

Apple Logic Pro 7

Logic Pro 7 has arrived with great fanfare. Brad Watts pipes it aboard.

As most folk in digital audio circles would be aware, Emagic GmbH is now part of the Apple Computer empire. Most of the Logic tribe believes the partnership to be a wonderful thing but some noses have been bent out of shape. No doubt the most contentious issue among the user base was Emagic's announcement to abandon the Windows platform after version 5 of Logic Audio. You didn't have to look far on the web to find a Windows/Logic user bemoaning their newly-discovered orphan status. Well to be honest these things must happen. Software and hardware combinations can simply outgrow each other. A similar situation

DVD Studio Pro, Motion, Shake and now Logic Pro are off to conquer the seven seas of the media production world aboard banks of liquid-cooled dual G5s!

Got Anything Grey-er?

However, it's unreasonable to expect this ship-shape crew to be sailing without donning a worthy uniform. Therefore, all Pro applications shall wear the appropriate 'Pro' apparel on deck – sorry, I'll quit it with the swashbuckling lingo. What I was getting to was the huge revamp that Logic has undergone. The most obvious change being the interface transformation to

keep in line with the rest of the Pro apps. Logic now has the look of Final Cut Pro and the rest of the crew [I though you said...? – CH]. The battleship [stop it – CH] grey backgrounds and dialog boxes have given the program a more upmarket feel but as a few have already suggested, it can become a little lifeless and drab working amongst the grey. Personally I'm a big fan of grey as it somehow screams 'don't look at me' yet still allows for reading text and checking boxes clearly. While the new look windows and backgrounds are a change from the 'version 4 look', there are a huge number of changes and additions under the bonnet that will quickly have you disregarding the aesthetic differences.

One important aspect of the change, however, is the behaviour of menus within Logic windows. When Apple introduced sticking menus (menus that stay open when you click on them until you find the item you wish to open) Logic's 'internal' menus remained the

old style 'click and hold' type until around version 4 when they became 'semi-sticky'. Even then the menu behaviour required a mouse click to escape each menu and open the next. Close but not quite. Now thankfully all menus follow the standard sticky protocol – it still throws me from time to time but I'll get used to it.

Home on Arrange

So what else has changed in the Arrange window? Quite a bit. The default song now boots with the back-



What you see is what you get – the new metering plug-ins. (Gotta love that grey.)

arose when Emagic left the Atari platform behind. Sure, people complained, but the software continued to evolve into a beast that needed far more processing power than the struggling 16MHz Atari TT or Falcon would deliver. Again Emagic has rightfully chosen to jump on board the Apple ship, and Apple could have hardly hoped for a better deck hand. The crew, comprised of hand-picked 'Pro' media aficionados, was desperately in need of a professional audio application to complete its ranks. Now assembled, Final Cut Pro,

ground grid enabled. A feature that's always been available but one that many would never have noticed. The grid can be a handy tool when you're slapping regions about in a hurry, as can the new edit modes in Arrange.

Shuffle mode allows regions to be adjoined without overlapping – it's virtually the same mode as shuffle in ProTools. The 'No Overlap' mode is similar in that it will still butt-join regions but it will adapt surrounding regions to fit with the region you're moving – a terrific mode for quickly compiling edits. X-Fade mode will automatically apply cross-fades between regions as they are placed. Each of these modes speed up editing operations immensely.

Other Arrange niceties include the resizable parameters section and the 'Channel Strip Only' view option that finally puts an end to the channel strip gradually disappearing as you add more inserts. I was glad to see the right-hand mouse button opens the toolbox palette after all these years. When I switched over from the Atari the first peripheral I bought was a two-button mouse simply so I could keep my toolbox where it had always been. It's satisfying to see Apple admitting there can be more than one button on a mouse.

Other neat changes are patch names for virtual instruments appearing with the track and those pesky telescope icons for zooming have been replaced with more sensible controls.

