

# SynthFont – the MIDI file SoundFont player.

© Kenneth Rundt, 2002 - 2012

Contact me at: [info@synthfont.com](mailto:info@synthfont.com)

Official Web page at: <http://www.synthfont.com>

---

## ***New in Version 1.613 (March 22<sup>nd</sup> 2012)***

### Bug fixes:

- When using "Relative to disk" paths for folders (in Options, Files and Folder), SynthFont would not always find the correct path
- The Mixer sliders went missing for some MIDI files
- When two or more controller values for the same controller coincided, SynthFont would make proper use of the first one only
- Fixed most other reported exception bugs

---

## ***New in Version 1.612 (February 3<sup>rd</sup> 2012)***

### Bug fixes:

- Since version 1.610 an exception occurred when activating Live Midi Input a second time if you did not have an arrangement loaded
- Since a few versions back, SynthFont would incorrectly attach the file extensions '.mid' instead of '.wav' to output files when writing a playlist to files and not using any compression mode; thus possibly overwriting the original midi file
- Version 1.611 introduced support for reading Unicode text from midi files. Writing of Unicode as ANSI did not succeed, however. Thus the text was lost.

---

## ***New in Version 1.611 (January 31<sup>st</sup> 2012)***

### Bug fixes:

- Version 1.610 would not let you create a new midi file
- The start/stop markers (green and red triangles) in the Playback Progress group in "Plug & Play" were difficult to move smoothly
- Some MIDI files that included Unicode text were not correctly read, resulting in that the Mixer scrollbar sliders went missing.

---

## ***New in Version 1.610 (January 18<sup>th</sup> 2012)***

### Bug fixes:

- Since version 1.600, changing the language using the Language menu item in the main toolbar did not change the language permanently
- SFZ file support was still lacking
- SynthFont Version "1" does not support multiple time signatures. From now on the last time signature defined before any notes will be used instead of the very last one defined in the file (which may be in the last bar...)
- Plus a number of other minor flaws.

### Interface:

- Changed keyboard shortcut: Shift+Ctrl+H is now "Show keyboard shortcuts" while Ctrl+H is still "Set default SoundFont file"

#### Features:

- You can now change SoundFonts while playing (and not only Presets)
- The Live MIDI Input playback mode has been enhanced: you can now assign VST Instruments and Effects and change SoundFonts and Presets, while active. Additionally the settings are retained while switching Input ON/OFF. You can furthermore save a special arrangement which can be used for this mode only, as it does not require a MIDI file. See main menu "File" item "Save Arrangement for MIDI Input mode...".
- The SoundFont Presets dialog has a new option "Lock when playing live from MIDI input". Check this to prevent MIDI program events from changing the Preset in Live MIDI Input playback mode
- The VST instruments dropdown menu ("VSTI" button in tracks header) has a new item: "Remove instrument from track" to quickly remove the VST instrument assigned to the track and restore the SoundFont previously used.
- In the VST editor window, the button "Lock" has a dropdown item: "Lock to MIDI channel 0". Use this if the VST instrument accepts midi channel 0 data only (like Clavia Lab).
- In the VST editor window, there is a new button "Reset", most useful for VST instruments. Use it to switch off the instrument of it continues to play notes even after the tune has ended
- SynthFont now keeps in memory VST Instruments and Effects when another Arrangement is loaded - if they are used in the other Arrangement - to speed up the loading of these
- Previously notes were ended abruptly when the note release envelope reached a lower limit. In most cases this was acceptable, but not if the number of notes playing was small. SynthFont now adds a short damping tail to the end to make it smoother.
- When playing to external MIDI devices through MIDI ports, SynthFont sends MIDI reset commands before, and after, playing.
- When using SFZ files, SynthFont can now automatically extract the required WAV files from OGG files (provided that the OggVorbis libraries OGG.DLL and VorbisFile.DLL are present). You can delete the OGG files when extracted.

---

### ***New in Version 1.605 (November 27<sup>th</sup> 2011)***

#### Bug fixes:

- In version 1.604, the SoundFont Presets list displayed when pressing the "SF2 Presets" button above the tracks did display the MIDI Programs and not the SoundFont Presets.
- Since version 1.603, when playing, the song length was sometimes incorrectly calculated - twice as long - making SynthFont stall when reaching 50%.

---

### ***New in Version 1.604 (November 24<sup>th</sup> 2011)***

#### Bug fixes:

- The SoundFont Presets list displayed when pressing the "SF2 Presets" button above the tracks was screwed up.
- File dialog boxes did not display correctly.

---

### ***New in Version 1.603 (November 23<sup>rd</sup> 2011)***

#### Bug fixes:

- Volume and BPM Automations did not work since some time back.

- The Automations were not always saved to the arrangement file.
- When you deleted the last track layer, the last midi track was also deleted.
- For a layer track with multiple MIDI program changes, you could not select each program separately to change SoundFont and/or Preset
- You could not change the midi channel of a layer track (now you can use Slot 2)
- Some Dynamic Data Exchange functions did not work after update to Unicode support
- Using Delete button to delete a note in the Pianoroll could cause an exception
- When calculating the length of the tune initially, the extra decay time was not taken into account
- It was impossible to locate new VST folders to be added
- Many edit boxes with Up/Down buttons did not work well
- Many other minor bugs, flaws, shortcomings, annoyances and gotchas fixed.

#### New features:

- You can now define in Setup / "Files and Folders " which Configuration file you want to use.

#### Other:

- The "MIDI Program" button in "Pug & Play" now again displays the available MIDI programs as a menu instead of as dialog window with a list.
- Improved looping of the tune when the stop position was not defined

---

### ***New in Version 1.602 (October 19<sup>th</sup> 2011)***

#### Bug fixes:

- In version 1.601, layer tracks were not correctly read from the Arrangement (due to the fix for Audio file tracks)

---

### ***New in Version 1.601 (October 19<sup>th</sup> 2011)***

#### Bug fixes:

- The standard Delphi 2010 TUpDown controller has a bug making it virtually useless. This is now replaced by another UpDown controller.
- Audio file tracks were not correctly read from the Arrangement.
- The Unicode support introduced with Delphi 2010 caused the Dynamic Data Exchange functions not to work.
- Some other minor bugs, flaws and irregularities fixed.

---

### ***New in Version 1.600 (October 3<sup>rd</sup> 2011)***

#### Bug fixes:

- A large number of reported bugs, flaws and irregularities fixed.

#### Other:

- All versions since 1.558 may have caused the anti-virus software Avast to think that SynthFont was potentially dangerous and suggested to run it in a sandbox. This was due to the new version of the EurekaLog exception report system introduced. This system has now been replaced with the JEDI debug system.
- Version 1.600 is compiled with Delphi version 2010, which has full support for Unicode.

---

## ***New in Version 1.561 (July 7<sup>th</sup> 2011)***

### Bug fixes:

- When a VST instrument was assigned to a track - any track - it was also assigned to the first track -the tempo track - causing SynthFont to send tempo changes to the VST instrument and not using them internally.
- Since version 1.553 track names were not always correctly read from a midi file
- Some VST instrument problems introduced by the Delphi 11(2007) compiler has been fixed
- Pressing the go forward button (for bar movement) repeatedly quickly could make SynthFont jump to the beginning of the song (also see below).

### New features:

- You can keep the go forward or backward buttons down to repeatedly go forward/backward one (or ten bars, with CTRL key pressed)
- When SynthFont detects bad notes (note ON event with missing note OFF event) it will now give you more options for what to do with the note.

---

## ***New in Version 1.560 (May 9<sup>th</sup> 2011)***

### Bug fixes:

- In the process of moving from the Delphi 7(2002) compiler to Delphi 11(2007) a few odd things happened, for instance, some string lists very emptied. For example the Small Buffer size list in Setup, which is used to set the buffer size when playing live and not using ASIO, was nullified, with adverse side effects, of course. Version 1.560 tries to fix all these (minor) issues.

---

## ***New in Version 1.559 (May 6<sup>th</sup> 2011)***

### Bug fixes:

- Some VST effects and instruments were not accepted by Version 1.558 [due to the change of compiler from Delphi 7(2002) to Delphi 11(2007)]

---

## ***New in Version 1.558 (May 5<sup>th</sup> 2011)***

### Bug fixes:

- SynthFont did occasionally not send Midi Program Change messages on to a VST instrument as it might have been flagged as "Locked" (i.e. not General Midi compatible), although the "Locked" button in the VST instrument editor was not pressed
- When assigning a VST instrument to several tracks at once, SynthFont did (since version 1.500) assign different instances to each track. Before version 1.500 the same single instance was assigned
- The Delete key did not delete selected notes in the Pianoroll
- Some GIGA and DLS files were not correctly interpreted

### Other:

- Replaced unmodified shortcut keys with modified ones, mostly using Shift+Ctrl as modifier (see file ShortKeys.txt)
- SynthFont had problems with midi files in which there were Midi Program Change messages for a particular channel spread over many tracks. SynthFont now moves all Program Changes to the track with the corresponding notes
- First version to be compiled with the Delphi 11(2007) compiler.

---

## ***New in Version 1.557 (April 14<sup>th</sup> 2011)***

### Bug fixes:

- Since version 1.552 some notes have tended to remain playing after note-off although they were mostly silent already and did not contribute anything. This caused the polyphony to rise and the system to slow down
- Master Fine and Coarse Tuning did not always work
- The two latest versions have often experienced a not fatal exception at start-up
- Exclusive Class for percussions did not work when short-cutting of overlapping notes was switched off
- A large number of other minor bugs fixed

---

## ***New in Version 1.556 (March 22<sup>nd</sup> 2011)***

### Bug fixes:

- Versions 1.554 and 1.555 had a bug causing it to draw the Pianoroll badly when the Grid Size was set to more than 1. Additionally the "Show Scale" checkbox in "Key Signature and Melodic Scale" did not work (notes were not grayed)
- Some midi files were not correctly read
- Keys used as shortcuts could not be used to navigate to files in the Explorer list
- After editing and saving a SoundFont group file in use by a track, the track presets were not updated
- The playback position in the Pianoroll did not respond to a user change of the BPM factor (in "Plug & Play")

### Other:

- The shortcut key for pause/resume playback used to be "W" or "Pause/Break". It is now only "Pause/Break".

---

## ***New in Version 1.555 (March 6<sup>th</sup> 2011)***

### Bug fixes:

- Version 1.554 had a nasty bug causing it to throw an exception at start-up when the Setup dialog was initially displayed. Function has been removed.
- The Scale Tuning feature for various temperaments has been broken since a few versions back.

---

## ***New in Version 1.554 (March 2<sup>nd</sup> 2011)***

### Bug fixes:

- If SynthFont cannot save the update file in the folder chosen for temporary files, SynthFont now tries to use another folder

- SynthFont could not read midi files created from Tyros style files
- SynthFont could not restore a VST instrument in an Arrangement file if the path contained parenthesis symbols "(" and/or ")"
- Since version 1.530 SynthFont may have decided to assign the SPDIF audio output as the default although not originally set so, resulting in no sound output
- Since version 1.540, you could not assign a SoundFont to a track in Live Midi Input mode
- Pitch Wheel range was not always correctly set from the Continuous Controllers
- Fixed a number of other reported bugs.

---

## ***New in Version 1.553 (February 22<sup>nd</sup> 2011)***

### Bug fixes:

- Fixed a minor but annoying bug that could prevent some midi type 0 files to be correctly read

---

## ***New in Version 1.552 (February 21<sup>st</sup> 2011)***

### Bug fixes:

- In version 1.520 an attempt was made to make the note release decay curve match the decay curve of my Creative Live! audio card. The curve became too steep. It is now correct
- Fixed a number of other reported bugs, for example problems with Pitch Wheel range settings and loops
- Slightly improved SFZ file support
- CPU load meter did not work on Windows 2000 (since version 1.522)
- In the virtual keyboard, the option to define the key velocity by using the mouse wheel did not always work.

---

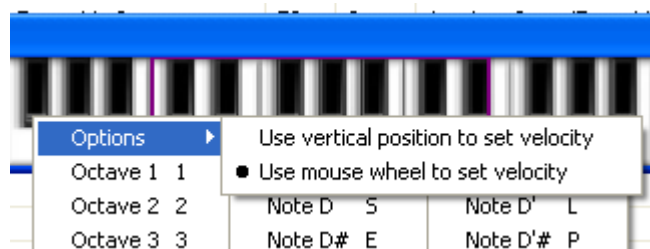
## ***New in Version 1.551 (February 7<sup>th</sup> 2011)***

### Bug fixes:

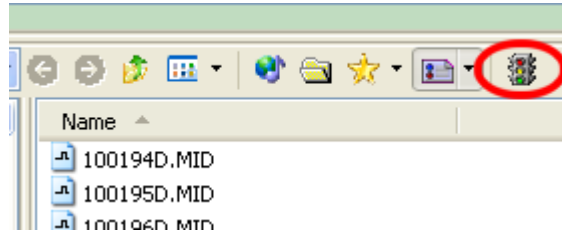
- The new Explorer control did not always behave as expected
- Some shortcut keys, like space bar for playing, were inactivated
- Exception reports never reached the SynthFont bug report server
- When minimizing to the Notification Area, the thread priority was set too low

### New features:

- In the virtual keyboard you now have the option to define the key velocity either by the vertical position of the mouse pointer (default) or by using the mouse wheel. To select method, use the right mouse button to pop up a menu with a new item called "Options".



- In the toolbar of the Explorer files list there is a new button with traffic lights. Check to have SynthFont play the tune immediately after loading it (you must double-click to load it). Also see the Autoplay checkbox in the "Play options" box at the top-right corner Files/Folders window.




---

## ***New in Version 1.550 (January 31<sup>st</sup> 2011)***

### Bug fixes:

- When selecting the German language, some additional File Open or Save dialog options were not visible (for instance settings for writing compressed audio files)
- A number of bugs fixed ... again

### New features:

- When playing to various compressed file formats (MP3, OGG, FLAC, APE; WMA), SynthFont now writes the compressed files directly, avoiding the initial creation of uncompressed WAV files. Additionally, also 24 bit and 32 bit files are allowed when using FLAC or APE.
- The Explorer in "Files / Folders" is now Windows 7 compatible (supports Libraries)
- New localization language: Italian, thanks to Andrea Bevilacqua.
- A new checkbox in the "Default SoundFont Override" dialog: "Disable all overrides". Check to temporarily disable all overrides (NOTE: state is not saved between sessions). Additionally, when importing a set of overrides from a file, all existing overrides are removed at first.
- The behavior of the solo play button in the Pianoroll has been extended so that you can change state also while playing

---

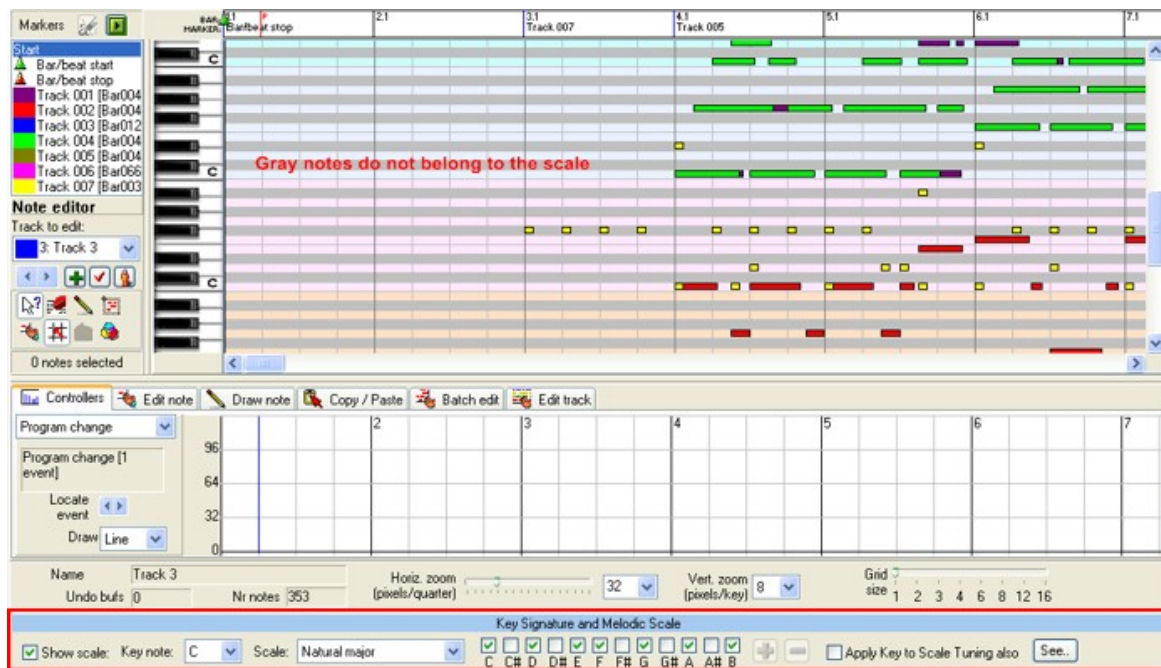
## ***New in Version 1.540 (December 30<sup>th</sup> 2010)***

### Bug fixes:

- The Live Midi Input Mode was broken in version 1.530
- Fixed some issues related to the Default SoundFont Override functionality
- Fixed some other minor bugs and irregularities

### New features:

- Added the midi file extension ".midi" to the list of known files (as an alternative to the old ".mid" extension)
- Added a function to display which notes belong to a certain scale in Pianoroll. Fully available to registered users only.



