right-click context menus in all screens. The Track/Bus Inspector is the software equivalent of an assignable console. The selected channel or bus is displayed in an

expanded view with better access to controls. In effect, Sonar provides the best of both worlds, a comprehensive panel of assignable controls together with something approaching 'knob per function' on the channel strips.

The new bussing arrangements are interesting. No distinction is made between sub-groups, groups or auxes. This reflects reality and removes some of the artificial restrictions brought about by slavishly copying the architecture of a hardware mixer. There are no restrictions on rerouting bus outputs back into other bus inputs. A multitude of possibilities opens up for circumventing awkward routing problems and for creative constructs difficult or impossible to achieve by other means. Buses can be mono or stereo but not as yet, surround. The other problem is the main outputs in Console View cannot be renamed. This can result in some cryptic labels unless you can rename the soundcard outputs in the driver applet. Conversely, aux send handling is very advanced. Unlike most other systems where, if you add an aux send, a knob etc. appears in every input strip, in Sonar you can place aux sends just where they are needed and freely re-assign them to other destinations. This can dramatically reduce screen clutter.

Gone are the days of stopping audio playback to insert a track, a bus or an effect or even to perform some DSP processing. 'Gapless' audio is the description and, unless you really push it, e.g. DSP on large clips, in most circumstances audio playback continues uninterrupted. Similarly, adjusting EQ and effects controls is usually artefact free.

The main channel EQ, and a variety of plug-in effects are supplied by Norwegian company, Ultrafunk. The EQ is especially noteworthy. Although only four bands are visible in the Console view, opening up the graphic EQ display, 'Plot' in Sonar speak, gives access to the underlying six bands. This EQ offers +/-18dB of boost and cut, Q of up to 20 and the usual peak/dip, high/low shelf and low/high pass options. The interface is clear and obvious and the vertical axis can be scaled to show a range of +/-5dB, 10dB, 20dB or 40dB. All of this would be unremarkable by itself but the algorithms employed sound very good to me, a considerable improvement over some of the opposition.

Reverb, EQ and time-domain effects from DSP-FX, familiar from previous versions are most welcome, as are updated versions of Cakewalk's own plug-ins, but the icing on the cake is the inclusion of Lexicon's Pantheon reverb. Like every other Lexicon reverb I've ever heard the presets are somewhat glassy for my





taste but in this case it is easy to tweak the harshness out and the rewards are manifold.

Some Sonar audio commands result in destructive changes to the original audio. These are found on the Process menu. There is no particular problem with this, since Undo and a user-definable undo history are available, but you need to keep in mind which commands are destructive and make copies of the audio if you are likely to want it in its original form for another purpose. Apart from the usual Normalise, 3dB Louder or Quieter, Remove Silence and graphic and parametric EQ are on offer.

Non-destructive audio editing in Sonar is referred to as 'Slip Editing' although even here there is emphasis on providing destructive methods of making editing changes permanent. A number of preset curves are provided for fades and crossfades together with the means of applying and editing them in agreeably sophisticated ways. Asymmetric crossfades are a doddle, as is slipping the underlying audio while leaving the fade(s) intact. I see the relatively limited selection of curves as an advantage — it's quicker. If you feel the need for more sophisticated curve manipulation this is available by choosing Process-Audio-Fade/Envelope. Curves can then be user-defined although fades performed this way are destructive.

Sonar provides some interesting tools to assist in managing projects. All audio used in a project can be copied and gathered together in one place using the Consolidate Project Audio command. The Bundle Files option creates a single file containing all information, apart from video, used in a project. This is highly convenient for archiving and moving projects without worrying about losing elements. Once a project has been agglomerated by one or other of these methods Tools-Clean Audio Folder provides assistance in cleaning up unused files.

Cakewalk was an early adopter of the WDM driver model. Native WDM soundcard drivers have taken some time to become well established and with the notable exception of Native Instruments, the same applied to DXi instruments. The effort required from manufacturers to support several driver models is not inconsiderable. Happily, most of the major soundcards now support WDM, MME and Asio and there is a prodigious range of DXi instruments available from a wide range of manufacturers. Sonar concentrates on the perceived advantages of native WDM and DXi (Cakewalk's Direct X based open interface standard) instruments and effects while providing elegant support for Asio and VST. The Cakewalk VST Adapter 4 is a 'Wrapper' that enables VST plug-ins and instruments to be used in a Direct X or DXi environment with delay compensation where necessary. It works very well.

Sonar is pleasingly robust and, for stereo music, provides a remarkably comprehensive package. There are still some glaring holes in the feature list. I searched in vain for a fixed cursor, moving track display option. Reverse play is similarly absent, but the most egregious omission is surround support. One of the Sonitus plug-ins is enigmatically named Surround. However this turns out to be a surround panner that encodes into two-channel matrixed surround and you will need an external decoder and monitor controls to make any use of it. I suspect the new busing structure is the first step to addressing this.

The MIDI and looping facilities are, to my untutored

eye, both approachable and deep. Bundled synths include Dreamstation, Cyclone DXi 'Groove Instrument' and the Producer Edition also includes Speedsoft's Vsampler 3.

Sonar has matured gracefully and is a far more convincing proposition than its predecessors. The look and feel is appealing and the learning curve agreeably shallow. The overall impression is one of easy fluidity with few glitches to interrupt the workflow. It also removes much of the donkeywork of keeping track of the myriad files big projects inevitably generate. Although unashamedly and squarely aimed at making music, there is a great deal here that will be of interest to users more concerned with audio editing and mixing. The EQ algorithms are a cut above much of the opposition and the high quality plug-ins lift Sonar's game with the Lexicon Pantheon reverb as a considerable bonus.

All this adds up to a 'must have' upgrade and it is also well worth a look for anyone considering a change of heavyweight, sequencer-based audio workstation. ■

**PROS**

Good EQ; accomplished loop composition; looks and feels approachable and stable.

**CONS**

No surround support; no scrolling audio track display; no Reverse Play.

**Contact**

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