

Treecle

Treecle stands for "*A Tree like Collection of Linked Elements*". It is a program for creating, managing and maintaining hierarchical data. What it does is create and manage user-defined, custom-built trees.

What are they, exactly?

Well, consider your company. If it is a typical company, it will have a tree-like employee structure. One CEO or President, a few senior management officers (call them Regional Managers, Vice-Presidents, or whatever), some more lower-level would-be managers, etc., and then all the way down the hierarchy to office staff and factory workers. This structure can be represented by a tree. The same company can be also classified as having various working level branch offices, divisions or departments, then regional offices, all the way up to one head office.

Consider the product catalogue of your company (your company does make something useful, right?). This is also a tree. Different products, various models for each product, options, accessories, etc.

Consider your collection of books (or objects d'art, or anything else). A typical collection can be classified into various categories and further into subcategories. This is also a tree.

Consider something as mundane as your list of contacts. It can also be arranged into a tree - with main categories like family, friends, enemies, colleagues, clients, suppliers, etc. The subcategories are also obvious.

If you are in the habit of keeping notes on various subjects and topics, or wish to keep any kind of data in an orderly manner Treecle can create, maintain, and keep it accessible.

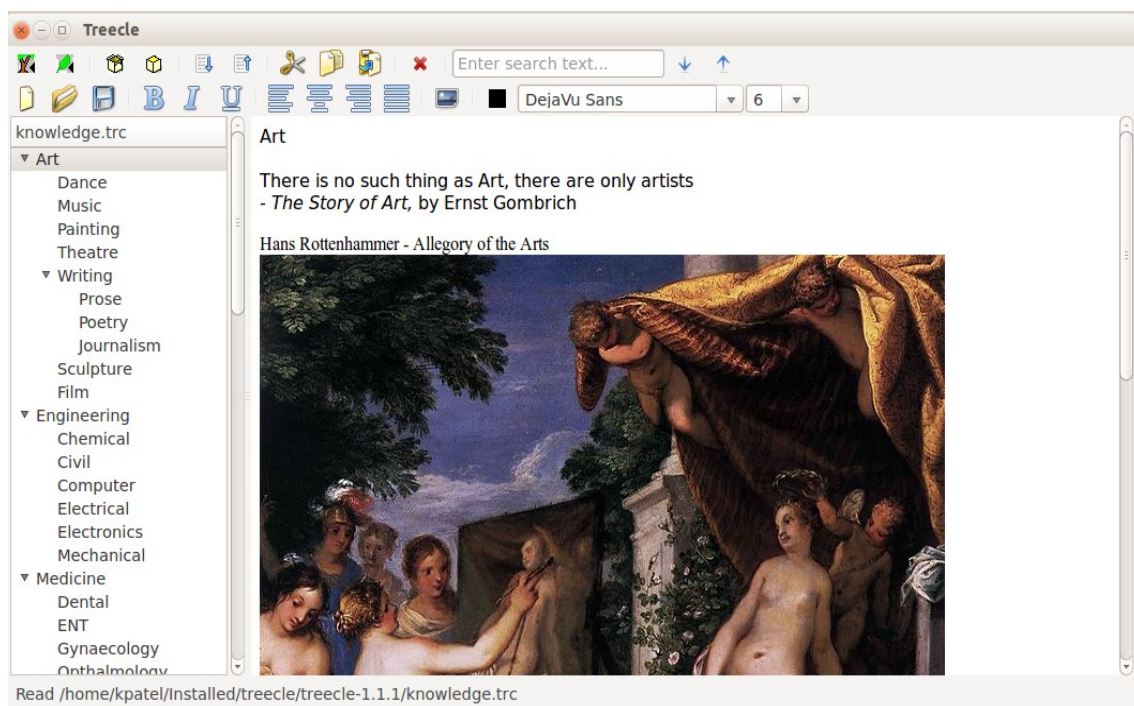
The idea is to organise the data into categories, then create the categories in the form of a tree whose branches and sub-branches mirror the organisation you have in mind. The various items in each category are then entered. The tree can be saved, retrieved, modified.

Obviously, the user interface is in the form of a Tree. A click on a branch opens or closes it. Branches can be assigned titles.

You must have seen and used graphical interfaces for the RPM database, such as *gnorpm*, *kpackage*, or *xrpm*. The left side of each of these programs displays a tree, and the right side the corresponding data. The KDE file manager *konqueror* is another example. MS-Windows users would also be familiar with the Explorer interface, but we will not go further into that.

