

Audio App Plug-ins

VST

- Steinberg's Virtual Studio Technology
- Interface for integrating software instruments and effects into audio editors, and hard-disk recorders.

VST Instrument

- Generates audio
- A virtual synthesizer or virtual sampler

VST Effects

- Reverb Delay Compressor EQ
- Etc...
 - ...thousands available (try KVR.com)
 - A number of good ones are free.
 - Blockfish, DX Reverb Light
 - Generally specific to computer OS

VST MIDI Effects

- Processes MIDI messages prior to routing
- Examples:
 - To *transpose*
 - To create *arpeggios*
 - (An *arpeggio* is a typical climbing or dropping series of notes in a particular key. Like a chord that is more interesting. Heard in the background of much music and film.)

Which Apps can Use VST?

- Most!
- Studio One, Tracktion, Cubase, Ableton Live, FL Studio, Sonar, Sound Forge, Premiere, Audition
- Some, like Pro Tools, has you use a transition layer or "shim" software to allow VST plugins.

Competing Technologies

- *DirectX* from Microsoft
 - Plugins for audio and multimedia, game programming, etc.
 - Well known derivative: xBox
- *LADSPA, DSSI, LV2*
 - For Linux systems
- *AudioUnit (.AU or .Component)* from Apple
 - For OS X DAWs (Digital Audio Workstations)
- AAX (and earlier RTAS) from Pro Tools

Versions Can Conflict

- Plugins are written for either 32-bit or 64-bit operating systems.
- Currently, new computers all run 64-bit OS.
- But: DAWs are also 32-bit or 64-bit.
- So all three must match: OS + DAW + Plugin
 - Upgrade one of these, and try to open your old mixes!

ReWire

- Developed by Steinberg and Propellerhead
- Allows transfer of audio and MIDI data between programs (256 audio tracks and 4080 MIDI channels)
- Example: You can use a different program (not a plugin) to edit sound files in tracks in your DAW, while it is running.