

Australian National University
<http://anu.edu.au>

Free and Open Source Software Development
COMP8440
<http://cs.anu.edu.au/student/comp8440/>

Project Work

Due Monday the 24th of May

K3b

<http://k3b.org>



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Choosing a project

The project I chose to work on is K3b,¹ the KDE CD/DVD Kreator. The suggestion for a KDE based application came from Brad Hards² (no surprises there!) who originally recommended updating documentation for Konqueror, KDE's web browser. He showed me KDE's online TechBase wiki³ which contains lots of information about KDE and related programs.

I looked into the state of Konqueror's documentation, which was indeed out-dated, but I was not overly passionate about the project so I kept looking. I was now sold on the idea of a KDE based application and so my thoughts moved to K3b – the greatest graphical burning tool around.

I immediately browsed to the K3b website at <http://k3b.org> to begin conducting some initial research of the product and gauge its suitability. I was looking for a project which was not too active, but obviously not dead!

K3b - The CD/DVD Kreator for Linux - optimized for KDE - licensed under the GPL

K3b is developed by:

- Sebastian Truog
Maintainer and Lead Developer
- Christian Kvasny
Developer
- Gianluca Varisco
Package Manager

2008 Members Choice Award Winner
LinuxQuestions.org
MULTIMEDIA UTILITY of the YEAR

Website powered by:

- sourceforge
- POWERED BY webGUI
- Design by Ayo

Supported by:

- Mandriva
- RPM freeware programs
- FileHeap!

K3b 1.69.0 alpha4 released

Michal Malek - I think today we should call him the new K3b core developer - did amazing work on K3b 2.0 which was never this close to a final release.

If you want to know more about Michal [read his introducing blog entry](#) on the planet.

Changelog since K3b 1.68 (2.0-alpha3)

New features

- Added close buttons on project tabs (159751)
- Added support for new libmpcdec API (214149)

Bugfixes

- Crash at the beginning of burning (204333)
- Crash during DVD ripping (207958)
- Crash right after burn (195436)
- Crash during Audio CD ripping (198015)
- Crash at the beginning of ripping Audio CD with data tracks (186555)
- Crash at the beginning of burning cue/bin image (190775)
- Fixed various typos in UI (208401, 209512)
- Fixed potential aliasing issues (210890)
- Show only one entry on the task list even when dialog window is opened (211680)
- Show correct size when project contains invalid links (212609)
- Show correct elapsed time when burning over midnight (211604)
- Added timeout when checking version number and features of executable (212582)
- Fixed visually endless busy status when opening an empty folder (113649)
- Burning double-layer DVDs should be possible again (214115)

Sources from now on available from the [K3b download page](#)...

Source: K3b website

K3b seemed a perfect fit – it's a smaller application with just a few developers. It's not an official part of the KDE SC *distribution* yet, so the development is likely to be easier to interact with (as it's not just a small part of the larger KDE, but an individual project in its own right). It's also a Sourceforge project, which I am both familiar and comfortable with.

I wasn't sure what I could contribute to the project, given that I am not a C++ programmer. This caused me to

¹ <http://k3b.org/>

² <http://www.kdedevelopers.org/blog/102>

³ <http://techbase.kde.org/>

look into the state of the documentation itself. Here I noticed that it was not updated to reflect the imminent 2.0 release, so I felt that this was something I could contribute. After this realisation I decided to settle upon K3b, so I began further research.

Preliminary project research

I began to harvest as much information as I could about the project from freely available online sources. The first place I started was the main website (well what I thought was the main website), <http://k3b.org>. I wanted to gather information about how the project worked, how many developers there were and how I might go about contributing.

The website itself is quite static, although the front page actually includes a blog (the “news” section) which project founder Sebastian Trueg uses to announce releases. The layout of the website was relatively straight forward. It provided information about the project, its goals, who the development team was, and of course how to download and install the software via both Sourceforge (although the version was out-dated) and SVN. There was also a section providing links to places where K3b has been in the news, including comparisons with other optical authoring products such as NeroLinux.⁴

Being one of the first places I looked for information about K3b, I naturally wanted to find out how to contact the project and so read the Support page. This got me into trouble, because it is horribly out-of-date. There is no mention of an IRC channel and the mailing list referenced is no-longer functional. I was not able to sign up to the mailing list, nor search the history. This affected my interaction at a later stage, where I assumed (wrongly) that there was no mailing list!

Indeed, much of the information on k3b.org is out-of-date – it even has a special news section for version 0.12 from around 2006! There was no mention of the KDE based wiki, nor of the KDE forums. There was no information about how to contribute and no developer or coding style guides.

I read the F.A.Q. to ensure I did not later ask questions of developers which have already been answered on the website. However, this was mostly technical in nature offering basic troubleshooting advice. Although my intentions were good, this might have backfired as I did later ask how to contact the project (and received no reply) because the information available on the website was outdated. The correct information was however, available on another website, at <http://k3b.sourceforge.net> (which I did not know about at the time).

One of the first things that I did notice when browsing to k3b.org, was that Trueg announced a new core developer, Michał Małek. A link was provided to Małek's own blog at <http://michalm.wordpress.com/>, so I followed this to see what I might discover.

Here I noticed that Małek had posted an announcement about a much newer version than was advertised on k3b.org and I soon began to realise that the information across various websites for the project was not consistent. It became clear after conducting initial research into K3b, that the state of documentation was somewhat in disarray. I discovered that what I considered to be the primary website was no-longer so.