Treecle is similar, except that the tree is created by you, according to your classification of the data it is supposed to manage.

See the example in the figure below, which gives you an idea of what the program looks like.



On executing the program for the first time in any account, the program notifies you of the creation of a hidden subdirectory named “.treecle”, which will be used as the location of a lockfile, which is also created subsequently.

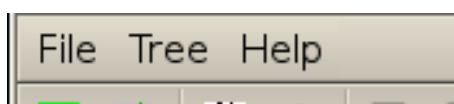
This lockfile is deleted when the program terminates. The purpose of this lockfile is to reveal to a second instance of the program that it is already running. A message is then issued to alert the user with the option to abort. Two instances of the program editing the same file will invariably lead to corruption of data.

The hidden subdirectory is also the location where the program looks to load the help file and the license file. These files should be present here if they are to be accessed when using the utility.

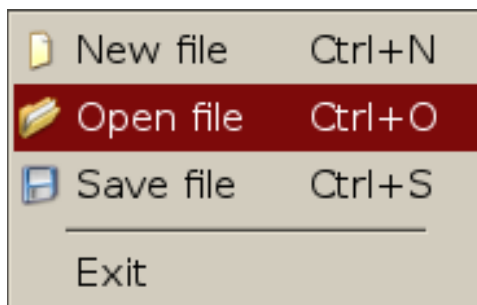
THE MAIN MENU

There is a main menu and two toolbars running the length of the window, below which are two panes. The left pane is the tree window, and an editor window on the right. There is a status bar on the bottom. The tree window contains the name of the currently loaded file. Simple, no? The program window can be resized, and the border between the tree and editor windows can be dragged left or right with the mouse.

The main menu looks like this.



Clicking "**F**ile" on the main menu pops down the following choices



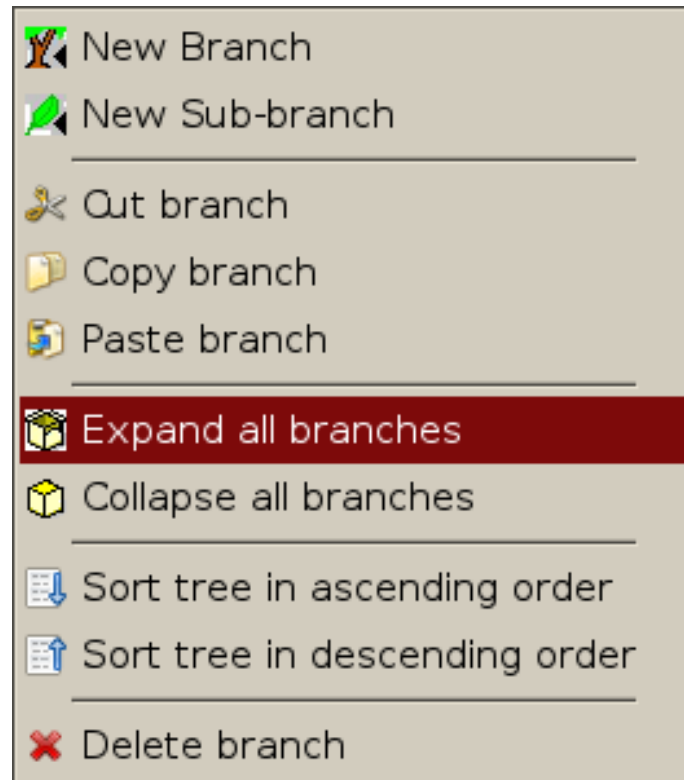
New- This option clears the currently loaded tree.

Open-This option opens a Treecle file. The recommended file extension is ".trc".

Save-This option opens a file selection dialog where you can select the file name. If this extension is not given it will add it after the name.

Exit-This option exits the program. The position of the main window, its size and the sizes of the tree and editor windows are saved to disc, and restored when the program is executed the next time.

Clicking "**T**ree" on the main menu pops down the following choices:



New Branch-This option adds a top-level branch.

New Sub-branch-This option adds a sub-branch below the highlighted branch

Cut branch-This option deletes the selected branch and all its sub-branches and puts the information in an internal buffer.

Copy branch-This option just copies the selected branch and all its sub-branches into an internal buffer.

Paste branch-This option pastes the contents of the internal buffer below the selected branch.

Expand all branches-This option opens the tree to display all branches and data items.

