

QUANTA+ WORKSHOP

Web pages with Quanta+

HTML MAGIC

If you want a presence on the World Wide Web then you have two choices: spend money on commissioning someone or invest the time in doing it yourself. The HTML editor Quanta+ makes it much easier to opt for the latter. Helga Fischer investigates



When creating Web pages, experienced Linux users will of course head straight for **vi** or **Emacs**. If you don't have too much confidence in your knowledge of HTML you might look for an HTML editor with a graphical interface that will help you with your first steps towards your own homepage. One such program is Quanta+ (<http://quanta.sourceforge.net/>).

Quanta+ integrates seamlessly into the KDE desktop environment and its look, feel and behaviour are similar to other KDE programs, so if you've already worked with KDE applications you'll immediately feel at home. Of course, the program also runs under other desktop environments and window managers.

The development between different beta versions often results in marked improvements and it is therefore advisable to install whatever is the latest version. This article refers to version 2.0.pr2-60. Don't be put off by the beta status though, as this is a stable program.

As is normal under Linux, the application is either started from an X terminal with `quanta &` or – where available – from a selection menu in your desktop environment.

The application

It may not look like it at first glance, but Quanta+ has turned into a proper little **IDE**, with correspondingly complex help facilities and configuration options for the program.

After starting the program you are presented with a three-way view (Figure 1). On the left is the directory tree, on the right the editor window and underneath you will see the message window, which can display all sorts of different messages.

Both the tree view and the editor window offer various tabs through which you can browse by clicking on them. The tree view hides an overview of the HTML document to be created later, as well as the project view and an access point for a whole variety of manuals (HTML, Javascript, **PHP4** and **CSS**) linked either to your local hard disk or to the Internet.

HTML consists of numerous formatting commands that belong to different function groups. Correspondingly, the Quanta+ authors have grouped similar or related tag options together on tabs above the editor area. Clicking on these reveals the respective toolbars.

The first tab, labelled Standard, contains the sort of formatting instructions you will be familiar with from word processing applications. If you position the mouse pointer on a tool icon for a moment a tooltip will reveal the function of the respective button.

The remaining tabs offer buttons for font selection, table and list creation, designing forms and also a group of functions that do not easily fit into any of the other categories, for instance a colour selection dialog.

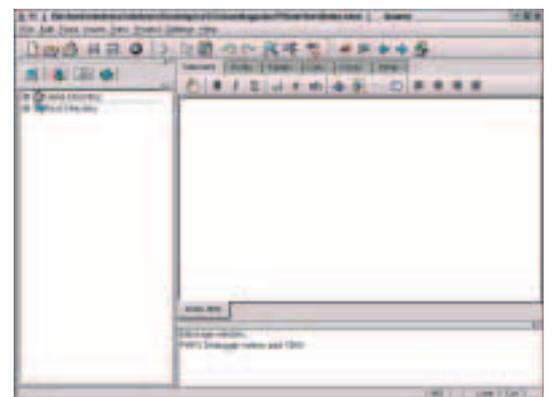


Figure 1: Quanta+ overview

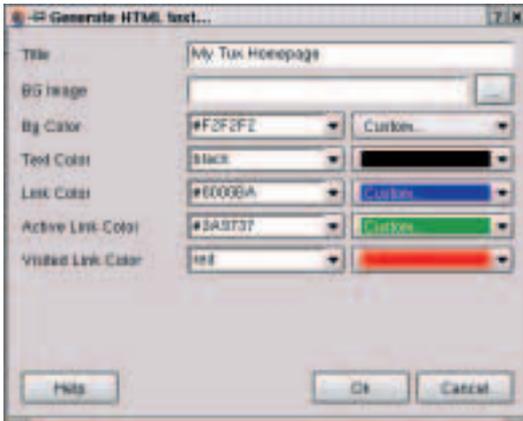


Figure 2: the Quick Start wizard in action...

First steps

On the Standard tab (Figure 1) you will notice an icon on the far left which does not really fit in with the other character and paragraph formatting tools. By clicking on this empty page with the magic wand you launch Quick Start in which a wizard will lead you through the most important presets for your HTML document. This is a simple way of configuring the title, the background image or colour and the font and link colours (Figure 2).

When you click on the OK button, a basic skeleton for your HTML document is loaded into the editor window and the cursor is placed between the body tags so that you're ready to go.

