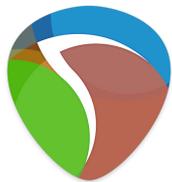


LiveとReaperの 微分音機能性の比較

微分音作曲において、各DAWの特筆すべき点



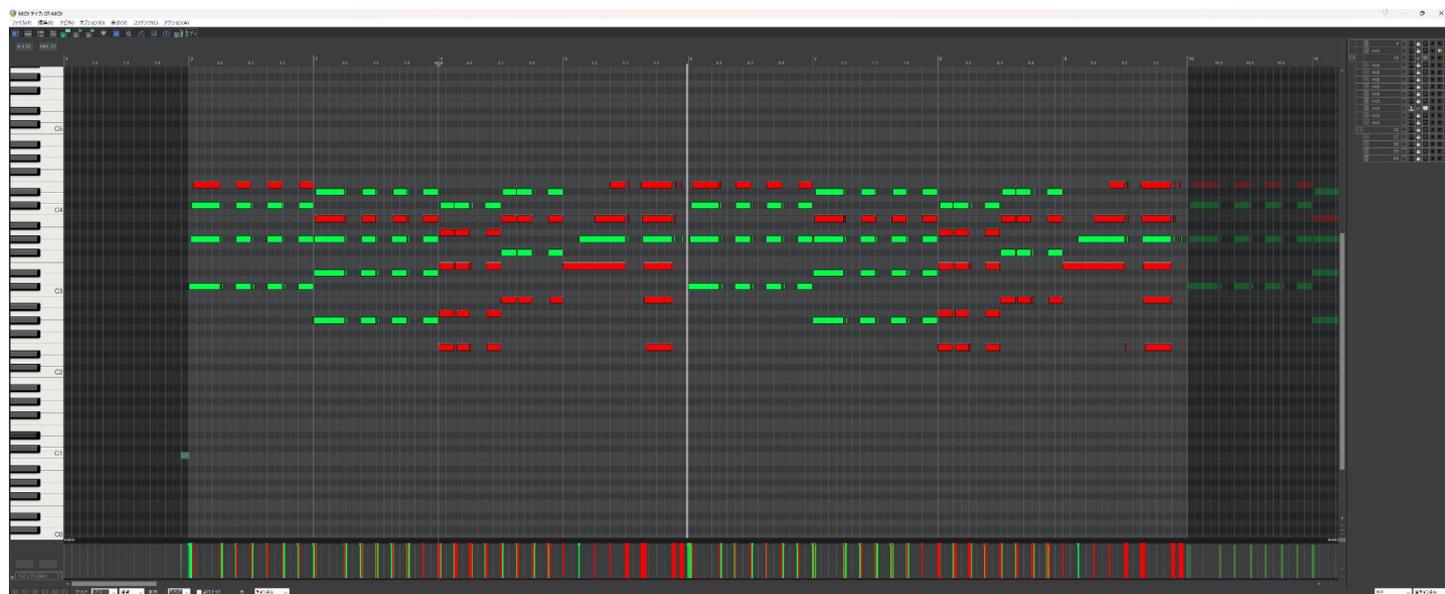
REAPER



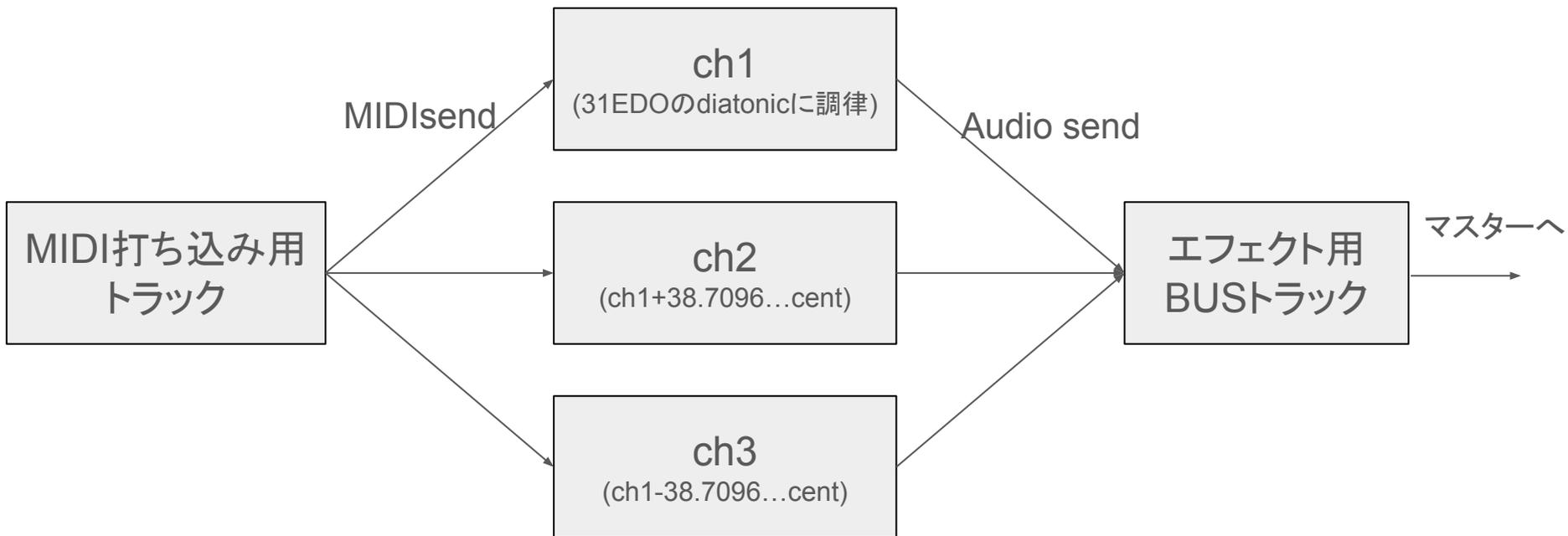
- ・MIDIチャンネルに対応
- ・MIDIのsend, receive機能
- ・アクションの設定より、簡単にショートカットを変更、追加が可能。
- ・Live独自の形式の調律ファイルにより、音律の変更が容易
- ・内蔵音源全てが微分音対応可能

