SONAR Membership "Braintree" Release
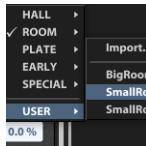
Welcome to the first SONAR Membership release, and thank you for your support of the SONAR Membership Program. Now that the dust has settled and people are realizing 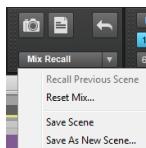the advantages of this innovative way to deploy new features and content, it's time for the next step—deploying them. Here's an overview of what members are receiving this month, followed by detailed documentation. Have fun, and make some great music! – *Bill Jackson and the Cakewalk Team*

New IR responses: We get it—you love the new REmatrix Solo reverb. Now you'll love it even more with Dan Gonzalez's two new expansion packs, Big Room Pack and Small Room Pack, which sample the main rooms from a legendary New York studio that spawned hit after hit in its heyday. The 126 new IR responses, including both stereo and mono impulses, extend the REmatrix Solo's flexibility even further.
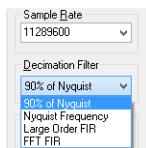
New ProChannel module from Boz: Boz's popular Bark of Dog plug-in has now been adapted to the ProChannel format for added convenience to SONAR uses. Stick this puppy in your ProChannel, and make voice, bass, kick, piano, and more come alive with a deep, but "mudless," low end.
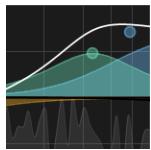
Mix Recall Templates: You can now save template files that reference mix scenes, so projects derived from this template will automatically copy the referenced scenes. This is a very powerful feature with lots of applications, like authoring useful templates with effects packaged in different mix scenes.

VocalSync rendering enhancement: Although the default stretching algorithm works for most vocals, you can now optimize the rendering quality of selected VocalSync clips by changing both the offline and online stretch methods directly from the clip Inspector.

Major DSD export/import improvements: There's now higher quality DSD export, thanks to four decimation filter options and a new "DSD-friendly" sample rate for PCM audio-based projects. Better import, too, from delta-sigma modulator improvements that reduce noise.

New ProChannel presets: These 15 ProChannel presets will make your acoustic guitar *really* sing. While designed around Gibson Acoustic models (with three presets for each of five guitars—J-15, J-29, J-35, J-45, and J-200), they translate to other guitars extremely well. Call up presets to hear what works best for you.

New CA-X Acoustic Piezo amp: Craig Anderton's effects and amps have been a huge hit, so he's back with more. This new **CA-X**-series amp is designed specifically for acoustic guitars using piezo pickups, and includes several innovative functions that bring out the best in any acoustic.

New Anderton Collection effect: The **VoxTools** multieffects is like a mini-500 series module system, with six useful effects—including de-plosive, vibrato, and automatic double-tracking—engineered for vocals (although they're useful with other signal sources as well).

New loop library: Hardgroove's Bass Loop Library features 300 loops (150 unique loops, available as "acidized" WAV Groove Clips and REX2 files) by Public Enemy bass player and bandleader Brian Hardgroove. While based in R&B, these loops provide strong foundations for rock and other musical genres. The library also includes individual notes for tweaking existing loops or creating your own—there's over 430 MB of total content (available only in "Braintree" release).

New Rapture Expansion Pack: While Brian was busy making loops, we figured why not make a new Rapture expansion based on the sounds from his trusty Steinberger? **Hardgroove Steinberger** not only features his signature bass sound, but eight other presets (available only in "Braintree" release).

CA-X amp tweaks: Additional tweaks enhance the performance of the **Classic**. **Sparkle**, and **Blues Lead** amps. Tremolo range has been extended for the Classic, Vibrato range for Sparkle, and the initial Sparkle preset opens with a more "sparkly" sound.