Of course, these basic settings are not sufficient to create an attractive Web page, so you'll want to use other formatting options. There are two ways of working on HTML files. If you already know which element you need next, click on the corresponding icon. Quanta+ will create the start and end tag and place the cursor between them so that you can immediately enter your text in the right place. Alternatively you can write your text and decide afterwards how you want to format it. In this case, mark the appropriate areas and then click on the icon that represent the required formatting. Quanta+ brackets the marked text with the appropriate tag pair.

The editor colours the individual parts of the document. These programmer colours (properly called **syntax highlighting**) help you to get your bearings in the source text and to correct errors. If any syntax elements do not change to the appropriate colour during entry then something is wrong. In this case, you need to have a closer look or to consult the online help facility.

Whenever you want to admire the result of your efforts in the browser view, click on the eye icon in the Quanta+ toolbar or press F6. The application will then switch to internal preview mode (Figure 4). By pressing F6 again you return to code view.

A preview is sufficient for a quick check on how your pages are coming along, but it doesn't

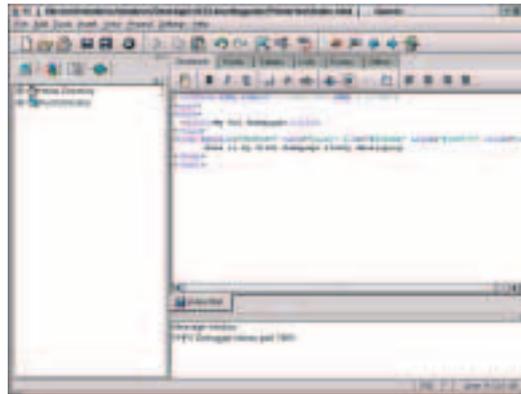


Figure 3: ...and the result

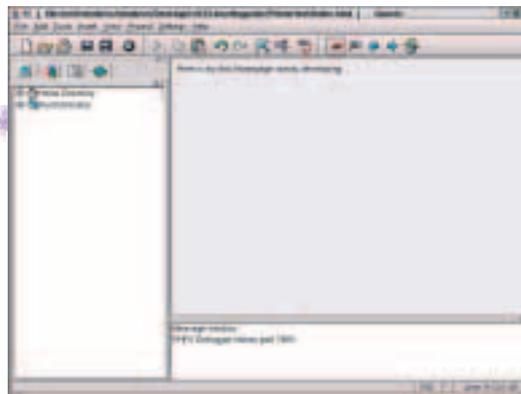


Figure 4: The browser view

necessarily guarantee the desired appearance in different browsers. For this you need to save the file and load it into the respective external browsers.

Project administration

Web sites rarely consist of **only** one file. Normally a number of different files are involved, making it easy to lose track unless you invest a little time in doing some admin work. Thankfully, Quanta+ offers tools suitable for project administration.

The project basis is created using a wizard, which takes you through three steps. It can be found on the toolbar of the IDE under Project/ New Project. The

vi and **Emacs** the two best known command line text editors of the Unix world. Their operating philosophy takes a bit of getting used to, so they are not everyone's cup of tea, despite being very powerful.

IDE Integrated Development Environment; an application that helps with the creation of software (or in this case Web pages) by providing a variety of functionalities under one roof. Standard features of an IDE are a "proper" editor with many menus and help functions, access to external programs and the ability to track errors.

PHP PHP Hypertext Preprocessor; a server-side, versatile scripting language, which is embedded into HTML files.

CSS Cascading Style Sheets; format templates held in a central location, which determine the appearance of the different elements of HTML documents.

Syntax highlighting Programming and mark-up languages consist of predefined words. Good editors recognise these keywords and display them in colour during the editing process.

XML eXtensible Markup Language; a special language that allows a unified description of documents and data structures. It is machine and human-readable and is a preferred file format for KDE projects.

Bugs another word for errors. Back in the dawn of the computer age insects really could cause faults, which then had to be corrected manually. These days we are only plagued by software errors, but the name has stuck.

first step provides an entry form for general settings (Figure 5).

Click into the first field of the entry form and give your project a name – the wizard will now fill in the lines below automatically. The second field, Project Destination, is used to specify the project directory. If you don't want to save your files in a subdirectory immediately below the home directory, as per the default, then you need to select a different directory using the button with the three dots. Your choice of directory also determines whether you can include existing files in your project with the help of the wizard or whether you will start with an empty project. The third field is for entering the name of the project file. Here, Quanta+ stores any information it requires for administering the project in **XML** format.

Under Project sources in the lower part of the wizard window you can determine whether the files you'll be working on are already located on your machine or whether they will need to be downloaded from the Web first. For a new project, Add local files is the right choice.