It was much later that I discovered the project's website on Sourceforge, well after I had already made initial contact and even introduced myself on the mailing list. I knew that the project had its own domain and that it was a KDE based project, so I didn't even think that it would have a completely separate and more up-to-date website somewhere else. Indeed, I came across the Sourceforge website just by trying it myself at some point, not because it was referenced anywhere. On this “new” website, I was able to find the IRC channel and a working mailing list! In fact it mentions that the forums is the preferred primary support channel (to which I signed up), but that the IRC channel is available for those wanting to chat in real time. It asks users to report bugs to KDE's bug tracker and recommends that those wanting to contribute to K3b join the mailing list. This

⁴ <http://www.flexbeta.net/main/articles.php?action=show&showarticle=86>

was a very refreshing find, and my only regret is that I did not find it earlier! I later discovered that these services were all set up new in 2010, and the histories had been lost. This meant there was only 4 months of mailing list archives available.

Need help?

K3b forum on KDE forums is our primary support channel. You can also join #k3b on Freenode to talk about K3b in real time.

If you think you have found a bug please report it.

Want to help?

If you want to help with K3b development you are very welcome.

Join k3b@kde.org mailing list ([subscribe here](#)).

Source: K3b Sourceforge website, support section⁵

Unfortunately, while this “new” website did provide more up-to-date information, it did not have much additional information. There was also no mention of a developers guide, or coding guideline (although these are in fact available as part of the KDE TechBase wiki⁶).

After discovering the IRC, I jumped online and found only about 10 others and not much traffic. I wanted to get an idea of the kind of topics discussed on the IRC channel and get a feel for how the project worked and what language was expected. I wanted to make the right impression so as to not annoy those on the channel and therefore restrict the possibility of working on the project. I logged onto IRC every few days and sat online for hours reading any messages and see how users interacted. There was very little to go by, most days would go by without a single message! Below is the log file for Sunday April 11th where we see very little traffic.

```
*** Logfile started
*** on Sun Apr 11 09:41:59 2010

[Sun, 11 Apr 2010] [09:41:59 am] Join      You have joined the channel #k3b (~chris@ppp254-
104.static.internode.on.net).
[Sun, 11 Apr 2010] [09:41:59 am] Topic    The channel topic is "K3b - The CD/DVD/BD Kreator for KDE - K3b
2.0 will be released soonish - http://www.k3b.org - low traffic channel, have patience when you ask (usually
½ a day)".
[Sun, 11 Apr 2010] [09:41:59 am] Topic    The topic was set by trueg on 23/11/09 10:09 pm.
[Sun, 11 Apr 2010] [09:42:00 am] URL Channel URL: http://www.k3b.org
[Sun, 11 Apr 2010] [09:42:29 am] Mode    Channel modes: no messages from outside, topic protection
[Sun, 11 Apr 2010] [09:42:29 am] Created This channel was created on 16/02/09 12:18 pm.
[Sun, 11 Apr 2010] [09:57:55 am] Quit    sequemis has left this server (Remote host closed the connection
).
[Sun, 11 Apr 2010] [02:46:15 pm] Join    sequemis has joined this channel (~detrriage@d199-126-159-
46.abhsia.telus.net).
[Sun, 11 Apr 2010] [03:04:56 pm] Quit    sequemis has left this server (Remote host closed the connection
).
[Sun, 11 Apr 2010] [03:33:00 pm] Quit    ivanich has left this server (Remote host closed the connection
).
[Sun, 11 Apr 2010] [03:33:23 pm] Join    ivanich has joined this channel
(~ivanich@ivanich.tenet.odessa.ua).
[Sun, 11 Apr 2010] [03:45:56 pm] Quit    kairu has left this server (Ping timeout: 276 seconds).
[Sun, 11 Apr 2010] [06:01:45 pm] Join    mmalek has joined this channel (~michal@rev-188-50.ramtel.pl).
[Sun, 11 Apr 2010] [06:07:56 pm] Quit    mmalek has left this server (Remote host closed the connection).
[Sun, 11 Apr 2010] [06:09:11 pm] Join    mmalek has joined this channel (~michal@rev-188-50.ramtel.pl).
[Sun, 11 Apr 2010] [08:44:40 pm] Join    Emdek has joined this channel
(~quassel@addu175.neoplus.adsl.tpnet.pl).
[Sun, 11 Apr 2010] [09:25:51 pm] Quit    sheytan has left this server (Remote host closed the connection
).
[Sun, 11 Apr 2010] [09:39:31 pm] Join    sheytan has joined this channel
(~sheytan@adab83.neoplus.adsl.tpnet.pl).
[Sun, 11 Apr 2010] [10:38:27 pm] Quit    ivanich has left this server (Read error: Connection reset by
peer).
[Sun, 11 Apr 2010] [10:41:32 pm] Join    ivanich has joined this channel
(~ivanich@ivanich.tenet.odessa.ua).
[Sun, 11 Apr 2010] [10:42:12 pm] Quit    mmalek has left this server (Remote host closed the connection).
```



⁵ <http://k3b.sourceforge.net/?q=support>

⁶ <http://techbase.kde.org/Development>

Part of my initial research also involved checking the source code out from SVN and compiling it. This was very straight forward and was successful, once I installed various dependencies. The resulting binary ran perfectly and I was able to erase a CD-RW and burn a new data disc. I now had a copy of the source which I would later modify and create a patch from.


Making contact

My first point of contact actually came about through my initial research of the project. I came across the new core developer, Michał Małek's blog where he was announcing release 1.69 (2.0-alpha4). A reader left a comment asking about documentation and whether it would also be updated, to which Małek replied that he would not have time to do it.

mkkot Says: December 6, 2009 at 21:39 Reply	
Hey, I'm proud someone from Poland took significant role in developing my most frequently used app :]	
Do you plan to update documentation as well?	
Michał Małek Says: December 9, 2009 at 00:07 Reply	
Cześć! No, I'm afraid I won't find a time for that 😞 Any help with documentation is welcomed though. Interested?	

Source: Małek's blog⁷

Noticing this, it appeared to be the perfect contribution for me to make. I posted a quick reply asking whether anyone had already volunteered, and if not, that I was “interested in having a go at it”. I used friendly language, thanking Małek for his work on K3b. I was also careful to use his name with non-English characters, as I did not want to offend him by changing his name.