Workflow enhancements and fixes: Traditionally, the first update after a major release concentrates on workflow improvements and fixes; this one is no exception. Noel Borthwick, Cakewalk's Chief Technical Officer, wrote an extensive blog post detailing the fixes that occurred between X3 and the current release. Please click here for the details. With this update, there are even more fixes and enhancements—further evidence of Cakewalk's goal to make SONAR the most stable DAW on the planet.

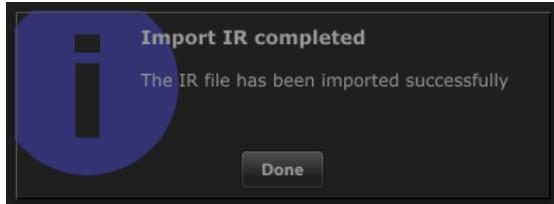## Dan Gonzalez IR Impulses for REmatrix Solo Convolution Reverb
Platinum

Dan braved the truly nasty east coast winter weather to create a new series of small and large room impulse responses for REmatrix Solo. But these 126 impulses aren't from any ordinary room—they came from a legendary New York studio, and Dan was the guy to bring back the character of these hallowed rooms alive.

There are two IR Expansion Packs, **Small Room Pack** and **Big Room Pack**. The Big Room Pack has 32 mono files and 16 stereo files. The Small Room Pack has 52 mono files and 26 stereo files. Although some may seem similar at first, you'll notice differences with different program material. These responses have many applications, but a really useful one is adding room sounds to instruments taken direct (like synthesizer or electronic drums) to give them some ambience.

To load custom responses, click on the down arrow inside the IR window, select User from the drop-down menu, then click on Import.

Navigate to the response you want to use, then double-click on it. After it's loaded, you'll see a confirmation screen.

Click on Done. Now when you select User, as you did for importing, you'll see any IRs you've imported and can choose from them.

Tip: Note that REmatrix Solo adds all your IRs into one big file named **userIRs.rir**, which is located at:

 C:\Users\Public\Documents\Overloud\REmatrix Solo\userIRs.rir

To prevent the User menu from getting too unwieldy, you can rename this file (e.g., **userIRs_original.rir**) so any existing files don't appear, then experiment with loading the new impulse responses. This will create a new **userIRs.rir** file. Note which ones are your favorites, then delete the **userIRs.rir** file, change the original .rir file back to **userIRs.rir**, and re-load only your favorites.

Boz "Bark of Dog" ProChannel Plug-In

Professional, Platinum

Looking for that deep, late-night FM DJ voice? Still haven't quite gotten over Barry White moving on to the Great Boudoir in the Sky? Do you want your kick drum to cause seismic events? How about a bass that stands out, but doesn't overpower? Maybe it's time to add a cool wah pedal effect to your guitar? Or perhaps, for reasons no one can fully understand, you want that annoying "Winchester Cathedral" vocal sound?

All of the above, and more, can be yours with Boz's *Bark of Dog* ProChannel module. To install it, check the Command Center for the "Boz Digital Labs ProChannel Collection," then follow the usual Command Center procedure for downloading and installation.

WHAT IT IS

This version of Bark of Dog is based on a free resonant highpass filter plug-in from Boz, but is making its debut as a ProChannel module for the convenience of SONAR users. It does a great job of giving those "voice of the Deity" vocal timbres; while you can do pretty much the same thing by tweaking a digital EQ, Bark's beauty is you can just drop it in and go—you may not even need to adjust any of the controls.

THE CONTROLS

However, because you *are* a SONAR user, you are of course inquisitive and unafraid of turning controls. So here's what they do.

Amplitude affects gain at the resonant frequency. Turn it up for a more resonant boost, and down for less.

Frequency controls the highpass filter frequency, and thus where the resonance occurs.

Mix adjusts the blend of emphasis compared to the dry signal (fully counter-clockwise is fully dry, fully clockwise is maximum effect). If you want to get fancy about it, you can consider BOD as offering parallel processing—something that few EQs in DAWs offer.

Trim sets the overall output level.

