Play and manage your music with JuK 2.0

Music Accountant

Colorful effects, all kinds of sound manipulation – many players abound with features. Unfortunately, they often fall short when it comes to managing tag information, an essential capability if you need to organize your digital music collection. Seek, or ask JuK, and ye shall find. BY DANIEL MOLKENTIN

Tagger, that was the name of a software project by Scott Wheeler, a KDE developer. Scott was tired of MP3 players that were incapable of managing information such as the title, album, genre, or artist details, stored in so-called ID3 tags. The program has changed its name to JuK by now, turning into a fully-fledged jukebox on the way. Version 2.0 has become a KDE 3.2 [1] tool.

It either uses the KDE 3 multimedia architecture, aRts, or the GStreamer [2] multimedia framework to play tracks. This is configurable in *Settings* | *Output to*. This said, the menu option is only available if you compiled JuK with Gstreamer support in the first place. As the binary package then also requires the GTK library, glib, most RPM builders tend to do without this functionality. The next version of JuK will be able to play and **rip** CDs itself.

KTools

In this column we present tools, month by month, which have proven to be especially useful when working under KDE, solve a problem which otherwise is deliberately ignored, or are just some of the nicer things in life, which – once discovered – you would not want to do without.

Music Oracle...

No matter how tracks are transferred from a CD to the computer (e.g. using an *audiocd:/slave*), although most programs offer to check **FreeDB** to discover the artist and title, and then store this information in **meta-tags** with the sound file. This approach typically causes no end of problems.

FreeDB often has no information on CDs by lesser-known artists, and most people are too lazy to change this. Although users might assign useful filenames, adding the meta-information is typically too much like hard work. JuK has a solution to this dilemma. Select the file in the playlist, and select *Tagger* | *Guess tag information* | *From Filename* or press [Ctrl-F]. This tells JuK to use a rule set, which is configurable via *Settings* | *Tag Guesser* (see Figure 1), to guess the title, artist and album.

... reloaded

Nondescript names such as *Track1.mp3* cause havoc. History tells us that most people tend to forget the artist or track name after a short while. All is not lost. JuK allows you to ask the free music database MusicBrainz [3] to guess the track title. To allow this to happen, the player creates a fuzzy fingerprint of the track, which includes specific characteristics of the song, no matter what format it is in, and compares this information with the database.

From this point on, the steps are similar to using FreeDB or CDDB. The server provides meta-information for the unknown track, and JuK automatically enters this data. If multiple tracks match a signature, the program will prompt the user to decide. The hit rate for tracks in the database is amazingly high.

You can tell JuK to ask the MusicBrainz detective by selecting *Tagger* | *Guess tag information* | *Internet Tag Guesser* (or [Ctrl-I]), but only if you compiled JuK with MusicBrainz support. This was the case for the Suse packages we used in our labs, but we did need to

🖋 🛛 Tag Guesser Configuratio	n - Juk 🛛 ? 🗆 🗙
Filename Scheme	
%A - %c - %t - %a - %t	Add
%a/%A/[%T] %t [%c]	Add
%a/%A/[%T] %t (%c)	Modify
%a/%A/[%T] %t	
%a - (%T) - %t [%c]	<u>R</u> emove
%a - (%T) - %t (%c)	
%a - (%T) - %t	
%a - [%T] - %t [%c]	
%a - [%T] - %t (%c)	
%a - [%T] - %t	
0/- 0/T 0/5 [0/-]	
[<u>O</u> K <u>C</u> ancel

Figure 1: JuK applies the rule highlighted in blue to guess the ID3 tags for track number (%T), title (%t), and artist (%a) from files whose names follow the "Title number Artist – Title.mp3" format.

	00000		
Collection	n List Search:		
L 퍼 a-ha	Track Name	Artist 🗸	Length
	Crying In The Rain	a-ha	4:22
	Dark Is The Night For All	a-ha	3:44
	Forever Not Yours	a-ha	3:59
	Minor earth major sky	a-ha	5:25
	Summer moved on	a-ha	4:37
	Take On Me	a-ha	3:50
	Take On Me (extended version)	a-ha	4:47
	The Sun Always Shines On TV	a-ha	5:04
	Touchy	a-ha	4:34
	You Are The One	a-ha	3:47
	Artist name: Eile n	ame:	
	Ártist name: Éile n a-ha	ame: - Forever Not Yours.mp3	
	Àrtist name: a-ha Irack name: Elie a-ha Track	ame: - Forever Not Yours.mp3 :: 1 Year: 2002	Length: [-59] Bitrate: [!
	Artist name: a-ha Irack name: Forever Not Yours Eom	ame: - Forever Not Yours.mp3 :: 1 ⊕ Year: 2002 ⊕ ment:	Length: 59 Bitrate: 1
	Artist name: a-ha Irack name: Forever Not Yours Album pame:	ame: - Forever Not Yours.mp3 :: 1 + Year: 2002 + ment:	Length: 59 Bitrate: 1
	Artist name: a-ha Irack name: Forever Not Yours Album game: Lifelines	ame: - Forever Not Yours.mp3 :: 1	Length: 59 Bitrate: 1
	Artist name: a-ha Irack name: Forever Not Yours Album game: Litelines Genre:	ame: - Forever Not Yours.mp3 ::: 1	Length: 59 Bitrate: [

Figure 2: After typing a substring of an artist's name that JuK recognizes, you can either use the arrow button next to the "Artist" field to select the name, or use the autocomplete function.

run YaST to install the *libmusicbrainz* package and the *trm* [4] tool.