Chris Smart Says: April 8, 2010 at 04:08	
Hi Michał,	
Thanks for your great work on K3b. Has anyone volunteered to do some documentation work on K3b yet? If not, I'm interested in having a go at it.	
Cheers, Chris	

Source: Małek's blog⁸

Małek replied shortly thereafter, confirming that no-one else had volunteered and that the task was all mine if I was interested.

Michał Małek Says: April 8, 2010 at 07:34	
Great! Nobody volunteered yet so your help would be very appreciated.	

Source: Małek's blog⁹

⁷ <http://michalm.wordpress.com/2009/11/28/k3b-1-69-2-0-alpha4/#comment-25>

⁸ <http://michalm.wordpress.com/2009/11/28/k3b-1-69-2-0-alpha4/#comment-163>

⁹ <http://michalm.wordpress.com/2009/11/28/k3b-1-69-2-0-alpha4/#comment-164>

At this point, I replied again saying that it sounded good and because I was (at this point in time) still confused about where I should collaborate, I asked if he would mind sending me an email to discuss, or whether there was a specific IRC channel available.



Source: Malek's blog¹⁰

As you might have guessed, I did not receive a reply to this question. Perhaps he just didn't have time, but my feeling is that to him it appeared as though I hadn't bothered to do any research. Surely, if I had I would have discovered the IRC channel, or at least tried #k3b on Freenode, right?

This is a common theme among Free Software projects, a low tolerance for anyone who won't do a little research and asks "stupid" questions. Indeed it was a stupid question. In all fairness to me, I *had* already done a lot of research, but the state of each website made it all extremely confusing and I honestly didn't know where the mailing list was! At this point, I had not discovered the more up-to-date website at <http://k3b.sourceforge.net> which contained information on the both IRC channel and mailing list. Reading this in hind-sight, I would not have posted it like that at all – indeed I remember regretting clicking the submit button at the time, but I just got excited at the prospect of contributing and forgot myself! I learned my lesson.

Nevertheless, it was great to receive such prompt positive feedback. I had successfully made contact with the project's core developer!

As I knew that I had to also conduct extensive research into K3b as a FOSS project, I decided to also contact Sebastian Trueg. I felt that I might need to ask questions at some point find answers not freely available on the web. I sent Sebastian a carefully worded email, introducing myself and explaining what I was doing and hoping to achieve. I told him that I would be researching K3b, but that I would do as much research as possible, myself (to show that I was putting in effort). I explained that if I couldn't find some answers, would he or *someone else* be willing to answer some questions at some point (without being demanding).

I also explained that I need to contribute to the project in some way. I mentioned that I had noticed the Handbook was not up-to-date in preparation for version 2.0 and suggested that working on this could be my contribution.

I was careful to be direct and straight to the point, so that I did not waste his time and increase the chance of success. Blabbering on might cause him to simply delete the email. Besides, I had no idea of his current workload or personality. I provided as much information as I thought suitable to enable him to reply. My hope was that the email would be professional, straight to the point, and encourage him to reply through careful wording and construction.

¹⁰ <http://michalm.wordpress.com/2009/11/28/k3b-1-69-2-0-alpha4/#comment-165>

☆ from **Chris Smart** [hide details](#) Apr 8 [Reply](#) ▼

<u3227509@anu.edu.au>
to trueg@k3b.org
date Thu, Apr 8, 2010 at 3:47 PM
subject K3b development
mailed-by christophersmart.com

Hi Sebastian,

My name is Chris Smart and I'm a master's student at the Australian National University. I'm currently doing an intensive course on FOSS development and have to choose a FOSS project to work with as part of a case study. I think that K3b is simply the best burning program (thanks for all your hard work!) and so I would like to work on it for this course.

As a part of this course, I need to research the project and at some stage contribute to it. I will produce a report about the history, structure and other aspects of the project. I will try to research as much as possible on my own, but I would like to contact someone to provide answers for questions which I'm not sure about. Would you, or someone else, be willing to assist?

I also note that 2.0 is on the way, but it appears there is no Handbook for K3b yet. I would be interested in creating this as my contribution to the project.

Please let me know your thoughts, if you have the time.

Many thanks!

Cheers,
Chris

I was not sure whether I would receive a reply, so I was pleasantly surprised when Trueg not only replied, but was also very positive. He CC'd in Michał Małek also, recommending that I contact the mailing list with any questions about K3b. He thought that a Handbook would be a great idea, but warned that it could be a large task as K3b is very complex. Below is the email he replied with, which I received only several hours later.

☆ from **Sebastian Trüg** [hide details](#) Apr 8 [Reply](#) ▼

<trueg@k3b.org>
to Chris Smart
<u3227509@anu.edu.au>,
Michał Małek
<michalm@jabster.pl>
date Thu, Apr 8, 2010 at 8:26 PM
subject Re: K3b development

Hi Chris,

this sounds like a very good idea. I think posting your questions on the mailing list would be best.
Creating a good hand book would indeed be nice. But you also need to be aware that this is no small job. K3b is a big application with lots of features and buttons to describe and explain.