## ***New in Version 1.530 (December 21<sup>st</sup> 2010)***

### Bug fixes:

- Since version 1.500, the loudness level has been twice as high as before. Fixed.
- Since version 1.520, SynthFont 1.520 could not exit if closed while playing
- SynthFont might cause an exception when closing after playing on the virtual keyboard
- In Plug&Play, the VST effect "Bypass All" button worked the wrong way around
- The Sound File Manager would not scan sub-folders initially when adding a new folder to the list
- Fixed the routine for reading GIGA files

### New features:

- In Pianoroll you can now copy notes to Windows Clipboard, in text format. The data can be pasted into e.g. Notepad, edited, copied to the Clipboard and pasted back to SynthFont at a later time.
- The virtual keyboard: in most cases where the virtual keyboard is displayed (e.g. in the Sound File Manager) you can use keys A, W, S, E, D, F, T, G, Y, H, U, J, K, O, L, P on the PC's keyboard to play notes, and keys 1-9 to switch octave. Use right mouse button for a popup menu.
- New implementation of Legato. While Legato is switched ON, a note will be coupled to the next note of the same value if closer than the length of a 1/32 note. Unlike Pedal Hold, Legato will have no effect on the length of one single note or notes separated by more than 1/32. Between Legato coupled notes, no interruption will be heard, even if "Cut Notes Short" for handling of overlapping notes in Setup is turned on.
- Some more items in the context sensitive menu (right click) for the Pianoroll.
- Limited support for SFZ-files ("SoundFez" files). NOTE: OggVorbis samples are not supported but must at first be converted to WAV samples. The SFZ-file itself does not need to be changed.



- Support for MIDI Format 2 files. These files have several independent sequences in as many tracks. SynthFont expands each sequence into as many tracks as there are midi channels and loads the sequences in sequential order with appropriate location markers.

---

## ***New in Version 1.521 (November 25<sup>th</sup> 2010)***

### Bug fixes:

- SynthFont 1.520 might hang at the end of a song when playing with VST instruments.
- For DLS-files, the Envelope Sustain level was not always correctly interpreted.
- The Controllers graph did not always update correctly in version 1.520
- For a track layer, the SoundFont was not always display in the tracks list (showed "N/A")
- Fixed a number of other minor bugs

### New features:

- In the Pianoroll, when using the eraser to eras note you previous had to move over the note, now it is enough to click on it.
  - In the Pianoroll, under the list with tracks, there is a new Solo button. Press to play the selected track only when playing.
  - When creating a new midi file you were previously asked to save it at the same time. This no longer happens.
-

---

## ***New in Version 1.520 (November 23<sup>rd</sup> 2010)***

### Bug fixes:

- In Pianoroll, "Edit track", "Change time (position) of events", the limits were wrong when using "Move events BELOW the limit" or "Move events ABOVE the limit"
- Setting the velocity to 0 for a note actually deletes the note. Now you can not set it to lower than 1.
- The velocity of a note when using the virtual keyboard to play, is determined by the vertical position of the mouse pointer on the key. This value was incorrectly computed for black keys.
- Fixed a larger number of crash report bugs!

### New feature:

- In Pianoroll, when moving over the lines, a hint window will display the key number and note. Use the context menu (right mouse button) to hide/show this message.

---

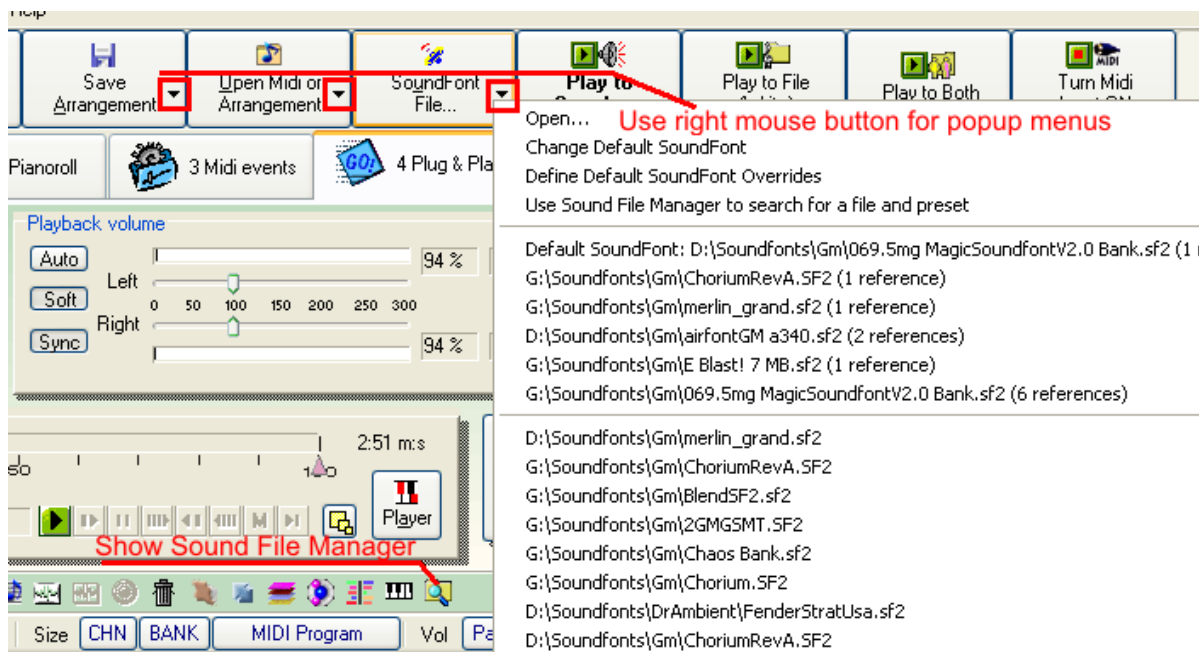
## ***New in Version 1.510 (October 27<sup>th</sup> 2010)***

### Bug fixes:

- SynthFont lost the path to it's program folder (where for instance all encoder libraries are)
- Fixed a larger number of crash report bugs!

### New features:

- Sound File Manager - scan through all of your folders with SoundFonts (or \*.GIG, \*.DLS, \*.PAT files) and listen to and compare. Use Ctrl+W or the new button in the tracks list header or a menu item to display this tool.
- In the Extended mixer the behavior of the up/down spin button has changed. Normal spin is now with larger increments. Hold CTRL key down to spin in smaller steps.



---

## ***New in Version 1.500 (October 14<sup>th</sup> 2010)***

### Bug fixes:

- A SoundFont Override was not correctly defined when preset was different from default
- SynthFont did not send Program Changed message to a midi out port
- SynthFont did not automatically save VST Effects program changes when saving the Arrangement
- Moving VST effects up/down while playing didn't work correctly
- Plus a multitude of minor issues ... too many to list here

### New features

- Much improved support for screen readers like JAWS from Freedom Scientific and the free NVDA (<http://www.nvda-project.org/>)
- Replaced some of Delphi's native StringGrids with Microsoft's ListViews and a number of Delphi's native SpeedButtons with normal buttons for better screen reader support
- You can now define a Default Scale Tuning (when no Arrangement is found)
- New Mixer, with two alternatives Standard - similar to as before and Extended (available to registered users only) with four parameters available
- Press Ctrl+H to see a large number of new (and old) keyboard shortcuts. (This list is in the file "ShortKeys.txt")

### These original version 1.420 features are now available:

- Bank change to a User Bank in live mode and the Bank Manager setting only "Either fine or coarse" selection (required for live mode)
- New Playback volume levels display
- More buffers for playing live without ASIO
- The Volume Offset in SoundFont Overrides is now connected to each Preset and not to the track (which is necessary for tracks with more than one Midi Program/Preset changes)

---

## ***New in Version 1.425 (July 14<sup>th</sup> 2010)***

### Bug fixes:

- SynthFont could not create MP3 files
- The stop marker in Playback range could not be reset to the end of the song after changing it once
- Fixed a few other reported bugs

---

## ***New in Version 1.424 (July 9<sup>th</sup> 2010)***

### Bug fixes:

- A VST instrument with a single instance used on several tracks would not close gracefully when playback was interrupted
- An exception could occur when closing SynthFont
- A few other reported minor bugs

---

## ***New in Version 1.423 (July 8<sup>th</sup> 2010)***

### Bug fixes:

- The displayed volume levels were twice too large
- SynthFont could not handle extremely long notes
- SynthFont did not correctly read midi files with a certain coding error (error handling)
- Fixed an issue with Pedal Hold on last note

- A few other minor bugs

Features:

- Pianoroll, "Draw note", a new checkbox #1: "Insert new note when moving notes and clicking on an empty space". Uncheck if you find this function awkward
- Pianoroll, "Draw note", a new checkbox #2: "Snap end to grid (and not length)". When changing note length, toggle to snap to standard lengths or the grid
- Since version 1.411 SynthFont removed notes shorter than 3. This no longer happens. All notes are retained, to be seen and edited.

These version 1.420 feature are not yet available in version 1.423:

- Bank change to a User Bank in live mode.
- Changed Playback volume levels display
- More buffers for playing live without ASIO
- The Volume Offset in SoundFont Overrides
- The Bank Manager "Either fine or coarse" selection

---

### ***New in Version 1.422 (June 29th 2010 - afternoon)***

Bug fixes:

- Version 1.421 had CPU usage monitoring problems on some Vista systems
- Bank selection did not work
- A few other minor bugs

---

### ***New in Version 1.421 (June 29th 2010 - morning)***

Bug fixes:

- Version 1.420 crashed quite often - randomly, for reasons still unknown
- When assigning a VST instrument to a track for midi channel X, the same instrument is now assigned to ALL tracks for midi channel X
- A number of other minor bugs and annoying inconsistencies fixed

Others:

- Localization function does not work on Windows 98
- A read-only midi file can no longer be saved to

These version 1.420 features are not available in version 1.421:

- Bank change to a User Bank in live mode.
- Pianoroll, "Draw note", a new checkbox.
- Changed handling of overlapping notes together with missing note-off events
- Changed Playback volume levels display
- More buffers for playing live without ASIO
- The Volume Offset in SoundFont Overrides
- The Bank Manager "Either fine or coarse" selection is still available

---

### ***New in Version 1.420 (June 10th 2010)***

Bug fixes:

- Version 1.412 did not save the Left and Right volume levels correctly in the arrangement
- Version 1.412 would reset the SoundFont choice to default when editing the midi file

- Pan Spread Defaults function didn't work (problem with Balance vs. Pan)
- Velocity Dynamics has been wrongly displayed with velocity response slopes in the range 1 through 6 while the correct range should have been 0 through 5, where 0 - 1 means a velocity response less than unity
- Since version 1.410, the Mixer Track Volume could be reset to 1.0 on some occasions
- In the SoundFont Group editor, the last melodic program was always blank
- Since some time back, double-clicking on a note in the Pianoroll did NOT make the note's track active
- Fixed a problem with SONiVOX VST instruments
- When playing from a Marker in Pianoroll, SynthFont would reset the Stop Marker to the end of the file

#### Others:

- Bank change to a User Bank now works also in live mode (use the new command "Reset all bank assignments (live mode)" in BANK menu, Plug&Play track list header, to reset banks)
- Pianoroll, "Draw note", a new checkbox: "Insert new note when moving notes and clicking on an empty space". Uncheck if you find this function awkward
- Still improved handling of overlapping notes together with missing note-off events
- Changed the Playback volume levels display; the display leaves a track of the peak level
- For playing live, without ASIO, you can now select to use up to 10 buffers to avoid stuttering (but get increased latency instead...)
- The Volume Offset in SoundFont Overrides no longer changes the Mixer Track Volume but has its own parameter
- The Bank Manager no longer lets you select "Either fine or coarse" bank selection controller. You must select "Bank Coarse (CC 0)" or "Bank Fine (CC 32)"

---

### ***New in Version 1.412 (May 20<sup>th</sup> 2010)***

#### Bug fixes:

- Version 1.411 caused an exception with Activate Midi Input
- Fixed a number of other minor bugs and inconsistencies at the same time

---

### ***New in Version 1.411 (May 19<sup>th</sup> 2010)***

#### Bug fixes:

- Version 1.410 sometimes showed an exception when playing stopped
- Version 1.410 did not always correctly set the volume levels
- Version 1.410 could not correctly use banks-within-banks defined in the Bank Manager
- Version 1.410 did not correctly render separated channel files

#### Features:

- You can now also define a relative Midi Editor path (Setup)

#### Others:

- Better handling of overlapping notes together with missing NOTE-OFF events

---

## ***New in Version 1.410 (May 11<sup>th</sup> 2010)***

### Bug fixes:

- Since version 1.400, the events list has not been able to show note-on/note-off pairs in bold
- Play-buttons were not initially enabled when starting up without loading a midi file but ready to play from a playlist
- Deleting files from the playlist didn't always work as expected
- Copy/paste notes between two midi files didn't work as expected if the PPQN-values were different
- In piano player the "less" button was always "less". Now it reads "Tracks" to show the list of tracks and "Hide" to hide it
- The Playback volume sliders now lock into even values (like 148%, 150%) and not odd values (like 149%, 151%)
- The Playback volume indicators were slow and choppy, often lagging behind - improved
- It is now easier to have a local copy of SynthFont on a flash drive, with a local copy of the configurations file "SynthFont.ini" and relative arrangement and data folders
- The first VST effect in the Default list was never included when opening a midi file
- Some other reported bugs fixed

### Others:

- The User Bank Manager has finally been updated to include "banks-within-banks" as it was originally designed, before introduction of the "SoundFont Override" feature.
- A third View mode introduced: "Midi Guru" - hides all three SoundFont editing panes

---

## ***New in Version 1.403 (April 12<sup>th</sup> 2010)***

### Bug fixes:

- BMP factor range was limited to 0.9 to 1.1 - fixed
- The "Default SoundFont Override" parameter "Volume Offset dB" was not used. It is now linked to the Volume level in the Mixer (if not already set in the arrangement).
- Some other reported bugs fixed

### Others:

- The User Bank Manager has been unavailable since version 1.400. Now it is back - in a simplified form.

---

## ***New in Version 1.402 (March 26<sup>th</sup> 2010)***

This is no longer a BETA version.

### Bug fixes:

- Fixed a number of reported bugs

### Others:

- Final German translation - thanks to Simon Tristan Papel
- The User Bank Manager feature is still (temporarily) turned off

---

## ***New in Version 1.401 (March 4<sup>th</sup> 2010)***

**Note: This is a BETA version!**

### Bug fixes:

- Fixed a bug in the localization function

---

## ***New in Version 1.400 (March 3<sup>rd</sup> 2010)***

**Note: This is a BETA version!**

### Bug fixes:

- Sorting of Arrangements in date order didn't work so well
- VST instruments would not finish off notes in the middle when stopping before reaching the end
- Saving of VST program data didn't always work and a major change in the method has been implemented
- The Hold Pedal was broken again!
- A couple of minor bugs fixed as well

### New features:

- Support for local languages - currently only Dutch (Belgium), thanks to Eli Dirkx. The technology is there so other languages can easily be added in the future. Some GUI changes had to be made in order to incorporate the somewhat longer Dutch texts.
- You can now set how long SynthFont will wait for the song to end. There is a new button with small, yellow squares in "Plug & Play", "Playback range". The setting is stored in the arrangement.

