Subject: deb packages don't update user sources properly Posted by dolik.rce on Sun, 18 Apr 2010 17:40:01 GMT

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Hi everyone!

I have to file bug against my own work

I just realized a stupid error in the logic of using ubuntu packages. If user installs the package (doesn't matter how, even manually) and runs theide for the first time, the dialog is presented, asking if the sources should be copied to home directory. But if we automatically update later, new sources are copied to /usr/share/upp, but they never get into the users home, where are his assemblies set up.

Simple solution would be to check if the version in users ide/version.h is the same as the version in corresponding file in /usr/share/upp. If they are different, user should be presented with dialog asking if he wants to overwrite the sources with newer ones.

So, before I start to work on a fix, does anyone see any problems with this solution?

Best regards, Honza

Subject: Re: deb packages don't update user sources properly Posted by mr\_ped on Mon, 19 Apr 2010 10:06:18 GMT View Forum Message <> Reply to Message

The sources are copied to userland to allow him to make changes.

This works against re-copy of fresh sources over them after update. (although I believe many users have clean copy without local changes, so the update is appropriate)

So we have local changes vs official update thing, and that's why things like versioning systems do exist, i.e. not easy to solve.

Still your solution is probably best what can be done.

I have also right now get a flash of an idea, how about putting into installer another wizard to not copy sources from /usr/share, but instead check them out from svn mirror right into userland. In such case after update your "fix" could run another svn update up to revision of installed package (not to head).

But this would be good only for experienced users, who know how SVN works and are capable to handle eventual conflicts with their local changes during such process.

But I personally would quite like it that way, to not bother with checkouting manually, but letting installer to prepare it for me all.

# Subject: Re: deb packages don't update user sources properly Posted by nineilson on Mon, 19 Apr 2010 10:35:32 GMT

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With another SDK I copied all the files I made changes to.

After updating the SDK then just pasted in the changed files.

I also had a text file with the changes, if the SDK update had changes to those files I wanted to keep then just make the changes to the specific lines I had changed.

That way is easy and works OK, no tinkering with a svn.

Subject: Re: deb packages don't update user sources properly Posted by mr\_ped on Mon, 19 Apr 2010 14:37:40 GMT

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nlneilson wrote on Mon, 19 April 2010 12:35With another SDK I copied all the files I made changes to.

After updating the SDK then just pasted in the changed files.

I also had a text file with the changes, if the SDK update had changes to those files I wanted to keep then just make the changes to the specific lines I had changed.

That way is easy and works OK, no tinkering with a svn.

This way it's actually lot more tedious than using SVN.

Subject: Re: deb packages don't update user sources properly Posted by dolik.rce on Mon, 19 Apr 2010 18:17:33 GMT

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Hi,

mr\_ped wrote on Mon, 19 April 2010 12:06l have also right now get a flash of an idea, how about putting into installer another wizard to not copy sources from /usr/share, but instead check them out from svn mirror right into userland. In such case after update your "fix" could run another svn update up to revision of installed package (not to head).

That is a great idea! Why it didn't flash myself? Let me try to put it all together and describe the processing logic...

When theide starts, it should check if there is /usr/share/upp svn is installed user copy of sources existsThen we can procede as follows: if(!c){

```
if(a || b){
  Give user the choices:
                   * copy sources from /usr/share [recommended]}
  if(a){
                   * checkout sources from svn [advanced users]}
  if(b){
                   * do not copy sources [very advanced users, not recommended :-) ]
 }else{
  ONCELOCK(Warn user that if he wants to use theide with ultimate++.
        he must either install upp package or subversion)
 }
}else{
 if((users sources are from /usr/share) && (user source are outdated)){
  Ask user if he wishes to: * overwrite everything
                   * overwrite only files that haven't changed since last update
                   * keep all the out of date sources
 }
    Alert user that update is available.
 }
}
```

Does it make any sense? It is bit more complex than I expected at first... By "oncelock" I mean do it only on first run, otherwise it would be annoying.