Note the two **meters**. The one on the left monitors the input, the one on the right monitors the output. Simple enough.

APPLICATIONS

As Boz Millar says, "While it's super-simple and pretty much any DAW EQ can do a resonant highpass filter, in my experience nobody ever uses it because the frequency response 'looks wrong.' It's counter-intuitive to cut the low frequencies and boost at the same time, especially in a time where people are used to seeing the frequency response curve that their EQ is making.

"Putting a highpass filter on stuff can cut out the nasty mud, but sometimes it thins out the sound too much. BoD gives you that highpass filter, but lets you keep the meat."

In addition to vocal effects, BOD is great for "tuning" bass or kick drums in dance mixes to favor one over the other. Some pretty cool wah sounds lurk within the Dog as well—turn Mix clockwise for processed sound only, Amplitude up all the way, and automate the Frequency from about halfway up to all the way up.
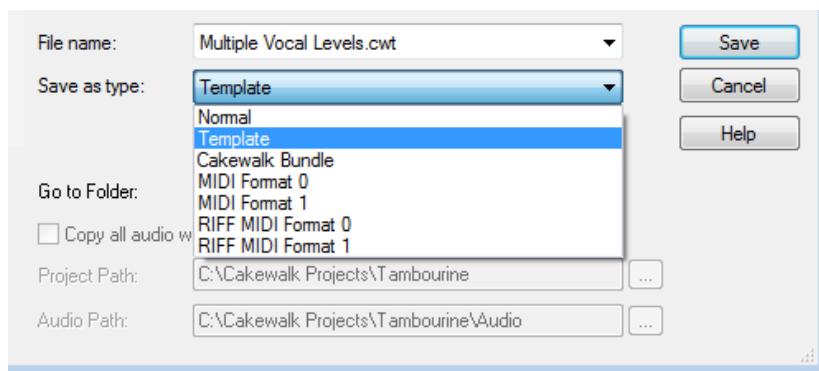
Probably what's best about Bark of Dog is that it's packaged in a way that zeroes in on the control you want, when you want it—which makes it even better as a ProChannel module.

Mix Recall Templates
Artist, Professional, Platinum

You can now save template files that reference mix scenes. A project derived from this template will automatically copy the mix scenes referenced by the template so they're ready to use. This is a very powerful feature with lots of applications, like authoring useful templates with effects packaged in different mix scenes.
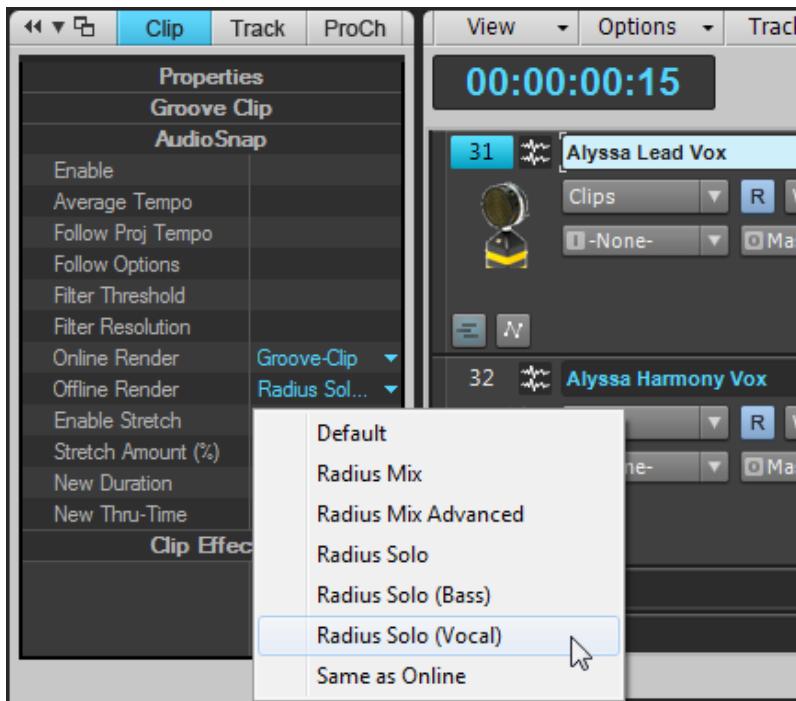
To save a mix recall template, simply create a project with the desired mix scenes, then save the project as a template file. When you save, all the referenced mix scenes will be saved with the template.