### Others:

- The user interface has gone through some changes
- The User Bank Manager feature has temporarily been turned off

---

## ***New in Version 1.345 (January 30<sup>th</sup> 2010)***

### Bug fixes:

- SynthFont always created a new empty arrangement when you pressed a "Play to..." button
- A couple of minor bugs fixed as well

---

## ***New in Version 1.344 (January 29<sup>th</sup> 2010)***

### Bug fixes:

- When the midi file in the arrangement was missing, SynthFont did not ask you to look for it
- You could not play track layers or assign SoundFonts to track layers
- In Pianoroll, Controllers, draw "Erase" did not actually erase everything
- In Pianoroll, grid size was not restored correctly when opening SynthFont
- When playing to a file from a defined position within the file the playback transport did not start from the position
- Removed some other reported bugs and annoyances

### New features:

- You can now also assign a VST instrument as a "Default SoundFont Override"

Others:

- Previously SynthFont would not allow to assign non-percussion midi channel numbers (others than 10 or 26) to layers for percussion tracks
- Setup Tuning Scales default was the first in the list and not "Equal Temperament"
- In Plug & Play, "Playback range", if bar/beat was activated one could increase the stop position to "infinity"
- The Wenc2.ocx library is no longer required for converting to Windows Media Audio.

---

***New in Version 1.343 (January 22<sup>nd</sup> 2010)***

Bug fixes:

- Some VST instruments, like Hypersonic 2 from Steinberg, were silent
- Removed some other minor bugs and annoyances

---

***New in Version 1.342 (January 4<sup>th</sup> 2010)***

Bug fixes:

- 1.341 lost the ability to restore the selected SoundFont from the Arrangement file
- In the Pianoroll, "Edit note", "Standard length" was often wrong
- TransposeAll values not displayed when reading back from the Arrangement file
- Removed some other minor bugs in "Midi Events"

New features:

- You can select notes in the Pianoroll by right-clicking in the virtual keyboard. Now you can unselect all notes as well with a second click

Others:

- "Delete notes" button in Pianoroll Batch Edit deletes all notes when no were selected. Warning message now displayed

Known issues:

The VST instrument Hypersonic 2 from Steinberg is mute. Will be fixed soon.

---

***New in Version 1.341 (December 29<sup>th</sup> 2009)***

Bug fixes:

- The new Vista/Win7 compatible program icons were lost
- Track layers were silent
- Vol & Pan initially not displayed in tracks list
- Default SoundFont Override did not work for tracks with multiple program changes

New features:

- New button in Pianoroll: Select/Unselect all notes in track
- It is now an option to store an altered track order in the midi file (and not in the Arrangement) when saving the Midi file



#### Others:

- Previously SynthFont always stored a METAEVENT for the track name in the midi file for all tracks when saving the file. Now it is only stored if a) previously stored or b) if the track name has been changed in the tracks list

---

### ***New in Version 1.340 (December 18<sup>th</sup> 2009)***

#### Bug fixes:

- The new color scheme choice "Even Greener" was not memorized
- SynthFont was not able to restore the position of the main window
- Version 1.330 lost the ability to read mute state from the arrangement
- Version 1.330 lost some buttons in Pianoroll/Note editor
- Some VST instruments produced no sound
- Improved the Pianoroll editor and fixed a number of bugs
- different loop points for linked stereo samples now plays correctly

#### New features:

- This version will only once show the missing WEnc.ocx warning if you click "Yes to All" in the dialog box.
- There is a function for finding lost midi files, called "Find lost Midi files", in the dropdown menu on the toolbar button "Open Midi or Arrangement".
- New button [+] in the Pianoroll window for adding a new midi track

---

### ***New in Version 1.330 (November 29<sup>th</sup> 2009)***

#### Bug fixes:

- Often you couldn't play a midi file directly after saving it
- Problem when shifting selected notes up/down in the Pianoroll
- The track order arrangement feature didn't work very well
- Problem with Pitch Band in midi files created with GuitarPro
- The buttons in the track list header would not always be correctly aligned
- Sometimes it took too much time and CPU resources to update the tracks list
- Improved emptying of VST effects and instruments when playing has stopped
- Improved GIGA file support (some GIGA files had additional noise). Maestro\_concert\_grand\_v2 also works now!
- In some cases the song length calculated before playing was incorrect
- Exception when restoring from minimized to the notification area
- Plus the normal bug fixes, as found in all those exception reports (thanks!)
- And finally, fixed a large number of minor bugs and inconsistencies

#### New features:

- Two new checkboxes in "Files & Folders": "Keep visible" - check to keep Files & Folders visible when double-clicking to open a file; and "Autoplay" - check to start playing immediately after double-clicking to open a file
- Splitting a track with events for more than one midi channel is now optional the first time you open the midi file

- One new color scheme: "Even greener". This is equal to SynthFont's original Green scheme. Also the other schemes have been slightly changed.
- New icons!

---

## ***New in Version 1.326 (November 3<sup>rd</sup> 2009)***

### Bug fixes:

- The normal bug fixes
- You can now define where to save VST effects settings: in the Arrangement or in the SynthFont.ini Configuration Settings file (for common use)
- Lots of other minor improvements

---

## ***New in Version 1.325 (October 15<sup>th</sup> 2009)***

### Bug fixes:

- The normal bug fixes
- In version 1.322 a not so good change was made: tempo changes in all other tracks but track 1 were ignored. In this version all tempo changes are moved to track 1 instead.

---

## ***New in Version 1.324 (October 3<sup>rd</sup> 2009)***

### Bug fixes:

- A silly bug introduced in version 1.323 made Live Input Mode inoperable

---

## ***New in Version 1.323 (October 1<sup>st</sup> 2009)***

### Bug fixes:

- A silly bug introduced in version 1.321 made program changes sometimes come too late
- Fixed a large number of other bugs
- The Karaoke Lyrics form was made useless in version 1.316
- In Pianoroll, Batch edit, Change note length section: when selecting a "Standard lengths" value, the value "Change to" was not always correct

### New feature:

- Introduced the first Custom Feature supported by Viena: "Always play sample to end". When checked, note off events will not have any effect, the sample will play to end. Loops are not supported!

Custom features are supported by ALL products in the SynthFont series. Other programs should be capable of ignoring these features.

---

## ***New in Version 1.322 (September 4<sup>th</sup> 2009)***

### Bug fixes:

- Fixed a bug causing an exception when closing Live Input mode

### Other issues:

- By default track 1 is the Tempo track. SynthFont has up to now also accepted tempo changes in all other tracks. This has been changed.

---

## ***New in Version 1.321 (September 3<sup>rd</sup> 2009)***

### Bug fixes:

- Some bugs related to the Live Input mode, for example, you can now change both SoundFont and Preset for a temporary track
- A few other reported bugs fixed

### New feature:

- When drawing in the Controllers window in Pianoroll, the first mouse click will "snap to the grid" if the "Snap to grid" button is checked

---

## ***New in Version 1.320 (August 17<sup>th</sup> 2009)***

### Bug fixes:

- Tried to fix a few bugs related to the Bank Manager for SoundFont Banks and the SoundFont Pool
- A few reported exceptions fixed

---

## ***New in Version 1.319 (August 14<sup>th</sup> 2009)***

### Bug fixes:

- When playing a song, pushing the pause button and then the stop button, SynthFont would hang.
- Some SoundFonts in a multi-program track were not found when opening an Arrangement
- A number of reported exceptions fixed!

---

## ***New in Version 1.318 (August 3<sup>rd</sup> 2009)***

### Bug fixes:

- Converting a list of midi files to WMA wasn't allowed
- When opening an arrangement, the VST effects always default to the mix option, even if saved as "replace"
- Since a few versions back SynthFont hasn't handled track layers correctly
- Tried to fix a few more reported exception bugs

---

## ***New in Version 1.317 (July 26<sup>th</sup> 2009)***

### Bug fixes:

- Improved handling of VST effects and instruments
- Fixed the faulty behavior of CC Pedal Hold introduced in 1.316
- Fixed some Karaoke Lyrics window bugs
- Midi Program 127, Gunshot, was not accepted
- The "I want to pay my fair share and become a registered supporter!" button did not work
- Tried to fix a few more reported exception bugs

---

## ***New in Version 1.316 (June 24<sup>th</sup> 2009)***

### Bug fixes:

- The Tuning Scale offsets in Setup could not be edited correctly
- Changed the behavior of CC Pedal Hold to avoid piling up notes
- Recording to an audio track fixed
- Tried to fix a few more reported exception bugs

---

## ***New in Version 1.315 (June 6<sup>th</sup> 2009)***

### Bug fixes:

- A major flaw fixed: SynthFont could not find the home folder!

---

## ***New in Version 1.314 (June 5<sup>th</sup> 2009)***

### Bug fixes:

- All versions since 1.300 have failed to respond correctly to Midi Program Change events!
- The very strange MP3 conversion bug now finally(?) fixed
- Editing of Midi Program Change events in the Events List not working correctly
- Tried to fix a few more reported exception bugs

---

## ***New in Version 1.313 (May 29<sup>th</sup> 2009)***

### Bug fixes:

- The fix for 24 bit GIGA files in 1.312 made the program unable to read standard 16 bit stereo GIGA files
- Made one more attempt to find the reason for the elusive MP3 encoding error randomly popping up. There are now two alternative MP3 encoding libraries "lame\_enc.dll" and "bladeenc.dll". If you do not need MP3 encoding capabilities, you can safely remove both files.
- Tried to fix a few reported exception bugs

---

## ***New in Version 1.312 (May 26<sup>th</sup> 2009, afternoon session)***

### Bug fixes:

- The version number in 1.311 was scrambled (was 1.3.1.1)
- Toontrack Ezdrummer, and possibility some other VST instruments did not work

---

## ***New in Version 1.311 (May 26<sup>th</sup> 2009, morning session)***

### Bug fixes:

- On some systems the program would get stuck in an infinite loop at start-up

---

## ***New in Version 1.310 (May 24<sup>th</sup> 2009)***

### Bug fixes:

- Improved handling of VST effects. In some case the VST window would be lost
- SynthFont can now read 24 bit GIGA files
- Fixed a VST Instrument bug when starting to play from the middle of the song
- Removed some reported exception bugs

### New features:

- Added some minor MIDI editing features
- You can now also change the Time Signature in the Events List
- You can copy and paste events in the Events List
- In Pianoroll, the "Change time (position) of events" function in "Edit Track" has been extended

---

## ***New in Version 1.309 (May 17<sup>th</sup> 2009)***

### Bug fixes:

- Removed some reported exception bugs

---

## ***New in Version 1.308 (May 15<sup>th</sup> 2009)***

### Bug fixes:

- Removed some reported exception bugs
- Fixed a few buffer overruns
- Minor user interface improvements

---

## ***New in Version 1.307 (May 14<sup>th</sup> 2009)***

### Bug fixes:

- Version 1.306 had a very BAD BUG making it impossible to use in Live Input Mode.

---

## ***New in Version 1.306 (May 13<sup>th</sup> 2009)***

### Bug fixes:

- On some systems the program would enter into an infinite loop during start-up and never show the main window
- When resuming playback after a pause the the Playback Progress showed the wrong, still running, value
- Full support for Windows XP/Vista themes
- Fixed a number of other user interface glitches
- When opening a midi file "AAA", the arrangement file "AAA" was also read even if it referred to a different midi file. Fixed.
- Fixed quite a few reported exceptions

---

## ***New in Version 1.305 (May 7<sup>th</sup> 2009)***

### Bug fixes:

- In version 1.304 some notes with low velocities became inaudible when using the standard SoundFont SYNTHGMS!
- Fixed quite a few reported exceptions
- Improved the new mechanisms for handling VST Effects and Instruments
- Fixed the "Edit Track" / "Change time positions of all events" in Pianoroll
- Changed the open SoundFont/preview Preset function ("Play a sample") to "play on keyboard"

---

## ***New in Version 1.304 (April 30<sup>th</sup> 2009)***

### Bug fixes:

- Fixed some reported exceptions
- Completely new mechanisms for handling VST Effects and Instruments! I recommend that you rescan your VST folders if you feel that SynthFont has not been able to find some VST files before.

---

## ***New in Version 1.303 (April 27<sup>th</sup> 2009)***

### Bug fixes:

- Fixed some reported exceptions

---

## ***New in Version 1.302 (April 24<sup>th</sup> 2009)***

### Bug fixes:

- Fixed some reported exceptions

---

## ***New in Version 1.301 (April 24<sup>th</sup> 2009)***

### Bug fixes:

- Version 1.300 seemed to have a problem with the WMA library on startup if you had installed the update only. Always on Linux/Wine systems as well.
- Fixed some other bugs reported since launch of 1.300

---

## ***New in Version 1.300 (April 22<sup>nd</sup> 2009)***

### Bug fixes:

- Versions 1.200-1.202 did not always initialize correctly at start-up
- Sometimes the Mixer faders did not update the correct track
- Removed some "Cannot focus a disabled window" errors
- Fixed a DLS-file read bug
- Some Non-registered Parameter Controllers were incorrectly interpreted
- Would not scan for VST effects in sub-folders if the main folder was empty
- Note length will again change while note is sounding as Beats per Minute change
- Looping is now much more accurate
- Better sync with VST instruments
- Fixed a few Pianoroll editor bugs (e.g. move note up/down)
- Smoother Pianoroll scrolling
- No lyrics for some Karaoke files - or ordinary midi files with lyrics.
- The program caption would not always display the name of the current arrangement file
- Track layers and audio tracks were not read back from the arrangement file
- The toolbar above the tracks list was not activated after playing to a file
- The SoundFont generators ModEnvToPitch and ModEnvToFilterFc did not always work as expected
- You could not change the MIDI Out Port state for more then one track at a time
- MIDI Out exception when stopping rendering engine
- Fast forwarding with MIDI Out active wasn't really doing so well
- Playing a Preset sample to the MIDI Out Port from the Preset and File Open dialogs did not work - preset did not change
- A few other minor bugs reported by Eurekalog

### Features:

- A much improved Karaoke feature
- Option to select "Cancel" and return to the application when quitting then program and SynthFont asks to save the arrangement
- Added a "Clear row" button to the SoundFonts Override dialog
- Added a confirmation dialog when SynthFont wants to use a SoundFont bank from the list of User Banks
- Play Control window can be made transparent
- Playing order for the two Playlists (Favorites and Folder) is now saved. Many other changes in the Playlist feature.
- In File Open dialog a now switch: "Read data from Arrangement file". Uncheck to avoid reading a bad arrangement and only the midi file.
- You can use the mouse wheel to scroll Pianoroll up/down
- Pianoroll editing functions updated. If you click on an existing note while inserting new notes, then move note function will be

activated. if you click in an empty space with the move note function activated, a new note will be inserted

- New button in the Tracks list header: "MIDI Program". Use this to change the actual midi program number in the midi file, and not in the arrangement.
- New button in Pianoroll, above list of markers, to start playing from the selected marker
- Plus many more minor improvements!

### **SynthFont has been updated a lot lately. Why? A word of explanation may be in place:**

Since version 1.200 SynthFont has gone through a number of problematic phases. I am sorry about that and ask all my loyal users out there to forgive me for publishing buggy software.

There is an explanation, and it is a technical one: In November 2008 I realized I will have to introduce support for Dual Core processors. Or actually, support for the more general case of a Multi Core processor. For this purpose I was forced to rewrite the rendering engine rather completely, as the only way to support multiple CPU cores is to have multiple rendering threads. Up to version 1.200 there was only one single thread. The first step required, in order to create multiple threads, was to take all real time functions, like showing the playback position and passing data to external devices through a midi out port, and put those into a separated thread. The next step would be to divide the remaining functions in the original thread into two or more threads. I tried to do this for version 1.200, but due to the technical problems I got into with version 1.200 I have not yet been able to complete this second step. Thus there is still no support for multiple cores in the latest versions. But there will be, as soon as I have removed most of the critical bugs introduced into the system because of the rather dramatic changes I have been forced to make. So, I want to ask all of you for your understanding and thank you all for your support in acting like "guinea pigs" for me at this moment.

