MPC Sample Manager

Documentation

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Content

Introduction

This document shows the usage of the MPC Sample Manager. A software I have written to support my personal workflow of sampling and documentation.

I have checked some sample manager programs, but no one support my workflow. So I decided to write my own. This software is, like myself a little bit old school. It is written in Pascal (using Lazarus IDE), and so it look. The elder ones will be reminded to the 90th of the last century.

At first i want to introduce my workflow of sampling. I explain the setup of this software and than I tell you how to use it.

System:

This software only runs under windows 32/64 bit. But you can grab the source and compile it for other platforms with no problems (use Lazarus 1.8). Sorry, but I don't have a Mac or a linux system.

This documentation and the software is open source under the GPL V2.

You can download the bins and the sources here:

http://www.thomassindt.de/mpc

If you like this software, please donate!

http://www.thomassindt.de/mpc

My personal workflow

So, how do I work with samples?

I am talking here about sampling parts from vinyl disks, but it may also work for tapes, CDs and youtube vids. So if I found a sample within a song I am listening, I sample the whole song with a Waveeditor[1]. In order to store the song, I set up a folder structure for that. For each LP/EP/single I sample from, I create a folder structure which looks like this:

0000_Interpret_RecordName		
Name	Änderungsdatum	Typ
01_Song	16.07.2017 20:59	Dateiordner
02_Drumloops	16.07.2017 20:59	Dateiordner
03_DrumSamples	16.07.2017 20:59	Dateiordner
04_SingleNotes	16.07.2017 21:00	Dateiordner
05_ChordLoops	16.07.2017 20:59	Dateiordner
06_Chords	24.07.2017 12:47	Dateiordner
07_Melodies	05.08.2017 18:22	Dateiordner
08_FX	05.08.2017 18:22	Dateiordner
09_Words	24.07.2017 12:48	Dateiordner
10_sonstiges	16.07.2017 21:01	Dateiordner

To do so, I have created a template folder called:

> 0000_Interpret_RecordName

which contains all needed folders. A few words for the naming conventions I am using: „0000" stands for the year of the record. „Interpret" and „RecordName" should be clear :).

Here a screenshot of my record folder:

samples › 02_VinylSamples		
Name	Änderungsdatum	Typ
0000_Interpret_RecordName	23.08.2017 13:17	Dateiordner
1962_ChrisBarbersJazzBand_WhenTh...	23.08.2017 13:17	Dateiordner
1972_WilsonPickett_Star-Collection	23.08.2017 13:17	Dateiordner
1973_K-TEL_20PowerHits	23.08.2017 13:17	Dateiordner
1976_HotChocolate_ManToMan	23.08.2017 13:17	Dateiordner
1981_AdamAntAndTheAnts_PrinceCha...	23.08.2017 13:17	Dateiordner
1982_BlueOesterCult_Live	23.08.2017 13:17	Dateiordner
1983_Magnum_TheEleventhHour	23.08.2017 13:17	Dateiordner
1986_Discharge_GraveNewWorld	23.08.2017 13:17	Dateiordner
1986_JoyDivision_ThePeelSessions	23.08.2017 13:17	Dateiordner

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1   I am using acon digital accustica V7, but it also works with wavelab or Wavosaur.

After recording my song, I store the song wave file to the 01_Song folder of my record folder with the full song name.

Then I crop the samples I want to use from this song and save them to the according sub folders (Drumloops for instance to the drumloop folder, etc.). So I can resolve, which sample was from which song and from which record. But it is not so useful to use this samples with the MPC. At first I sample with 24Bit depth, because I want to use the samples also in other contexts than the MPC. Then I use long filename (because of the same reasons). So I have to convert all samples to 16 bit and shorten the filenames to 8 characters.

I mainly use the naming convention from the MPC Tutor. It is roughly specified as follew: Two chars for the sample type, for instance „KI" for a kick drum sample and a number consists of five chars with leading zeros (but I use the sample ID and not the Song ID).

I have started to do all this stuff manually with some Open Office calculation sheets and audio editors. But this is a bit of cumbersome. So I decided to write a little software to manage all my samples.

So how does this software works …

Installation

OK, not so fast. At first, you have to install the software. To do so, you can extract the ZIP-File at any disk position you like. For instance I have extracted the program to a big USB-stick. I have all my samples on this USB device (and of course, I have backups!).

If you have extract the ZIP, your structure should look like this:

The MPCSampleManager.exe is the main program. The "backup" folder stores backups of your database files (not of the samples itself!). So in cases of an emergency, you could go back to an older database version. The "data" folder holds up all your database files. In the "sox" folder you find some executable programs for sample conversion and for sample playing, used by the MPC SampleManager. The "wave" folder contains software for generating waveform pictures, also used by the Manager software.

Now you can start the MPCSampleManager.exe. After your first start a dialog came up and informs you, that all database tables a newly created. Then you have to start the software again![2]

You will see a blank database and now you have to start ...

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2   I don't know, why this is nessesary, but it seems to be a little bug. But btw. it is not a stopper.

Adding Disk Information

If you sample from a disk (a record, a cd and maybe a MC, youtube, etc. [I am speaking here from a disk; sorry about that]), you have to tell the manager from which disk your samples are. So you have the first tab titled with "Disks":
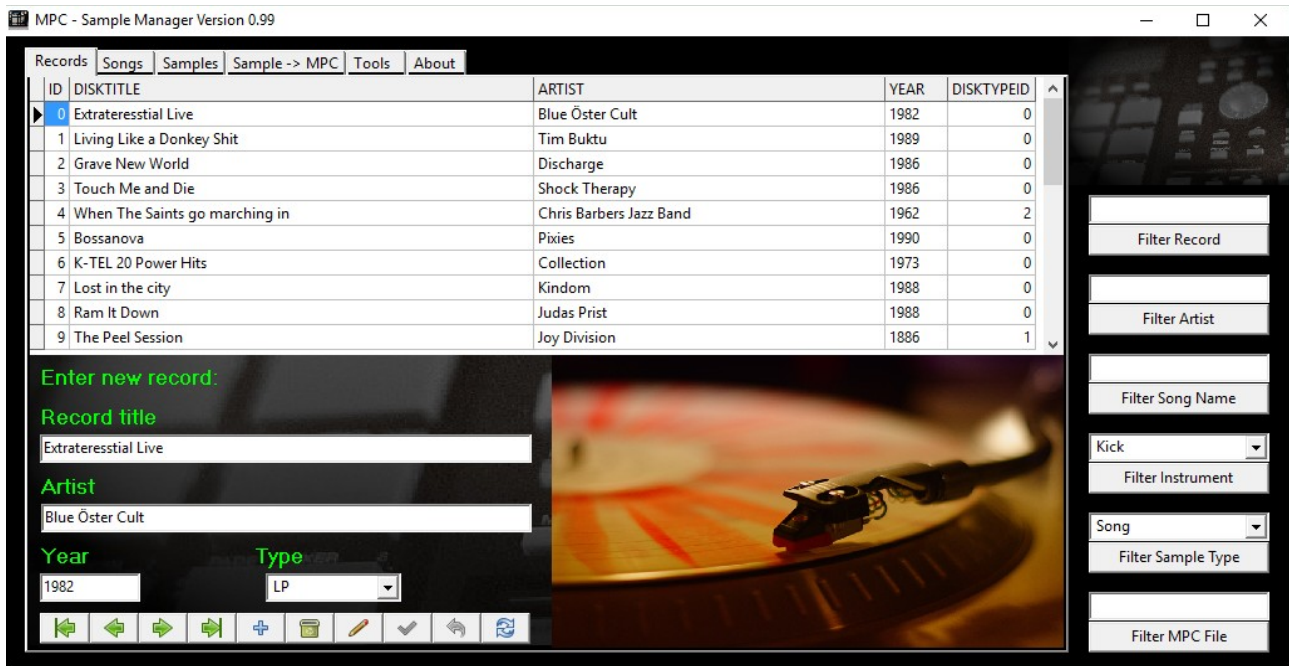
Use the "+" sign at the bottom of this dialog to enter a new disk. You can spezify the disk title, the artist, the year and the type of the disk. The big table shows you all your disks, you have sampled from.