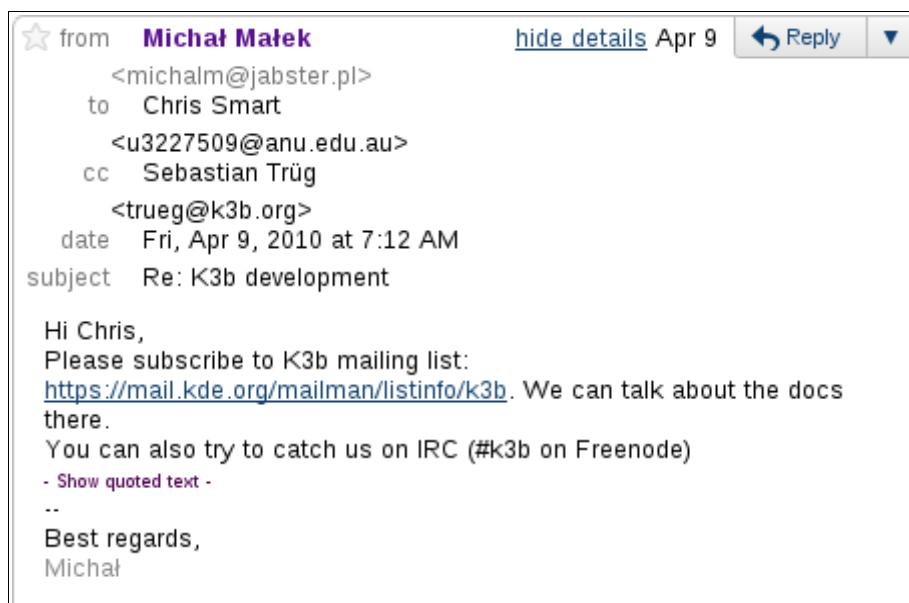
Cheers,
Sebastian
- Show quoted text -

I then replied with a short email (CC'ing Małek), thanking him for his reply and letting him know that I had

already contacted Małek via his blog to discuss updating user documentation.



After this exchange Małek chimed in, requesting that I join the mailing list and informing me of the IRC channel (perhaps prompted by my final comment left on his blog!).



Finally, I thanked them both for their time and let them know I would continue discussions on the mailing list as directed.

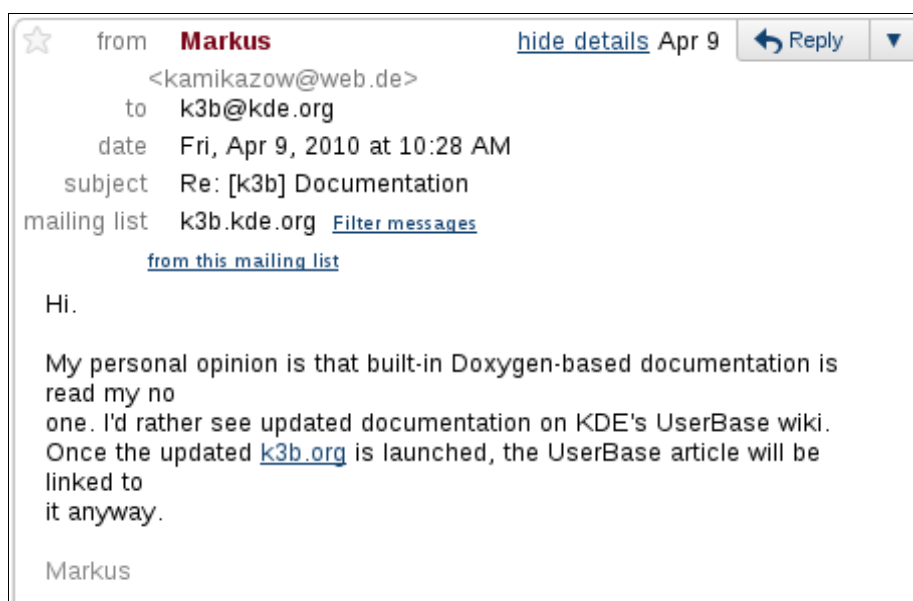
There were now two threads in motion – one for my research on K3b and the other for the contribution I was to make. I introduced myself to the mailing list,¹¹ informing them of my plans.

¹¹ <http://mail.kde.org/pipermail/k3b/2010-April/000038.html>



Once again I carefully chose my words and construction of the email. I mentioned that I was intending to work on the documentation, however I deliberately asked whether anyone had some suggestions – I did not want to come onto the mailing list and appear cocky or demanding. Rather than demand to work on something specific, I put it back onto them so that they could contribute and would be more welcoming of the idea. I did *not* want to tread on any toes and this provided the best way for someone to say, “*actually, I wrote all that documentation, DON'T TOUCH IT!*”, or for some to offer suggestions about where to start. Indeed, this proved successful and generated a little bit of discussion about the state of the documentation.

The first reply came from Markus, who suggested that I concentrate on the online wiki rather than the built-in Handbook.



This idea was also supported by Małek, but warned that it could make K3b inconsistent within KDE where

other applications have a functional Handbook.

☆ from **Michał Małek** [hide details](#) Apr 9 Reply

<michalm@jabster.pl>
to k3b@kde.org
date Fri, Apr 9, 2010 at 5:23 PM
subject Re: [k3b] Documentation
mailing list k3b.kde.org [Filter messages](#)
[from this mailing list](#)

2010/4/9 Markus <kamikazow@web.de>:
- Show quoted text -
I also like UserBase more. UserBase article (<http://userbase.kde.org/K3b>) has better chance being updated in the future than regular handbook. On the other hand it will be inconsistent with other KDE apps.

--
Best regards,
Michał Małek

This sparked a discussion about Handbook vs Wiki. On the one hand, the Wiki is used by many and easier to access and collaborate on. On the other, KDE applications are expected to have a built in Handbook, which would disadvantage K3b. Sebastian suggested I could create a new KDE standard for documentation that could be linked from with the program or KDE help menu. This sounded interesting, and I suggested that there should be a way to write documentation in the Docbook format required by Handbook, and then parse it for use in the Wiki.