---

## ***New in Version 1.124 (December 2<sup>nd</sup> 2008)***

**This version replaced the version 1.202.**

### Bug fixes:

- Tried to fixed an obscure bug that made SynthFont unable to convert WAV to MP3 on some Vista computers
- In version 1.123 the virtual keyboard button in the tracks toolbar on Plug and Play screen did not work
- In version 1.123 the Metronome button on Plug and Play screen - once pressed in it stayed there
- The song length was calculated wrongly while playing
- The Bar/Beat Stop position couldn't be set to the last beat in a measure
- The Volume Automation was not saved for the right channel
- In some cases the Pianoroll would initially not point to any existing track. Adding notes would result in an exception
- Track layers were not read back from the Arrangement file
- The SoundFont generators ModEnvToPitch and ModEnvToFilterFc did not always work as expected
- When Windows was set to hide known file extensions, the preset list in the file open dialog would be empty

---

## ***New in Version 1.202 (November 24<sup>th</sup> 2008 - withdrawn)***

### Bug fixes:

- The program caption would not always display the name of the current arrangement file
- Track layers and audio tracks were not read back from the arrangement file

- The toolbar above the tracks list was not activated after playing to a file
- The SoundFont generators ModEnvToPitch and ModEnvToFilterFc did not always work as expected
- You could not change the MIDI Out Port state for more than one track at a time
- MIDI Out exception when stopping rendering engine
- Fast forwarding with MIDI Out active wasn't really doing so well
- Playing a Preset sample to the MIDI Out Port from the Preset and File Open dialogs did not work - preset did not change
- A few minor "anomalies"
- A few other minor bugs reported by EurekaLog

---

## ***New in Version 1.201 (November 20<sup>th</sup> 2008)***

### Bug fixes:

- An exception occurred randomly at start up
- SynthFont could not start up minimized
- The tracks list was not always updated automatically
- When Windows was set to hide known file extensions, the preset list in the file open dialog would be empty
- Some SoundFont Presets were incorrectly played
- The registration code could not be changed
- A few other minor bugs

### Other:

- Setup/Options item "Always ask to save files when exiting or opening another file" changed to "Always ask to save changed Arrangement files when exiting or opening another file"

---

## ***New in Version 1.200 (November 18<sup>th</sup> 2008)***

### Bug fixes:

- In version 1.123 the Metronome button on Plug and Play screen - once pressed in it stayed there
- Better synch between audio and the Pianoroll
- Fixed a potential memory leak
- The song length was calculated wrongly while playing
- The Bar/Beat Stop position couldn't be set to the last beat in a measure
- The Volume Automation was not save for the right channel
- Better timings when creating Automations
- In some cases the Pianoroll would initially not point to any existing track. Adding notes would result in an exception
- Fixed some Pianoroll/Marker bugs
- ... and a lot of other minor bugs

### Advanced Features:

**"Advanced Features" are always available to all registered users. Unregistered users can test these features freely during ten executions of the program!**

- A Player Piano keyboard for showing the notes being played in real time
- SynthFont can now be minimized to Windows Notification Area. (See Setup/Options or main menu 'View' to switch ON/OFF)
- When rendering to a file only, with SynthFont minimized to the Notification Area, the main thread priority is set to 'Idle'. The file conversion window is not displayed.



- You can Freeze the default BPM speed factor to a value <> 1.0
- Easy to use function for creating SoundFont/Preset combinations overriding the default SoundFont/Preset (e.g. use a GIGA file instead)
- Function to remove surplus Program Change/Controller/Tempo changes in Events list view
- Output track data to a MIDI port for playing on an external synthesizer instead of the internal one
- You can communicate with SynthFont using Windows Dynamic Data Exchange protocol (ask about my DDE offer!)
- In the SoundFont file Open and Preset dialogs there is a new button below the list of instruments (=Presets). Push the button to play the current track with the current instrument. You can change the instrument while playing. In the file Open dialog you can also change the SoundFont (but you must stop and start playing again then).

#### Other minor changes (for all users):

- When opening SynthFont without the option to automatically open the last tune, SynthFont used to display a file selection window. This has now been removed. Instead the Files & Folders page is displayed
- The program now remembers the tracks table column widths in the Plug & Play screen.
- The program now remembers the choice of files to play (open file only, the playlist, files in a folder)
- In earlier versions there has been an option to play only selected files in a folder, now you can also play only selected files in the playlist

---

### ***New in Version 1.123 (October 7<sup>th</sup> 2008)***

#### Bug fixes:

- Manual Preset selection did not work
- Playback would stop too early for some combinations of Stop Bar/Beat values. These values were not always updated correctly.

---

### ***New in Version 1.122 (October 3<sup>rd</sup> 2008)***

#### Bug fixes:

- There was a problem reading velocity layers in some GIGA files
- SynthFont crashed on some systems if the LAME encoder library was not present
- Fixed some other minor issues

#### User interface:

- A "play next song" button introduced to skip to the next song in the playlist
- The selection to play from a playlist now "sticks" after the last song

---

### ***New in Version 1.121 (July 24<sup>th</sup> 2008)***

#### Bug fixes:

- Bad timer for the Painoroll scroll and Metronome ticking!
- Better Bank Manager - less questions asked
- Some other minor bugs (like mixer settings were not read back from the arrangement)

#### User interface:

- Changed some icons and other stuff

---

### ***New in Version 1.120 (July 11<sup>th</sup> 2008)***

#### Bug fixes:

- Pitch Wheel (a "Channel Voice" message) and ModWheel (Continuous Controller #1) were not sounding correctly.
- For some SoundFonts the polyphony voice count would become too high
- Some other minor bugs

#### New features:

- ModWheel (CC #1, see bug fixes) now takes it's frequency from the SoundFont's VibLFO ('new school') or ModLFO ('old school').
- Improved scrolling of the Pianoroll while playing. Not good, but improved.
- Option to turn off the message that says "This SoundFont contains ROM samples and may not render properly"
- All conversion file formats MP3, OGG, FLAC, APE and WMA are now optional. To remove a format you have to remove the supporting library file(s):

- MP3 - lame\_enc.dll
- OGG - one of: ogg.dll, vorbis.dll, vorbisenc.dll or vorbisfile.dll
- FLAC - flac.exe
- APE - MACDll.dll
- WMA - WEnc2.ocx

#### User interface:

- Added one more button to the toolbar, "SoundFont File...", as many users did not locate this button (called "File...") in the tracks list header
- Changed the name of the "1 Files" page to "1 Files & Folders" and the "4 Tracks" page to "4 Plug & Play"
- The "Nag" screen has been changed. For unregistered users the policy is this: The screen is no longer displayed before you have used the program 20 times, after which it will be displayed randomly half of the time; and every time after 50 uses.
- No more warnings for crippled default GM SoundFont when starting up
- The default focused control in Pianoroll is now the Markers list and not the horizontal zoom
- All conversion file formats MP3, OGG, FLAC, APE and WMA are now optional. To remove a format you have to remove the supporting library file(s):

- MP3 - lame\_enc.dll
- OGG - one of: ogg.dll, vorbis.dll, vorbisenc.dll or vorbisfile.dll
- FLAC - flac.exe
- APE - MACDll.dll
- WMA - Wenc2.ocx

---

### ***Viena was updated to version 0.620***

#### Bug fixes:

- Just some minor ones

#### New features:

- Use Shift+Left/Right to move quickly to the next/previous cell when editing splits in the table directly

---

## ***VSTSynthFont was updated to version 1.030***

### Bug fixes:

- Buffer overflow when the VST was called rapidly with output buffers smaller than 256 samples.
- Some dynamic memory pointers were not freed

### New features:

- Vib or Mod LFO frequency now also used for CC Mod Wheel. See the Synth page in Options.
- Option to have 1 output (the normal), 3 outputs (normal + reverb and chorus) or 16 outputs (one for each channel). See the Output page in Options.
- The choice of using the slower but better method called "Perfect Pitch" is now a track feature.
- Some speed improvements achieved

---

## ***New in Version 1.113 (April 25<sup>th</sup> 2008)***

### Bug fixes:

- Short release times often became too short
- Tr# - Arrange tracks - button not enabled again after playing
- Some serious bugs fixed in the Pianoroll editor
- Continuous Controller "CTRL Coarse" not required to be defined for CC data
- Deleting a midi track did not remove it from the list in Pianoroll
- Pianoroll CC edit of "Bank Select (Fine)" possible but not "Bank Select (Course)"
- User Banks were mostly ignored when playing
- After a Midi Channel switch between slots 1..16 and 17..32, the "Chnl" popup menu was not updated
- Improved Legato (CC # 68)
- Midi channel number will be as added to new tracks automatically if not manually assigned

### New features:

- In the Open button's drop-down menu list of Arrangements you can select to sort Arrangements by name or by time

### Known issues:

- The VST instrument Garritan Personal Orchestra does not work
- When rendering large numbers of midi files to audio files, the committed RAM memory grows all the time. After a few hundred files you may need to restart SynthFont.

---

## ***New in Version 1.112 (March 23<sup>rd</sup> 2008)***

### Bug fixes:

- On some systems the program crashed immediately

---

## ***New in Version 1.111 (March 17<sup>th</sup> 2008)***

### Bug fixes:

- VST Instruments were at most 0.1 sec out of sync
- When finished playing, the default SoundFont was displayed in the Tracks list (under File../VSTi) instead of the selected VST Instrument
- When finished playing, some buttons were not enabled again

Known issue:

- The VST instrument Garritan Personal Orchestra does not work

---

***New in Version 1.110 (March 14<sup>th</sup> 2008)***

Bug fixes:

- Drawing misalignments & such fixed in the Pianoroll
- The CC window was not aligned with the Pianoroll window
- Midi looping issues (for example the looping based on midi metadata)
- Not all available controllers could be selected for editing in the CC window
- Improved sync between sound and Pianoroll scroll in playback
- WMA support is now optional (and never supported on Windows 98)
- The "Go" and "Add" buttons for favourite folders in the "Play to File" dialog didn't work
- Some VST instruments like Toontrack's EZDrummer and Steinberg's Groove Agent were silent
- Some VST instruments would not shut down when SynthFont was closed, which would leave an invisible SynthFont process in memory
- 24bit data without the Playback volume Soft button down was scrambled
- Some GigaStudio (GIG) files, especially version 3, were not read correctly
- Memory overflow in midi edit Undo
- This version works on Windows 98 also, but conversion of audio WAV to WMA is not enabled

Features:

- CC legato pedal, # 68, extends the release part and decreases the attack of the next note
- Higher horizontal and vertical zoom resolutions in the Pianoroll
- Stretch function in Pianoroll/Batch Edit - multiply all events by a factor <> 1.0. Optionally also change the BPM. For example, a song originally encoded at 50 bpm can be "multiplied" by two to play at equal speed at 100 bpm.
- In the Pianoroll you can select track also with an up/down scroller
- The amount of the waiting time when finishing playing a file, to let notes and effects die out, is now an option. See "Setup"

User interface:

- Some more color schemes (see menu item "View") - just for fun
- Removed unnecessary functions from the "Wave editor", which is now called "Sample data"
- Some other minor changes, too small to mention

Others:

- The option of using a circular buffer for midi file playback has been removed. The multiple buffer method is now always used. You can still set the size (number of buffers) in "Setup", "Synth Engine" to minimize dropouts
- For live playback from a midi port, ASIO is preferred. An alternative is to use the smallest combination of multiple buffers and size. See "Setup" and "IO Ports"

---

***New in Version 1.102 (Jan. 8<sup>th</sup> 2008)***

Bug fixes:

- Buffer overflow when using any of the 16 VST channels buses caused noise and other undesired effects

- Fixed problems when adding VST effects or instruments to the lists in Setup
- Removed the continuous controller Soft Pedal implementation
- In real time Midi Input mode most continuous controllers were "silent"
- Fixed some flaws related to midi looping (do not wait for VST instruments to finish, save original start point)
- Cleaned up the code

---

## ***New in Version 1.101 (Jan. 2<sup>nd</sup> 2008)***

### Bug fixes:

- VST instruments could not be added to the list (caused exception)
- The default Play button was not always "Play To Speakers"
- Fixed a few other minor inconsistencies

---

## ***New in Version 1.100 (Jan. 1<sup>st</sup> 2008)***

### Bug fixes:

- Piano hold without "un-hold" could make the tune run forever
- Sometimes an extra silence would be added to the beginning of rendered audio files
- Kontakt 2 VST instrument did not work. Some other VST effects could not be loaded
- Pianoroll scroll option was not saved
- Some Pianoroll editing bugs fixed
- An important render function was compiled without optimization, causing the render process to run with high CPU usage
- The Pianoroll position was not updated in sync when playing
- Better memory management
- Volume and BPM automation values were not updated when going forwards or backwards
- The VST instrument instance numbers in the arrangement file were not always correctly set when opening the file
- Muting VST instruments could leave notes hanging
- Fixed some other bugs reported by EurekaLog

### New features:

- You can now render files in a folder in Explorer to audio files without creating a playlist
- Support for creating Windows Media Audio (WMA) files
- You can select to skip files that have been already converted (so you can continue from where you stopped)
- You can now select pitch shifting method (normal or anti-aliasing) on a per track basis
- Implementation of the Continuous Controller "Soft Pedal" (#67)

### User interface:

- There are now three Play buttons in the main toolbar for playing to speakers, to file(s), or to both
- In the Files pane there is a new radiobutton group for selecting the source file(s) for playing
- New keyboards in the Pianoroll, Preset Layers and Instrument Splits and as stand alone
- Tracks list heading has two new buttons: Tr# and Chnl. Press Tr# to show a dialog for changing the order of the tracks, Press Chnl to change the Midi channel. This function used to be in the mixer before but has now been removed from there.
- The Alt. View button has been removed from the main toolbar. Instead there are two alternative view items available in the View/Layouts menu

- In the View menu there is a choice for color scheme: SynthFont Green (default) or Windows Standard
- The Midi Channel selection has been removed from the mixer and is now found in the Chnl button in the tracks list header
- The Pan Spread function has also been removed from the mixer and is now found in a button in the toolbar ABOVE the tracks list header
- In the View menu is an item "Karaoke Lyrics". This is a first attempt to display Karaoke lyrics while playing.
- In the Play List you can now select and delete several files at the same time.
- Warning when trying to delete a track with Tempo setting (a METATAG)

Known issues:

- When rendering large numbers of midi files to audio files, the committed RAM memory grows all the time. After a few hundred files you may need to restart SynthFont.

---

***Viena was not updated now***

---

***VSTSynthFont was not updated now***

---

***New in Version 1.081 (July 2007)***

Bug fixes:

- There were problems with some VST Instruments
- The Pianoroll editor did not work as well as before (e.g. Copy/Paste)
- The Group file creator was rather buggy
- Opening midi files using the same VST Instruments always created new instances on top of the previous ones if the Create new Instance checkbox was checked
- You could not render a Playlist to audio files in the same folder as displayed in the Explorer file list below
- Mostly the program would not check for updates from the Web site
- Sometimes exceptions were generated when exiting while playing (still may...)
- Main volume automation could not be saved

New features:

- Pan spread - a new track mixer feature. You can select to spread notes according to the Piano keyboard, either as a player (Piano front) or as a listener (Piano back).
- Better handling of multiple instances of VST instruments

---

***Viena was not updated now***

---

***New in VSTSynthFont 1.011 (July 2007)***

Bug fixes:

- The "Files..." dialog for searching for SoundFont files did not work.

---

## ***New in Version 1.080 (June 2007)***

### Bug fixes:

- At the end of a tune the last notes were too short
- Some GIGA files with looped stereo samples were not played correctly
- Some newer VST effects did not play but crashed after the editor window was opened
- Changing the speed factor (BPM) while playing did not actually change the speed
- The Tempo "controller" (actually a META event) could not be edited in the Pianoroll / Controllers window
- When moving VST effects up/down, the check state did not follow
- Some VST effects would not empty their buffers when switched off
- Progress bar end marker was faulty
- Notes can no longer be moved off the Pianoroll
- Tracks with VST instruments were silent in Live Input mode (played by external keyboard or Pianoroll keys)

### New features:

- The "As Good As It Gets" render quality method was really not As Good As I Thought. It has been replaced with a better but slower method (should maybe be called "As Slow As It Gets")
- Two new methods for selecting several notes for batch editing or copy/paste in Pianoroll: CTRL-click and right-click on Key

---

## ***New in Viena BETA 0.510 (June 2007)***

### Bug fixes:

- Fixed most exception bugs reported by Eurekalog
- Some other minor bugs fixed

### New features:

- New alternative pitch shift render quality method: Perfect Pitch, same as for SynthFont
- The Normal pitch shift method has also been improved

---

## ***New in VSTSynthFont 1.010 (June 2007)***

### Bug fixes:

- Fixed a serious bug causing exceptions in Cubase (at least)
- Fixed a problem when the configuration file could not be found or was in a write protected folder
- The Tuning Scales file wasn't always available or it was write protected
- Some other minor bugs fixed

### New features:

- Audigy envelope option
- New alternative slow pitch shift render quality method: Perfect Pitch, same as for SynthFont
- The Normal pitch shift method has also been improved

---

## ***New in Version 1.071 (April 2007)***

### Bug fix:

- The program would occasionally stop playing after a few clicks on some tracks in the tracks list.

---

## ***New in Version 1.070 (April 2007)***

### Bug fixes:

- Fixed a number of exception bugs reported by EurekaLog (Thanks for sending them to me)
- The Continuous Controller "Master Fine Tune" was out of tune.
- Forward/backward to a position in an area without midi events did not work
- The envelope minimum values are now closer to those of SoundBlaster Live!
- Fixed some minor memory leaks

### New feature:

- Added function to make it easier to add files in a folder to a Group file. If the file name includes some numbers in the beginning, these will be use to determine the program.
- Added a better pitch shifting algorithm. This requires more memory and some initial processing before playing. If you experience problems with this method, you can switch back to the original method in Setup/Synth Engine, Render Quality.
- After playback the mean volume levels are displayed in the boxes far to the right of the level controllers in '4 Tracks'.