REAPERでの打ち込み方法(31平均律の場合)

MIDI打ち込み用
トラック



REAPERでの打ち込み方法(31平均律の場合)



Liveでの打ち込み方法

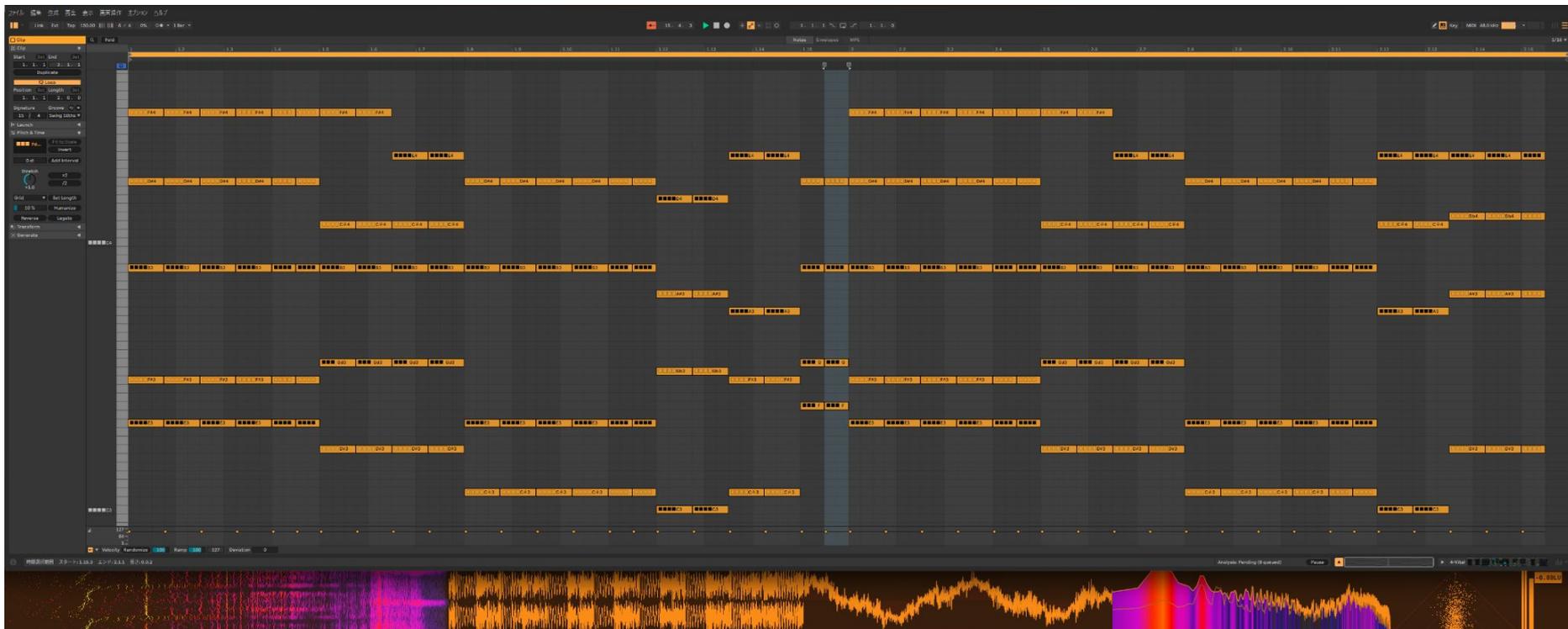
一般的な12平均律でのマッピング

| | | | | | | | | | | | |
|---|----|----|---|----|----|----|---|--|--|--|--|
| | bD | bE | | bG | bA | bB | | | | | |
| C | D | E | F | G | A | B | C | | | | |