Creating a project from a mix scene template automatically links all scene files referenced by the template to the new project file, and copies them to the project's MixScenes folder.

VocalSync Rendering Enhancement

Platinum

You can now change the offline and online stretch methods for selected VocalSync clips directly from the clip inspector. (Your options are the same ones as the AudioSnap section's "Online Render" and "Offline Render" settings.) This simplifies optimizing the rendering quality to match different types of voices. To adjust the settings:

1. Enable VocalSync on a vocal clip. Set the guide track.
2. Open the Clip Inspector for the dub track clip, then click on the AudioSnap section.
3. Click on the rendering picker for offline and online rendering options.

The Clip Inspector's **Offline Render** drop-down menu lets you choose the rendering algorithm. Although the default Radius Solo (Vocal) algorithm is ideal for most voices, it's worth experimenting with different algorithms to find what works best with your voice. The choices are:

- **Default.** This uses Radius Solo (Vocal).
- **Radius Mix.** Best for clips containing polyphonic, stereo data (although this type of source material isn't commonly used with VocalSync).
- **Radius Mix Advanced.** Similar to Radius Mix, but exposes a Smoothing slider that adjusts how much detail to preserve.
- **Radius Solo.** Optimized for clips containing monophonic, solo instruments.
- **Radius Solo (Bass).** Best for clips containing solo bass instruments, but can also be a good choice for low voices.
- **Radius Solo (Vocal).** Usually best for clips containing solo vocals in normal singing ranges.
- **Same as Online.** Uses the same choice as the Online field.

The Clip Inspector's **Online Render** drop-down menu lets you choose the stretching algorithm for real-time previewing. The options are:

- **Default.** Uses the default Groove Clip algorithm (the same algorithm used for stretching Groove Clip files).
- **Groove clip.** Works best with sustained vocal sounds, is faster than Percussion render mode, and uses less processing power.
- **Percussion.** Can work better than the Groove Clip render mode for percussive vocals.
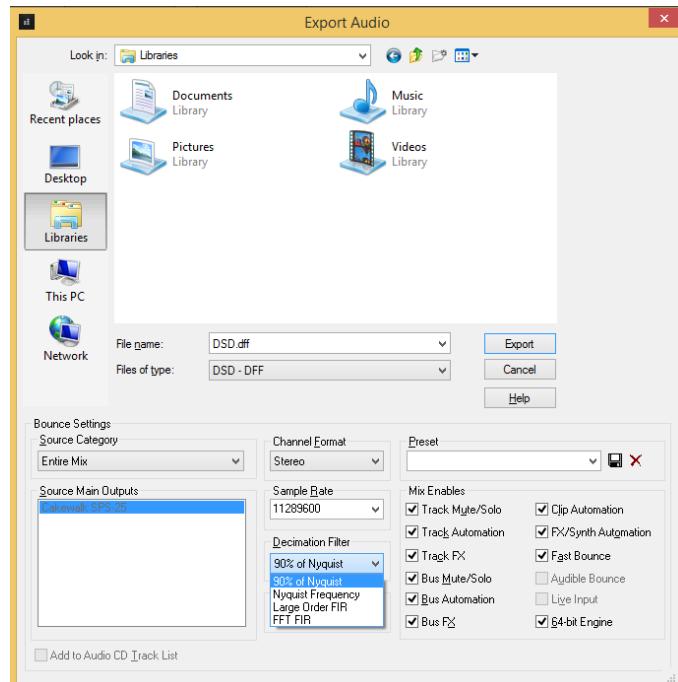
DSD Updates

Platinum

The enhancements in DSD import and export maintain SONAR's leadership in Direct Stream Digital technology.