---

## ***New in Version 1.062 (Jan. 2007)***

### Bug fixes:

- Audio tracks were played to 50% only
- When assigning a SoundFont to many tracks using the File Open dialog, the preset in the right preview pane was assigned to all tracks. This was supposed to work only when one single track was selected.
- Some VST instruments require separate Note Off events when playing is interrupted in the middle

---

## ***New in Version 1.061 (Jan. 2007)***

### Bug fixes:

- Audio tracks were silent (again)
- Files with more than a few 100000 events in a track were not handled correctly (added a filter to remove surplus events)
- On some systems the Arrangement files were not listed in the Open button's drop down menu
- Fixed the MIDI Registered Parameter "Channel Fine Tuning" (#1)
- Fixed some bugs reported by EurekaLog

---

## ***New in Version 1.060 (Jan. 2007)***

### Bug fixes:

- Fixed some more VST instrument related problems
  - Better sync between SoundFont sounds and VST instrument sounds
  - A certain combination of VST Instruments and Bus Effects would make some Instruments silent while some played)
  - The Mixer Position function did not work with VST Instruments
- GIGA files were not correctly interpreted
- DLS files were not correctly interpreted



- Removed the Breath Controller (#2) function as it was not compatible with SoundBlaster live or Audigy
- Fixed some User Banks related problems
- If the Arrangement folder path (Setup/Options) was undefined the Arrangement would not be saved ('Save As' did work)
- The Pianoroll and Events panes were not visible when they should have been
- Group files were not correctly read
- In some cases the song length was incorrectly computed
- Fixed notes hanging when looping
- Fixed a problem with SoundFonts having bad envelope parameters (e.g. some from www.lyd-teknik.dk)
- Output to MP3 or OGG will automatically always be 16 bit samples
- Fixed some memory leaks
- Fixed some midi file reading issues
- SynthFont can now read 24 bit SoundFonts (but data is still treated as 16 bit)
- Fixed most other bugs reported by EurekaLog

#### New features:

- When you change the default SoundFont you are given the option to change it for all tracks using the previous default at the same time
- The Sound File Open dialog displays a list of available presets to the right. In many cases you can select the Preset already here.

#### **Viena (version 0.472)**

- When saving some SoundFonts the audio sample pointers were mixed up
- Some other minor bugs fixed

#### **VSTSynthFont (version 1.005)**

- The Modulation Wheel Controller (#1) did not sound as it should
- Some other minor bugs fixed

---

### ***New in Version 1.052 (Nov. 2006)***

#### Bug fixes:

- Fixed some VST instrument related problems
- A note would keep sounding when playing a region where the end mark was between note on and note off
- Fixed most other bugs reported by EurekaLog

---

### ***New in Version 1.051 (Nov. 2006)***

#### Bug fixes:

- Viena did not start up on Windows 98
- Wav files as sound source for a track did not work
- Fixed the automation function
- Fixed a bug in the display of the Group dialog
- Fixed a few other minor bugs reported by EurekaLog

---

### ***New in Version 1.050 (Oct. 2006)***

#### Bug fixes:

- The arrangement file "Save As" dialog did not automatically add the file extension if deleted from the name
- The MIDI Continuous Controller "Breath" was badly interpreted
- Program changes in the middle of the MIDI stream were lost

- Markers were not always created when pressing the "M" button in play controls while playing
- Pure audio tracks were silent
- Tried to fix the obscure "Nothing to play" bug
- Fixed memory leaks when editing the MIDI file stream (undo buffer was not released)
- Minimized the amount of silence at the end of output files.

#### New features:

- Support for using Gravis Ultrasound (GUS) patch files (not complete yet)
- Introduced a new file format: the "group" file - combine several files into one "GM" file. This feature will let you take a bunch of e.g. GIGA files and GUS files and assign them to the GM MIDI programs, one file and preset per program. (Typically GIGA and GUS files contain only one preset.) If you assign a file with many presets (e.g. a SoundFont), you still have to select the preset that will play for the particular MIDI program. The only additional function is that you can change the loudness (volume) of the preset.
- MIDI files can be associated with SynthFont. See main menu "Files"
- Improved support for users with restricted access to certain folders
- Added a Metronome. You can change the volume of the tic sound in Setup
- Main volume and BPM automation. Push the AUTO button for a popup menu with functions
- Better support for 8 bit, 24 bit and 32 bit audio data ("wav" files), also in Viena
- Support for editing the MIDI Tempo (BPM) Meta data in the Events tab
- Default user banks. Banks from other SoundFonts can be set to override the bank in the default SoundFont. Removed the undocumented and awkward track banks feature
- All events in a track can be shifted back or forth in Pianoroll/Edit Notes

#### Other changes:

Removed some items from the Tracks list context popup menu. These items were not directly related to any particular track feature.

#### **Viena (version 0.470)**

- ROM samples can now also be replaced with a sample of the same name
- Improved support for users with restricted write access to certain folders
- Some other minor bugs fixed

#### **VSTSynthFont (version 1.004)**

- Tried to minimize the number of dialogs popping up during initialization
- VSTSynthFont now saves its settings in its own configuration file (VstSynthFont.ini) instead of in SynthFont's file
- Improved support for users with restricted write access to certain folders
- File history in 'Files' dropdown menu
- Some other minor bugs fixed

---

## ***New in Version 1.043 (June 2006)***

### Bug fixes:

- Fixed broken splash screen.

---

## ***New in Version 1.042 (June 2006)***

### Bug fixes:

- Fixed a problem with finding the correct main initialization file (usually "SynthFont.ini")
- Fixed a problem in the VST effects initialization code

---

## ***New in Version 1.041 (April 2006)***

### Bug fixes:

- Fixed most bugs reported by EurekaLog
- Fixed a VST instruments bug
- Fixed some memory bugs
- Karaoke files lyrics was not saved correctly
- Fixed the CPU usage routine
- Tried to address most other exceptions reported by EurekaLog
- Sometimes some tracks (especially layers) would be silent
- Tried to fix the problem with protected files for users with restricted rights

### New features:

- The files in the playlist can be played in random or sequential order (see dropdown menu)

---

## ***New in Version 1.040 (April 2006)***

### Bug fixes:

- Fixed most bugs reported by EurekaLog
- The live Input mode (from an external midi port) did not work
- The rendering engine has been slowed down in all versions after 1.020
- Changed the Velocity CC interpretation back to versions prior to 1.020
- On some sound cards there were still problems with the playback synchronization, resulting in some kind of random "fast forward"
- Some midi files were read extremely slowly
- Fixed drawing of Breath Controller in the Pianoroll/Controllers graph
- ... plus an odd number of user interface glitches fixed

### New features:

- Support for reading midi files named as Karaoke files ("kar" files)
- A "Transpose All" command in the Mixer to change Song key
- When rendering a playlist to files, you can select the output folder a) same as midi files b) same as arrangement files or c) specified folder.
- New button in transport for Fast Backward 1 or 10 bars (with left Ctrl key down)
- Changed the old Backwards button to jump to start position (defined marker or beat)

---

## ***New in Version 1.034 (March 2006)***

### Bug fixes:

- Tried to fix most exception bugs reported by Eurekalog - quite a few! (Many thanks to the Eurekalog people for this excellent tool.)
- Notes could be hanging when a track was muted while playing
- Channel buffers were inactive (no channel files, no VST effects busses)

---

### ***New in Version 1.033 (March 2006)***

#### Bug fixes:

- Due to a mistake in compiling version 1.032, it was not compatible with Window 98 or ME.

---

### ***New in Version 1.032 (Feb. 2006)***

#### Bug fixes:

- Because some systems seem to have had problems with audio output using one single, large circular buffer, an alternative mode is now also provided. This uses many smaller buffers in sequential order. Please try this method if you have problems, and tell me which you find works best for you. Go to Setup/Synth Engine to select method. You can also set the size of the small buffers (in samples) and total size of buffer(s) (in seconds).
- The CPU usage monitor would cause an exception on some systems when starting up
- The midi Pitch Wheel was not operational in Live Input mode
- Some midi files were (still) not read correctly
- Improved support for the Pedal Hold controller to avoid overflow
- Most other reported bugs and flaws fixed

#### New features:

- Some statistics data are displayed also in the Live Input mode
- The BMP (playback speed) factor is now also saved in the arrangement file

---

### ***New in Version 1.031 (Feb. 2006)***

#### Bug fixes:

- On some machines audio samples was randomly dropped from the audio output stream (but not from the file stream)
- VST effects added to the chain while playing were not activated

#### New features:

- The new versions of both SynthFont and Viena have been compiled with the Eurekalog functionality. In case of a crash or any other exception, a log file will be created ("SynthFont.elf" or "Viena.elf"). If you want to help me develop the software, then please e-mail me these log files.

---

### ***New in Version 1.030 (Feb. 2006)***

#### Bug fixes:

- The CPU load was too high when using VST effects
- A bug introduced in the last version made some SoundFonts to be incorrectly interpreted
- The low pass filter did not perform according to SoundBlaster Live or Audigy standards
- Modulation Envelope did not change the pitch correctly
- The clipping of data for 24 bit audio samples was flawed
- Better support for VST instruments (still not perfect)
- A larger number of other minor bugs removed

New features:

- Option to set short Envelope Hold values closer to the SoundBlaster Live and Audigy interpretation

---

***New in Version 1.020 (Feb. 2006)***

Bug fixes:

- Percussion SoundFonts with preset bank value less than 128 could not be used in the percussion midi channel
- Fixed reading of DLS-files
- Improved handling of VST instruments (not yet perfect, though)
- Some instruments became out of tune when the pitch shift was large
- Linked samples where not correctly played
- Audio files where slightly out of sync (too slow)
- Midi files where not saved correctly
- The live input mode has been much improved (with ASIO, only ASIO4ALL seems to work reliably, though)
- A lot of minor bugs fixed!

New features:

New features:

- SynthFont now responds to the two midi Continuous Controllers Registered Parameters "Channel Coarse Tune" and "Channel Fine Tune"
- Selectable default folder for arrangement files
- Adjustable output main volume
- New alternative audio file output formats: 32 bit IEEE floating point and 24 bit integer.

---

***New in Version 1.010 (Oct. 2005)***

Bug fixes:

- When opening a midi file without an existing arrangement, the Mixer volume was set to 0
- The Alternative Banks feature had a few nasty bugs
- Fixed the note edit tool in Pianoroll
- Use of a wave file as a sound source for a track did not work
- Fixed the "New midi track" function
- Improved the "New MIDI file" function (in main menu File)
- Some VST effects or instruments would not reappear in the lists in Setup

New features:

- Selection of several notes for copy/paste or delete
- The "New note tool" changed. No popup window, see the tabs list
- Support for ASIO in the real time input mode
- In View (or Setup) you can choose to have a flat background for the synth engine frame in Tracks
- You can set the grid size, i.e. number of divisions of a bar in the Pianoroll
- You can change the midi channel for all events in a track in the Events pane. This is saved in the midi file and not in the arrangement

---

## ***New in Version 1.000 (Oct. 2005)***

SynthFont is still Freeware, but as per Version 1.000, in order to remove the "nag screen" you have to receive a registration code from me. To receive a code you may either donate using PayPal, help me solve a technical problem or develop a new feature.

### Bug fixes:

- Too many to list here.

### New features (too few):

- Track layers - use to create multi-preset tracks, i.e. one midi note can trigger several instruments
- New Bank alternative: set bank for a combination of key range and velocity range
- Last accessed SoundFont files displayed in "Files..." dropdown menu
- Some new options in the Setup
- And some more minor improvements

---

## ***New in Version 0.999(1) (Viena 0.44) (July 2005)***

### Bug fixes:

- **Version 0.999 could not always find the Viena executable although it was in the SynthFont folder. Fixed in 0.9991.**
- In the wave editor, the root key was not displayed
- Looping of playback range fixed
- Fixed the reading of badly coded sf2 files created by Xlutop Chainer
- Pitch Wheel was incorrectly saved when saving a midi file
- SynthFont would hang when using VST effects on a bus and loading another file
- "Save As" alternative when saving an arrangement file did not save under the specified file name
- Turned of the debug function that saved "unsaved" arrangements
- Sometimes SynthFont would skip forward some milliseconds when using VST effects (may still happen). The rendered file is ALWAYS intact.
- Viena: changing the loop for a sample could change the loop for another sample as well
- Viena: fixed the importing of loop points for samples created with SoundForge
- Viena: changing the sample name did not work
- Instrument generators could sometimes be incorrectly calculated, usually resulting in loss of sound
- Channel files with bus effects had zero data size coded in the file header
- Fixed changing note value in the Events list editor
- The events list row count was sometimes too small
- Fixed a lot of PianoRoll midi editor bugs
- Changed interpretation of some CC events and Channel Pressure to make transitions even smoother
- Changed handling of overlapping notes (again)
- The playlist items were not always played in correct order
- VSTSynthFont: fixed problem with notes not assigned to any sound in the SoundFont

### New features:

- New Mixer layout, to the right side of the tracks list

- New Mixer function: The low pass filter is now a "send" effect for each track. Select the send amount in the Mixer. The default value is 100%.
- New Mixer function: three low pass filter alternatives for each track. Set the default type in Setup/Options for new arrangements.
- You can now save VST instrument program settings as well as VST effects settings. These settings are stored in the SynthFont.ini file and can be manually changed and removed by editing the file.
- Viena: You can now send external midi notes to Viena to test the sound instead of clicking on the virtual keyboards. Use it with your external keyboard or even a sequencer.
- You can now select if you want to show the Play Controls in other panes than Tracks.
- Undo function for the midi editor in PianoRoll and Event list. May still be buggy?
- New bank selection method: SynthFont can code the bank for a single note in the note off velocity value, which is usually not used.

---

## ***New in Version 0.998 (Viena 0.43) (April 2005)***

### Bug fixes:

- DLS files (e.g. Window's GM.DLS) were not interpreted correctly!
- Bank numbers are now always 0-based, like in most other sequencers
- The file dialogs used in the most recent versions were quite buggy. Replaced with standard Windows dialogs with some additions
- The Viena button in SynthFont was not connected
- Start and stop positions were incorrectly calculated from bars and beats values
- The Backward function was fixed
- Arrangements with audio tracks could not be played more than once
- Added missing 'continue after release' option to split loop generator
- Fixed a few odd bugs in Viena (e.g. copy/paste presets from one SF2 to another)
- Fixed Playback Progress display. The progress is displayed in fractions of time. The total time is displayed to the right
- Fixed some bugs in the PianoRoll editor (It is still not good, but better)
- Fixed the real time (live) input mode - again. Maybe it finally works?
- Max True Polyphony limit didn't always work
- When rendering the playlist to audio files, only the first entry was rendered to a file
- Advancing to next song in the playlist caused exceptions in VST effects
- The Events list display has been improved
- TRIED TO FIX: On some systems the first note was "cut short" in the speaker audio stream (but not in the file output).

### New features:

- In VSTSynthFont, added a feature where you can set the same midi channel for two or more tracks for note events. The presets will not change. Use this to create layered sounds
- You can now select the scale tuning. Go to Setup and Synth Engine and have a look!
- In the PianoRoll, you can click on the virtual "keyboard" to the left to sound a note (like in Layers and Splits panes)
- Added a note editor to the PianoRoll
- The Events list scrolls to the event selected in the PianoRoll

- You can define the play region with pointers below the progress bar or in the PianoRoll bar heading. The progress bar pointers work in real time
- You can loop the play region, indefinitely or for a certain number, and optionally continue to finish after the loops
- In Wave Editor, the current sample play position is shown in the wave graph
- In Wave Editor, when using the mouse to define SAMPLE loop points, the values are continuously updated in the table while drawing (use left mouse button for start and right mouse button for stop)
- In Wave Editor, the SAMPLE loop points can also be edited directly in the table
- Unfiltered file type (\*.\*) in the Open File windows.

---

## ***New in Version 0.997 (Viena 0.42) (March 2005)***

### Bug fixes:

- A major bug fix: changes made to the internal SoundFont structure, meant to speed up creation of note data from SoundFont data, led to that some SoundFont generators were misinterpreted.
- The real time Input mode has degraded in quality the last few versions. This version contains a completely rewritten version.
- The song pointer was not correct if the midi file contained silent bars at the beginning.
- Fixed some problems with using VST effects in busses.
- In Viena: soundfont files created by Viena did not adapt to the soundfont standard and could not be used by the SBLive! audio card. I also fixed some other bugs in the user interface.

### New features:

- No really new features in this release.