You can also edit existing entries by double clicking into the table cells and edit them (don't do that with the ID or the DiskTypeID!). If you press enter or use the green chop your changes will be stored.

Adding songs

Normally, if you sample vinyl, you sample some parts of a song. Because I don't know, if I need the song later again to take another sample, I sample the whole song first and then I extract my samples from that.

So if I have sampled a song, I go to the song tabulator and enter the song information.
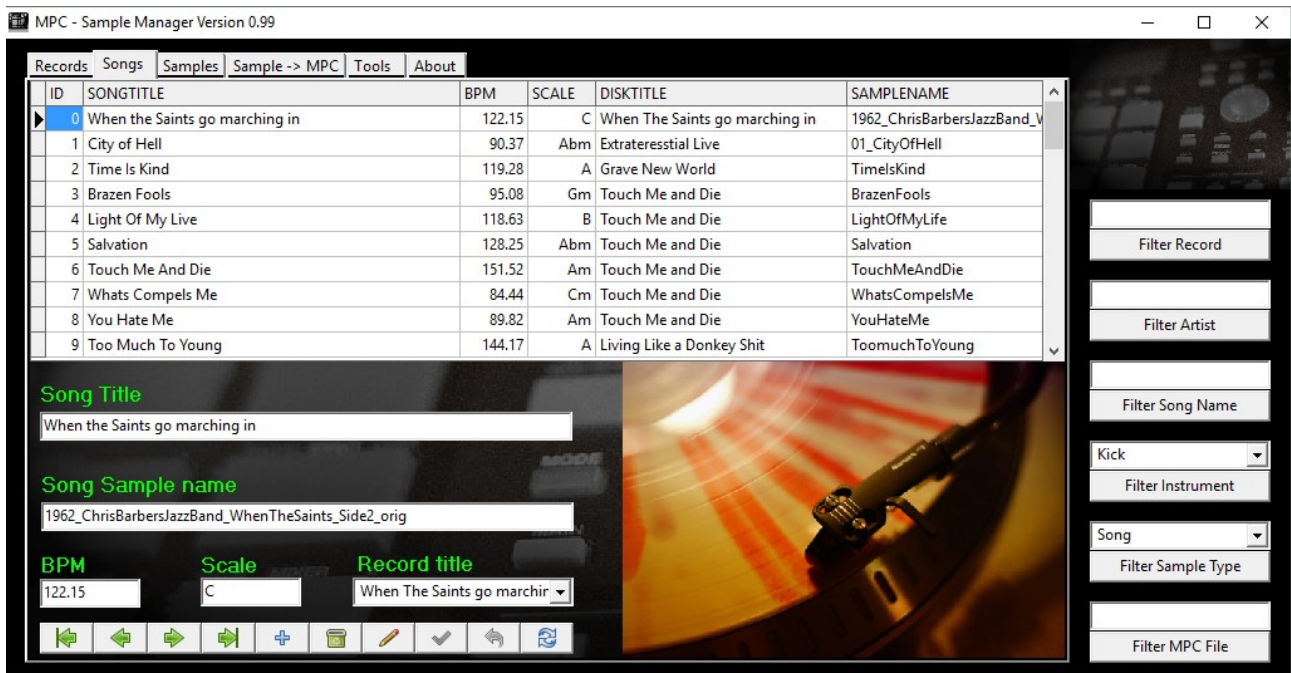
Also press "+" and enter the song title, the beats per minute (if you know them), the used scale or tonal key of the song (also, if you know it). With the Disk drop down, you can select the recording from which the song is sampled.

The last entry is the song sample name (filename for this song sample without the ".wav") on disk.

Adding Sample Information

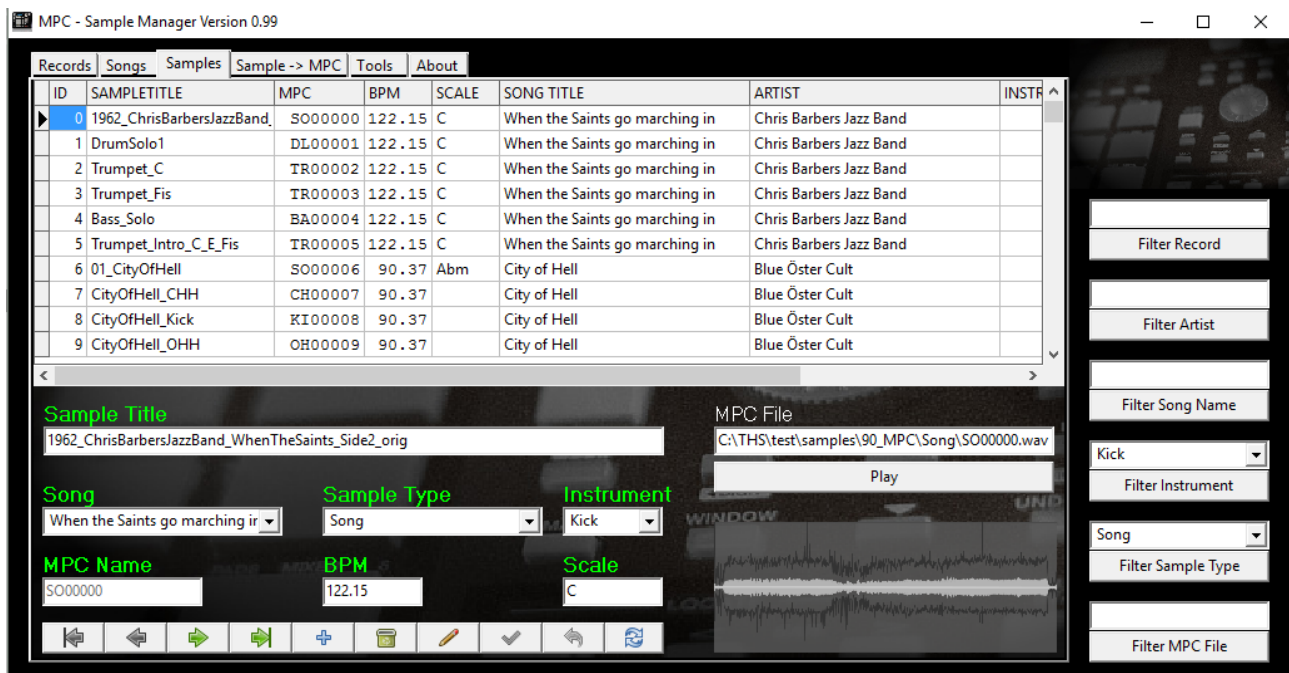After sampling a song, I go down and chop my samples out of it. Remember, I store all original samples in high quality within a folder structure per disk.

