# **Tutorial ' Playing Midi with MC Musiceditor'** by Reinier Maliepaard (mcmusiceditor.com)

version 1.0 – May 2015

We will be using MC Musiceditor 8.2.5 for this tutorial (www.mcmusiceditor.com). This release has implemented the powerful SoundFont Midi Player of Zoltán Bacskó (falcosoft.hu). This excellent player has many features, more than will be accessed in this elementary tutorial. Requests for extending this tutorial will be welcomed!

I would like to thank Zoltán for his great contribution to MC Musiceditor.

### Section A. The first steps

1. Start MC Musiceditor and write a melody:



The previewer shows:

temp_pre.ps	×	
🚊   Page: 1 /1 🔶	😳 🔎 🗩 F ind:	♦
¢4	• •	
•		H.

2. To play this melody, click the Play button or press F4:



a. Midi Player will start

b. and plays your melody automatically

×	Midi P	layer	= -	[ [ -	- [ -
	1. temp1	1 1 0			
-	Type: 0 Tracks: 1 PPQN: 480	120 BPM			
*	Midi In: 0 Net: 0				
					-   -
+		· · · · · · · · · · · · · · · · · · ·	🖳 🖸 🖉	olume Balance Bass	Treble
<					
Show	All Program 000 Acoustic P	iano   Bank MSB 0	Bank 0	Channel 1	••
- Chi			$\dot{\sim}$		
Ditch		Volumo Ban Ba			Denet
Pitch	Modulation Sustain	Volume Pan Re	everb Chorus	User	Reset
Pitch	Modulation Sustain Title (1 item) D:\mcCompile\temp1.mid	Volume Pan Re	everb Chorus	User	Reset
Pitch	Modulation Sustain Title (1 item) D:\mcCompile\temp1.mid	Volume Pan Re	Chorus Chorus Cine 0:00:08	User SoundFont	Reset
Pitch	Modulation Sustain Title (1 item) D:\mcCompile\temp1.mid	Volume Pan Re	everb Chorus	User SoundFont	Reset
Pitch	Modulation Sustain Title (1 item) D:\mcCompile\temp1.mid	Volume Pan Re	everb Chorus	User SoundFont	Reset
Pitch	Modulation Sustain Title (1 item) D:\mcCompile\temp1.mid	Volume Pan Re	everb Chorus	User JSoundFont	Reset
Pitch	Modulation Sustain Title (1 item) D:\mcCompile\temp1.mid	Volume Pan Re	everb Chorus	User SoundFont	Reset
Pitch	Modulation Sustain Title (1 item) D:\mcCompile\temp1.mid	Volume Pan Re	Everb Chorus	User Ja SoundFont	Reset

3. To play this melody again, click the Play button of this Midi Player:



## Section B. Special topics

### 1. Changing the tempo

a. Define your initial tempo by adding the Q: tag (before the K: tag!). Here Q:1/4=72, meaning 72 quarter notes (crotchets) per minute (72 BPM).



b. Click the Play button and Midi Player will start your song. You can change the tempo by moving the Tempo slider:



c. The tempo changes will be given in %. The default is 100% and moving the slider to the right shows the percentage 200%: your song will be played two times faster. This is equal to Q:1/4=144. The black window shows indeed 144 BPM:

×	Midi Player	
	1. temp1 1 4 72 0:00:13.37 0:00:02.62	
\$	Type: 0 Tracks: 1 PPQN: 480 144 BPM Midi In: 0 Net: 0	
₽		yolume Balance Bass Treble
<		
Show	All Program 000 Acoustic Piano   Bank 0 MSB 0	Bank 0 Channel 1 +
Pitch	Modulation Sustain Volume Pan R	Reverb Chorus User Reset
5	Title (1 item)	🕼 Time 🎜 SoundFont
<b>&gt;</b>	D: \mcCompile \temp 1.mid	0:00:13
<u> </u>		

#### 2. Finding your instrument

a. The default midi instrument is '000 Acoustic (grand) piano'. This equals the following code:

```
X:1
M:4/4
L:mcm_default
%%MIDI program 0
K:C clef=treble
C4 D4 E4 F4 | G1 | G4 F4 E4 D4 | C1 |]
```

Midi Player gives that info also:



b. One nice feature of Midi Player is that you can experiment with different midi instruments before modifying the code. I tried '011 Vibraphone' .