---

## ***New in Version 0.996 (March 2005)***

### Bug fixes:

- A few minor bugs fixed
- The inbuilt Explorer and the file open dialogs did not work correctly when Windows was set to hide file extensions.

### New features:

- The Playback range can now alternatively be set using bars and beats: (press this button to select alternative)



- Midi bank and program numbers can be display using the range 1..128 instead of the intrinsic range 0..127. See Setup.
- Default loading of previous file can be deferred by pressing SHIFT while program starts. You can also permanently switch this on/off in Setup.

---

## ***New in Version 0.995 (March 2005)***

### Bug fixes:



- Some of the bugs that were supposed to be fixed in 0.994 were not actually fixed.
- 0.994 could not open any other sound files than SoundFonts.

---

## ***New in Version 0.994 (March 2005)***

### Bug fixes:

- Fixed a LARGE number of bugs in Viena - it is starting to be a working solution now, I hope
- Fixed a large number of bugs in the PianoRoll midi editor
- Sometimes the layers and splits where not updated when a new SoundFont was loaded into a track
- Selecting only one file in the Files Explorer window and pressing the "play files" button did not play the file but the whole folder
- Open button in Open file dialog did not open the folder selected in ListView
- Deleting a track would scramble the mixer faders
- Hitting Enter in the Explorer or in various open dialogs did not do what it should
- One single VST instruments assigned to several tracks caused a lot of noise because of wave clipping
- Muting/unmuting notes for VST instruments while playing did not work
- The first two radio buttons in the soundfont file open dialog (used to assigning a soundfont to a track) had the text interchanged. Hence, the first button would assign to the whole track and the next to the current program change only
- The Stop button did not work when the Pause button was pressed
- Sometimes SynthFont will (still) get stuck if pressing Start/Stop very rapidly in succession
- Real time input mode (use with a virtual MIDI cable!) had some glitches. Also, you can now change the latency (in Setup)
- When rendering to channels files, the resulting files had the wrong file size reported in the file header
- Mixer's track volumes and positions were not correctly updated. Also, in some cases the track position was not evaluated.

### New features

- Viena is now only available as a standalone tool!
- Improved the accessibility for blind users
- SOME support for Muon's DS404 patch/bank files. These are originally to be used with Computer Music's DS 404 VSTi sampler.
- Support for using MIDI bank message CC0 (and some others) for switching to another soundfont and/or preset.
- In play controls, there is a new button (backwards) to take the song pointer back to the previous markers. Also, you can freely change the position using the markers list beneath "From".

---

## ***New in Version 0.993 (Jan. 2005)***

### Bug fixes:

- Support for creating MP3 or OggVorbis files was temporarily out of order. Sorry.

---

## ***New in Version 0.992 (Dec. 2004)***

### Bug fixes:

- Viena: removing unused instruments did not work as supposed to
- Viena: deleting a Preset would not update the TreeView correctly
- Viena: adding audio samples; optional root note and loop points were not read from the file
- SynthFont could not read RMID files (midi encoded within a RIFF structure)
- Corrected a bug in the GIGA file reading routine
- Changed the behavior of the Modulation Wheel (made it "softer")
- Some audio files were just not read correctly
- In percussion tracks: switching to a percussion preset that was not found in the SoundFont would result in a preset from the melodic bank instead of from the percussion bank
- Fixed "All Notes Off" controller - would also switch off notes for other channels
- Fixed display of VSTi windows when several tracks share the same effect instance.

### New features:

- Viena: added "Purge unused items" (i.e. instruments and samples) to the Edit menu. Use it to clean up and compact a SoundFont
- Viena: added a button to switch to SynthFont's main window. Then, press the Viena button to get back. Useful when both windows are maximized
- Viena: When adding sample files, you can check two checkboxes at the bottom of the file open dialog to automatically create a new instrument and preset
- Viena: When creating instrument splits from samples, you can let Viena automatically distribute the sample over the keyboard. The same function also lets you manually quickly define the keyboard ranges for the samples
- You can now change the preset also while playing. Press the button above the "SF2 Prog" column in Tracks pane
- You can use the ESC key to close the Setup dialog and the Presets dialog (see above). Also use ESC to quite editing of track name (F2)
- You can use UP/DOWN arrows to quickly scan the presets (very useful in the Layers pane!)
- The status of the Tracks/FIT button is now stored in the SynthFont.ini file
- There's a new function (new button, new popup menu item) for re-arranging and assigning split regions. Also, when assigning new audio waves to an instrument, you can check the box at the bottom of the dialog to call this function
- Software programmers: you can send a few messages to SynthFont using Windows standard SendMessage function. See then Help file for more info.

---

## ***New in Version 0.991 (Nov. 2004)***

### Bug fixes:

- SynthFont did not work if you had very restricted Windows XP user rights.
- In Wave Edit: playing linked files as stereo did not work - mono sound was produced. Also, defining loop points for only one of the stereo linked samples would cause a crash when playing.

- When using several VST instruments, only the last one was actually played
- VSTSynthFont would sometimes crash when used in Cakewalk (through a VSTi-to-DXi adapter).

#### New features:

- When editing the loop for a stereo audio sample, saving the new loop would also change the loop for the optional linked sample. This is now changed. Thus, you can now set the loop point for the left sample to something else than for the right sample.
- In previous version I changed how a VST instrument was instantiated when used several times - only one instance was created for all tracks. In this version this is now an option. You can thus create a new instance for each track, if you want.
- The Default SoundFont: The very basic SoundFont SynthGMS.sf2 is no longer included in the distribution. Instead, SynthFont will look for and offer Microsoft's GM.DLS, if available.

---

## ***New in Version 0.990 (Nov. 2004)***

### **At least a much improved Viena SoundFont editor**

#### Bug fixes:

- Some Program Change messages were lost when reading a midi file, and...
- Program Changes messages were not always updated correctly in the Tracks list (although used correctly)
- In Viena: Cut/Copy/Paste did not always work (in fact, seldom worked)
- In Viena: Editing a presets name and/or Bank:Index values not OK
- In Viena: wrong sample was used when creating a new split in an instrument and using a sample as source
- Fixed an error in the Live Input function
- All assigned VST instruments were lost from tracks when a new VSTi was assigned
- Key (or note) names were wrong in many places
- When editing linked audio samples or splits, loop parameters must be updated for both
- Fixed some note editing bugs in the PianoRoll
- The global "samplemode" generator was not used (looping on/off)
- Corrected the implementation of the Channel Pressure message
- Plus numerous other minor bugs I am too ashamed to mention

#### New features:

- Introduced two view modes: "Basic View" and "Expert View". Go to main menu "View" to change mode.
- You can edit generator values for splits and layer directly in the tables.
- SynthFont uses internally the channel numbers 0..15 as these are the numbers used in midi messages. BUT you can change the DISPLAYED numbers to the range 1..16 (as used by many sequencers). Go to Setup/Options to do this.
- In Viena: The Presets Cache feature is now activated
- In Viena: Simplified copy/paste of several presets in one operation. You can use this to split a large SF into several smaller ones.
- An new tool to make it easy to change midi channels to the upper slot range (16..31). There are internally 32 midi channels in two slots: the standard slot 0..15 and the extended slot 16..31. This feature is useful if you have a midi file with many tracks sending

notes to the same midi channel. Now you can easily isolate one track from the others by assigning it a new midi channel from the upper slot. NOTE: If you use the Live Input mode through a virtual midi cable, you can select one port for each slot. (See Setup)

- The Low Pass Filter behaves now more like SBLive's filter and does not damp high frequencies so much as before
- Playlists can be saved in different files now.
- In Explorer, the Play button plays either all files in the current folder or selected files only.
- Implemented one of Creative's NRPN messages: the NRPN LSB 21 Initial Filter Cutoff (see <http://atlas.csbnet.se/livecenter/showpage.php?id=15&page=3>)
- Handling of VST instruments: in previous version a new instance of a particular VSTI was create for each track, in this version all tracks share the same instance (as in Cubase)
- Created a new Setup tab: Synth Engine and moved the Render Quality option here. Also did some other minor layout changes in the Tracks/Synth pane.

---

## ***New in Version 0.980 (Sep. 2004)***

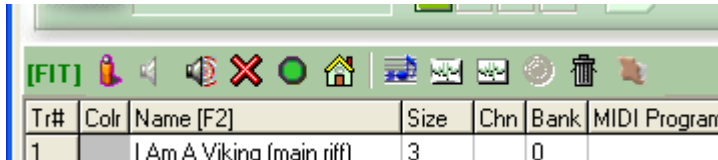
### Bug fixes:

- **Fatal bug:** the program would often crash when opening a midi file without an arrangement file.
- SoundFont presets with long names were not accessible.
- Muting/un-muting while playing was temporarily not available.
- Some other minor bugs were fixed as well.

### New features:

- New track type: audio track. Audio tracks are a feature of SynthFont and NOT stored in the midi file. An audio track has NO midi data, and only references an external audio file (type "WAV"). It plays the file from the beginning when you start playback of the midi file. You can also record your voice or any other sound source into an audio track.
- You can add tracks; new midi tracks or new audio tracks (see above).
- **The Vienna SoundFont editor** - not only a Vienna clone, but something more (or less). This is the very first implementation and not very much tested. **Please use with care.**
- The Mixer Pan feature has been changed. Instead of using a factor (X) to multiply the midi pan/position message, the factor X is added to the message value. Reason: Zero multiplied by X always gives zero, but zero plus X gives X.
- A floating "Play controls" window is visible while playing when viewing other panes than the Tracks pane.
- Added a "move up" and "move down" buttons in the VST Effects list, so as to organize the plug-ins chain order.
- Assigning a VST instrument or a VST effects bus will now work on all selected channels.
- New short-cuts: use <Ctrl-S> to save the arrangement file using the default name and <Ctrl-Alt-S> for Save As... You can now close VST effects windows also with <ESC> (not only Alt-F4).
- New toolbar in the Tracks pane:





These buttons have the same functions as you already have found in the context menu or in the main menu "Edit|Tracks".

---

## ***New in Version 0.976 (Aug. 2004)***

### Bug fixes:

- The OggVorbis encoder could not be found.

---

## ***New in Version 0.975 (Aug. 2004)***

### Bug fixes:

- Corrected a Fatal Bug: the midi channel for all tracks in Arrangement files was always set to 0!
- Fixed a bug in ModEnv-to-Pitch function.
- Improved the volume envelopes. Now much closer to SoundBlaster Live!.

### New features:

- Support for creating compressed audio files; either MP3 or OggVorbis.
- Default VST effects for the Main Bus. Save by pressing the vertical button left to the effects list. These effects are always applied when there is no arrangement file.

---

## ***New in Version 0.974 (Aug. 2004)***

### Bug fixes:

- The program would crash when trying to play midi files lacking a "set midi program" event in **any** track.
- There were problems with changing the default SoundFont.

### New features:

- Customizable output level for the batch mode. Set the Volume levels in the Tracks pane before you start to play from the play list.
- An option to retain the original directory structure for the output files of the play list.
- A play button in the Explorer's toolbar. Press to play all selected files.
- A new mixer function: set the Volume Envelope steepness. There are three levels: 0, 1 and 2. 0 is the normal shape, 1 is Envelope to the power of 2, and 2 is Envelope top to the power of 3. This makes the notes appear shorter.

---

## ***New in Version 0.973 (June 2004)***

### Bug fixes:

- You could not use a DLS or a GIGA file as the default SoundFont
- There was an error in reading percussion instruments from DLS files

- The NOTE OFF function sometimes did a "CUT SHORT" instead of a normal decaying note off
- Some other minor bugs fixed as well.

---

## ***New in Version 0.972 (July 2004)***

### Bug fixes:

- When muted a track while playing, the note currently played was kept on hold until you pressed stop.
- VST instruments were sometimes out of tune do to an error in the pitch wheel function.
- The lists of VST effects and instruments in Setup could sometimes be mixed up if an effect could not be fully loaded by SynthFont.
- There were still problems with reading some non-standard midi files.
- Much improved handling of VST instruments.
- Many more minor bugs fixed.

---

## ***New in Version 0.971 (May 2004)***

### Bug fixes:

- Introducing support for VST instruments in version 0.970 had two side effects: zero length notes were dropped, which is not good for percussion, and tempo changes were randomly applied.
- Fixed a few other minor bugs at the same time.

---

## ***New in Version 0.970 (May 2004)***

### Bug fixes:

- NASTY ONE: You had to have Administrator rights on your PC account to use the program!
- Playing the files in the Playlist did not work as intended (only one file was played).
- Arrangement files could not be added to the playlist.
- If a track had more than 256 program changes the program would crash.
- The first track, which is often the tempo track containing no notes, was difficult to mute.
- Removed the last(?) remains of noise from the rendering engine.
- In the last few versions the envelope was applied twice.
- Removed a bug in the Wave display unit.
- The Continuous Controller (CC) display in PianoRoll did not show the CC values
- The real-time Input mode could be noisy at times. Stereo linked splits were not processed correctly.
- "Bypass all VST effects" was not initialized correctly.
- Drum sets were not always correctly retrieved from a SoundFont. Sometimes the bank 0 was returned.
- No luck when trying to open a midi file for which there existed an arrangement file pointing to a different midi file.
- User's Piano Roll markers were not deleted from the Arrangement file when required.
- Right mouse button on the tracks list did not select the track.
- The Exclusive Class function did not always cut notes short.
- Track names were not correctly displayed in the events list.
- System Exclusive messages were not stored in a saved midi file. The original track markers were also lost.
- **VSTSynthFont**: didn't always listen to program change messages

- **VSTSynthFont:** didn't always store name of last used arrangement

### **New Features**

- Support for VST instruments. SynthFont is now also a host for VST instruments. (It has long been a host for VST audio effects). NOTE: this is only the first implementation and may be buggy.
- Piano roll: Basic midi note editing: move note, change length, delete note, insert note.
- Piano roll: Basic midi Controller editing: draw in the Controller window to add/remove Controllers.
- Piano roll: Added vertical scroll, and some minor improvements (i.e. position is saved in the arrangement file)
- Events pane: The very simple event editor been improved.

---

## ***New in Version 0.967 (April 2004)***

### **Bug fixes:**

- Program changes in the middle of a percussion track did not work as intended.
- Finally got the Pedal Hold function to work as it should (I think...).
- Improved the handling of overlapping notes when in real input mode.
- In Setup, The VST effects folder's Refresh button/function did not work when "Include subfolders" was checked.
- In Setup, The VST effects Sort button/function did not sort the actual effects, only the names.
- The Volume Controller (CC 7) was out of order.
- Changing midi channel number for a track would mute the track!
- "Lock Preset" in Presets dialog locks the selected preset (program) for a midi channel so that all program changes messages in the midi event stream are ignored. This setting was saved but not read back from the arrangement file.
- The rendering engine would cause some clicks when CC pan changed rapidly.

### **Some new features:**

- There is a VST instrument version of SynthFont now. This is a separate file (VSTSynthFont.dll) which you (may) need to copy to your VST-folder.
- The VST instrument version uses a slightly different arrangement file structure than SynthFont. The reason is that the VSTi version does not read any midi file and has now knowledge about how tracks and midi channels are related. Therefore the VSTi anticipates that these are one and the same. SynthFont **can** export an arrangement in VSTSynthFont's format (see File menu).

---

## ***New in Version 0.966 (March 2004)***

### **Bug fixes:**

- The Modulation Envelope to volume level (i.e. tremolo) was behaving badly. Shame!
- Fixed a few other minor issues as well.

---

## ***New in Version 0.965 (March 2004)***

### **Bug fixes:**

- The rendering engine would STILL (YES! - STILL) cause some clicks and noise in rare cases.
- The Splash Window was supposed to go away after you have proudly donated. (What? You haven't donated yet?)
- Saving a midi file could result in an scrambled, unusable file.
- Opening a MIDI file, for which there exists an arrangement file containing a pointer to the wrong file path, might cause the message "midi file not found".

**New feature:**

- There's a new controllers window in the Piano Roll (and a button - down left - to trigger on/off).
- Added some scrollbars to the Events pane.

---

## ***New in Version 0.964 (March 2004)***

**Bug fixes:**

- The rendering engine would STILL cause some clicks and noise in rare cases.
- Use of Create Marker when in Pause would cause "list index out of bounds".
- Main window was not truly maximized when restarting from a maximized state.
- SynthFont did not handle correctly tracks containing midi events for two or more channels. These tracks are now split into separate tracks, one for each channel.
- Alphabetically sorting a preset list with only one preset didn't work (and makes no sense).
- The real-time (live) input mode would not recognize key hold messages.
- The Track Transpose function was temporarily out of order.
- Sometimes the wave pane would not be updated with the correct wave data pointers causing an exception error.