New sample entries can be entered by using the "+" button.

So you can enter the sample title (the name of this sample on your harddrive without the ".wav" ending). Then you can specify the scale (MPC name and BPM will be generated later on). Yoe have to select a song, from which this sample came from. Then you have to specify the sample type and, if not a song, you have to select an instrument. Update your database by using the chop button in the bottom button line. **After updating a sample, the MPC name will be generated and the BPM from the Song will be transferred automatically.**

At this moment you do not see the waveform and the MPC File. This information will be generated later for you.

How to use the "Record"- and the "Artist"-filter

OK, by the time you will have many many sample information within your database (if not so, you don't need a database like this!). So how do you navigate through your samples?

That's were filter came into the game:

On the right side of the application you have some filter fields. In some of then you can specify a name. Some works with drop down boxes.

Lets exterminate the filters …

In my case I want to search for a record called "Bossanova". Let's enter this in the text field over the "Filter Record" button" and then press this button.
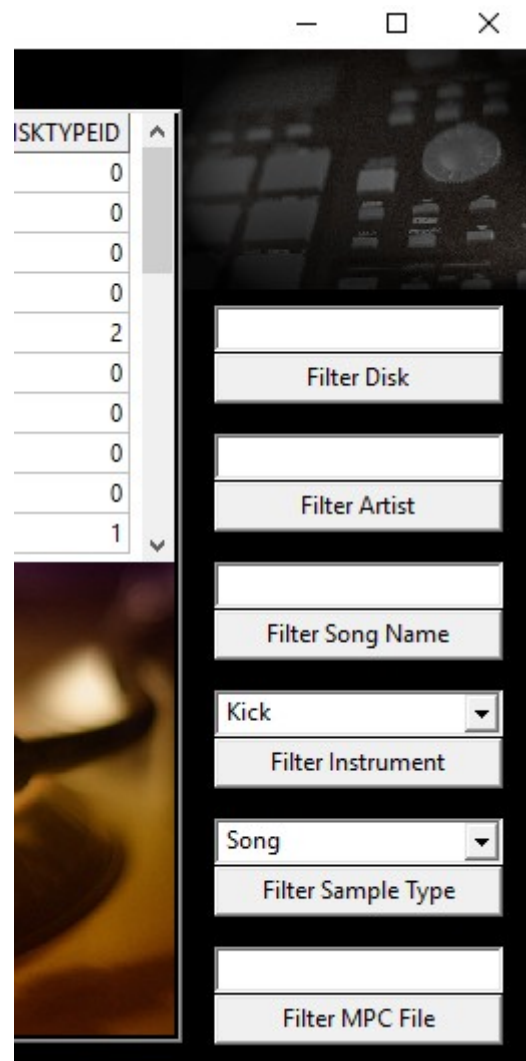
In my case I see the following result:
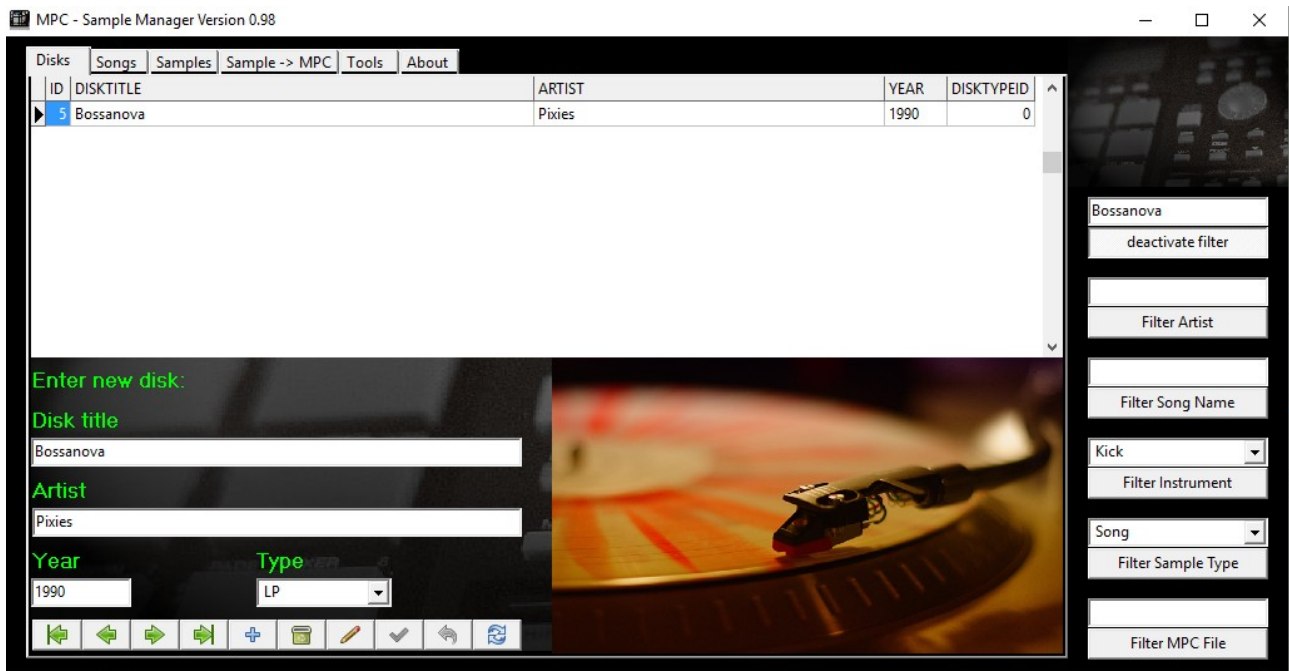
So I have found one record with the title "Bossanova" from the Pixies, recorded in the year 1990. If I only know the start of a title, I can enter only this and start the filtering. For instance "Bossa" will deliver the same result, but maybe it delivers more hits.