☆ from **Chris Smart** [hide details](#) Apr 9 Reply

<u3227509@anu.edu.au>
to Sebastian Trüg
<trueg@kde.org>
cc k3b@kde.org
date Fri, Apr 9, 2010 at 10:24 PM
subject Re: [k3b] Documentation
mailed-by christophersmart.com

On Fri, Apr 9, 2010 at 5:53 PM, Sebastian Trüg <trueg@kde.org> wrote:
> You could try to make it a KDE standard by creating a dedicated
> formatting that can be used by the KDE help system in some way or
> at
> least be linked from the help menu in KDE apps.
>

Hi Sebastian,

That's an interesting suggestion. Perhaps the UserBase Wiki could be linked in K3b's Handbook, rather than having old doco there? Or perhaps a change could allow the Handbook to pull the HTML down directly from the Wiki and render it in Handbook. Either way, I do think that having a manual in the application is useful (what if people have no Internet connection?), and at least better than out dated information :-)

Anyway, if people are more interested in the UserBase Wiki for now, then I could concentrate on that and see if I can improve it. We could deal with DocBook (or some other method) down the track. Free time is scarce for me in-between full time work, part time study and freelancing, but I'll do my best!

Cheers,
-c

After this discussion, I confirmed whether it was OK for me to update the online wiki in preparation for the 2.0 release, or to wait until after 2.0 was released. Markus confirmed that some of it was already written for 2.0, so there was no problem with that.

So now I had successfully contacted the project, on the officially sanctioned mailing list as well as direct email contact with the two core developers. I had generated some discussion and had a clear idea of where I was going to go from here.

Contribution

My initial contribution to K3b was to update the documentation on the wiki in preparation for the upcoming 2.0 release. I did make a small number of contributions,¹² including updating the main screenshot and re-wording the language.

I also made some small contributions on the IRC channel. Here I answered some questions about K3b, directing users to available documentation and offered some suggestions as to why a user could not play a DVD made with K3b. Finally, I also replied to some emails sent to the mailing list, including one where user Jason Bouzane was chasing up the committing of a patch he had submitted to the bug tracker.¹³ I double checked his issue which I was able to confirm, and provided some suggestions.

However, for the purposes of this report, the contribution I will be concentrating on is a patch which I contributed to the project.

The patch

While my initial contribution was to edit the wiki, after updating some documentation I realised that the upcoming version 2.0 of K3b will have Blu-ray Disc support. I knew that the motto of K3b is “*The CD and DVD Kreator*”, but it wasn't always that way. Before it supported DVD's it was just “*The CD Kreator*”, so I thought this might be a good opportunity to submit a patch to the project, adding “*BD*” - the acronym for Blu-ray Disc.

Code

The first thing I did was to revert to a fresh copy of trunk from SVN and begin working on my patch. I made a build/ subdirectory from where I ran “`cmake ../`” to prepare the compilation and then “`make -j2`” to build it (with two threads). This gave me a clean build of trunk, without my contribution, in a separate directory without adding build files to the source structure.

Now, in the source I ran various greps for the string I wanted to change, finding various forms in about 5 different files. These were:

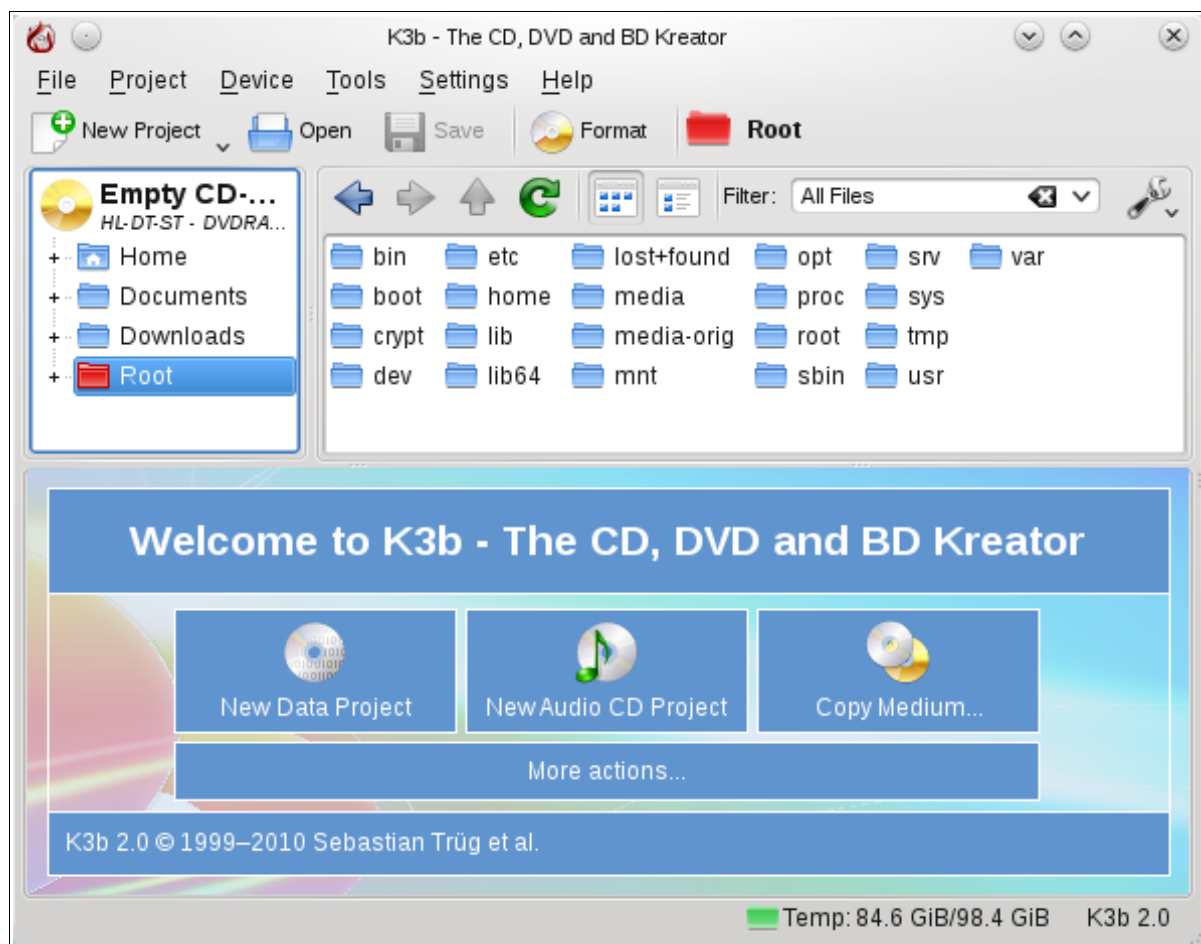
README		2 +-
libk3b/projects/dataacd/k3bisooptions.cpp		2 +-
src/k3b.cpp		2 +-
src/k3bwelcomewidget.cpp		2 +-
src/option/k3bthemeoptiontab.cpp		2 +-