**Some new features:**

- Rendering engine improvement: better support for linked (left+right = stereo) samples to make it faster
- **Support for DLS files.**
- **Support for GIGA files** - definitely NOT finalized! E.g. filter frequency and resonance are not yet interpreted.
- Added a very simple midi event editor in the Events list pane. You can change three values for any event: Note, Velocity and Length. Please note that these three values have a different meaning depending on the event type. For example, if the event is a Volume event (Controller 7), then Note must be '7' as it is the controller value, Velocity is the actual volume level, and Length has no meaning. Also note that these changes are made to the midi data and not saved in the Arrangement file (".sfarr"). You need to save the midi file in order to save the changes. - Some more shortcut keys. Look in SynthFont's help file (SynthFont.chm) for a complete list.

---

## ***New in Version 0.963 (Feb. 2004)***

**Bug fixes:**

- The rendering engine would STILL cause some hiss and noise in rare cases.
- Changed Velocity, Expression response from linear to a response similar to the SBLive! audio card's.



- The overall signal level is no closer to what the SBLive! audio card produces.
- The maximum signal levels shown in the synth engine's Playback Vol L/R sliders were clipped. Now the unclipped values are displayed.
- Selecting several tracks with shift and popping up the menu cleared the selection so you couldn't apply function to several tracks at once.
- Changed the way VST effects are called to make more of them work.
- Corrected the handling of VST effects and folders in the Setup dialog.
- Reloading the midi file would open the default arrangement and not the current.
- The lowpass filter now works more like the filter in the SBLive!.
- Overlapping notes and notes within the same Exclusive Class are normally "cut short", i.e. the decay time was set to a short value. This is no longer the case when rendering to files ONLY. Furthermore, in Options you can now set the "cut short time" and even disable this feature altogether.
- Fixed a bug in the procedure that handled releasing and cutting notes short (see above).

#### **Some new features:**

- Added ModWheel response (changed the pitch in a cyclic manner).
  - Added Breath response (changed the note intensity in a cyclic manner = tremolo).
  - Added Tremolo Depth response (changes the depth of the Breath control).
  - You can now mute/solo tracks also while playing.
  - Muting tracks now only mutes the notes - not other events (e.g. program or tempo change). To completely switch of a track use the command "Inactivate" from the popup menu.
  - Added a switch to select VST processing mode (when available in the effect): "Replace" (i.e. VST function 'ProcessReplace') or "Mix" (i.e. function 'Process'). Some effects like JS Limiteur and C\_SuperStereo requires replace mode to work properly.
  - VST effect editors are now displayed in separate windows - you can have several open at the same time.
  - Added a Pause button to "Playback Progress" in the synth engine window.
  - In the events list, unhandled controllers are marked and shown in red.
- ... Plus a large number of other minor improvements!

---

#### ***New in Version 0.962 (Jan. 2004)***

- **SERIOUS BUG:** you couldn't play on the "keyboards" in the Layers and Splits panes. The program would freeze.
- BUG: The new mixer (XVol column) was really mixed up! This version should work much better.
- BUG: When rendering to channel files only, the statistics were not updated on screen
- BUG: Right button -> popup menu -> Rename track caused popup menu to be lost.
- BUG: you couldn't edit the track names of a midi file originally containing one single track but split into several tracks by SynthFont.

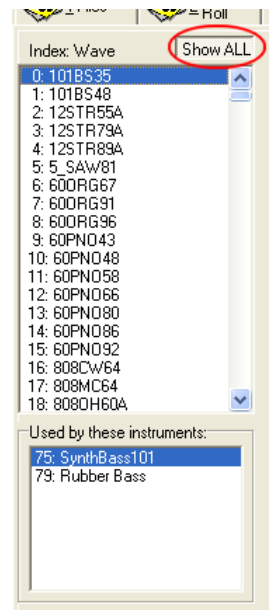
- Feature: New track names are now stored in the arrangement file. The names will also be stored in the midi file if you save it.
- Feature: When you save a midi file it will get the text ' [NEW]' added to the name (but only once).
- Feature: Added a checkbox to create longer and more informative file names when rendering to channel files (see Play to File dialog).

---

## ***New in Version 0.961 (Jan. 2004)***

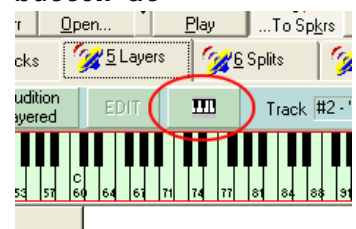
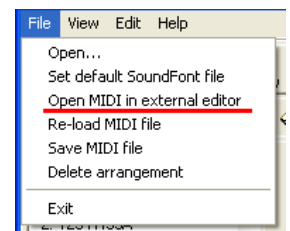
### **A lot of bug fixes:**

- The rendering engine would cause some hiss and noise in rare cases.
- The real-time live input mode through Midi Yoke hasn't really been working for some time. Now it should (but you still need a rather fast machine and low latency driver. WinXP WDM drivers are OK.) *Function improved in 0.961!*
- The last track was not scanned for notes for the "mouse over notes" information in the status bar.
- Sometimes the events list would not list all events at the end of the track
- Improved some functions in the Wave display pane. Sometimes the loop points would not show, sometimes the wave would not play correctly. Selecting "Show All" to show all waves in the SoundFont was rather unsafe.
- Could not assign a SoundFont to a track without Midi Program change metaevent.
- Starting to play from the very last bar sometimes would lead into an infinite loop
- The first track is mostly the tempo track. This it will NOT be automatically disabled when soloing any other track. You can still mute it manually.
- Some soundfonts have very strange loops defined - tried to avoid using bad loops.
- Plus a lot of minor bugs.

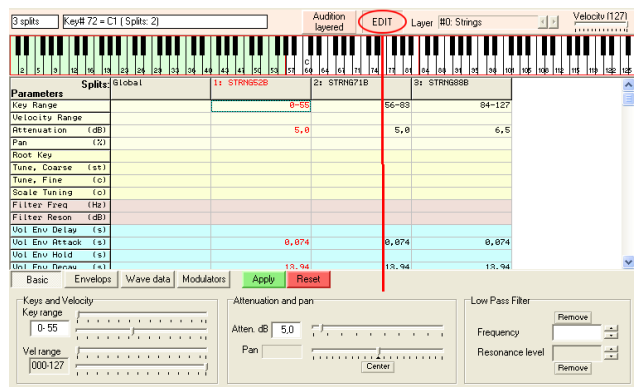


### **Some new features:**

- Put the rendering engine into its own CPU thread to avoid hiccups when doing things in the background (like popping up a menu).
- Zoom button in piano roll for vertical zoom
- "Add market at event" button in the events list pane.
- Link to external MIDI editor (sequencer). This will try to launch the current midi file into the sequencer where you can do some editing and save the file; SynthFont will watch the time-date stamp of the file and re-load it if needed. Alternatively, use the Midi Yoke port to play the file in real-time (press "Input" button at first!)
- "Sort by name" checkbox in the Presets list (in the dialog you pop up when pressing e.g. this new button).
- New button in the Layers pane to make it easy to switch preset and audition it immediately using the internal "keyboard":

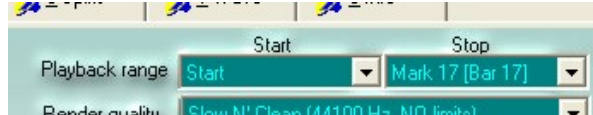


- Introduce new SoundFont editor. Currently it works only with the Instruments and not with the Layers (of Instruments). The editor is not very well tested yet but should be a lot easier to use than the old implementation. Toggle with this button to show/hide the editor.

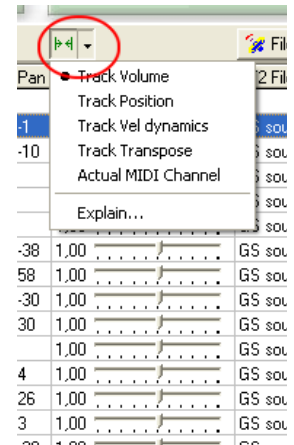


- Changes to the playlist will be noticed and a Save? question issued before exiting the program.

- You can now define a playback **range**:



- There's a new "mixer". The "Vel Dynamics" is an experimental effect. Select "Explain" to get a short explanation of these functions.



- ... **Plus a large number of other minor improvements!**

---

## ***New in Version 0.951 (Dec. 2003)***

- Due to a small bug you could NOT assign a SoundFont to a program change in the middle of a track.

- Added some functionality to the VST-icon button above the tracks list.

---

## ***New in Version 0.95 (Dec. 2003)***

### **A lot of bug fixes:**

- Corrected lost bank and preset numbers

- When saving changed SoundFont the wrong wave data was save if the original file was retrieved from a compressed sfArk file.

Additionally, modulator information was lost (as modulators are *not* yet used by SynthFont - this will change soon).

- Rendering to files from the playlist didn't work.

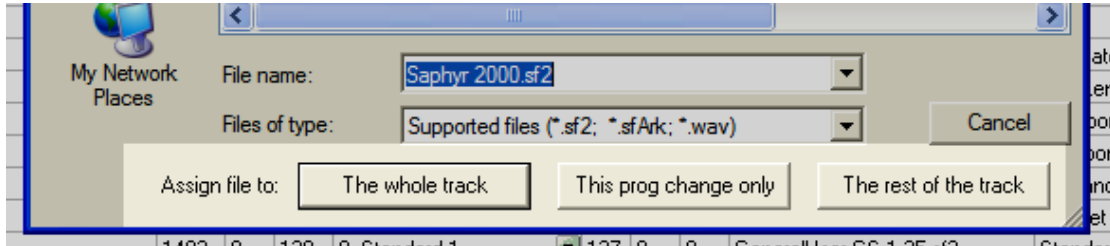
- Removed a bug that sometimes prevented playing on the Layers/Splits "keyboards" or on an external keyboard as well. Removed another bug that prevented playing notes Splits "keyboards" by drawing the mouse (after mouse down). Removed a third bug that caused ModEnv-to-Pitch to behave badly in live mode (not in rendering mode).

- Removed a bug causing an error when starting some VST effects the first time. Also removed some other errors from the VST manager (Setup).

- **This is not a bug, but, I tried to speed up the rendering engine again. It keeps slowing down as I add new features.**

### **Some new features:**

- Added a button to make it easier to assign a VST bus to a track (above the bus column).
- Added code to show volume changes while playing: changes the Vol value in the tracks list.
- Added feature: SoundFonts can now be assigned to program changes in the middle of the track (provided a program change already exists). Also, there are three new buttons in the file open dialog:



**If you want to test this concept, load the file "12daysXmas.mid" from the SynthFont folder.**

- Added drop down menu to the Sf2File button. Show a list of SoundFonts in use. This is a fast way to assign an already open SoundFont to a track (or the rest of the track, or a program change - see above).
- Added transport buttons ("play/stop", "forward to next market", "forward 1 bar [10 bars]", "add marker". To go forward 10 bars, hold down the CTRL key.)



- Sfarr-files are now registered in Windows Registry as SynthFont files. Open by double-clicking or use Explorer's context-sensitive popup menu.
- "Feature?": if a channel doesn't contain any program information the text "No program" is displayed in the Programs column.
- Added a checkbox in the Options dialog saying "Always create Track Markers". Uncheck this if you don't want SynthFont to create the list of markers pointing to the very beginning of each track.
- The "Start playback from" position is now also saved in the Arrangement file.
- ... Plus a large number of odd improvements!

---

## ***New in Version 0.94 (Dec. 2003)***

Changes in this version:

**One bug fixed:**

Strange things happened when you changed the SoundFont file for a particular track. This feature is so crucial for the function of SynthFont that I HAD to release a new version immediately.

---

***New in Version 0.93 (Nov. 2003)***

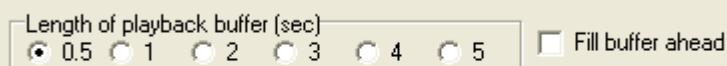
Changes in this version:

**A lot of bug fixes:**

- The pitch bend effect didn't always work correctly.
- Overlapping notes in combination with Pedal Hold could cause havoc in some cases. The polyphony could rise to sky limits causing break-ups in the speaker sound.
- Some MIDI files seem to have declared more tracks than they actually contain. These were reported by SynthFont as corrupted and not fully interpreted. Improved.
- Some MIDI files contain more MIDI channels than declared tracks. As it is very important for SynthFont to have the midi channels separated into tracks, I have tried to improve the reading of these files.
- The volume levels were much too low because the extra track volume level - the one you can adjust by clicking in the Vol column and changing the slider - was wrongly calculated. At the same time I changed the upper limit for this extra volume level to 255 (from 127).
- Ooops! The single file wave output could result in a WAV file with bad header. Some programs - like Winamp - could still read the file, while some others (like SynthFont!) could not.
- Some SFs could not be saved after editing.
- In the Live mode routine: Changing the SF would not necessary be acknowledged by the routine, causing unpredictable results.

**Some new features:**

- Added some playback buffer parameters to the Setup dialog and a button to pop this up. The buffer size should normally be set to the smallest value in order to respond quickly to real time changes (like changing the VST effects). If the midi file has a very high true polyphony (typically above 200, depending on the speed of your computer) you may experience stuttering if the buffer is too small. Increase the buffering time to reduce stuttering, and allow for buffering ahead to get a good start as well.



- Added a button (▼) in the track list to view and select any MIDI program change that may occur within a track. This button only shows up when there are more than one program in the track. During

playback, the current MIDI program will always be displayed in the tracks list.

- Removed empty tracks when splitting a single track's channels into tracks.

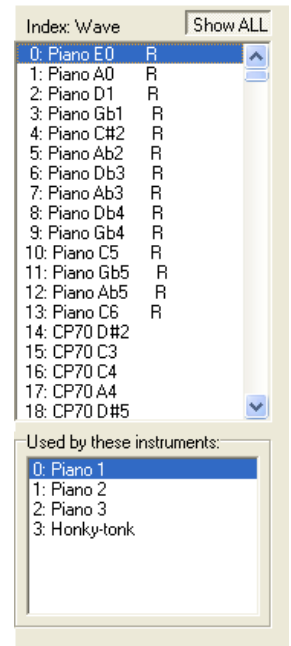
- Added a Show All button to the Wave tab. Use this function to list all waves in the selected SoundFont and to see which instruments use a certain wave. Note, that ROM based waves will have their names preceded by an exclamation mark (!).

- Added a button to erase midi markers in the Piano Roll pane.

- Added code to store and retrieve user defined midi markers in the arrangement file

- Added 'Rel. Note Activity' display while playing. In the tracks list (tab: 4 Tracks) the relative (true) polyphony of each channel is indicated by a bar.

- The VST effect program number is now also stored in the arrangement file.



---

## ***New in Version 0.92 (Oct. 2003)***

Changes in this version:

- Removed a quite nasty bug that was introduced in the previous version: rendering to one single wave file (not separate channel files) could result in an audio file full of noise.

- New features: there's an internal file explorer. You can use it to open midi files or SoundFonts. You can drag files onto the play list, or in alternative view (see below) on to the tracks list.

- New feature: there's a full screen alternative view (actually two alternatives). Use the Alt View button in the toolbar to activate. Select view type from the dropdown menu.

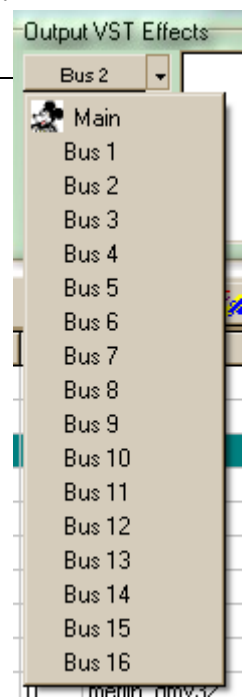
- A few other minor bugs and inconsistencies were fixed as well.

---

## ***New in Version 0.91 (Oct. 2003)***

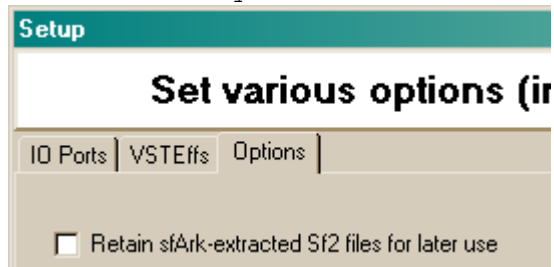
Changes in this version:

- **There is one major new feature: You can now create VST busses and assign them to MIDI channels. The main bus introduced in version 0.90 is by default used by all channels. To assign a bus to one or several MIDI channels do this: select the bus from the drop down menu, select the appropriate track(s), and then press the button. To remove a bus, either assign the Main bus to it (no change introduced as this is always ON by default for ALL tracks) or use the menu item in the tracks list popup menu (right mouse button).**



- The handling of VST effects and folders in the Setup dialog was a little bit buggy. Most bugs should have been removed. There were quite a few. Sorry for that.