If I now switch to the "Song" tabulator, I see following screen:
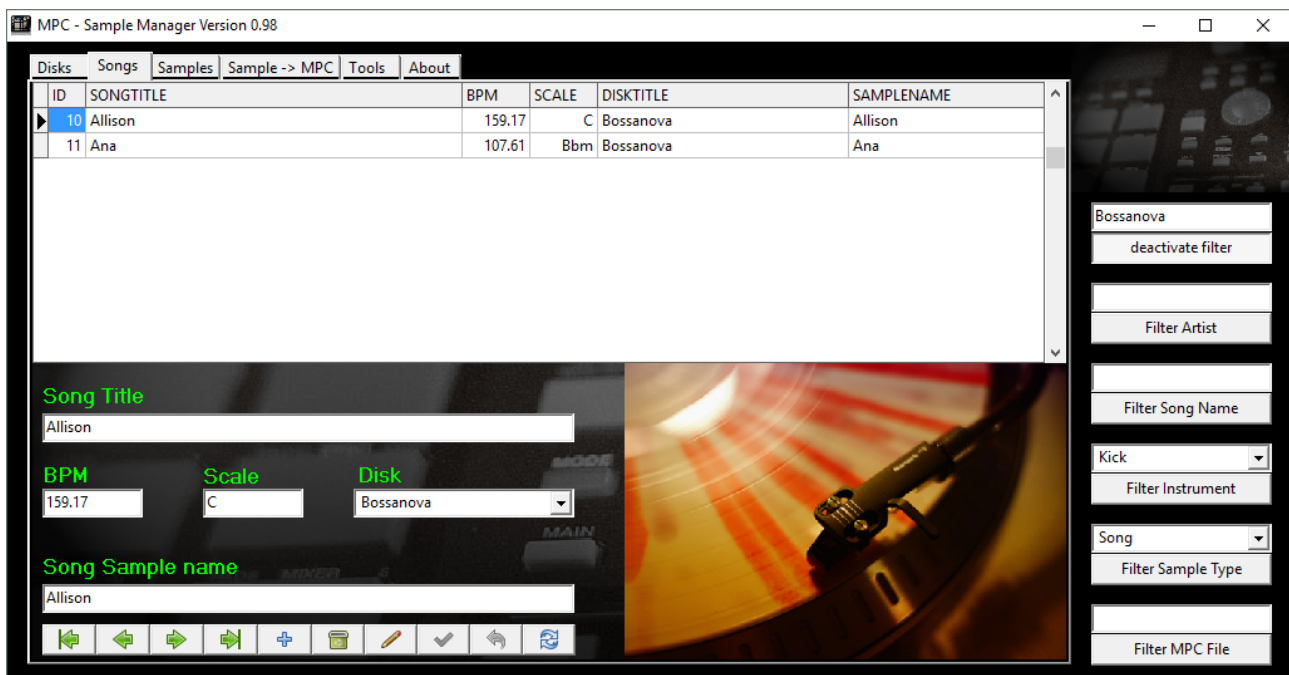
As you see, I have only sampled two songs from the Bossanova record, called Allison and Ana. So the filter works on the "Record"- and the "Song"-Tab. What is with the "Samples"-Tab? Take a look …
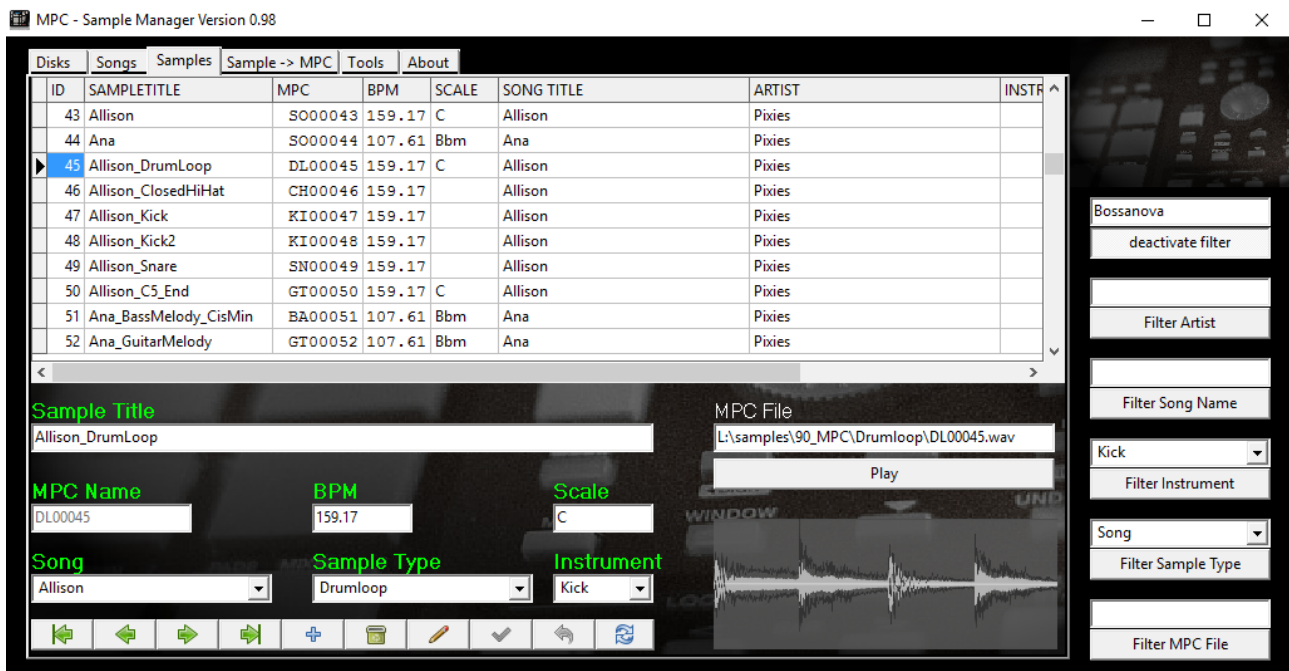
You see only samples from the record "Bossanova" from the Pixies.

If you don't need the filter anymore, you have to push the "deactivate filter" button. After that, the application shows all information without filtering.

The "Artist"-Filter works in the same way.