Collapse all branches-This option closes the tree to display only top-level categories.

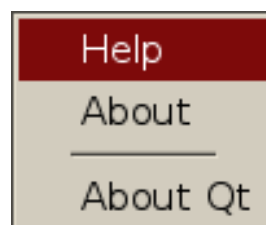
Sort tree in ascending order-This option sorts the tree and all its internal subbranches in ascending order of names.

Sort tree in descending order-This option sorts the tree and all its internal subbranches in descending order of names.

Delete branch-This option deletes the selected branch if and only if it has no child branches.

Clicking on the small arrows on the left of the categories or branches opens or closes them.

Clicking "**Help**" on the main menu pops down the following choices:



Help-This option displays the help file named "treelehelp.pdf". This file should be in the hidden sub-directory which is created when the program runs for the first time.

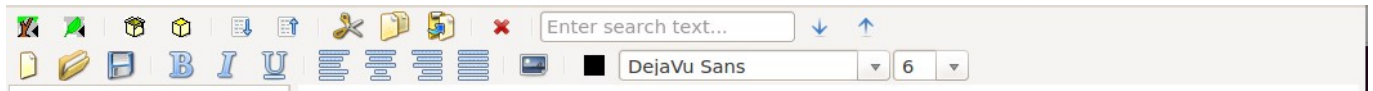
About-This option displays the program version, author and copyright information. The information displayed is the contents of the COPYING file, which should also be in the hidden sub-directory which is created when the program runs for the first time.

About Qt-This option displays information about the Qt toolkit which has been used in compiling the

program.

THE TOOLBAR

The toolbar consists of two rows of icons, just below the main menu, and looks like this:



The top row of icons is the equivalent of the Tree menu in the main menu-bar. The icons represent, from left to right:



Add a new top-level branch to tree. Top level categories branches can be created only from the menu or toolbar. If you wish to duplicate a category, first create an empty category and then copy-paste the data in the editor window from one to the other.



Add a new sub-branch (the icon is supposed to represent a leaf!) to the selected branch or sub-branch.



Open the tree to display all branches and sub-branches.



Close the tree to show only the top level branches.



Sort the tree in *ascending* order.



Sort the tree in *descending* order.



Cut and copy the selected branch.





Copy the selected branch without cutting it.



Paste the copied branch *below* the selected branch as a sub-branch.



Delete the selected branch

And lastly, the search box, where you enter the text to be searched for, and whether you want to search in the forward () or reverse () direction.

The first set of icons in the second row is equivalent to the **File** menu and represent, from left to right:



New file



Open File



Save File

These next set of icons can be used to format the text that you type in the editor window. They have no menu equivalents:



Convert selected text and all further text in bold.



Convert selected text and show all new text in Italics.



Convert selected text and all further text to underlined.



Left justify selected text.



Centre selected text.



Right justify selected text.



Fully justify selected text both left and right.

The next icon, which represents a picture frame:



allows insertion of an image at the cursor position. When this is clicked a file selection dialog is presented, where you can choose the image file to be inserted. This is placed at the cursor position within the displayed tree branch.

The program does not copy the image itself, but only stores a hyperlink to the location of the actual file. If the image is moved or deleted, it will no longer be accessible and thus not be displayed in the tree.

The next icon (a black square) sets the color of the selected text and all typed text. Clicking this icon opens a color selection dialog, which allows you to pick a color for the text.

The next two controls are pull down dialogs that can be used to select the font, and the font size.

DATA FILES AND STORAGE

The tree that you create is stored as a text file, whose format maintains the relationships between the various nodes and branches. See the source code for details of the file format. While it is readable in any viewer that displays ascii text, *please do not add or modify the contents externally in any editor*. It bears repeating that the images are stored as hyperlinks within the data file. The hyperlink contains the full, absolute path to the image. If the location of the image is changed, or the file is deleted, it will not be displayed in the editor window when the tree is opened later. While opening a file, the program will automatically display filenames with the extension "trc". When saving a file, this extension is automatically added if you do not supply it. There is no limit to the size of the data in the editor window, or the number of branches and sub-branches in the tree that you create.

IMPORTANT: There are NO BACKUPS made at present!
Please save often, and remember to make backups!

COMPILATION

See the README file for details on what is needed to make a binary. This is version 1.1.1, and while there is no guarantee that this number will be incremented, there is every probability of it increasing in the future as and when I get the time, or if enough people ask.

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