- Added support for sfArk<sup>1</sup> compressed SoundFonts. You can assign a compressed SoundFont to a MIDI channel in the same way as you would assign a normal SoundFont. SynthFont will extract the SoundFont when needed. In the Setup dialog you can select whether you want to retain the extracted file on disk or not when SynthFont exits. It is advised that you choose to retain the files if you have enough of disk space available as SynthFont will load faster the next time.



- There is a new pane in the Setup dialog. (See above) This includes very few items at the moment but will certainly be extended with others over time.

- I have changed the implementation of the MIDI note-off message when two notes of the same pitch overlap. The algorithm should be more "clever" now and behave "correctly".

- Tracks list: You could already use SHIFT to select a range of tracks, AND NOW you can also use CTRL to select tracks which are not next to one another in the list. (This is standard Windows practice and useful e.g. for muting several instruments at once.) This is also possible in the VST effects list (Setup).

- Tracks list: The right mouse button now both selects the line under the pointer *and* brings up the popup menu at the same time, hence reducing the number of clicks needed. (The 'Delete (Cut)' item was removed from this menu as it didn't do anything.)

- It is now possible to assign the same **patch** to multiple selected tracks at the same time (as you already could do with SoundFonts).

- Piano roll: Move the mouse over a specific event and see info about the event in the status bar below.

- File menu: "New" option didn't do anything, removed.

- Bug corrected: 'Show All' wouldn't unmute a muted tempo track, resulting in tempo information not being passed on to the rendering engine (this must be the third time I correct this bug...)

- Bug corrected: Stereo wave files assigned to a track did not play (but mono files did).

- Bug corrected: After changing SoundFont for a track, the 'live mode' did not necessarily updated it's SoundFont cache. This could result in some nasty error messages.

---

<sup>1</sup> sfArk SoundFont Compression is copyright melodymachine.com, all rights reserved.

...And some other minor bugs which I have forgotten to make a record of.

---

### **- New in Version 0.90 (Aug. 2003)**

Changes in this version:

- There is one major improvement. You can assign VST effects to the main output bus. (Currently there is only one bus available.) You can assign as many effects as you want and your processor allows. To see the editor window for an effect in the chain, click the effect in the list (not the check mark!). You can temporarily disable effects by un-checking the check mark.

You can load an effects bank/preset file (\*.fxb), if you have one available.

NOTE that the VST capability is enabled only when rendering to the speakers and/or to one single wave file. It does NOT work when rendering channels to individual files, nor does it work with the live input (from e.g. your external keyboard).

Visit my home page at <http://www.rundt.de.vu> for links to free VST effects.

- Added automatic version checking. This function can be accessed from the About box as well.

---

### **New in Version 0.87 (June. 2003)**

Changes in this version: Mostly bug kills.

- The rendered WAV-files had correct physical length but this was wrongly reported in the file header (half of the size).
- The Wave display didn't handle stereo files (because SoundFonts really don't hold stereo files. This is needed only if you assign a WAV-file and not a SoundFont to a track.)
- Rendering to a WAV-file only wasn't any faster in versions 0.85 and 0.86 due to a missing Boolean test. Corrected.
- Tried to hide warning messages when playing from the playlist as these simply - and annoyingly - interrupt the stream.

---

### **New in Version 0.86 (June. 2003)**

Changes in this version: Killed a few poor bugs.

---

### **New in Version 0.85 (June. 2003)**

Changes in this version:

There are two major features added:

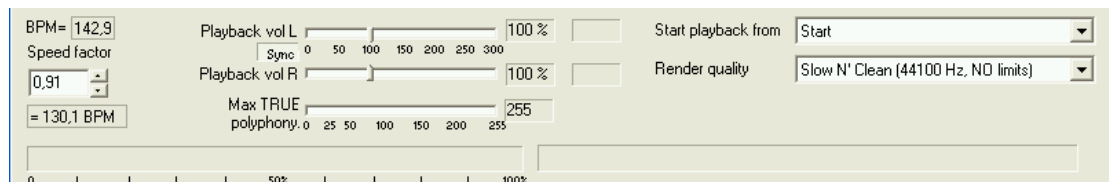
The live input now works pretty well. Go to Setup and select the input port. This can be an external keyboard or a midi loopback. (At least MidiYoke works well on Windows XP). Then press the Input button to activate the real mode. Note: if you have no midi file loaded, you basically have no SoundFonts loaded. What happens then is that SynthFont will load the Default SoundFont (See menu item 'File').



The "soft keyboard" displayed at the top of the Layers and Splits panes uses the same input engine. Thus, if you click on a key in this keyboard the input button will be depressed. You can now also play your external keyboard as well (alternatively). The input function will stop when you switch pane.

You can now load a standard audio (WAV) file instead as a SoundFont. What happens is that a very basic soundfont structure is created internally. This has two presets: 'Trigger Note ON' and 'Trigger Note ON/OFF'. In the first case the audio data will start to play always when any not one event is received. The audio will play until the end of the stream. In the second case... well you can guess.

The rendering engine has been altered quite a lot for the live input option. The engine has now much lower internal latency. Also, I fixed a bug that could turn up when rendering to a sample rate of 22050 Hz and the filter frequency become higher than 11025 Hz.

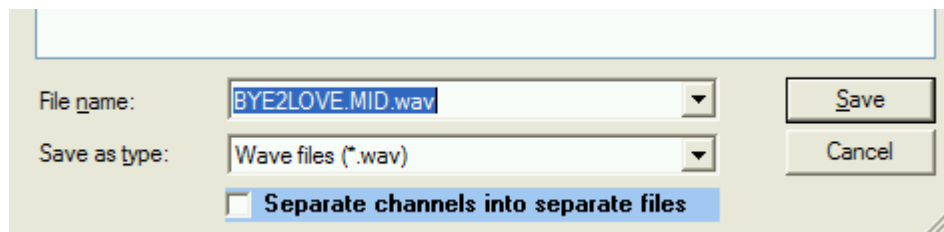


The display of song position has been changed. It is now a progress bar (to the left above) and other relevant information is displayed as text to the right. Currently the only relevant information shown is the Bar number (NOT the beat number). **The pianoroll now also scrolls to the currently playing bar position.**

The maximum permissible polyphony number is now displayed in a small box to the right of the trackbar (see above).

When you change the BPM Speed factor, the resulting value is displayed below. To change in steps of 0.01, hold down the left CTRL key while clicking on the Up/Down buttons.

Favorite Folders has been added to all Open / Save dialogs. The Separate button has been removed. If you want to specify separate wav files for each midi channel, then check this box in the '...To File' (button) dialog:



The playlist file structure and file saving code as been changed slightly. (Removed [Files]).

Extended the number of track colors to 32 (enough for the moment).

Removed the extra characters displayed after the track name in both the Tracks list and the Pianoroll.

In the Events tab, the new "beat" column screwed up the text in the "length", "operation" and "data" columns. The 'Save as text' function didn't work as intended.

Added a "play layered" check box to the Splits pane. This was already present in the layers pane (layers are more often layered "on top" of each other than splits).

AND... a LARGE number of SMALL bugs were killed.

---

## ***New in Version 0.80 (May 2003)***

Changes in this version:

(There is also a help file available now for download).

The toolbar contains two new buttons:



The left button is for selecting input and output ports. For the moment the only use is for selecting wave output. The right button - grayed - is for activating the live input. This feature is still on hold due to some technical problems.

The File Open dialogs contain a history (favorites) folder list. Always when you open a file the folder is added to the list (if not already there). For midi files, there is also a button called "Add file(s) to playlist". This adds the selected file(s) to the playlist in the Files tab.

The Events window now also displays the beat number for the events. Likewise, when playing, also the beat number is displayed in the status bar together with the other related information.

The "Select track" dropdown list beneath the Piano roll now behaves as was intended. It displays the selected track in the Tracks tab, and when changed, also changes the selected track.

The Piano roll automatically scrolls to the center of the key range instead of the top range (where there seldom are any notes).

The small Edit generator window with one or two scrollbars that popup when you edit a generator in the Splits tab now behaves correctly. (It did behave better when editing Layers than Splits).

There is a new column in the Track list on the Tracks tab. This column has the heading 'Trst±' and is for transposing all notes of a midi channel up/down in semitone steps (12 steps = 1 octave). To activate this feature, click in this column OR press the right mouse button in the Tracks window to popup a menu.

You can now also change the Pan value. Click in the Pan colum (or use the right mouse). (This feature has already been available for the Vol value).

I have removed the Instruments column from the Tracks list. Instrument names may be defined in a midi file. It is not really used for anything, and is very seldom defined.

You can select which panes you want to have displayed. Press the right mouse button on any of the tabs.

The Presets Dialog no longer pops up when a file is loaded and the selected soundfont doesn't contain the default preset. You have to fix this later yourself, before playing.

The Presets Dialog contains a checkbox "Lock Preset". If you check this, the selected preset will remain in function independently of any midi event.

Puh.. I just can't continue this list. I will cut it short here by saying that there are a number of smaller and not so small bugs fixed as well.

---

## ***New in Version 0.70 (April 2003)***

Changes in this version:

The major change is the addition of very simple soundfont editing capabilities. You can edit the parameter values in the Layers and Splits grids - either directly by editing the numbers or by pulling the popup scrollbar(s). Double-click on a cell to start editing. You can switch off this capability (if it annoys you) by unselecting 'Edit mode' below the table. This feature has not been extensively tested yet - use with care and be sure to select Yes to 'Create backup of original file' when saving OR use **Save as...**



Fixed a number of minor bugs - among others:

- Selecting Cancel in the Preset dialog no longer clears the preset information and displays 'no preset assigned'.
- Fixed a number of 'anomalies' in the wave tab. 'Use Correction' is now 'Use Split loops' (when sounding the wave - no other split-corrections are used here). The "-><- loop" button wasn't always enabled when it should have been. Pressing this overlays some part of the loops. You can scroll/zoom in on these to better inspect the loop quality.
- And many, many others too small to list here.

---

## ***New in Version 0.63 (March 2003)***

Changes in this version (nothing very dramatic):

The Pan generator now works correctly. Previously the engine tended to pan everything towards the left.

Tried to make the Exclusive Class "generator" work as it should. Feedback please!

Fixed a number of minor bugs and a few glitches in the rendering engine. The notes should sound more well defined now (in some cases high pitched notes could sound a little bit off pitch...).

---

### ***New in Version 0.62 (March 2003)***

Changes in this version:

Fixed a missing link - the tempo changes within the song were not propagated to the rendering engine.

---

### ***New in Version 0.61 (March 2003)***

Changes in this version:

Corrected a minor bug in the Select Preset procedure.

---

### ***New in Version 0.60 (March 2003)***

Changes in this version:

**I have rewritten the core rendering engine to optimize it for speed. It is now as fast as it can get without turning to massive assembler coding and using MMX instructions.**

In the course of this task I also corrected some bugs - and most probably introduced some new ones.

Fixed a bug in the Piano Roll window: in some cases a controller was interpreted and drawn as a note (the window does not draw controller values at the moment).

Added code for program change in the middle of song data. I have already twice before tried to get this to work, and always managed to do something later on to stop it from working again. This should be the FINAL correction. Not it works. Today at least.

---

### ***New in Version 0.53 (Feb. 2003)***

Changes in this version:

Corrected one bug: there was an unhandled exception when rendering to a file only (and not playing to the line out at the same time).

Corrected the handling of the MIDI channel velocity message, which was "lost in space".

Corrected the handling of MIDI files having no tempo information. The default is 120 BPM.

Corrected a bug in the wave display unit - switching to another wave when zoomed caused an exception.

Corrected some interface "glitches" in the wave windows: e.g. the width of the graphs now adjust to the width of the main window.

The list of sfarr-files in the 'Open' toolbar button's dropdown list is now sorted alphabetically.

Corrected some other minor "irregularities".

---

### ***New in Version 0.52 (Feb. 2003)***

Pitch Range (RPN 0) now works.

Pedal Hold now works.

Corrected some minor "irregularities" and one bug.

Minor interface improvements.

---

### ***New in Version 0.5 (Feb. 2003)***

Corrected 'last opened file' to mean last opened sfarr-file, if defined.

Added code for different rendering qualities (mainly different sample rates), and for limiting the maximum TRUE polyphony to any number up to 255.

Added a popup-menu to the track volume slider (which you get when you click in the Volume column). This popup contains Maximum, Default and Minimum.

Added a playlist. See the tab named 'Files...'.

Added a wave display. See the tab named 'Wave'. There is also a first attempt to find the key of the wave based on a Fast Fourier Transform analysis (at doesn't really work very well yet).

Corrected some minor bugs.

---

### ***New in Version 0.41 (Jan. 2003)***

Corrected a minor bug in the 'Start playback from' function (to start playback at a predefined marker position (see Piano Roll tab for markers)) and added hint text.

---

### ***New in Version 0.4 (Jan. 2003)***

Added code to choose wave file path and name.

Added code to make it possible to render tracks (actually MIDI channels) into separate files (new toolbar button).

When rendering to a wave file, extra silence in the beginning is preserved so that files can easily be combined in a mixing software by aligning them all at the beginning.

Corrected some more soundfont memory allocations routines. When changing preset for a track the presets wave data could become erased from memory although it was still in use by other presets.

The MIDI Controller 11 (Expression) now works more or less correctly.

Added code for program change in the middle of track data.

Added slider for changing channel volume (click in Volume column to try it!).

Added 'Start playback from' to start playback at a predefined marker position (see Piano Roll tab for markers)

Corrected a number of minor bugs (no reason to list them here).

---

## ***New in Version 0.3 (Dec. 2002)***

Swapped the left and right channel in order to comply with SoundBlaster Live - I can't see why I haven't done this before...

Corrected a number of inconsistencies in relation to the handling of midi and sfarr files. For example, not all soundfont information was deleted when opening another midi file with another set of soundfonts. Hence there was a slight risk of a memory allocation error.

Corrected the behavior of the modulation envelope decay which has to be linear even if the decay of the volume envelop is exponential.

Corrected the PitchWheel function, which caused extra noise in some cases.

Added the missed delay parameter to the mod LFO and the vib LFO.

Corrected a few soundfont memory allocations routines. Memory became wasted and wave sound not released correctly when presets were changed for a track (channel).

Corrected a number of minor bugs (no reason to list them here).

New Setup creator: Inno setup version 3.0.4-BETA.

---

## ***New in Version 0.2 (Dec. 2002)***

The rendering engine is much faster now!

1. Speeded up the filter routine and tried to improve the behavior.

It is still not working perfectly. Can't seem to be able to handle a combination with resonance > 0 and no filter frequency (i.e. 20000 Hz). How should this work?

2. Minor improvements in the GUI

- added a scrollbar for scrolling thru tracks in the Layers tab
- better handling of main window placement on screen
- Added hyperlink to About box.
- The first un-muted track is now selected in the Tracks Info list when a file is opened.

- Max signal levels shown in area above tracks info in the Tracks Info pane

3. BUG: Drum set not found - was not handled correctly

4. Open SF2-files in share mode

6. The SF2 specification says:

"sampleModes

This enumerator indicates a value which gives a variety of Boolean flags describing the sample for the current instrument zone. The sampleModes should only appear in the IGEN sub-chunk, and should not appear in the global zone. The two LS bits of the value indicate the type of loop in the sample: 0 indicates a sound reproduced with no loop, 1 indicates a sound which loops continuously, 2 is unused but should be interpreted as indicating no loop, and 3 indicates a sound which loops for the duration of key depression then proceeds to play the remainder of the sample."

This doesn't seem to hold. I have a soundfont (SYNTHGMS.SF2) that has sampleModes=0 for all samples, but still is supposed to be looping. Can't find a way to handle this? Anyone...?

7. Changed to Modulation Envelope calculation routine to be exactly similar to the Volume Envelope routine. Corrected the way modulation sustain level is calculated (it is not the same way as for volume sustain).

8. Prevented keyboard hint to popup when a key is pressed (caused crack in the sound)

10. One SF2 file can now be assigned to all selected tracks.

11. Added code to set channel 9 as the default percussion channel ALWAYS.

12. SynthFont now responds to tempo changes within a song

13. Relative file paths stored in arrangement files.

14. Better handling of assigning bank and presets when opening a new midi file. If there is a SF2 file with the same name then that is used as the default soundfont. If a SF2 file is specified in the arrangement file and missing a file open dialog will pop up.

15. Corrected one bug: midi data was erased from memory when the arrangement was saved.