HIGHER QUALITY DSD EXPORT

SONAR now handles 352.8 kHz as a project sample rate, as listed under Preferences > Driver settings. When anticipating DSD export, choosing a project sample rate of 352.8 kHz (assuming your audio interface supports it) allows PCM to DSD conversion where the up-sample frequency is lower than 384 kHz PCM. As a result, the sound quality when exported from 352.8 kHz to DSD is higher than when exporting from 384 kHz to DSD.

DSD IMPORT IMPROVEMENTS

Delta-sigma modulator improvements reduce noise when converting to DSD from a signal that exceeds 0 dBSACD.

SOUND QUALITY IMPROVEMENTS WITH DSD EXPORT

When exporting to a DSD format, you can now select one of four decimation filter modes in the DSD export dialog:

- 90% of Nyquist
- Nyquist Frequency
- Large order FIR
- FFT FIR

Each successive option gives higher quality conversion than the previous one, but may take longer to process.

Acoustic Guitar ProChannel Presets

Professional, Platinum

The piezo pickups used in acoustic guitars benefit greatly from proper equalization to compensate for resonances and frequency response anomalies. These ProChannel presets have been designed for Gibson Acoustic's J-15, J-29, J-35, J-45, and J-200 model acoustic guitars, all of which include piezo pickups. However, these presets can also be good matches for other models of acoustic guitars with piezo pickups—just try different presets until you find one that works with your guitar of choice.

There are three presets for each guitar, and three families of presets: Rhythm Natural, Articulated, and Big and Bright.

RHYTHM NATURAL

This shows the Rhythm Natural preset for the J-200. The main object is to lower two resonances from the piezo pickup, while retaining the low end and giving a slight boost in the 5 – 10 kHz range, but rolling off gently above 10 kHz to reduce some of the unnaturally high frequencies contributed by typical piezo pickups. The preset results in a natural guitar sound, like what you hear from the guitar when playing a rhythm guitar part. Note that this curve is best served by the QuadCurve EQ's **E-Type** mode.

ARTICULATED

The Articulated preset (for the J-45) is useful when accompanying other instruments that occupy the midrange, particularly vocals. It brings out finger picking and gives more note definition by emphasizing the upper mids and highs, while reducing the midrange to leave more "space" for other instruments. The **G-Type** EQ seems to sound best for this applications.

BIG AND BRIGHT

This is the Big and Bright curve for the J-200, which is already pretty big and bright. Again, the **G-Type** EQ works well; it adds more emphasis to the lows and highs while de-emphasizing the midrange. The "bigness" comes from a boost in the 100 – 200 Hz range. Lo Mid provides a general midrange cut to reduce any tendency toward "muddiness," while Hi Mid reduces the range where piezos tend to "honk." A high shelf augments the treble response.

CA-X Amp: Acoustic Piezo

Artist, Professional, Platinum

This amp compensates for the deficiencies of piezo pickups to bring out the true beauty of your acoustic guitar. While not intended for acoustic guitars with built-in EQ, if you can disable the EQ you'll likely find Acoustic Piezo a much better alternative.

Also, while not optimized for electric guitar, Acoustic Piezo can be very useful for clean, defined electric guitar sounds, especially with neck humbucker pickups.

THE MODULES

Compress adds gentle, unobtrusive, wideband compression.

Body Boom can either augment or diminish the low-end "boom" that's characteristic of most acoustic guitars.

Vocal Mode introduces compression in the vocal singing range to create more space for vocals. However, it can also tighten up the guitar sound by giving an apparent increase to the low and high frequencies.