Help!

A surprise addition is help tags. Hovering the cursor over just about anything in Logic will instigate a small yellow tag informing you of the object's uses. They're somewhat like Microsoft 'tool tips'. Like them or love them you'll find they're mightily useful. In fact, they're often indispensable, as help tags also relay position and length information when moving regions about or changing automation levels. This info used to appear at the top of the Arrange page but, due to the internal menu revamp, a different approach had to be found. Fortunately the tags are adjustable in Preferences for display duration time and the amount of data displayed. I found myself liking them pretty quickly, as the help tag is always displayed at the cursor – where you're actually making an edit.

There are plenty of further timesaving additions such as 'Show Selected Audio Files in Finder' and the ability to arrange tracks according to Midi channel, audio channel, output channel, instrument name or instrument channel. Suddenly opening someone else's Logic file is not such a daunting task.

A new track solo button also makes its debut and, just so those folk using split stereo files don't get



A mixing environment window with its battleship grey colour scheme.

confused, you'll have to press the solo buttons for both left and right tracks to solo the file correctly. It's becoming apparent that many of the new breed of audio-based features evolving within Logic are increasingly incompatible with the split stereo format. That implies Digidesign TDM users are going to be a tad upset with a few things – especially the fact that you still cannot glue regions together on DTDM tracks.

Edit

A new method for representing Global Track functions also makes its way into many Edit windows. The indicatively dubbed 'Global Tracks' appear below the bar ruler/timeline and allow graphical editing of tempo, time and key signatures, as well as being able to transpose an entire section or song or to show a chord progression chart. The Chord Track is actually quite neat – it'll work out your progressions from Midi data in the arrangement.

The Video Thumbnail Track and Marker Points Track is now part of the Global Tracks section and offers the fabulous timesaving measure of checking your video file for cuts and placing SMPTE locked markers at each cut point. Very nice! The old and difficult-to-understand 'Reclock' feature is now a Global Track called 'Beatmapping'. Simplified to the point of actually making sense, the Beatmapping Track allows audio or Midi-based regions that are played to an unknown tempo to be given meaningful tempi.

Esoterica

Getting into some of the more esoteric aspects we find a number of cool additions such as the ability to



Logic Pro 7 can sing to a world of different tunings.

advance or retard all Midi output in tenths of milliseconds and MTC in milliseconds. Midi clock data can be delayed by up to 36 milliseconds. How very handy. You'll also find a plethora of export and import options. 'All Tracks as Audio Files', 'Region as Audio File', 'Track as Audio File', 'Song as OpenTL File', 'Song as OMF File' or export your 'Song as AAF File'. All big time savers! Then of course there's the option to import or export a song as a Final Cut Pro/XML file – that'll get a few cheers.

Gosh, even GarageBand songs can be imported directly into Logic. Songs can now be saved as templates and Logic 7 comes with a dozen or so typical templates. The template dialog is presented when you create a new song file or you could opt to reopen the last used song at bootup.

Global instrument tunings are now possible with just about every conceivable intonation map available. Or you can make up your own tuning regime. This affects the tuning of all virtual instruments in the current song file. From plain old equal-tempered chromatic through to Arabic, Werckmeister and Hermodé tuning [you're just making those up – CH].

Just to get into a little more esoterica, check out the new 'Pan-law' preference. You see when one puts a mono signal through a stereo buss (on an analog console) and pans the signal from the centre pan position to hard left or right, the stereo mix buss level will drop by 3dB. A signal reading -6dBFS at the mix buss when panned to hard right will read -9dBFS when panned to the centre. Logic used to keep the signal as -6dBFS throughout the pan field, as do various other editing platforms. It can often result in a very up front' mix. Now you can change back to the correct method or choose to stay in the world of the 'in-your-face' 0dB pan-law.