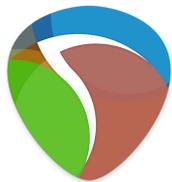
Liveで31平均律の調律ファイルを読み込んだ場合

| | | | | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|---|----|----|----|----|
| #C | bD | | #D | bE | E | | F | #F | | G | #G | dA | | #A | dB | | dC | #C | bD | |
| C | #C | dD | D | #D | dE | #E | dF | #F | bG | dG | #G | bA | A | #A | bB | B | #B | C | #C | dD |

実際に打ち込まれたMIDIの様子



各DAWの問題点



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- ・内蔵音源は使えない為、微分音に対応したVSTiプラグインが必須
 - ・チャンネルごとにトラックを割り当てる為、ごちゃごちゃするうえの負荷が大きい
- pcへ

- ・打ち込みのしづらさが神
- ・MIDIは128音しか使えない為、細かい音律ほど使える音域が狭くなる

微分音に対応したプラグインたち



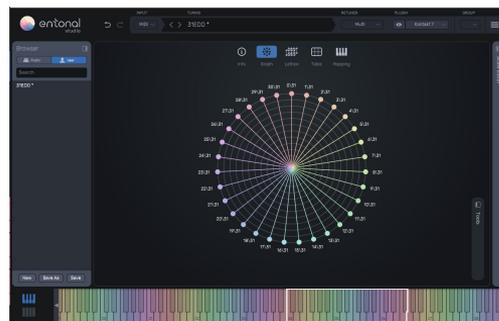
VITAL



KONTAKT



sforzando



entonal studio

.tunや.sclなどのファイルは以下の「Scale Workshop」で簡単に作成することができる。

(Live独自の.asclもいけるしKONTAKTのスク립トもいける。何？神？)

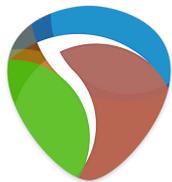
The screenshot displays the Scale Workshop application interface. The main window is titled "Untitled scale" and features a menu bar with options: File, Build Scale, Analysis, Lattice, Virtual Keyboard, Synth, MIDI/O, and Preferences. The central area contains a table with the following columns: #, Freq, Cents, Ratio, and Name. The table lists 12 scale steps, all with a frequency of 440.000Hz, a cent value of 0.000, and a ratio of 1.000. The names for these steps are: 44, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, and 88.

On the left side, there are several control panels: "New scale" and "Modify scale" buttons, "Scale data" section, "Tuning" section with "Base frequency" set to 440 Hz and "MIDI note for base frequency" set to 69, and "Key colors" section with a color palette and an "Auto" button.

On the right side, there is an "Export current settings" panel with a list of export options, each with a brief description:

- Share scale: Copy this scale's unique URL to clipboard
- AnaMark v1 tuning (.tun): Tuning file for various synths
- AnaMark v2 tuning (.tun): Tuning file for various synths
- Scale scale (.scl): Scale file for various synths. If you use this file without an accompanying .kbn file, most synths will assume your scale starts on C = 262Hz
- Scale keyboard mapping (.kbn): Maps an accompanying .scl file to start on a specific MIDI note and frequency
- Abelton scale (.ascl): Scale file for Ableton Live 12
- Max/MSP coll tuning (.txt): List of frequencies (.Hz) in a text file to load into a Max/MSP coll object
- PureData text tuning (.txt): List of frequencies (.Hz) in a text file to load into a PureData text object
- Kontakt tuning script (.txt): Tuning script for Native Instruments Kontakt. Some instrument libraries allow this custom script
- Soniccuture tuning file (.nka): For Soniccuture sample libraries
- Harmon pitch map (.fny): Envelope state file for the pitch envelope in Image-Line Harmon
- Sytrus pitch map (.fny): Envelope state file for the pitch envelope in Image-Line Sytrus
- Korg Sound Librarian scale (.mmlguns + others): Tuning formats for use with Monologues, Monologues, Monologues 20, and Prologue synthesizers
- Dellmask reference (.txt): List of "line tune" values for Dellmask
- Reaper note name map (.txt): Displays custom note names on Reaper's piano roll
- MTS Syntex Bulk Tuning Dump (.tys): Bulk export of a bulk tuning dump

まとめ



REAPER



- ・無料で利用できるうえ、拡張性も高い。
- ・MIDI打ち込みがかなり直感的で分かりやすい
- ・内蔵音源や内蔵エフェクトが心もとない

- ・DAW自体が微分音対応している為内蔵音源やエフェクトも問題なく利用できる
- ・MIDIチャンネルを利用しない打ち込み方式故に後からの移調が楽
- ・打ち込みしづらい。くそ。

ご清聴ありがとうございました。