The task was simply to modify the strings and re-compile in a new build directory. I was able to do this

¹² <http://userbase.kde.org/Special:Contributions/Csmart>

¹³ <http://mail.kde.org/pipermail/k3b/2010-May/000087.html>

successfully, with the end result looking quite good.



K3b, showing my applied string patch

Creating the patch

Now that I had working source code, it was time to create a patch. The easiest way to do this was to use SVN's ability to create a patch, so this is what I used. As the K3b websites have no developer information about preferred methods for contributing, I referenced the KDE Tech Base documentation. It specifies the preferred format for patches is unified.¹⁴

When creating the patch I was conscious of making it as easy as possible for anyone who might apply it to do so. As such, I was careful to ensure the directory structure was the default created by a fresh SVN check out (as per instructions on website) – I did not want to add complexity with my own directory structure (like “k3b-testing-new/working/”) by forcing the developer to specify the locations of each file (actually I never created my own random directory structure in the beginning to avoid this problem).

Creating the patch was very easy, thanks to SVN, which creates it in unified format:

```
svn diff > k3b-add-bd-string.patch
```

I was also able to create a patch which showed the function each change was in, by telling SVN to use an external diff program (I then also needed to add the unified option):

```
svn diff --diff-cmd diff --extensions "-u -p" > k3b-add-bd-string.patch
```

This latest command created the patch I then used for testing, which was like so:

¹⁴ http://techbase.kde.org/Contribute/Send_Patches#Creating_a_Simple_File_Patch

```

Index: src/k3b.cpp
=====
--- src/k3b.cpp      (revision 1121650)
+++ src/k3b.cpp      (working copy)
@@ -233,7 +233,7 @@ K3b::MainWindow::MainWindow()
    d->dirTreeDummyTitleBarWidget = new K3bDummyWidget( this );
    d->contentsDummyTitleBarWidget = new K3bDummyWidget( this );

-   setPlainCaption( i18n("K3b - The CD and DVD Kreator") );
+   setPlainCaption( i18n("K3b - The CD, DVD and BD Kreator") );

    // ////////////////////////////////////////
    // call inits to invoke all other construction parts
Index: src/option/k3bthemeoptiontab.cpp
=====
--- src/option/k3bthemeoptiontab.cpp (revision 1121650)
+++ src/option/k3bthemeoptiontab.cpp (working copy)
@@ -108,7 +108,7 @@ void K3b::ThemeOptionTab::selectionChange
 {
    ThemeViewItem* item = (ThemeViewItem*)m_viewTheme->selectedItem();
    if( item ) {
-       m_centerPreviewLabel->setText( i18n("K3b - The CD/DVD Kreator") );
+       m_centerPreviewLabel->setText( i18n("K3b - The CD/DVD/BD Kreator") );

        QPalette pal( palette() );
        pal.setColor( backgroundRole(), item->theme->background-color() );
Index: src/k3bwelcomewidget.cpp
=====
--- src/k3bwelcomewidget.cpp (revision 1121650)
+++ src/k3bwelcomewidget.cpp (working copy)
@@ -260,7 +260,7 @@ void K3b::WelcomeWidget::slotThemeChange
    .arg(theme->foregroundColor().name() ) );

    }

-   m_header->setHtml( "<html><body align=\"center\">" + i18n("Welcome to K3b - The CD and DVD Kreator") +
"</body></html>" );
+   m_header->setHtml( "<html><body align=\"center\">" + i18n("Welcome to K3b - The CD, DVD and BD Kreator")
+ "</body></html>" );
    m_infoText->setHtml( QString::fromUtf8("<html><body align=\"center\">K3b %1 &copy; 1999&dash;2010
Sebastian Trüg et al.</body></html>" )
        .arg(KGlobal::mainComponent().aboutData()->version() ) );
    setMinimumWidth( 2*MARGIN + qMax(( int )m_header->idealWidth(), m_buttonSize.width() ) );
Index: README
=====
--- README      (revision 1121650)
+++ README      (working copy)
@@ -1,6 +1,6 @@
K3b Version 1.0

-Thanx for downloading K3b - The CD Kreator
+Thanx for downloading K3b - The CD/DVD/BD Kreator

These are the features so far:
- the most userfriendly interface ever ;-)
Index: libk3b/projects/datacd/k3bisooptions.cpp
=====
--- libk3b/projects/datacd/k3bisooptions.cpp (revision 1121650)
+++ libk3b/projects/datacd/k3bisooptions.cpp (working copy)
@@ -28,7 +28,7 @@ K3b::IsoOptions::IsoOptions()
    "The string should not be longer than 16 characters to avoid warnings regarding "
    "Joillet extensions which induce this restriction.",
    "K3b data project" ) ),
-   m_applicationID( QString("K3B THE CD KREATOR (C) 1998-2010 SEBASTIAN TRÜG AND MICHAL MALEK" ) ),
+   m_applicationID( QString("K3B THE CD/DVD/BD KREATOR (C) 1998-2010 SEBASTIAN TRÜG AND MICHAL MALEK" )
),
    m_systemId( K3b::systemName().toUpper() ),
    m_whitespaceTreatmentReplaceString( "_" )
{

```

The last thing I wanted to do was submit a patch that didn't work! I reverted the code to a fresh copy without my changes and tested my patch with:

```
patch -p0 < k3b-add-bd-string.patch --dry-run
```

This was successful, so I applied it by removing `--dry-run` and re-built it. This was successful. Finally, I checked out a fresh copy of trunk and tested the patch in the same manner. This was also successful, so I noted the SVN

revision so that I could reference the specific version my patch worked against in my email.