Big Ticket Items

Enough of the fine print! Let's have a look at the heralded features of the recently instated Logic Pro 7. With a major new Logic release we've come to expect a veritable rolling maul of new effects and instruments and Logic 7 doesn't disappoint. No doubt the first extras to catch the eye are the new instruments.

Sculpture is Logic's first physical modelling synthesis engine. Instead of using CPU-generated oscillators, Sculpture's base building block is called a 'string'. A string can be plucked, bowed, struck or in fact blown to create your initial oscillator or tone. The supplied patches cover countless and very authentic-sounding strings, guitars and mallets along with some sounds you'd really have to hear to believe – atmospheric and earthy.

An FM-based instrument, EFM1, has become a firm favourite of mine – clear as a



Top: Sophisticated sound sculpting with Sculpture. Above: Retro drum programming for the 21st Century.

bell and solid as rock for bass lines. Start with the patch 'Stereo Bass' and adjust the modulation envelope's decay setting for the 'Solid Bass'.

UltraBeat is a percussion synthesizer and step sequencer. Synthesis methods include sample playback, FM, physical modelling and phase oscillation. It's a very cool toy with each of the 25 voices able to utilise a different synthesis method.

A further insert entitled 'External Midi' is basically an insert setup for any outboard Midi devices – allowing hardware synths to be used as if they were a software instrument. You can even use GarageBand instruments within Logic – handy, I presume, when importing GarageBand song files. Incidentally, ever had a whinge over having to use your Midi keyboard just to trigger a few sounds here and there or to simply hear a patch of a software synth? Logic 7 has a 'Caps Lock Keyboard'! Simply engage the caps lock key and your computer's keyboard becomes a Midi input device. A cute little keyboard with variable translucency appears on screen. This is great for laptop people and lazy

buggers like myself who can't be bothered to reach over to a traditional Midi keyboard.

Just for Effects

A raft of additional processors and effects make the grade in Logic Pro 7. Guitar Amp Pro offers guitar amplifier and cabinet simulations with choices for microphone type and placement as well as various cabinet and amp options. Nifty!

I was very pleased to see a bunch of metering and test plug-ins available. Test oscillator, level meters, phase correlation meters and spectrum analysers all make troubleshooting and metering a piece of cake. They also look very cool to the (often easily impressed) clientele.

The new Linear EQ raises the bar – even better than the oft raved-about Channel EQ that first appeared in version 6.

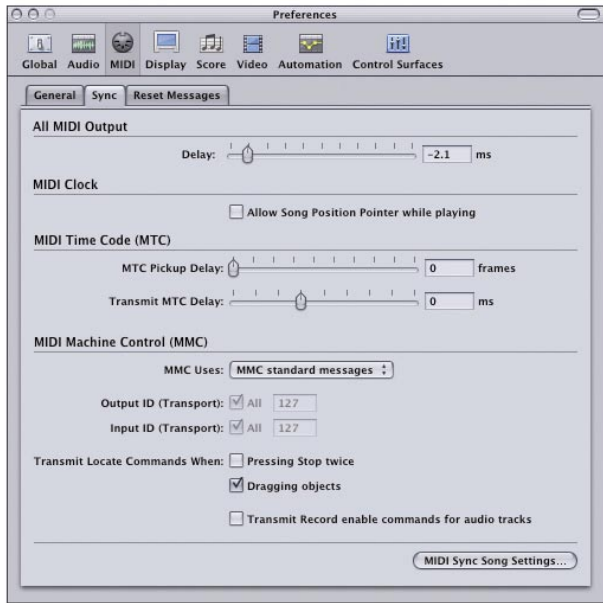
The Match EQ insert magically analyses the EQ of one audio passage and applies it to another.

The somewhat silly (but still entirely useful) Vocal Transformer will make anyone sound like Mickey Mouse, Darth Vader, Davros or Andy Stewart. An intonation correction processor also arrives within Logic 7. Brilliant! It works well but I still haven't got it working quite as well as the industry standard Antares Autotune. As the manual suggests you can use this for achieving the often-abused 'Cher' vocal effect. Not to be confused with the other 'Cher effect' of perching aloft various pieces of naval ordinance wearing little more than gaffa tape. What on earth was she thinking?!