Mid Freq, **Boost/Notch**, and **Q Lo/Hi** make up a semi-parametric EQ. This can help dramatically with reducing piezo "quack" or "honking." The easiest way to do this is:

1. Set **Notch/Boost** clockwise for maximum boost.
2. Sweep the **Mid Freq** control until you hear a massive peak.
3. Rotate Notch/Boost counter-clockwise to "tune out" the quack. Try this with **Q** in the **Lo** and **Hi** positions and decide which sounds best.

Also note that even if the piezo doesn't have any problematic resonances, this set of controls can alter the overall tone in useful ways.

Articulation accents frequencies that bring out the articulation when fingerpicking, and can also give more general definition.

Highs affects the highest frequencies. Turn clockwise for a glossy, bright sound or counter-clockwise to dull the sound somewhat.

Chorus adds a gentle chorus effect.

Extra Wide increases the stereo spread to widen the overall sound.

Reverb adds ambience to the sound, with the **Room/Hall** button choosing the reverb type.

Anderton Collection VoxTools Effect
Artist, Professional, Platinum

VoxTools (Platinum)
VoxTools (Artist+Professional)

Both versions have identical functionality.

VoxTools is a collection of six effects tailored specifically for vocals, with a "look" that recalls a rack of 500-series modules.

THE MODULES

The top row of buttons enables the various effects. Enabling an effect illuminates the button's middle "LED."

De-Plosive uses steep low-pass filtering to reduce plosive sounds ("p," "b," etc.). Turn **Plosive Cut** clockwise to reduce plosives. *Bonus application:* This can also tighten up vocals, as well as reduce the low frequency emphasis caused by the proximity effect.

Distortion is your ticket to industrial vocals and other nastiness. Turn up **Mayhem** to increase the distortion, or simply to scare people.

Cylon gives a sci-fi robot/pseudo-vocoder effect. **Pitch** varies the effect's timbre and frequency.

Megaphone provides "telephone" and "megaphone" voices by coupling steep low and high pass filters (like the way early Moog synthesizers created bandpass filters). **Frequency** determines where the two filter types meet.

Vibrato adds pitch modulation to held or sustained notes. **Rate** varies the vibrato frequency from 4 to 9 Hz.

ADT gives quick Automatic Double Tracking effects, *i.e.,* the sound of recording a vocal and then overdubbing it. Turning **Doubled Mix** clockwise increases the level of the doubled sound.

USING MULTIPLE MODULES

For most applications, you'll probably want to use individual effects. However, the order of effects was chosen to provide some useful combinations. For example, the **De-Plosive** effect is useful for lots of vocal applications, so it's first in the chain and is turned on by default when you open the effect. **Distortion** and **Megaphone** also make a good combination, as does **Vibrato** and **ADT**.

But that's not all—feel free to experiment, you never know what you'll find. For example, you can turn any drum loop into an electro wonderland with the **Distortion** and **Cylon** effects.