Figure 5: Setting project data

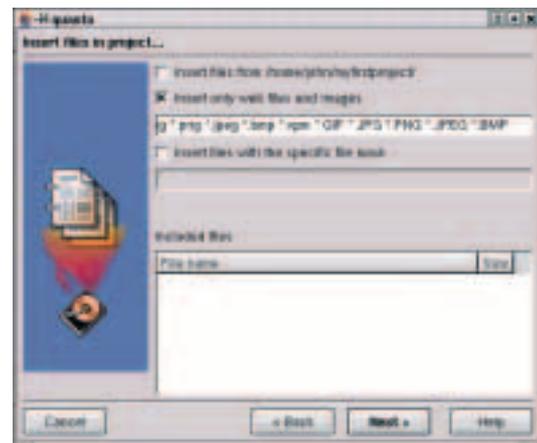
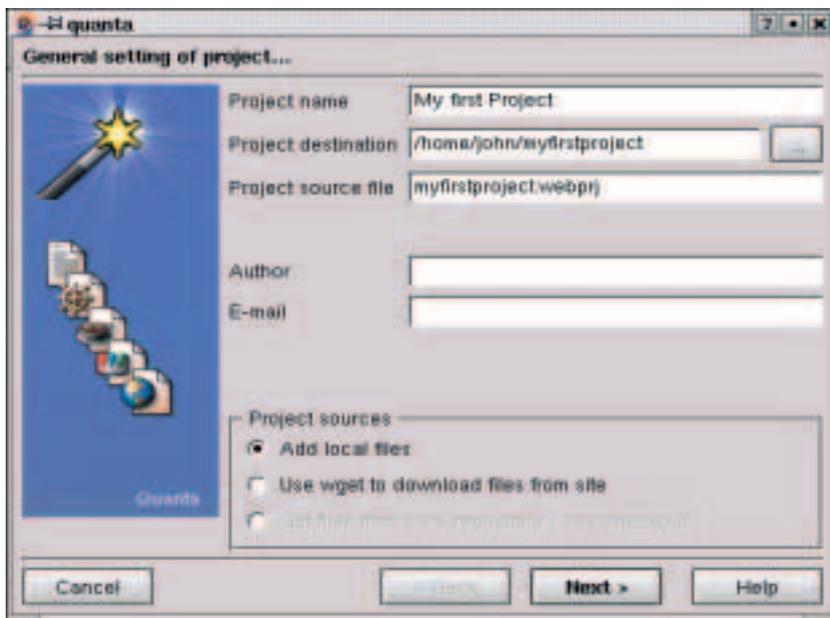


Figure 6: Linking existing files

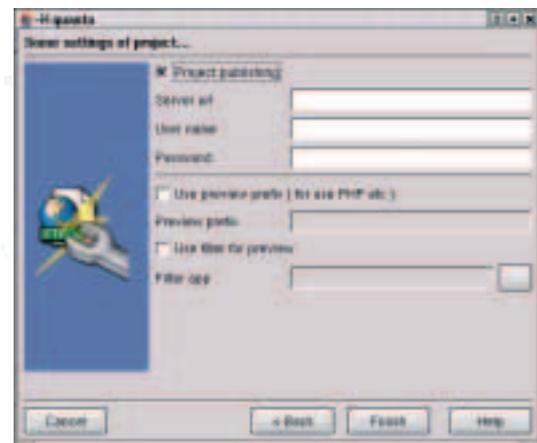


Figure 7: The key to publishing

Now click on Next. In a second step the wizard lets you link existing files to the project (Figure 6). By selecting the Insert files from Project directory option, all files from the project directory (entered in the previous step) and its subdirectories are listed in the lower window.

Alternatively, the second check button is used for the specific selection of files according to their extensions. As shown in Figure 6, the standard Web file formats are predefined. As the field is not large enough to show all of them at once, the screenshot doesn't tell you that this includes, of course, HTML files with the suffixes HTML, HTM, html and htm.

The third check button, Insert files with the specific file mask, allows you to link files with other, user-defined extensions.

With Next, the wizard will open up a gateway to the Internet for you (Figure 7). Should you be planning on making your homepage accessible to the public at large, you'll need to transfer it to a computer that your audience can visit using a Web browser. You should be able to get the relevant access data from your service provider.

