The kdissert handbook

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1 Introduction

1.1 Multi-purpose document generator

Kdissert is a program for the creation of mindmaps containing text, pictures, comments and links, and their transformation into Documents like reports and presentations. The main purpose is to make it possible to create documents quickly and efficiently.

The name of the application means it is a KDE application for helping to write dissertations. It is mainly targetted at students, and can be useful for engineers, businessmen and teachers as well.

1.2 Mind-mapping tool

Kdissert main gui has a mind-mapping interface, it makes it possible to think the document globally, and connect/disconnect/reorganize ideas very quickly. For those who prefer the outline, a tree view is also provided.

1.3 Suggested method

- Start by adding objects - add as many unique ideas as possible
- Switch to link mode and start linking your ideas

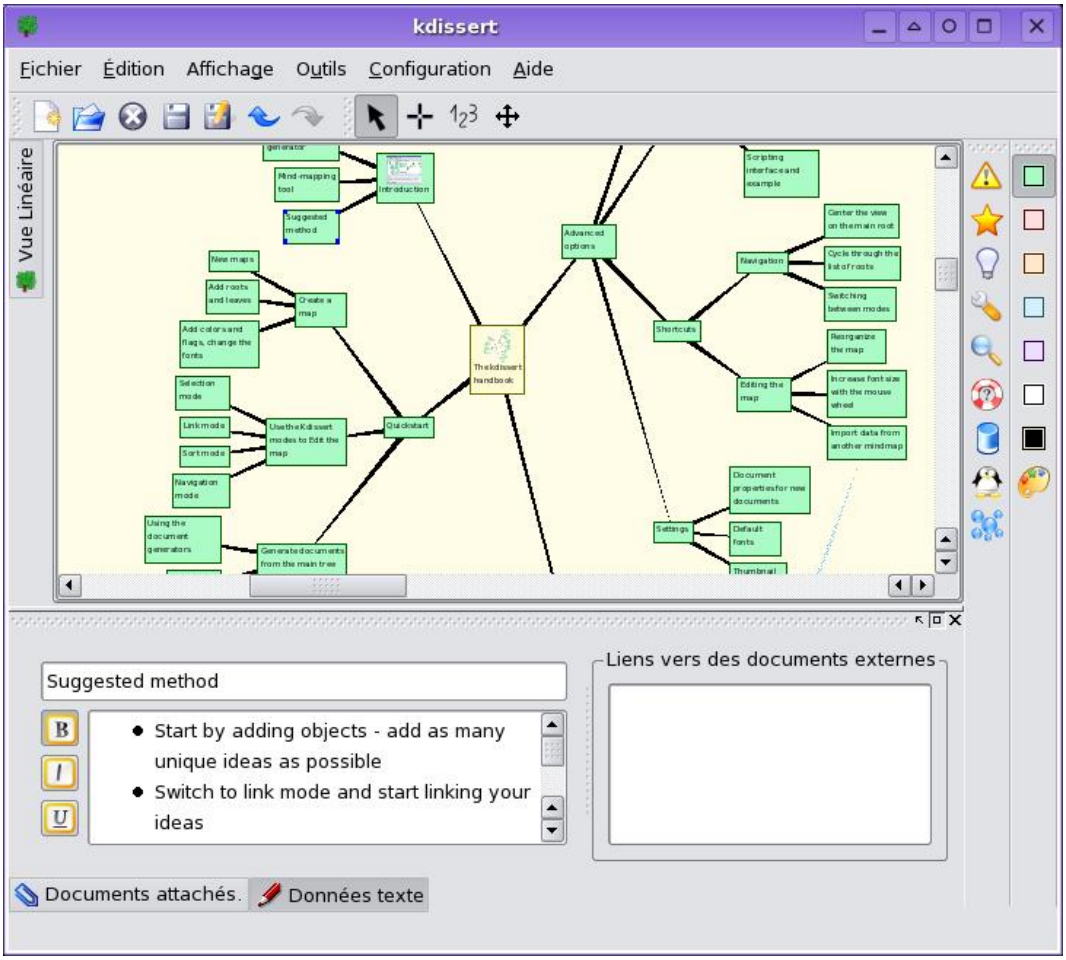

Figure 1: Kdissert screenshot

- Delete irrelevant objects, balance the tree (3-4 objects by branch on the average, no more than 5 ancestors)
- Add text and pictures to the map objects - the more, the better (in reports, pictures especially)
- Switch to sort mode and sort the branches by order of relevance
- Generate your documents and work on them (LaTeX, OpenOffice, ..)

2 Quickstart

2.1 Create a map

2.1.1 New maps

First, you will create a mindmap of your ideas using the mind map view (first tab on the kdissert gui). Maximize the window to make as much space available as possible, right-click on the canvas (in the middle of the map) and choose 'new item' to create a root.

2.1.2 Add roots and leaves

It is also possible to double-click on the canvas view to create new mindmap items. To delete items, just press the delete key when some items are selected. By default, roots of mindmap trees are coloured in yellow, while leaves are coloured in green.

2.1.3 Add colors and flags, change the fonts

To make the mindmap more meaningful, it is possible to change the colors and fonts - the menus are available by right-clicking onto items (both mindmap and linear views). This also applies to groups of mindmap items selected.

2.2 Use the Kdissert modes to Edit the map

2.2.1 Selection mode

Use the point mode (cursor icon) to switch to selection mode. You can now select items and drag them to make more space available for new items (use the arrow keys while holding the left mouse button pressed). When left-clicking onto the canvas and dragging around, a rubberband appears for

selecting mindmap items more easily. Multiple items can also be selected by holding the shift key pressed, and left-clicking on the mindmap items sequentially.