Now I had a working patch and a new contribution I felt was suitable for the project.

Research into submitting the patch

Having a patch is just half the battle, now I had to submit it to the project in the best possible way so as to give it the best chance of being accepted. I was aware that if my email was not written in the right way, or if I made it confusing and hard to access or apply the patch, it ran the risk of being ignored. Naturally I didn't want that!

I once again referred to the KDE Tech Base on how to share a patch.¹⁵ It says that if the patch applies to an existing bug report, then the best way forward is to attach it to the bug tracker. However, it also states that the main way to share a patch is by emailing it to the mailing list (this would be a plain text email). As my patch was not related to any bug, I decided that this was probably the best way for me to proceed, however I still wasn't sure whether I should include my patch as an attachment or inline. The mailing list was new, and there were no other patches sent which I could reference! Fortunately, the Tech Base also addressed this saying that they prefer attachments.¹⁶

I had a pretty good idea what I was going to do, but just to be sure (and because K3b is not yet a distributed KDE application) I felt it would be prudent to confirm my plans on the IRC channel.

```
[Sun, 2 May 2010] [11:30:06 am] <csmart>    does anyone know the preferred method for submitting a patch?
Are attachments of plaintext diffs via the K3b mailing list OK?
[Sun, 2 May 2010] [04:18:45 pm] <kimrhh>    csmart: i don't think there is any guidelines, maybe besides kde
ones, there are not so many developers so it's a bit informal :) a patch against trunk would work fine,
perhaps open a bug about it, but i think email is also fine
[Sun, 2 May 2010] [04:21:33 pm] <kimrhh>    csmart: http://techbase.kde.org/Contribute/Send_Patches
[Sun, 2 May 2010] [04:22:04 pm] <kimrhh>    i think an svn diff, in a bug report, with a small example test
case to reproduce the problem would be the preferred way
[Sun, 2 May 2010] [06:18:44 pm] <csmart>    kimrhh: thanks
[Sun, 2 May 2010] [06:43:47 pm] <csmart>    kimrhh: this is just a small string change, so I might pop it on
the mailing list rather than lodge a bug report. The link you sent says the mailinglist main way to share a
patch (unless it fixes a specific bug on the tracker), so I'll give that a shot :-)
```

IRC log, submitting a patch

Fortunately, kimrhh was willing to reply (the IRC channel is very low traffic!) and referenced the Tech Base article I had already been reading. I felt more confident now and although he suggested the bug report method, I explained my reasoning for emailing to the mailing list instead.

Composing the email

Now that I had my patch and the method of submitting it, I now just needed to formulate the email for the mailing list – a very important step!

I wanted my email to be very short, direct and to the point as I was conscious of wasting developers' time. To give my patch the best chance of even being looked at, I broke the email into simple sentences to make it easier to digest.

Subject

Firstly, I formulated the subject as this is probably the first thing a developer will read and could decide whether or not they read the email content. As previously mentioned, there were no previous patches sent to the mailing list, so I had to best guess how to proceed. Fortunately I had done a course which gave me pointers on what to do :-) (as did the KDE Tech Base).

¹⁵ http://techbase.kde.org/Contribute/Send_Patches#How_To_Share_the_Patch.3F

¹⁶ http://techbase.kde.org/Contribute/Send_Patches#Preparing_The_Email

I started the subject with *[PATCH]* so that it was obvious to anyone reading the subject that the topic of this email was about a patch. This should hopefully entice developers to read it. Next, I provided a brief outline of what the patch did, namely “*Adds string "BD" to titlebar, etc*”. This way developers could quickly see what my patch was expected to do, and decide whether they were interested or not.

The format of the subject was designed to cleanly convey the purpose of the email and patch, in order to stand out and entice those interested to open the email and examine the patch.

Body

Assuming that the subject was successful in getting the developers to open the email, the next hurdle was the body of the email.

I started with a warm greeting to set the tone (I wanted to come across as nice and friendly), but then I got straight into the topic without many further niceties. This is because I don't want to waste their time, I just want to convey the purpose of my patch as conveniently as possible.

I started by conveying the issue, namely that K3b does not yet reflect the ability to burn Blu-ray Discs in its motto, which is a new feature of the upcoming 2.0 release. I specifically mentioned which SVN revision my patch related to, so that there is context and time frame. After all, a newer revision might already contain the change outside of my contribution, which would make the email more confusing. Did I mean the latest trunk which already has the change or was there a problem with what was done? No-one would know. By specifying the SVN revision a developer could easily reply with something like, “*already applied in a later revision*” and be done with it. This way there would be no need for emails going back and forth clarifying the position.

Next, I added any concerns I had with the patch. This was to encourage discussion and to show that I was thinking in more broad terms about what might break. I wasn't just sending in a rough patch that hadn't been thought through. The two concerns that I had were that changing a string would break translations, and that the project might not even want to change the string at all! I didn't want make any presumptions. Here I also downplayed the patch so that I did not appear gung-ho and cocky (and honestly, it really is a tiny, tiny patch which adds no functionality to the product whatsoever).

Next, I moved onto the patch itself, letting them know which directory the patch could be expected to apply cleanly from. This was simply *multimedia/k3b*, the recommended directly structure as per SVN build documentation on the K3b website. Nevertheless, I felt it useful to specify the directory as a simple courtesy. Some might be applying it via a source tarball which would have a different structure (and they would therefore need to use *patch -p4* when applying).