Honza

Subject: Re: deb packages don't update user sources properly Posted by mr\_ped on Tue, 20 Apr 2010 07:56:52 GMT View Forum Message <> Reply to Message

more afterthought on the svn idea...

It will mean that all your local changes will live in your working copy as live changes, you have nowhere to commit them (and archive them), unless you make another personal repo and juggle between them.

I'm not sure how bad this is, after all you probably don't want to divert from official uppsrc too much anyway if you plan to stay up to date, so in most of the cases the changes will be sparse and minor, thus letting them live in WC is probably ok.

(I expect if somebody has to seriously modify upp, he would branch some stable revision anyway for his project, and he will be very likely ignore further updates on that branch, so he can easily switch to own repo)

Still it doesn't feel right, like ultimate solution.

But this leads me to question whether for example GIT would not work better, i.e. allowing for both easy update to revision from updated deb package and committing and tracking local changes with proper commit log.

Any GIT expert to look into this, if it's merging allows this?

This would be maybe that final reason, why to finally switch to GIT and learn it. (although I'm now

Subject: Re: deb packages don't update user sources properly Posted by mr ped on Tue, 20 Apr 2010 08:11:05 GMT

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#### About procedure:

I think it's not very accurate, or diverts from my expectations too much, so I will post my version:

- I assume TheIDE is installed from .deb, I don't care about non-deb installation (we can rethink that later, what can be reused for custom installation)
- if .deb was not updated, nothing to do [exit]
- no user copy -> ask if he wants:
- 1) SVN checkout (to revision from .deb)
- 2) copy
- 3) use /usr/share read only sources (imho this should be recommended, because it's keeping the platform consistent for users who follow recommended choices)
- if user copy is SVN checkout, update to .deb revision (not head) (it should probably ask for confirmation, but it's very likely desired behaviour, so no need to complicate it). Report conflicts after update if any, so user knows he has to solve them manually. [exit]
- if user copy is copy of /usr/share -> ask about update (full copy, keep local changes, no copy) [exit] (this part is well written in yours diagram)

\_\_

It would be very likely good to make this independent for uppsrc and examples+reference. I think it's quite ok for new users to dig into examples and play with them, i.e. copy or SVN should be recommended there. On the uppsrc I think the exact opposite, keeping it in /usr/share and not letting them modify it.

Also it would be nice to have these wizards available trough menu in case you want to restore your installation (i.e. your local toying around went into unrepairable state).

Subject: Re: deb packages don't update user sources properly Posted by mr\_ped on Tue, 20 Apr 2010 08:29:10 GMT View Forum Message <> Reply to Message

And to make clear where my ideas come from:

I'm thinking about common C++ Joe programmer...

He's been doing probably some wx, QT or GTK+ GUI programming, and he wants to try out some new IDE (not yet realizing the upp will change his life much more, bwahahahaha).

So let's see what he will do:

- start his favourite package manager
- search for C++ IDE
- +install upp
- click "apply"

### What we want to happen:

- install all needed build stuff (gcc, whatever, basic libraries for SQL coding, SDL?, OGL?), suggest also all tools which can make big difference (svn, git?)
- install TheIDE, uppsrc, examples, etc.. the good U++ stuff
- put TheIDE into menu

#### Now Joe will run the IDE:

- wizard should automagically preset all the tedious stuff, i.e. GCC build method (with proper gcc, like avoiding defunct 4.3 or 4.4 or which it was), paths to libs
- ask about copy/svn/RO shared [uppsrc, examples+reference] with clearly marked recommended stuff

In ideal case there should be like 2 or 3 (max) clicks to let Joe into IDE, yet to let him know what was done with default setup and letting him know it can be adjusted later as well)

Then the "alien" choose package window comes ...: / Hard to tell how to make this crash into upp softer, probably at least text explanation to new users should be there.

TheIDE at this point should be capable to compile and run most of the examples (at least all interesting, and I think SQL and SDL are interesting examples how far upp can be pushed), so Joe can just switch the packages, hit compile&run and watch.