c. I like the result, so I adapt my code by changing the number 0 into 11:

X:1 M:4/4 L:mcm\_default %%MIDI program 11 K:C clef=treble C4 D4 E4 F4 | G1 | G4 F4 E4 D4 | C1 |]

### 3. Changing the default soundfont

The developer of Midi Player, Zoltán Bacskó, made a default, tiny soundfont: reality\_gmgs\_falcomod.sfogg. You can use another one within Midi Player:

a. Save the soundfont you like into the subfolder 'midiplayer'. Suppose you installed MC Musiceditor in D:\MCMusiceditor, then you have to save your soundfont into D:\MCMusiceditor\midiplayer.

b. Click the button for Device Settings:

Midi Player         1. p1 tem       1 1 0         0:00:08.02       0:00:00.00         1. pe: 0 Tracks: 1 PPQN: 480       120 BPM         M ii In: 0 Net: 0       120 BPM         Device Settings	
Show All Program 011 Vibraphone Bank 0	$Bank 0 \Rightarrow Channel 1 \Rightarrow 0$
Pitch Modulation Sustain Volume Pan Re	everb Chorus User Reset
Irtle (1 item)      D:\mcCompile\temp1.mid	Ime J SoundFont  0:00:08

## c. The next popup window appears:

Midi Player Device Se	ettings			×
Midi <u>O</u> ut			BassMidi Settings	
Use Midi Mapper	Use BassMidi	<b>v</b>	Default Soundfont	Volume
Output Port	BassMidi	-	reality_gmgs_falcomod.sfogg	0
Soundfont Device	BassMidi	-	Bank Additional Soundfonts	Volume
Midi <u>I</u> n				0
Active	Channel override			0
Input Port			File File	
Mixer			Real Time Loaded Soundfont Volume	Q
Use Mixer Zero				5
Mixer Port	BassMidi	-	Map Soundfonts into Memory Preload S Enable Directsound Acceleration Use Since	oundfonts Interpolation
Recording Source				
Input Port	BassMidi	•	Reverb     Level     Chorus       Hall 1     Image: Chorus 1     Image: Chorus 1	Level
Midi via <u>N</u> et				
Send Ren	note Host 192.168.0.255 Port 6666		Maximum Polyphony 128 Sample Rate (Freq)	44100 🔻
Receive Loca	al Port 6666		Buffer (Latency)	
	OK Cancel			

d. You can change the default soundfont\* by selecting and opening another sound file (via File). Click then OK.

\* Soundfonts are sound files (default extension sf2) made of many different recorded audio samples of different real-world instruments. Bigger soundfiles have better quality of sound, because more samples per instrument were recorded.

rho.					
Midi <u>O</u> ut		ettings	$\sim$		
Use Midi Mapper	Use BassMidi 🔽		Default Soundfont Vo		
Output Port E	t Port BassMidi v reality_gm			File	) – 1
Soundfont Device	assMidi 👻	Bank	Additional Soundfonts	$\sim$	Volume
Den Open		0.0		×	
A Look	in: 🏭 midiplayer	•	G 🤌 📂 🖽 -		
Ir (Area	Name		Date modified	Туре	0
Mixe 🍼	\mu layout		4/14/2015 8:41 PM	File folder	-0
Recent Place	s 🔒 midiplayer_271		4/15/2015 6:02 AM	File folder	J
	퉬 midiplayer_271_bse		4/15/2015 6:35 PM	File folder	Indfonts
	🐌 OLD		4/15/2015 6:36 PM	File folder	terpolation
Desktop	🌗 readme		4/14/2015 8:41 PM	File folder	
	soundfonts		4/15/2015 6:24 PM	File folder	Level
I	MourSoundfont.sf2		9/2/2013 8:08 AM	SoundFor	- <u>n</u>
Libraries					
					14100 🔻
Computer					
	<			•	-
Network		-			
_	File name: YourSoundfont.sf2	2	-	Open	
-	Files of type: Soundfonts (*.sf2)		▼	Cancel	

e. A great source for soundfonts is: synthfont.com/links\_to\_soundfonts.html

## Section C. Collapse/expand window Midi Player

Click the 'Show Playlist & Piano' button to collapse or expand the Midi Player window:

Midi Player	
1. temp1 1 1 0 0:00:08.02 0:00:00.00	
Type: 0 Tracks: 1 PPQN: 480 120 BPM Midi In: 0 Net: 0	
•	
	Volume Balance Bass Treble
Show Playlist & Piano	
Show All Program 011 Vibraphone   Bank 0 MSB 0	Bank 0 Channel 1 + +
	<u>.</u>
Pitch Modulation Sustain Volume Pan R	everb Chorus User Reset
J Title (1 item)	🕓 Time 🎜 SoundFont
→ D: \mcCompile \temp 1.mid	0:00:08

### The result is:



### Section D. Channels in case of more part pieces.

As already said, the default midi instrument is '000 Acoustic (grand) piano'. In case of a solo melody, channel 1 is active. How does the following code behave in Midi Player:

```
X:1
M: 4/4
L:mcm default
V:1 clef=treble
V:2 clef=treble
V:3 clef=bass
%%staves [1 2 3]
K:C
V:1
%%MIDI program 46
E2 D2 | E1 |]
V:2
%%MIDI program 46
C2 B,2 | C1 |]
V:3
%%MIDI program 46
C,2 G,,2 | C,1 |]
```

I selected for this three part piece '%%MIDI program 46' (Orchestral Harp). This corresponds with the first three channels in Midi Player:





	1 omp1 t	Midi P	layer					- [ -	- [ -	
	0:00:04.02			0:00:00	.00		100			
\$	Type: 1 Tracks: Midi In: 0 Net: 0	3 PPQN: 480		120 E	3PM		0.0			
	0				_				2 2	
¥	<b>I</b> •   K			·		4 o	Volume	Balance	Bass	Treble
<										
Show A	Program 04	6 Harp		Bank	0	Bank 0	-	Channel 3	3	
in.			XX.	Xix	~~~	1 in	6			(61.00)
			QL		$\odot$	$\odot$				
Pitch	Modulation	Sustain	Volume	Pan	Rever	Choru	) 🔳	User	,	Reset
Pitch	Modulation	Sustain	Volume	Pan	Rever	b Choru Time	) • us L	User SoundFor	nt	Reset
Pitch	Modulation Title (1 item) D:\mcCompile\t	Sustain emp1.mid	Volume	Pan	Rever	b Choru Time	}∙ us ₽	User SoundFor	nt	Reset
Pitch	Modulation Title (1 item)	Sustain emp1.mid	Volume	Pan	Rever	b Choru Time	}∎ us ₪	User SoundFor	nt	Reset
Pitch	Modulation Title (1 item)	Sustain emp1.mid	Volume	Pan	Rever	b Choru Time	) us J	User SoundFor	nt	Reset
Pitch	Modulation Title (1 item) D:\mcCompile\t	Sustain	Volume	Pan	Rever	b Choru Time	) = us	User SoundFor	nt	Reset
Pitch	Modulation Title (1 item) D:\mcCompile\t	Sustain	Volume	Pan	Rever C	D Choru Choru Time	) = us	User SoundFor	nt	Reset
Pitch	Modulation Title (1 item) D: \mcCompile \t	emp1.mid	Volume	Pan	Rever	D Choru Choru Time		User SoundFor	nt	Reset
Pitch	Modulation Title (1 item) D:\mcCompile\t	emp1.mid	Volume	Pan	Rever	Choru     Choru     Time     00:04		User SoundFor	nt	Reset

So the next code would have different instruments for the first three channels. Check it yourself!

## Section E. Record to WAV file

Midi Player is able to record your session. Follow these guidelines:

a. Check if you use bassmidi (which is default): in this case you don't have to configure anything.

Midi Player Device Se	ttings		×
Midi <u>O</u> ut		BassMidi Settings	
Use Midi Mapper	Use BassMidi 📝	Default Soundfont	Volume
Output Port	BassMidi	reality_gmgs_falcomod.sfogg File	0
Soundfont Device	BassMidi 👻	Bank Additional Soundfonts	Volume
		□ 0 📮	0
Midi <u>I</u> n	Channel ausorida	File 0	0
Active	Channel override	File	0
Input Port	· · · · · · · · · · · · · · · · · · ·	File	0
Mixer		Real Time Loaded Soundfont Volume	0
Use Mixer Zero			
Mixer Port	BassMidi 👻	Map Soundfonts into Memory Preload So	oundfonts
		Enable Directsound Acceleration 🛛 Use Sinc I	nterpolation
Recording Source			
Input Port	BassMidi 👻	Reverb     Level     Chorus       Hall 1     Image: Chorus 1     Image: Chorus 1	Level
Midi via <u>N</u> et			
Send Rem	note Host 192.168.0.255 Port 6666	Maximum Polyphony 128 Sample Rate (Freq)	44100 🔻
Receive Loca	al Port 6666	Buffer (Latency)	
	OK Cancel		