Hardgroove's Bass Loop Library
Artist, Professional, Platinum

Brian Hardgroove is a record producer, bassist, and member of the legendary Rock-n-Roll Hall of Fame hip-hop group Public Enemy. Hardgroove's musical repertoire spans the genres of hip-hop, soul, rhythm and blues, rock, and reggae. Although he's done productions that include the extraordinary talents of Chuck D (Public Enemy), Steven Tyler & Joe Perry (Aerosmith), Burning Spear (Grammy winner "Reggae Album of the Year" 2009), Marc Anthony, Supertramp, and The Fine Arts Militia, his most cherished work is the production of two of China's premier punk rock bands—Demerit and Brain Failure.
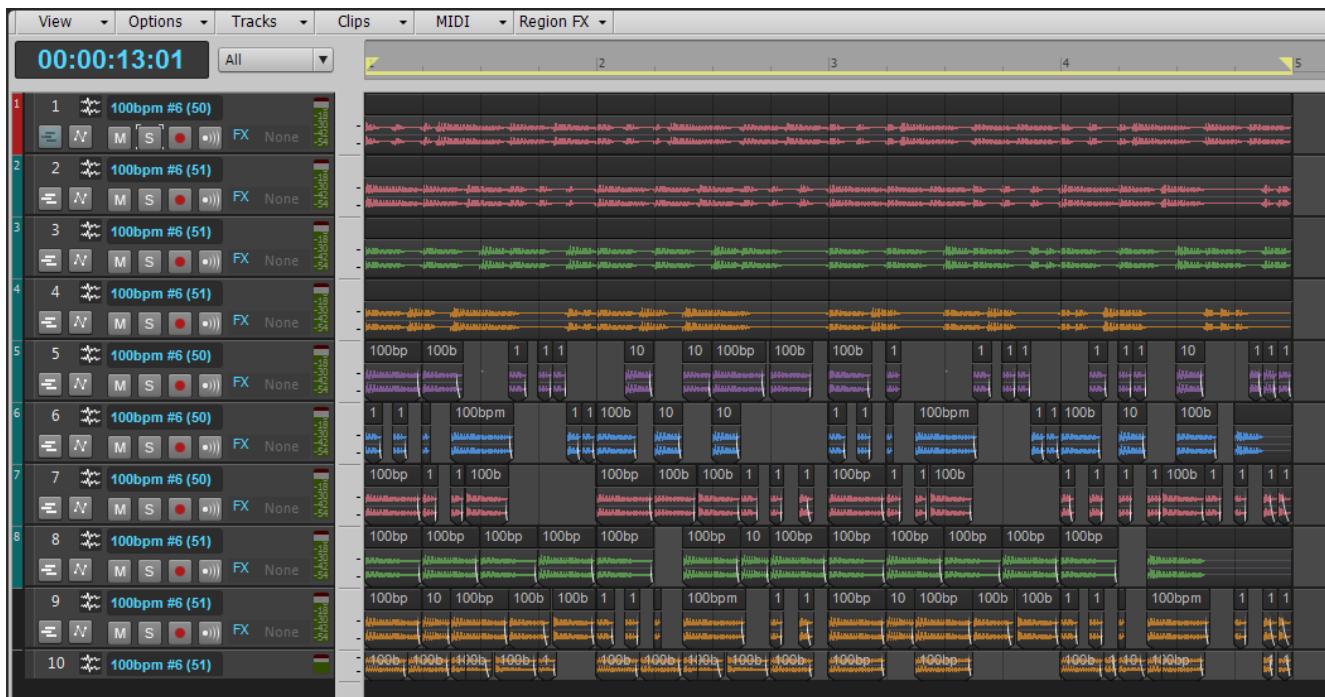
Brian serves as Artist in Residence with the Santa Fe University of Art and Design. Check out a video of Brian in action, and stay tuned for his upcoming project with Stewart Copeland (formerly with the Police) and Chuck D.

THE LOOPS

There are 150 unique loops in both REX and Groove Clip format (300 loops total). These are arranged in two groups of seven folders. Each group has its own native tempo (80 BPM and 100 BPM).

Each folder starts with a Hardgroove loop. Then in collaboration with Craig Anderton, additional variations on the main loop were created from this loop by cutting, pasting, re-arranging, and sometimes transposing notes. By retaining the original notes, tone, and style, these variations allow building up a song with variations that can be far more interesting than conventional repetitive loops. Just drag them in, and get inspired.

A snapshot of how loop variations are created in SONAR. The top loop is the original loop. The next three are finished variations, and the remaining loops are "under construction" to create new variations.

TRANSPOSING AND STRETCHING

Each loop has a "native" key, which is the letter prior to the RX2 or WAV suffix. Note that the REX and Groove Clip (WAV) formats have different strengths and limitations.

- REX files are optimum for playing at the native key, and stretch well over a wide range of tempos. REX files stretch more elegantly to slower tempos than WAV files. REX files do not follow Pitch marker changes in SONAR.