That's the main case (IMHO) we should make sure it works absolutely flawlessly and as smoothly as possible.

Working on the svn/git wizard copies of uppsrc will also make life easier for more advanced users who keep some custom changes to uppsrc in their userland, but that's not about Joe.

Subject: Re: deb packages don't update user sources properly Posted by dolik.rce on Tue, 20 Apr 2010 16:10:38 GMT

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Himr ped!

I must agree with all you said. Especially two things are important: The initial setup must be as quick and simple as possible. Maybe a windows-style wizard wouldn't hurt - common Joe programmer is used to click "Next >" very quickly to accept the defaults.

It should be possible to change or re-run the setup later, from within theide. That is related to 1), since Joe just accepted defaults without reading and later he might find that working over svn

suits him better.

About the "alien" package selection window: theide recognizes already when it runs for the first time. It should be easy to show a big nice pop-up explaining the basics of packages and assemblies. And probably also something like "Hey, if you want to see what this beast can do, have a look at the X,Y or Z package in examples". Just don't add a picture of a big-eyed paper clip, that would scare most of the people

Honza

Subject: Re: deb packages don't update user sources properly Posted by mirek on Tue, 20 Apr 2010 16:50:34 GMT

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dolik.rce wrote on Tue, 20 April 2010 12:10Hi mr\_ped!

I must agree with all you said. Especially two things are important: The initial setup must be as quick and simple as possible. Maybe a windows-style wizard wouldn't hurt - common Joe programmer is used to click "Next >" very quickly to accept the defaults.

It should be possible to change or re-run the setup later, from within theide. That is related to 1), since Joe just accepted defaults without reading and later he might find that working over svn suits him better.

About the "alien" package selection window: theide recognizes already when it runs for the first time. It should be easy to show a big nice pop-up explaining the basics of packages and assemblies. And probably also something like "Hey, if you want to see what this beast can do, have a look at the X,Y or Z package in examples". Just don't add a picture of a big-eyed paper clip, that would scare most of the people

Honza

Anything from me required?

As for the opinion, I would like to afford the luxury of not having one.

Personally, whenever I need to work in Linux, I use src tarball to get the first ide, then svn...

But making the process easy for Joe is fine with me.

Mirek

Subject: Re: deb packages don't update user sources properly Posted by dolik.rce on Tue, 20 Apr 2010 18:17:15 GMT

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luzr wrote on Tue, 20 April 2010 18:50Anything from me required?

As for the opinion, I would like to afford the luxury of not having one.

Personally, whenever I need to work in Linux, I use src tarball to get the first ide, then syn...

But making the process easy for Joe is fine with me.

#### Mirek

Not yet, we will start to beg for your help when we get stuck in the coding And no opinion from you is fine - it would be worse if you had a negative one

Honza

Subject: Re: deb packages don't update user sources properly Posted by nlneilson on Thu, 22 Apr 2010 08:53:33 GMT

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dolik.rce wrote on Tue, 20 April 2010 18:10 Especially two things are important: The initial setup must be as quick and simple as possible. Maybe a windows-style wizard wouldn't hurt - common Joe programmer is used to click "Next >" very quickly to accept the defaults.

It should be possible to change or re-run the setup later, from within theide. That is related to 1), since Joe just accepted defaults without reading and later he might find that working over svn suits him better.

I am like "common Joe programmer", these are important.

The most experience I have had is with the NASA WorldWind C# .net version svn. If there is any way of staying away from an svn there are many that would choose that way except as in #2.

There are two things NASA changed when when they switched to the Java version (NASA no longer funds the C# version).

- 1. Nightly builds, the svn is used by the developers but common Joe uses the builds. There have been several threads/posts regarding a public read only svn but I think they realized the problems involved.
- 2. Too many had access to make changes in the svn, it got to be a big mess, plugins that could not be removed, they were built in.

An interesting note is when they were changing to a version that would work on other OS/platforms C++ was considered but there were more Java programmers available. If U++ had of been more well known/used it may have ended up C++ rather than Java.

edit: See how much bandwidth is being used for Win install, src tarball versus svn

regardless of how the svn is set up this ratio may not change significantly.