b. Play a Midi file with MC Musiceditor (or load a Midi by clicking the folder button: right below the Close icon). In the Playlist appears your midi: here temp1.mid



c. To record your session, follow the next steps:

Step 1. Click the Record button, choose a file name and click the Save button:



You should see red colored label 'Recording' in the black display window:

X		Midi P	layer			-	<b>—</b> –	- [ -	- [ -	- [ -
	1. emp1 t 0:00:04.02			1 1 0:00:00.	0					
\$	Type: 1 Track Midi In: 0 Ne	s: 2 PPQN: 480 t: 0	,	120 BF Recordi			-		-	
	0			Ć	~		-			_   _
₽		• • •				<b>O</b> Vo	olume	Balance	Bass	Treble
<										
Show	All Program	000 Acoustic P	liano	<ul> <li>Bank MSB</li> </ul>	) <u> </u>	Bank 0 LSB 0	×	Channel	1	
	) 🖸 🥥 🗉		Ö		O	0 🔘		• 🧭	6	
Pitch	Modulation	n Sustain	Volume	Pan	Reverb	Chorus	;	User		Reset
5	Title (1 item)				0	Time	5	SoundEd	ont	
					-				2010	
~	D:\mcCompile	e\temp1.mid			0:00	:04			2110	
7	D: \mcCompile	<pre>\temp1.mid</pre>			0:00	:04		boundi		
	D: \mcCompile	≥\temp1.mid			0:00	:04				
7	D: \mcCompile	e\temp1.mid			0:00	:04				
7	D: \mcCompile	e\temp1.mid			0:00	:04				
	D: \mcCompile	e\temp1.mid			0:00	:04				
	D: \mcCompile	≥\temp1.mid			0:00	:04				

Step 2. Press the Play button:

Midi Player	
1. temp1 1 3 470 0:00:04.02 0:00:01.49	
Type: 1 Tracks: 2 PPQN: 480         120 BPM           Midi In: 0 Net: 0         Recording	
	Volume Balance Bass Treble
Show All Program 000 Acoustic Piano   Bank MSB 0	Bank 0 Channel 1 +
	<u>.</u>
Pitch Modulation Sustain Volume Pan R	everb Chorus User Reset
J Title (1 item)	🕓 Time 🎜 SoundFont
D:\mcCompile\temp1.mid	0:00:04

#### Step 3. Finish recording

If you would like to finish recording, you should press the recording button again. Now the red recording label in the black window disappears.

#### Step 4. Converting WAV into MP3 /cutting MP3

For converting the WAV file into MP3, I recommend the free version of the Switch Audio File Converter: www.nch.com.au/switch (right column at the bottom under 'Download Free Audio Converter Software'). For an online service, try e.g. audio.online-convert.com/convert-to-mp3. For cutting MP3, I recommend the free mp3splt (sourceforge.net/projects/mp3splt). Also try an online service, e.g. mp3cut.net

## Section F. Features of Midi Player

falcosoft.hu provides the following information about Midi Player: try it yourself!

Fully configurable Midi in and out ports.
Real time program and bank modification on any midi channel.
Real Time effects on any midi channel.
Mute and solo on any channels.
Variable Tempo and Pitch during playback.
Real time Synth (F1-F8 Function keys for octave change, Right click for note name)
Send Sysex for Synth (GM, GS, XG)
Midi send and receive over Net.

Karaoke midi files support.

Bassmidi output mode. Spectrum Analyzer. Module files (mod,xm,s3m,it) playback support via realtime converting.

Record to wave file capability.

Real time soundfont loading from playlist.

(Place your midi and sf2 file in the same directory with the same name, or postfix your sf2 file with the required bank number

e.g. mysong.mid mysong.sf2 loads the soundfont to bank 1, but mysong\_008.sf2 loads the soundfont to bank 8.)