I then included a diffstat, so that developers could easily see which files my patch applied to. Had it been only one then I could have just specified that file instead, as per recommendation on KDE Tech Base.



Finally, I signed off with another nicety, without going into any further detail or adding unnecessary text.

Attachment

Now that I had the file constructed, it was time to attach the patch. I double checked that it was formatted correctly, did one last dry-run patch and ensured that the name of the patch made sense. Happy with all of that, I attached the file and after one last re-read over it all, added the K3b mailing list address and hit the submit button. It was done! I read the email again once it came into my inbox which all looked OK. Now it was time to sit back and wait for a response!

Complete email

The email which I sent to the mailing list looked like this:

☆ from **Chris Smart** <u3227509@anu.edu.au> [hide details](#) May 2  

to k3b@kde.org

date Sun, May 2, 2010 at 6:55 PM

subject [PATCH] Adds string "BD" to titlebar, etc

mailed-by christophersmart.com

Greetings,


As of revision 1121800 in SVN, K3b doesn't appear to reflect support for Blu-ray Discs in the titlebar, etc, so this patch adds it.

My concern is that this will break translation strings (and you might not even want to change it!). Perhaps a somewhat tiny, useless patch, but nevertheless here it is.

The attached patch applies to the directory multimedia/k3b.

diffstat:
README | 2 +-
libk3b/projects/datacd/k3bisoptions.cpp | 2 +-
src/k3b.cpp | 2 +-
src/k3bwelcomewidget.cpp | 2 +-
src/option/k3bthemeoptiontab.cpp | 2 +-
5 files changed, 5 insertions(+), 5 deletions(-)

Cheers,
Chris

 **k3b-add-bd-string.patch**
4K [Download](#)

Source: K3b mailing list 2/5/2010¹⁷

Outcome

The email I sent through to the mailing list was well received, although it was never applied to the source code. As I expected, the first response came from Markus, which said not to apply the patch after 2.0 is released due to the string freeze. I knew this would be a problem which is why I mentioned it in my email.

☆ from **Markus** [hide details](#) May 3  

<kamikazow@web.de>

to k3b@kde.org

date Mon, May 3, 2010 at 12:17 AM

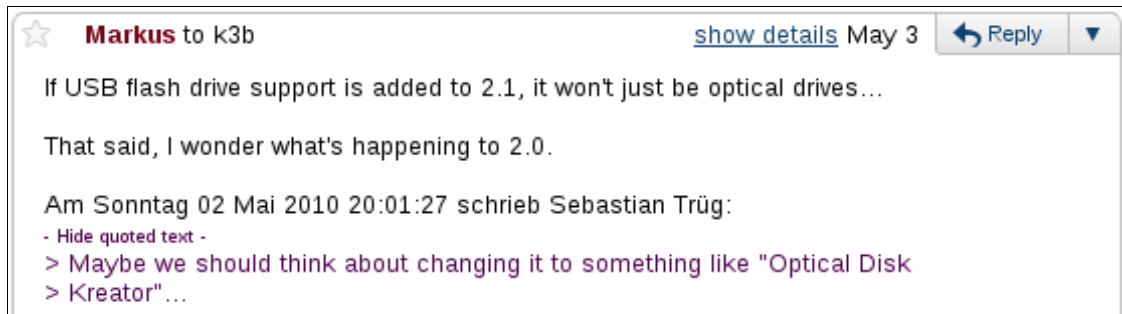
subject Re: [k3b] [PATCH] Adds string "BD" to titlebar, etc

mailing list k3b.kde.org [Filter messages](#)
[from this mailing list](#)

String freeze.
Nobody commit this after 2.0 is released, please.

¹⁷ <http://mail.kde.org/pipermail/k3b/2010-May/000049.html>

What the patch did achieve however, was some healthy discussion on the list about what the motto should be. Sebastian posted that perhaps the title should simply be changed to “*Optical Disk Kreator*”, however Markus suggested that this would not be suitable as future version 2.1 is expected to support USB flash drives (and therefore no-longer supports only optical devices).



Source: K3b mailing list 3/5/2010¹⁹

Others joined the conversation voicing their support for Sebastian's suggestion, but without the much loved KDE-centric “*K*”, such that it would be simply “*Optical Disk Creator*”. I suggested that it could also be renamed to something more generic such as “*K3b - the disc authoring Kit*” however the conversation soon fizzled out. In the grand scheme of things, the motto of the project is not a high priority.

Due to the uncertainty of future features and lack of agreement over the title, the patch was not applied and is likely to never be. I am happy with the resulting discussion however and it was a great experience contributing a patch like this to the source code of a FOSS project, even if it was rejected.

Conclusion

Although my patch was not committed to the source code it was great to be able to submit it and for it to generate lots of discussion. I felt that it was a success and I was pleasantly surprised by the friendliness of the other developers who replied to the thread (and they obviously read my email!).

One of the great things about contributing to the wiki is that I see the result of my effort straight away (hopefully no-one reverses it!) I know that the changes I have made to the wiki will be helpful, and will be built upon by others to improve the documentation in the future.

Free and Open Source Software is not just about the code, it's about community. A project needs others to not only use the software, but to contribute to it and support it in order for it to develop and grow. The beauty of it is that anyone can contribute, whether it's just helping out with a general query on the IRC channel, or refactoring the entire source code.

Working on K3b has been a great experience for me. I have always respected this project greatly and I have learned so much about the project itself. Involving myself in the project and making some contributions has been a lot of fun! Hopefully I can continue to work with the project, finalising documentation or perhaps learning some C++. The best thing is that through this experience I now feel like a part of the K3b community, that I have someone done something worthwhile and given something back. That is very rewarding.

¹⁸ <http://mail.kde.org/pipermail/k3b/2010-May/000050.html>

¹⁹ <http://mail.kde.org/pipermail/k3b/2010-May/000052.html>