The OAS-7 Sequencer

2 : Editing an Existing Wersi MIDI-File – (a)

In April 2008 I produced an introductory article to the Wersi Sequencer in OAS-7. It's now time to use this Sequencer and it's a good idea to start with an existing MIDI-File to see how that is set up and make a few changes to gather the feel for this piece of software. Wersi has provided several MIDI-Files within the OAS and I've chosen "Wonderful World" as the example to look at in close detail.

Load "Wonderful World" by using **Quickload > MIDI-Files > Wonderful World**, then touch **Quick edit** or select **Settings > Edit Sequences**. The following window will appear.

This middle section is the one we're particularly interested in to begin with.

There are always 16 MIDI Tracks available. This window shows six at a time. Screenshots below show just this panel with the remaining ten Tracks displayed.

In this MIDI-File, Tracks 1, 15 and 16 are blank before the File starts playing.

You could use this button to load the File once in Sequence Edit.

These buttons allow us to navigate among the 16 MIDI Tracks.

The top and bottom button jump to display Tracks 1 – 6 and 11 - 16 respectively.

The inner two buttons move up or down by one Track respectively for each touch.

Tracks 7 to 12 have the following appearance:

Here Track 7 is selected, so "Individual Track Entries" shows the values for Track 7, Grand Piano. These will change if any individual box for Grand Piano is changed. Track 10 is always the Drum Track.

Tracks 13 to 16 have the following appearance:

The same applies here for Track 11. Offset values in the individual Track boxes range from –99 to +99. Values in "Individual Track Entrys" range from 0 to 127.

The offset values in the Track boxes and the actual values in "Individual Track Entrys" are related to each other. To change a value you can do so via either. The manual recommends changing the "Individual Track Entrys" figure as this is an absolute value and therefore relates to all such similar values elsewhere on the instrument.

The first thing to do is to establish which Tracks have the tune. We want to produce a MIDI-File from this where we can play just the tune ourselves, accompanied by the MIDI-File, in the first instance. There are various ways of finding the tune and a combination of them all is needed when using a MIDI-File produced by someone else, as here

- You can listen to the file and write down which instruments have the tune at any time.
- You can import the MIDI-file into a Midi Notation Program (like "Notation Player") on your computer and observe the notes on-screen.
- By using such a Notation Player you can establish approximately how the tune is dispersed, though the accuracy of this may well depend upon the Player used. Using "Notation Player" I find there are no Track numbers and the instruments identified for each track displayed bear little resemblance to the actual instruments used. It does, however, number each fifth bar which is extremely helpful.

A further avenue of enquiry is needed and this makes use of the "Edit" button to the right of the **Sequence Edit** screen. Touching this button will ovrelay a new screen, called the **Edit Track** screen. This is specific for each Track. By obtaining an approximate bar number from the notation software for where the tune changes instruments and where it is played by more than one instrument, a reasonable plan of what is going on can be established. Using this Edit button to display the **Edit Track** screen for each Track enables a final analysis of the whole MIDI-File to be completed.

Here is the Edit Track screen for Track 7, Grand Piano, overlayed on the Sequence Edit screen. We shall return to this screen at another time.

The Event of interest here is "Note". The Position identifies the Bar:Beat:Tick and it is the Bar number which is of interest here.

We shall return to this area of Position and Event later. In the meantime, by touching each Note row anywhere in the row you can hear that note being played.