How to use the "Song"-filter

If you want to filter for a specific song, you have to switch to the "Songs"-tabulator. Then you can enter a song name or the beginning of a song name into the field over the "Filter Song Name" button. For instance If I enter "You" in the field and activate the filter I see the following:
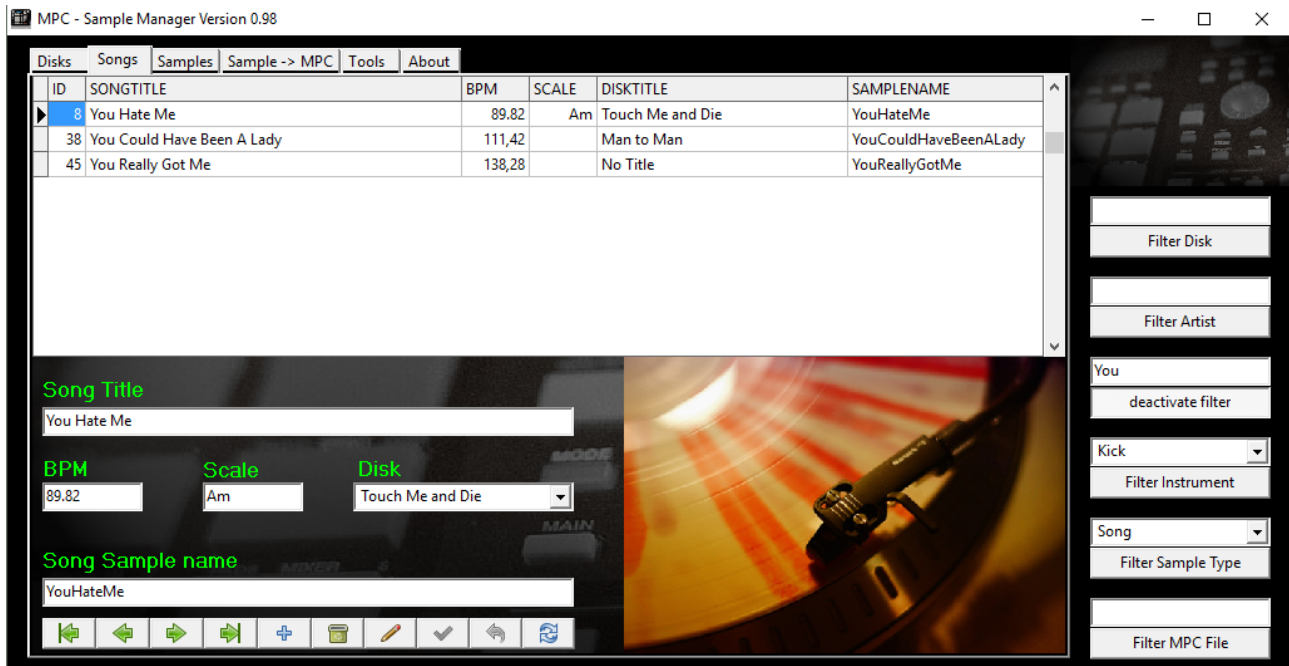
I have three songs starting with "You". Also my samples will be filtered:
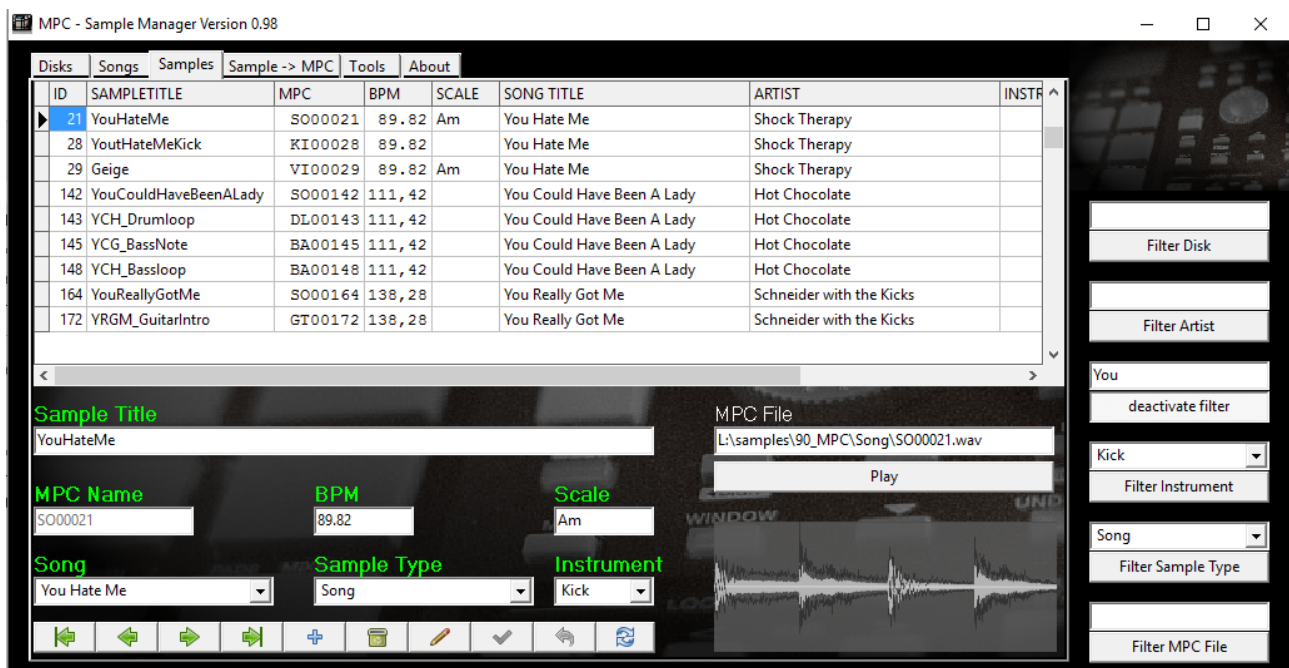
But if I switch to the "Record"-Tab, there will be no filtering, because I am too lazy at the moment to program this feature (but I you need this; call me).

Special Filters for Samples

You have to swith to the "Samples"-Tab for the next step. Here you have the possibility to filter all your samples for special instruments. So for instance I have filtered all samples which are associate to a guitar sound and see the following:
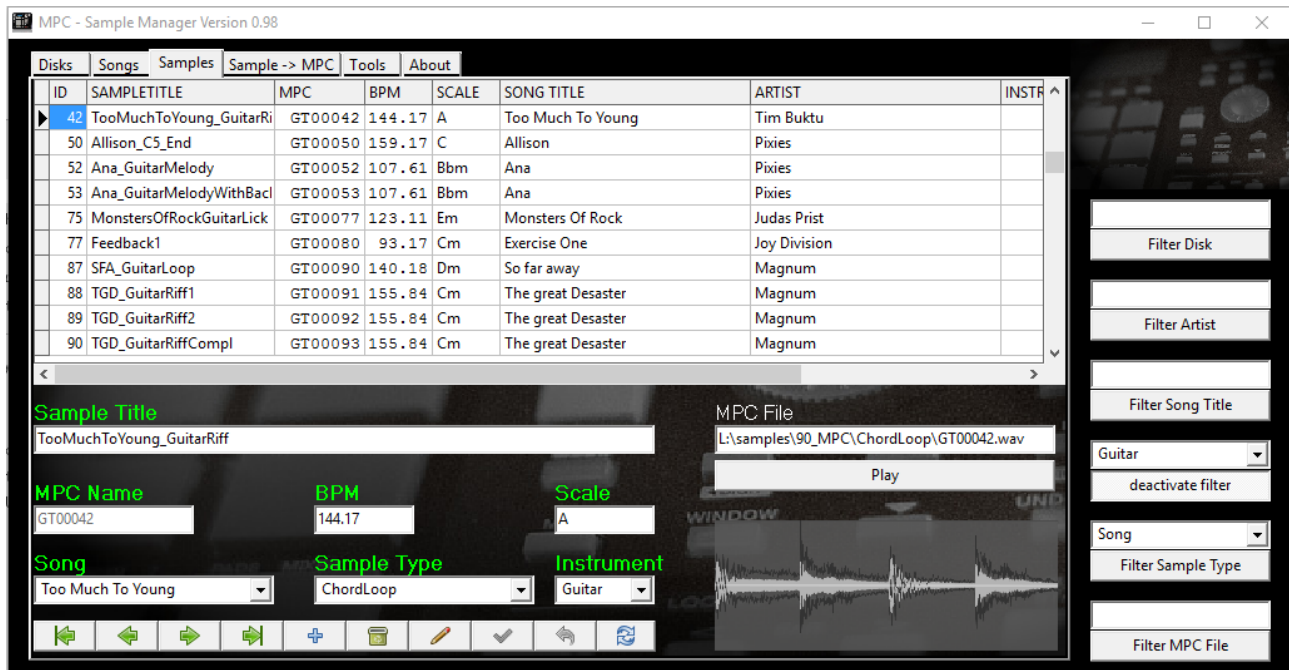
Or I can filter for a specific sample type (melodies for instance):
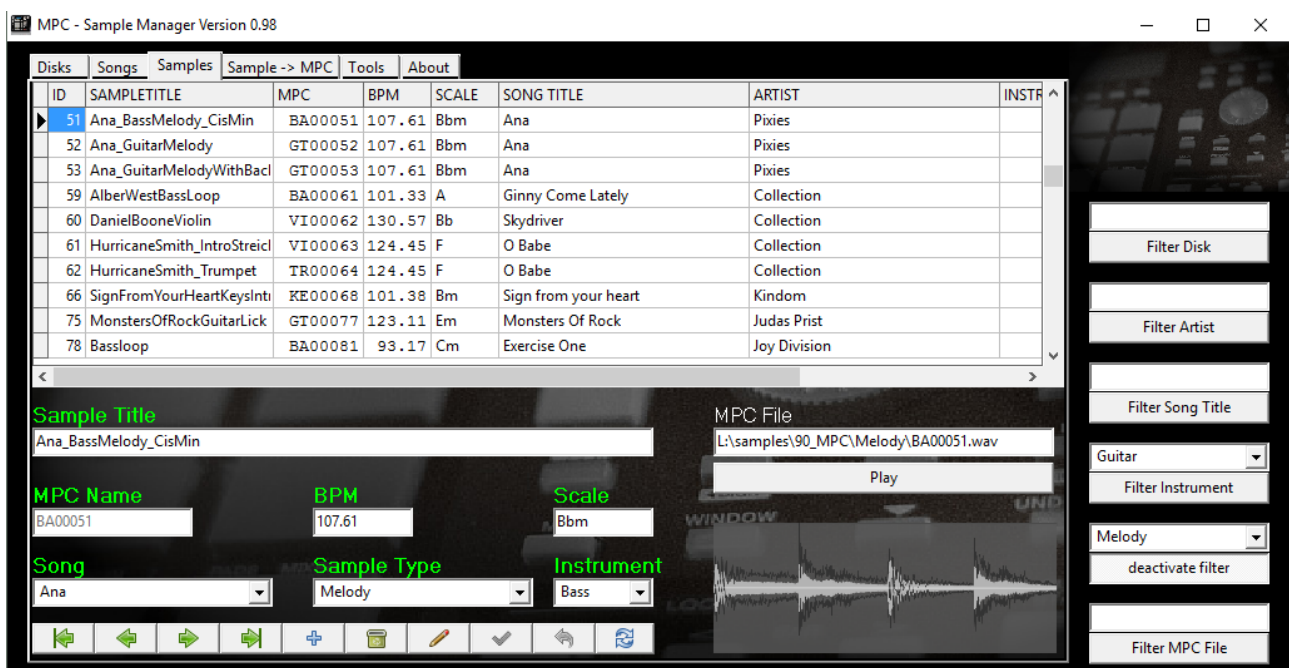
If you have the MPC Name of a sample, you can enter it over the "Filter MPC File" button. Then press the button and you see the sample information according to your MPC file name.