Subject: Re: deb packages don't update user sources properly Posted by dolik.rce on Mon, 06 Sep 2010 21:43:19 GMT

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Hello everyone!

After a long, long time (yes, it is a long time since April ) I finally offer a fix to the situation described in above posts. Hereby I ask anyone having a little bit of time and courage (and posix OS) to test it and tell me what you think please.

I changed theide to have a nice and simple setup wizard shown upon the first run and also a system to check for updates and generally manage the source codes. I will not tell you more about it. My goal was to design something "fool-proof", that a ten year child could use, so I hope you will be able to figure out what to do - if not, then I did a poor job

So just a few notes how to get it running: The attached file contains all changed files, that is a subset of files in uppsrc/ide and uppsrc/usvn. I recommend you to get a copy of your uppsrc and drop those files in. Then just compile package ide as usually and you are ready to go If you name the resulting binary "theide", you might mess up you normal settings (that is just disclaimer, actually the worst that can happen is overwriting or deleting you assemblies), so I recommend to stay with "ide". To see the automatic updates in action, you will probably wait till someone commits something in SVN (when using SVN based assemblies) or rewrite the version string in /usr/share/upp/uppsrc/ide/version.h (When using local copy of /usr/share/upp).

There is some proto-documentation in ide/SrcUpdater. If you are unsure about something you might find an answer in there, or just ask me.

If you test on win32, you should not see any big changes, just few details in usvn. As for now the changes are for POSIX environment only.

I'm looking forward to your comments!

Best regards, Honza

EDIT: Removed the file due to serious errors in the code.

Subject: Re: deb packages don't update user sources properly Posted by dolik.rce on Thu, 20 Jan 2011 16:53:43 GMT

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### Hi everyone

It's about time to revive this thread again First short review of the problem to refresh your memory without reading full thread

Since we started publishing deb (and other) packages, there is an unresolved problem. The sources are installed into /usr/share/upp and theide copies them into user home directory on the first invocation. If you update the package later, theide just ignores it. There was some discussion about this above and I tried to implement it, but the code wasn't smooth enough and there was number of bugs. See above for more details.

But that was few months ago and since then, I was polishing the code and taking the bugs out one by one. I have been using the modified ide for quite a long time in various configurations and I think it is ready now. The main ideas are: nicer first-run installer, automated update checks in background (every 15 minutes), simple source management in case of local copy.

I won't go into details here, it would be boring and pointless. I rather post part of the documentation, since it has screenshot and as you probably know "one picture equals to thousand words" So see the attached PDF. I will of course also publish sources, see the next post.

Best regards, Honza

## File Attachments

1) updater.pdf, downloaded 499 times

Subject: Re: deb packages don't update user sources properly Posted by dolik.rce on Thu, 20 Jan 2011 16:56:21 GMT

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Here are the promised sources. The archive contains only changed files. Just copy the ide and usvn directories inside your uppsrc and it should work just fine.

Honza

## File Attachments

1) updater.zip, downloaded 446 times

Subject: Re: deb packages don't update user sources properly Posted by jibe on Fri, 29 Apr 2011 09:03:29 GMT

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Hi,

Will this be part of Theide, or will it stay a separated kind of addon, not included in the official package? I updated to the 3371 built, and this is not included yet (unless I missed something?).

#### You told me here:

dolik.rce wrote on Tue, 01 March 2011 10:26l am working on a fix for this for quite some time, but so far no one was really interrested because nobody really complained so far

I think that you should not wait that a lot of people complains: I'm sure that there is several (a lot ?) who don't know or don't take time to ask you about this problem but would be happy to have a solution...

Subject: Re: deb packages don't update user sources properly Posted by dolik.rce on Fri, 29 Apr 2011 10:28:22 GMT

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Hi jibe

jibe wrote on Fri, 29 April 2011 11:03Will this be part of Theide, or will it stay a separated kind of addon, not included in the official package? I updated to the 3371 built, and this is not included yet (unless I missed something?).