Edit Track   Solo   Back

Position	Event	Val 1	Val 2	Length
2:01:000	Contr Change	121	0	0
2:01:300	Contr Change	11	127	0
13:02:318	Contr Change	64	127	0
13:02:426	Note	C3	92	72
13:02:430	Note	C4	112	64
13:03:201	Note	E3	96	63
13:03:206	Note	E4	109	60
13:03:451	Contr Change	64	0	0

	Val1	Val2	On
Notes	Off	Off	✓
PRG-Ch.	Off	Off	✓
Controller	Off	Off	✓
Pitch Bend			✓
AfterTouch			✓

Copy   Delete   Insert   Delete All   Exchange   Modify   Apply

Paste

Left + Right   1 52 53   Position 0 0   Beat 6/4   Tempo 107   Offset(%) 100

Locator   Cycle:Off   In   Out   Aftertouch Off   Click:Off   Quantize   Off   AQ:Off   Overdub

This Position table is on the underlying Sequence Edit screen. The left box is the Bar number and the right box is the Beat number. Touch the left box, use the Tempo/Data wheel to advance to a particular bar, then touch the box again to unhighlight it. Touch the Play button, the music will play from that bar and the Position column in the Edit Track overlayed screen will display the Events from that bar.

There are 53 bars in this MIDI-File. The music starts during bar 3 and ends at bar 52.

By investigating Tracks 2 – 9 and 11 - 14, in conjunction with information obtained from a Notation Player, the contribution of each of those Tracks to the full File can be ascertained. Tracks 1, 15 and 16 contain no Note Events because they were not used in the original recording. Here is a summary of the contributions of each Track.

Track No.	Sound	Start Bar	Contribution	Comments
1	Harmonica	-	-	
2	Clarinet	5	Tune : Bars 5-13, 21-29, 37-44	Mute
3	Sax Section 2	21	Tune : Bars 21-29, 35-51	Mute
4	Bass Guitar	3	Bassline	
5	Vibraphone	5	Tune : Bars 5-20, 25-29, 37-44	Mute
6	Strings 1 Soft	3	Tune and accompaniment throughout	
7	Grand Piano	13	Tune : Bars 13-20, 37-44	Mute
8	Horn Section Warm	13	Counterpoint	FX4 on score
9	Celesta	3	Arpeggios	Music Box on score
10	3 Standard GM	3	Drums	
11	Vocal 1	3	Accompaniment and Counterpoint	
12	Solo Trumpet	19	Tune : Bars 29-35	Mute
13	Muted Trumpet	21	Accompanying phrases	
14	Natural Guitar	5	Arpeggios	
15	Jazzflute 1	-	-	
16	Rock Sax	-	-	

My initial suggestions for muting Tracks are presented above. These are the Tracks which contain the tune. It seems to me to be possible to play the tune live using a percussive sound while the MIDI-File plays the tune using a sustained sound and vice versa. To try to play a percussive sound while the MIDI-File also plays such a sound could cause slight variations in the start of each note between the two versions which is undesirable.

Muted Tracks will save as such in the Sequencer. When trying out a MIDI-File like this and using a printed score there can be differences in the arrangement. Harmonies can be different, as can repeats etc. My music score for this piece is in Common time but the Wersi MIDI-File displays 6/4 time. Obtaining a score direct from the MIDI-File via Notation software is particularly useful in enabling the comparisons and therefore adjustments to be made. By setting the Notation software to display one instrument only, the one providing most of the tune, in this instance the Clarinet is a good bet, the single stave score for that instrument can be printed out (on a single sheet, most often). This can then be compared with the full on-screen score and the harmonies etc which are different from the score which you normally use can be notated on that score (in pencil!!).

You can also try changing the instrument for a particular Track. You'd normally do this for a particular purpose and this MIDI-File seems not to need any such changes. For the purpose of experiment, though, it's worth trying the procedure out. In this example, the experiment is quite straightforward. Some MIDI-Files, however, have a change of instrument within a single Track as the music progresses. This is not so simple to alter and I'm still in the dark about what exactly happens. At present I avoid changing the instrument in such circumstances!

That will suffice for this initial look at editing an existing MIDI-File. I shall pursue my quest to try to understand more of what Wersi has offered within the Sequencer and report back in a future article. In the meantime, if anyone spots any errors in this article or feels able to contribute to this quest for knowledge I should very much like to hear from you: I have many questions!!

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