MusicBrainz, tends to concentrate on the US music scene. For those of you who live elsewhere, the next version of JuK will have a function for uploading tag information allowing users all over the world to populate the database.

Well-Informed

If you want to add extended tag information for a file from the CD booklet, for example, you can enable the powerful tag editing function by selecting *View* | *Show Tag Editor* (see Figure 2). Select the same function again to disable tagging. When you type the name of an artist, song or genre, JuK will autocomplete the entry, if it has a matching keyword. You can accept the suggestion by pressing name. The same approach applies to all the other columns. JuK again provides autocompletion.

change

[Enter], or simply

carry on typing to

ignore it. If you click

the playlist window

after completing the correction, JuK will

ask you if you want to write the changes to

There is a downside

to the Editor, however.

It needs a lot of space.

If you simply need to

correct a typo, you can

right-click on the entry in the playlist. If you

right-click the Track

Name column, the

menu that pops up

will have an entry for

Edit "Track Name".

Select this item to

the

track

the MP3 file.

Global Changes

If you need to change the spelling of an artist's name across a number of albums (for example, if you have various spellings for "a-ha", such as "aha", "A-HA" or "A-Ha".), it might be quite time-consuming to edit each title individually. JuK saves you the trouble, by allowing you to hold down the [Shift] key, while selecting multiple files. You can then pop-up the drop-down menu, or launch the tag editor, to unify the spelling with a single action.

While you are tidying up, you might like to sort out that MP3 collection that you never got round to. There is a

GLOSSARY

Rip: A term typically used to refer to digitizing music or sound tracks stored on conventional sound media, and copying the results to computers.

audiocd:/ slave: A KDE component that can display and parse the content of audio CDs. If you type "audiocd:/" in the Konqueror address box, the file manager displays the tracks on the CD, allowing you to drag & drop tracks into the virtual "Ogg Vorbis" and "MP3" folders to convert them into these formats.

FreeDB: A database (*http://www.freedb. org/*) that has information on CDs including

the artist, title and genre. FreeDB uses the serial number of the CD for reference. The FreeDB project follows in the footsteps of the CDDB service. The providers of the CDDB service changed the licensing model, allowing use only under the most obscure circumstances.

Meta-tags: The MP3 format supports data such as the album title, artist, track name, release year, genre, etc. for audio tracks. This meta-information is stored in so-called ID3 tags. There are several ID3 tag specifications by now (e.g. ID3v1 and ID3v2). Ogg Vorbis uses a similar architecture to store meta-information. *Rename File* pop-up menu item that renames selected files according to the rules defined in *Settings* | *File Renamer*. You can use a configuration, like the one shown in Figure 3 below, to tell JuK to create subdirectories, where needed, and copy the renamed files to these directories.

Of course, you can also use the dropdown menu to permanently remove files from the disk. JuK will prompt you to confirm before destroying your files, however.

Browsing Your Collection

JuK lets you browse your music collection while listening to the current track. And if you suddenly stumble across a track that you haven't heard for ages? To allow the current song to finish playing, select *Play Next* in the dropdown. JuK will insert your fave rave without changing the playlist. This feature will work in combination with random play by the way. And if you need an overview of the tracks you have just listened to, you can opt to display the track history by selecting *View* | *Show History.*

🖋 🛛 File Renamer (Configuratio	n-JuK ? 🗆 🗙
File Renamer]
<u>F</u> ilename scheme:	/daniel/Music,	/%a%A%T%t%c
<u>T</u> itle token:	%s	□ Need value
<u>A</u> rtist token:	%s/	🔀 Need value
Al <u>b</u> um token:	%s/	🔀 Need value
T <u>r</u> ack token:	[%s]	🔀 Need value
<u>C</u> omment token:	(%s)	🗙 Need value
_ Test		
C <u>u</u> rrent filename:		
New filename:		
	ſ	<u>OK</u> <u>C</u> ancel

Figure 3: This file name scheme moves a selection of tracks to ~/Music/artistname/albumname, renaming the tracks to "[tracknumber] track.mp3" in the process.

	INFO
[1]	JuK: Daniel Molkentin, "Local Jukebox Hero" Linux Magazine, Issue 42, 2004, p. 74
[2]	GStreamer: http://www.gstreamer.net/
[3]	MusicBrainz database: http://www.musicbrainz.org/
[4]	TRM: http://www.musicbrainz.org/ products/trmgen/download.html

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