It is already part of theide The setup dialog appears by default only on clean install. Try looking into Setup > Source management or starting theide with -install parameter from commandline

Best regards, Honza

Subject: Re: deb packages don't update user sources properly Posted by jibe on Fri, 29 Apr 2011 21:32:56 GMT

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I don't understand... In Setup > Source management, I have :

- Local copy of sources from /usr/share/upp [recommanded]
- Check when TheIDE starts.
- \$SRC = /home/<user>/upp
- \$OUT = /home/<user>/.upp/\_out

but the updates are not done... Did I missed something?

I did not try starting theide with -install, but it should work without it, right?

Subject: Re: deb packages don't update user sources properly Posted by dolik.rce on Sat, 30 Apr 2011 02:55:41 GMT

I can think of two possible reasons:

- 1) There is no update available. Have a look in /usr/share/upp/uppsrc/ide/version.h and compare it with ~/uppsrc/ide. If they are the same, there is nothing to be updated.
- 2) You didn't click the update icon. When update is available, it is not installed automatically, it is just signaled by icon on toolbar. The icons look like this(taken from help):

I have written a documentation for this feature which explains all this... Unfortunately, it is not yet properly linked with the rest of the docs, so it doesn't show on web nor in theide help. To see it please have a look in ide/SrcUpdater package, it is in the app.tpp file.

Honza

PS: Last two days there were some trouble with the launchpad builds, so there were no updates, that could be a reason too

File Attachments

1) icons.png, downloaded 982 times

Subject: Re: deb packages don't update user sources properly Posted by jibe on Mon, 02 May 2011 08:40:04 GMT

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Hi,

Thanks for your help!

It was the 2nd case: I thought that the update would be installed automatically... All works well now

Subject: Re: deb packages don't update user sources properly Posted by jibe on Tue, 10 May 2011 07:47:21 GMT

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Hi.

I updated to the last built (3409). I obtain a "synchronize" dialog box, with all files to add/update/delete. Good! But the problem is that it wants to delete all my apps and tests, even in the MyApps folder

Could you add some check box to choose "(un)select all files to be deleted"? It could do that globally, or better folder by folder. Globally would be already very usefull: I cannot uncheck manually hundreds of files that I want to keep!

# Subject: Re: deb packages don't update user sources properly Posted by dolik.rce on Tue, 10 May 2011 08:32:35 GMT

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jibe wrote on Tue, 10 May 2011 09:47Hi,

I updated to the last built (3409). I obtain a "synchronize" dialog box, with all files to add/update/delete. Good! But the problem is that it wants to delete all my apps and tests, even in the MyApps folder

Could you add some check box to choose "(un)select all files to be deleted"? It could do that globally, or better folder by folder. Globally would be already very usefull: I cannot uncheck manually hundreds of files that I want to keep!

Hi Jibe,

That is weird, it shouldn't touch the stuff in MyApps... I will have a look at it ASAP.

The "select all files" actions are good idea, I'll try to implement it soon.

Best regards, Honza

Subject: Re: deb packages don't update user sources properly Posted by jibe on Thu, 12 May 2011 17:01:22 GMT View Forum Message <> Reply to Message

Hi Honza,

As we talked in PM, this is because I have the MyApp directory inside the upp tree. I'll remove it from there to solve this problem.

If you plan to add an (un)select action, maybe you could do this in a tree, to (un)select complete branches? Just an idea...

Subject: Re: deb packages don't update user sources properly Posted by jibe on Fri, 13 May 2011 08:46:48 GMT

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Hi,

The problem is that it wants also to delete a lot of files in "out", "tmp" and "bazaar" directories...

Maybe Ok with "tmp", but I'm afraid about bazaar: why so many files are deleted? I'm surprised that we don't need anymore them at all... ie, it wants to delete files in bazaar/CtrlPropTest and bazaar/TabBar directories...