Sample - > MPC Tabulator

At first we take a look at the "Sample - > MPC"-Tab. On this tab, you have the possibility to transform all your samples MPC conform and in an extra directory.

So here it is:
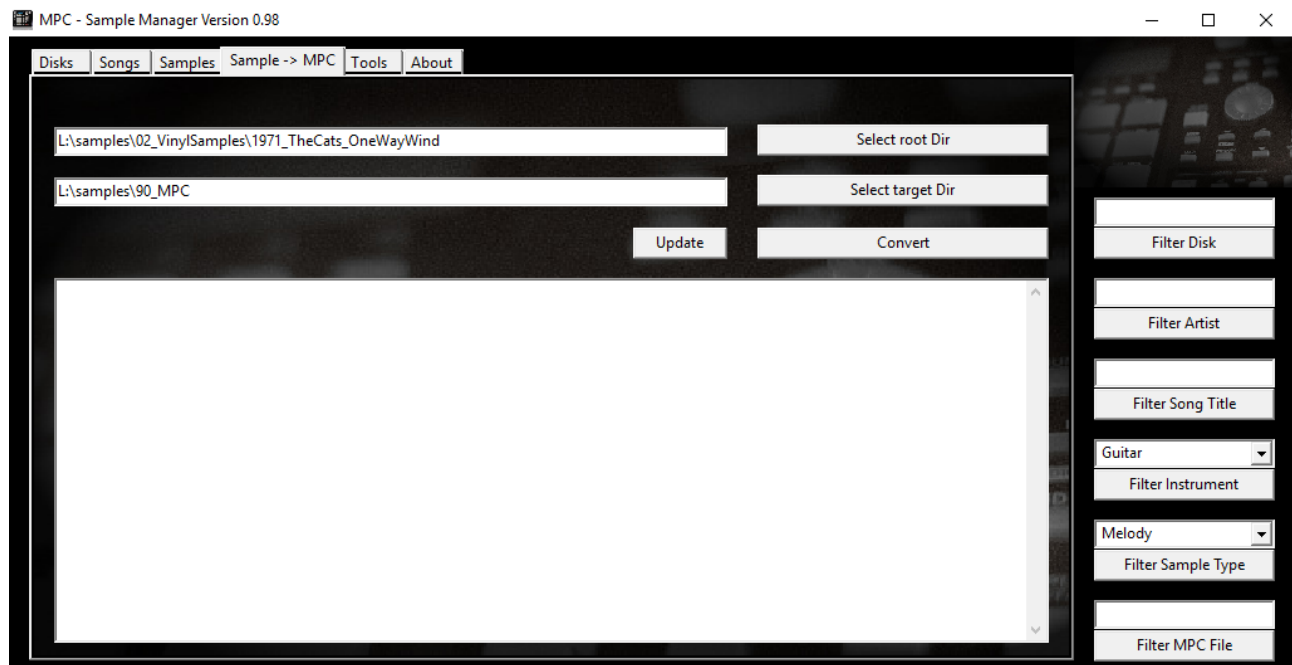
To understand this tab … here is my workflow again:

1. Search a song with cool sample possibilities in my record collection

2. If I found a record … create a directory for this record with all the subfolders in it (see "my personal workflow)

3. Then I record the first song I want samples from in an audio editor

4. I store the wave file with the song title in the "song" folder of my record folder structure

5. Then I extract all samples I want to use and store each file individual in the according sub folder

6. Maybe I record another song and extract other samples

7. If I am finished with that, I switch to the MPC Sample Manager and enter the disk information

8. Then I enter the song information

9. And after that I enter the sample information in this tool.

Now this tab came into the game:

After I entered all sample information I switch to this tab and select at first the folder for the newly sampled record (in the screen above the folder "1971_TheCats_OneWayWind"; the so called root folder).

Then I select the folder, where I want to store the samples in the MPC format (16 bit; 44 KHZ; 8-chars filename). If you have a CF-Card-Reader or your MPC is per USB connected to your computer … you specify the MPC CF Card as target folder directly (you don't have to, but you have the possibility).

Then press the "convert" button. So, what happens now:

1. The MPC Sample Manager scans your root folder and each sub folder for ".wav" files (so you can scan your whole sample lib at once, if you want).

2. If it founds a wave file it checks, if the file name is stored in the sample database (it checks the SAMPLETITLE).

3. If so, it takes this wave file and transform it to 16 bit, 44khz (there for I use the sox-system tools; see http://sox.sourceforge.net/). It also generates waveform pictures using the sndfile-waveform tool (see here: http://rg42.org/wiki/sndfile-waveform; https://github.com/andrewrk/waveform; https://hydrogenaud.io/index.php/topic,102495.0.html).

4. The filename of the MPC sample is taken from the MPC column.

5. The MPC sample is stored in the given target folder under a sub folder called the same as the given sample type (for instance Drumloops are stored in the <targetfolder>\Drumloop).