2.2.2 Link mode

Use the link mode (cross icon) to connect an item to a parent item or to a root item. For this, left-click on an item, and while holding the mouse button pressed, drag the thread that appears to another item. The connections can start from any item, but must stop on an unconnected item (yellow color).

2.2.3 Sort mode

The document generators need the items to be sorted, to know which mindmap branches come first. To sort the items, select the sort mode (icon with numbers) and click on an item. Numbers appear near the children of the item selected (yellow discs). Click on the numbers sequentially to sort them.

2.2.4 Navigation mode

Use this mode to navigate in the map quickly. Hold the left mouse button pressed and move the cursor around to navigate the map.

2.3 Generate documents from the main tree

2.3.1 Using the document generators

The document generators are powerful tools to help reusing the mindmap information, they are accessible through the Tools menu. Instructions are provided in the wizard for how to use the documents properly, so please read carefully the information displayed in the dialog boxes.

2.3.2 Create pictures

Pictures of the mindmap can be obtained by choosing the picture export through the Tools menu. The picture output is a PNG file which can be reused in most graphic tools.

3 Advanced options

3.1 Tips for editing the map

3.1.1 Inline editor

The item summary can be typed directly in the mindmap view when an object is selected. The shortcuts are very vim-like: 'A' for appending text, 'E' to select the whole text, and 'I' to put the cursor at the beginning of the line.

3.1.2 Special actions in selection mode

When in select mode, double clicking with control key pressed disconnect an object from its parent. Double-clicking on a link with the control key held disconnects it too. Clicking sequentially on two objects with the control key held links them.

3.1.3 Drag and drop

The linear view is used for looking at the mindmap in a flat way. Drag and drop to sort items is working, and some quick shortcuts are implemented : delete (delete key), demote ('o' key) and promote ('p' key).

Dropping text onto the mindmap or in mindmap items is possible

3.2 Document generators

3.2.1 Document generator types

Kdissert currently features LaTeX (presentations using Beamer or Prosper, pdf report and article), OpenOffice.org Writer and Impress, docbook, plain text and html document generators.

LaTeX output

In the settings, thick the box 'use LaTeX code' so that the comments are interpreted as LaTeX commands (they are no longer commented) in .tex documents generated.

If you encounter issues with LaTeX documents and unicode, you might solve it by installing xmltex and related packages (worked for me on Fedora Core 3).

OpenOffice.org presentation

The pictures in OpenOffice.org presentations are moved randomly, do not forget to put them in order.

3.2.2 Document processing information

The document generators usually take the biggest tree to generate the document, so small trees and orphans will be left aside.

3.2.3 Scripting interface and example

To generate documents on the command-line one may use kdissert like this:
kdissert -g kdisspdflatexarticle -g kdissOOOdoc -p folder file.kdi

```
#! /bin/sh
DIR=/tmp/atest/
rm -rf $DIR
# generate the document
kdissert -g kdisspdflatexarticle -p $DIR /home/ita/SGD/sgd.kdi
pushd $DIR/kdisspdflatexarticle
# substitutions
perl -pi -e "s/\%\\ \\\\usepackage\[frenchb\]/\\\\usepackage[frenchb]/" main.tex
# compile the latex document
make
rm -f main.pdf
make view
```

3.3 Shortcuts

3.3.1 Navigation

Center the view on the main root

To center the view on the root of the biggest tree in the mindmap view, use the shortcut 'ctrl+h'

Cycle through the list of roots

Cycle through the list of roots using control+COMMA (',' - configure it in the shortcut editor)

Switching between modes

To switch between the point, link, sort and move modes faster, the following default keys are assigned : 'f' for point, 'd' for link, 's' for sort and 'a' for move. These shortcuts can be changed in the shortcut editor, accessible through the settings menu.

3.3.2 Editing the map

Reorganize the map

Use ctrl+G to reorganize the map.
Increase font size with the mouse wheel
Use ctrl+scroll wheel
Import data from another mindmap

3.4 Settings

3.4.1 Document properties for new documents

The document properties for new documents are applied to new documents only. To change the properties of the current document, use Edit, Document properties.

3.4.2 Default fonts

The default font represents the font used for the mindmap accessories (labels for sorting the items), and the initial font used by mindmap items. Mindmap items from other .kdi files keep their font as settings. To change the fonts for all items, you will have to select them and apply a new font (right-click on the mindmap view and choose the font setttings).

3.4.3 Thumbnail size

The thumbnail size represent the size of the pictures previews that are made visible on the mindmap view (for items that have a picture). Those previews can be turned off by unchecking the appropriate checkbox.

4 Developer information

4.1 Build system, based on BKsys

BKsys page http://www.kde-apps.org/content/show.php?content=19243

4.2 Design decisions

4.2.1 Import data instead of copy and paste

4.2.2 Inline editor

Editing the item text directly as soon as a box is selected is tempting, but it breaks the shortcut system. This can be seen as a widget stealing the focus from the application.

4.3 Compilation and installation

Use the following commands: **./runme.sh && make && make install**

4.4 Document generators as plugins

To create new kdissert plugins, one should take one of the existing generators in src/templates (for example : kdissasciidoc), change the name (keeping the 'kdiss' prefix), and create a library. The .h and .cpp files will need to be modified (change the names). The content of the config.bks file will also need to be modified.

A tarball, named like 'kdissPLUGIN.tar.gz' is required for the document generation. It will not work if no such file is available. It is highly recommended to include a README file in that archive.