And as it deletes all in out directory, I'll have to recompile all my apps, with all libraries?

I just choose to install local copy of upp... Did I do something wrong? Why must I move MyApps when the installator put it there? Is there other folders that I should move?

(sorry for these newbie questions... I'm still just discovering U++)

Subject: Re: deb packages don't update user sources properly Posted by mr\_ped on Fri, 13 May 2011 10:19:19 GMT View Forum Message <> Reply to Message

To recompile all is anyway a very good idea, after core sources are updated. So deleting "out" is a good thing.

Subject: Re: deb packages don't update user sources properly Posted by dolik.rce on Fri, 13 May 2011 10:43:05 GMT View Forum Message <> Reply to Message

The thing is that for the updater to detect changes, the local source tree must be kept clean. If you add another directories in there, and they are missing in the system-wide sources (in /usr/share/upp), the updater thinks they were removed from U++ and suggest to delete them (quite correctly). I have been lately working on some improvements in the detection which might solve this, at least partialy, but it is not in state to be committed safely just yet.

I think I will also add some sort of "ignore pattern", so you could mark files/directories to be ignored by the update mechanism. That is probably the best universal solution I can think of.

Honza

Subject: Re: deb packages don't update user sources properly Posted by jibe on Sat, 14 May 2011 13:53:06 GMT View Forum Message <> Reply to Message

Hi.

mr\_ped wrote on Fri, 13 May 2011 12:19To recompile all is anyway a very good idea, after core sources are updated. So deleting "out" is a good thing.

Yes... and No! This obliges to recompile all libraries, when maybe there is changes only in one or two test programs in the bazaar...

dolik.rce wrote on Fri, 13 May 2011 12:43The thing is that for the updater to detect changes, the local source tree must be kept clean.

Yes. And it's true that I installed all from scratch some monthes ago, and since this time I just

copied the /usr/share/upp to my upp local directory and never deleted anything... This could be the reason why there is so many things to delete...

dolik.rce wrote on Fri, 13 May 2011 12:43I think I will also add some sort of "ignore pattern", so you could mark files/directories to be ignored by the update mechanism. That is probably the best universal solution I can think of.

Yes, I think that it's a very good idea!

Subject: Re: deb packages don't update user sources properly Posted by dolik.rce on Tue, 17 May 2011 17:28:58 GMT

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Just committed a code bringing following changes to the source updater part of theide: better algorithm for analyzing source changes

ability to ignore certain files/directories (using globbing patterns)

ability to set actions for entire directories, instead only on file level

I am pretty sure I didn't test all the possible situations and scenarios that can happen, there is just too many combinations... The most common situations I tested seem to work well, so hopefully this change won't break anything

To access the features, just update as before. You will find a new context menu in "Synchronize local sources" window, it should be pretty obvious what each entry does. If not, experiment

A picture for reference:

The ignore patterns are implemented using PatternMatch function, so if you want more details on the allowed globbing patterns, read the documentation

Best regards, Honza

## File Attachments

1) sync.png, downloaded 743 times

Subject: Re: deb packages don't update user sources properly Posted by jibe on Mon, 23 May 2011 07:46:52 GMT

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Hi,

Sorry, I was very busy on others works... I did not try yet, will do asap. Seems nice

Subject: Re: deb packages don't update user sources properly Posted by jibe on Thu, 26 May 2011 09:02:13 GMT

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Hi,

I tried this morning: good

Just one little thing: after changing something with the context menu, we go at the top of the list... Better if we can stay in place, but maybe it's too difficult to do for something not very important...

Subject: Re: deb packages don't update user sources properly Posted by dolik.rce on Thu, 26 May 2011 17:45:44 GMT View Forum Message <> Reply to Message

jibe wrote on Thu, 26 May 2011 11:02Just one little thing: after changing something with the context menu, we go at the top of the list... Better if we can stay in place, but maybe it's too difficult to do for something not very important...

I agree, it was annoying It should be fixed in 3462, but I'm not really happy with the solution, so if anyone knows better suggestions are welcome

Honza