6. that's all

In the big text window, you see a protocol of the transformation process.

A few words to this:

Under windows 8.1 64 Bit: sometimes, the program seems to "hang", but it come back. Seems to be a lazarus bug.

If you have convertet your samples, you see under the "Samples" tab the generated wave forms and you can play the sample.

OK, what's the deal with the update button?

So, if you want to move your sample lib to another folder or disc, you can use the update button, and only the database will be updated (no file transformation). Only the new paths will be stored.

Report samples
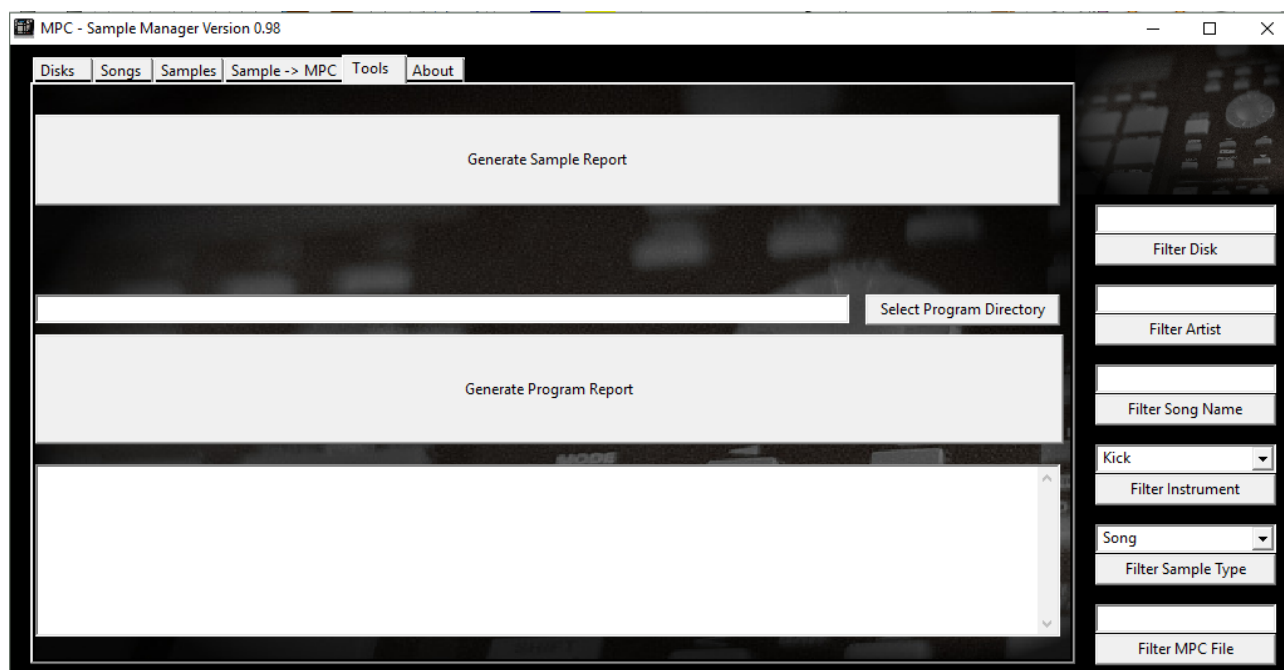
If you want a sheet with all your samples on it, you can use the "Generate Saple Report" button. This generates a pdf-file with all relevant sample information on it. It look look like this:

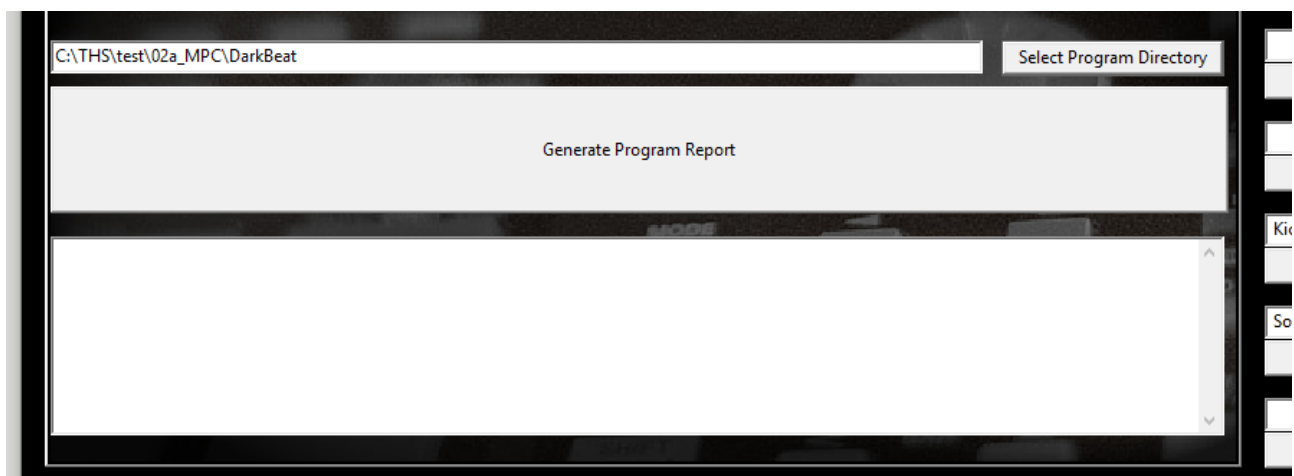| ID	SAMPLETITLE	BPM	SC	MPC	SONGTITLE	DISKTITLE	ARTIST
74	MonstersOfRockSnare2	123.11		SN00076	Monsters Of Rock	Ram It Down	Judas Prist
75	MonstersOfRockGuitarLick	123.11	Em	GT00077	Monsters Of Rock	Ram It Down	Judas Prist
76	ExericeOne_33rpm	93.17	Cm	SO00078	Exercise One	The Peel Session	Joy Division
77	Feedback1	93.17	Cm	GT00080	Exercise One	The Peel Session	Joy Division
78	Bassloop	93.17	Cm	BA00081	Exercise One	The Peel Session	Joy Division
79	ExerciseOneFeedback	93.17	Cm	GT00082	Exercise One	The Peel Session	Joy Division
80	SoFarAway	140.18	Dm	SO00083	So far away	The eleventh hour	Magnum
81	TheGreatDesaster	155.84	Cm	SO00084	The great Desaster	The eleventh hour	Magnum
82	ViciousCompanionsEnd	92.85	Em	SO00085	Vicious Companion	The eleventh hour	Magnum
83	SFA_Snare	140.18		SN00086	So far away	The eleventh hour	Magnum
84	SFA_SubKick	140.18		KI00087	So far away	The eleventh hour	Magnum
85	TGD_Kick	155.84		KI00088	The great Desaster	The eleventh hour	Magnum
86	TGD_Snare	155.84		SN00089	The great Desaster	The eleventh hour	Magnum
87	SFA_GuitarLoop	140.18	Dm	GT00090	So far away	The eleventh hour	Magnum
88	TGD_GuitarRiff1	155.84	Cm	GT00091	The great Desaster	The eleventh hour	Magnum
89	TGD_GuitarRiff2	155.84	Cm	GT00092	The great Desaster	The eleventh hour	Magnum
90	TGD_GuitarRiffCompl	155.84	Cm	GT00093	The great Desaster	The eleventh hour	Magnum
91	VCE_ChordPad	92.85	Em	KE00094	Vicious Companion	The eleventh hour	Magnum
92	SFA_LeadVocals	140.18	Dm	SW0009	So far away	The eleventh hour	Magnum
93	TGD_GuitarIntro	155.84	Cm	GT00096	The great Desaster	The eleventh hour	Magnum
94	OneNightOfPassion	159.6	Em	SO00097	One night of passion	The eleventh hour	Magnum
95	ONOP_KeysMelody	159.6	Em	KE00098	One night of passion	The eleventh hour	Magnum
96	ItMustHaveBeenLove	71.13		SO00099	It must have been love	Wings of heaven	Magnum
97	TooOldToDieYoung	82.91	Dbm	SO00100	Too old to die young	Wings of heaven	Magnum
98	IHTBL_Snare	71.13		SN00101	It must have been love	Wings of heaven	Magnum
99	IHTBL_Subkick	71.13		KI00102	It must have been love	Wings of heaven	Magnum
100	IMHBL_Keys	71.13	Bm	KE00103	It must have been love	Wings of heaven	Magnum
101	BadTimeForBonzo	100.97	Am	SO00104	Bad Time For Bonzo	Strawberries	The Damned
102	GunFury	162.13	G	SO00105	Gun Fury	Strawberries	The Damned
103	PleasureAndPain	120,00	C	SO00106	Pleasure And Pain	Strawberries	The Damned
104	BTFB_DrumLoop1	100.97		DR00107	Bad Time For Bonzo	Strawberries	The Damned
105	BTFB_DrumLoop2	100.97		DR00108	Bad Time For Bonzo	Strawberries	The Damned
106	BTFB_Cowbell	100.97		CB00109	Bad Time For Bonzo	Strawberries	The Damned
107	PAP_Bass	120,00		BA00110	Pleasure And Pain	Strawberries	The Damned
108	BTFB_GuitarLick	100.97	Am	GT00111	Bad Time For Bonzo	Strawberries	The Damned
109	GF_GuitarLick1	162.13	G	GT00112	Gun Fury	Strawberries	The Damned
110	PAP_Chembalo1	120,00	C	KE00113	Pleasure And Pain	Strawberries	The Damned