- Groove Clip files stretch over a wide range, but sound better when sped up compared to slowing them down. They also transpose well and follow Pitch Markers; the fidelity depends on how far you transpose from the native pitch.

MODIFYING THE LOOPS

These loops transpose very well in Melodyne. After choosing the tempo and importing the file, convert either format to a standard WAV file by bouncing the clip to itself. Now you can open it in Melodyne and transpose individual notes or even entire patterns.

You can also cut and paste loops to create variations, and there's an *additional* folder of single chromatic bass notes. Drop them into a track to augment the existing loops, or create sections from scratch.

Most importantly, now you can have Brian Hardgroove play bass on your session, and add his unique combination of R&B and rock flair to your own productions.

SPECIFICATIONS

- 150 unique loops in both REX (.rx2) and Groove Clip/Acidized WAV format (300 loops total)
- 374 MB of loop content
- Compact file size (44.1kHz sample rate, 16-bit resolution, dual mono)
- 62.6 MB (22 files) of individual chromatic bass notes
- 436 MB total content

Rapture Expansion Pack: Hardgroove Steinberger

Professional, Platinum

This instrument uses Brian Hardgroove's Steinberger bass samples as a point of departure, then wraps a bunch of presets around them.

INSTALLATION

After installing via the Cakewalk Command Center, **don't forget to type F5** the first time you open Rapture after the installation. This is necessary to refresh the program browser so the programs show up. The refresh may take a while if you have lots of expansion packs—be patient.

Note that if a program contains **MW**, that means mod wheel does something interesting. Wiggle it and find out!

CA-X Amp Tweaks
Artist, Professional, Platinum

Apparently Craig has been playing with his virtual soldering iron again, because the LFO rates for the **Classic** amp Tremolo and **Sparkle** amp Vibrato have been extended from a top rate of 8 Hz to 12 Hz, and **Blues Lead** now opens with Tremolo turned off. Also, based on popular demand (actually it was one comment in the forum, but that qualifies) Sparkle's initial preset has been tweaked so it sounds more "sparkly" when you first load it. Here are Sparkle's new initial settings.

Note that if you have any projects that use Sparkle, it will open unchanged. The new preset appears only when you load in a new instance.

Fixes
Artist, Professional, Platinum

And what would an update be without fixes? We'd like to give a special thanks to all of you who filed reports with steps to reproduce.

- Track controls could jump to previous value when overwriting automation
- Pattern Tool created erroneous gaps in data in some cases
- Middle mouse click HUD was not working in PRV under some circumstances
- Error when attempting to open a missing project from recent files menu
- Some Anderton CA-X amps would instantiate with wrong settings
- SONAR sometimes failed to migrate SONAR X3 settings
- Missing Console Emulator had graphical issues in new tracks until enabled
- MIDI data could not be selected via PRV Keyboard under some circumstances
- Mix Recall would crash with some projects containing AudioSnapped clips
- Melodyne clips could potentially become corrupted
- Under some circumstances launching SONAR in Safe Mode would revert the product to Demo
- Lasso in the PRV Controller Pane would sometimes perform an additive selection
- Zooming on take lanes would zoom to parent track
- AudioSnap Palette graphics were misaligned on non-English installs
- Dense projects may have scrolled sluggishly
- Errors when loading projects with Kontakt on some languages
- Drum map output prevented parent track from muting correctly
- Under some circumstances control surface help files were installed in incorrect language
- "Fades and Crossfades" section was missing in the documentation
- Documentation inaccuracy related to Browser drag-and-drop behavior
- Dimension Pro and Rapture serial numbers would not authorize automatically on systems with pre-existing installs
- Inaccurate tooltip was shown for the Automation Offset button
- Demo Mode notification links were incorrect
- Issues with looping playback when using MFX
- SONAR could potentially crash after recording in projects containing Region FX
- "About" now presents current membership status

SONAR Membership
"Braintree" Release eZine

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