Now when it comes to stringing all these processors and instruments together Logic 7 provides a function we've wanted for years. Channel Strip patches! Each channel strip or audio object can now save and load patches. A patch consists of the various inserts and instruments and all their settings. This lends itself to use in a situation where perhaps you'd like to move an entire channel's processing over to another channel; perhaps save an ideal vocal processing path or mastering setup; or in fact build up a library of instrument and insert setups. Logic 7 installs countless channel patches such as EQ and compression settings for vocals and myriad other instruments, mastering setups etc. A brilliant feature that I'll be using constantly.

Deep Thought

But when all is said and done the most impressive feature in Logic Pro 7 is Distributed Audio Processing. DAP, as it shall be known, allows additional Macintosh computers to be connected to your main machine to increase processing power. Machines are connected via gigabit Ethernet cables with the slave machines running a small 'Logic Node' program. When your main host machine sees the 'node' machines you simply add the extra node (or machine) in preferences. Each audio track displays a node button just beside the Freeze, Mute and Solo buttons. Pressing the Node button will



Slip and slide your Midi output and delay Midi Clock. Eureka!

force that tracks insert effects to be processed on the external machine. This is big news folks as it means your current machine may never become redundant – you simply add another Node (computer) and another, and another. For the review Apple sent me a G5 (a single 1.6GHz machine) to test the concept out. Connecting via a single Cat5 cable I soon grew tired of trying to max out the system. I did eventually top it out with about 50 spectral gates and a dozen or so Space Designer Reverbs. That was on top of 40-odd channels of EQ and a stack of compressors. Apple will tell you that this procedure is only possible via Gigabit (or 1000BaseT) Ethernet – an Ethernet protocol only seen in G5s and the upper echelons of the Powerbook and G4 lineage. However, DAP is possible over Firewire cabling. You just have to set up the machines to run TCP/IP over Firewire. I can attest to this working as I got the method functioning with my G4 1.25GHz and a 1GHz iBook G4. Incidentally, the iBook had enough grunt to run three Space Designers. Be aware though that while this is possible, Firewire 400 (FW400) is less than half the bandwidth of

1000BaseT Ethernet. FW800 would be a more feasible pipeline. There are other caveats to be concerned with as well. So far only Logic insert effects and instruments will function over a Node, AU plugs also won't function on a node machine (at the moment). Buss insert processors also must be carried out on the host machine. The major exception to this rule is the EXS24 – the sampler must be used on the host machine. Split stereo files don't like functioning over nodes either so just be careful if you're a TDM user wishing to 'hang a G5 off the back' of your not-so-current system. Mono or in fact interleaved stereo DTM tracks will function over a node correctly. Aside from these foibles, the whole distributed audio processing concept means running out of native DSP power should be a thing of the past – you simply add another G5. Deep Thought look out!

Lucky ??

So what are my impressions after a two-week run in Logic Pro ?? 'Wow' springs to mind, along with further exclamations and supporting expletives. This truly is the biggest and best upgrade to Logic since Logic 1.0. It's far more stable, more responsive, more customisable, more useable, powerful, and now that it's in the hands a huge global marketeer (Apple) it will definitely become more popular and more of a standard audio platform. While I've outlined most of the features I'm keen on, there are enough new features lurking within the new version to keep me raving about it for the next few weeks. Did I mention Logic will burn Red Book CDs? So many features and so little page space. It's a corker of an upgrade to what is destined to become a hugely successful editing platform.



Distributed by

- Apple Australia

Phone: 133 622
Web: www.apple.com.au/logic

Price

- Logic Pro 7: \$1,499; Upgrade to Pro 7 (from Gold 5 or higher): \$499;