So you see a part of my sample list.

If I have finished a song with my mpc, I record a master mix to my pc. Further more I copy all samples of each program to a sub folder right beneath the master (in order to have a backup and in order to know what I have done, if this piece goes up the charts :) for sample clearing).
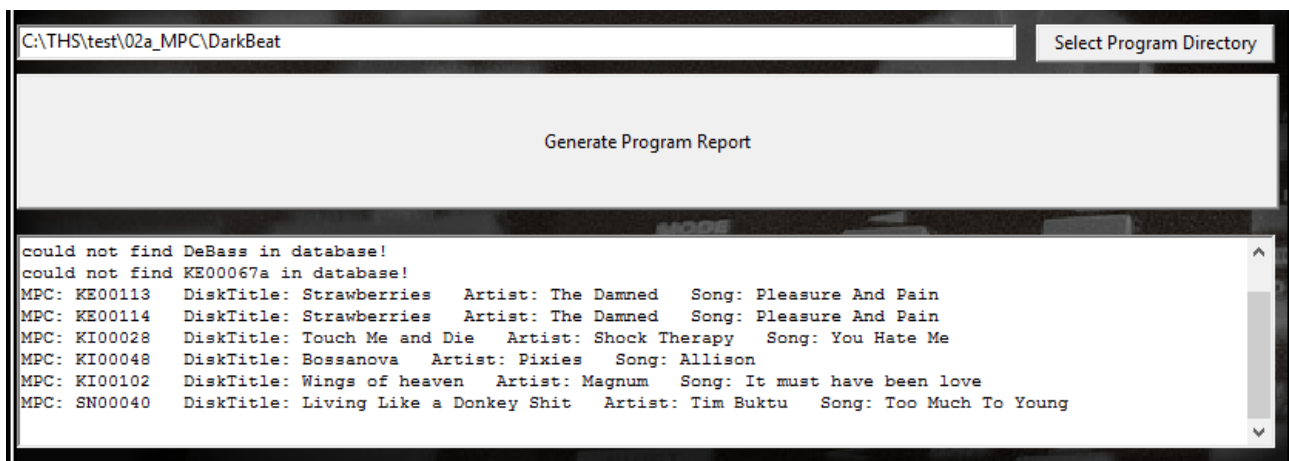
So with the second report function you are able to check this folder and your database generates a list. So take a look at this folder from one of my beats:
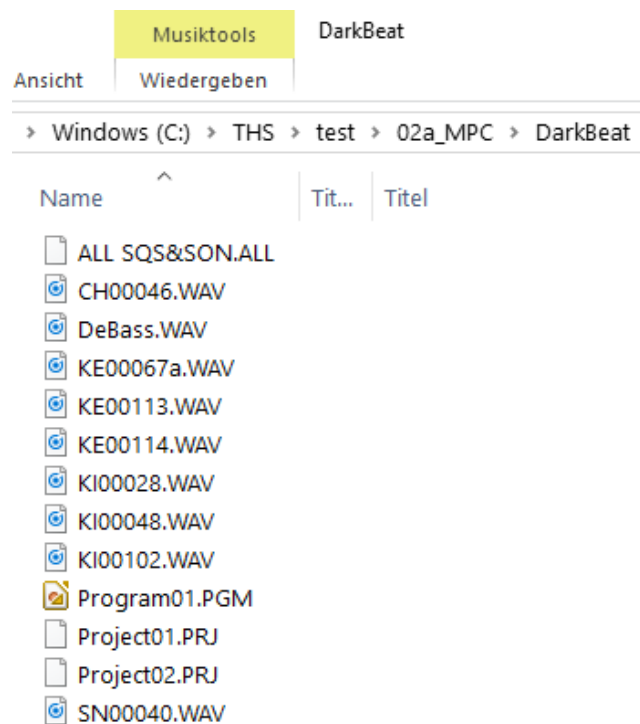
So this shows all samples I have used in a track called DarkBeat. Now I can select this folder in the MPC Sample manager:

Now I press the "Generate Progam Report" button …

```
C:\THS\test\02a_MPC\DarkBeat                                          [ Select Program Directory ]

                            Generate Program Report

could not find DeBass in database!
could not find KE00067a in database!
MPC: KE00113    DiskTitle: Strawberries    Artist: The Damned    Song: Pleasure And Pain
MPC: KE00114    DiskTitle: Strawberries    Artist: The Damned    Song: Pleasure And Pain
MPC: KI00028    DiskTitle: Touch Me and Die    Artist: Shock Therapy    Song: You Hate Me
MPC: KI00048    DiskTitle: Bossanova    Artist: Pixies    Song: Allison
MPC: KI00102    DiskTitle: Wings of heaven    Artist: Magnum    Song: It must have been love
MPC: SN00040    DiskTitle: Living Like a Donkey Shit    Artist: Tim Buktu    Song: Too Much To Young
```

So you can copy and paste the list to an email or a table if you want.

That is all at the moment …

I hope you enjoy this tool.

If you have some cool Ideas … please feel free to share them with me …