Although it would be useful to enter the name of the target Web server at this point, in the version of Quanta+ tested such entries had no discernible

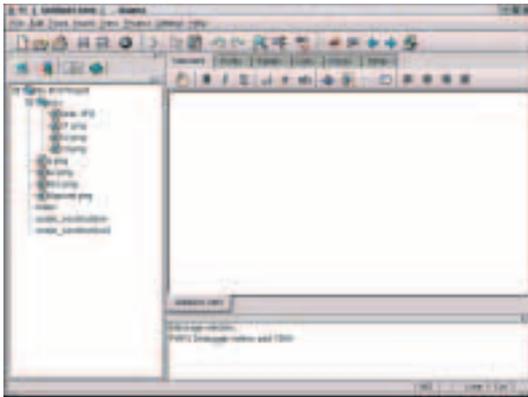


Figure 8: Complete overview

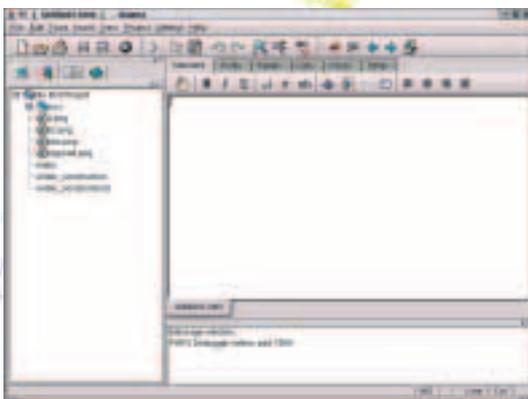


Figure 9: Tunnel vision

effect. In order to initialise the project, skip this step and click on Finish. Now nothing stands between you and the development of your homepage.

Working on the project

It's worth remembering that Quanta+ distinguishes very strictly between files that are part of the project and other files that can also be accessed. So that you don't lose track of them, Quanta+ provides a tree view and a project view in the left window of the IDE – you can toggle between them using tabs. The tab with the screen icon represents the tree view, while the icon with the three dice in red, blue and green stands for the project view.

The project view only shows those files that are part of the project and ignores any other files, including the project administration file (which has the extension `.webprj`) while the tree view shows all existing files (Figures 8 and 9).

Both views enable you to open a file and load it into the editor by double-clicking on it. The only file that can't be opened this way is the administration file, `myproject.webprj`. You can add more files to an existing project at any time using Project/ Insert file(s). A new tab is created at the bottom of the editor for each file that is added.

You can toggle between the individual files using the mouse. Should you find it awkward to reach for the rodent while you are writing you will soon come

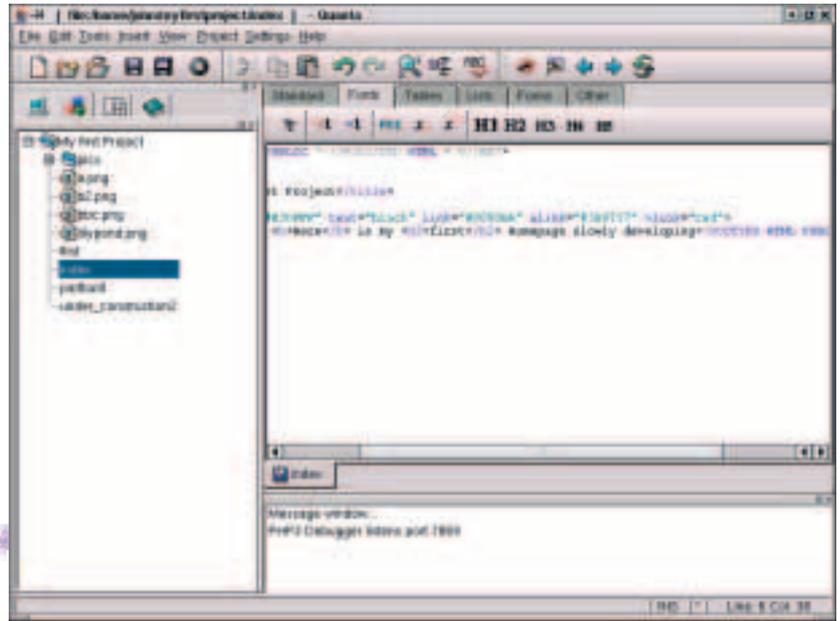


Figure 10: Editing fonts

to appreciate the key combinations Alt+right arrow and Alt+left arrow.

As long as a file has not been saved it receives a temporary description. You should save all your files as soon as possible and give them meaningful names. Not only does that make it easier to keep track of them but it also enables you to link the documents using hyperlinks.

To save a file, either use the menubar or the context menu of the right mouse button. In the dialog that follows, Quanta+ offers you the previously created project directory as the location for saving your file. Give the file a name and click OK. Confirm that you want to add the file to the project. If you answer No here, the file is not lost but stored separately so that you can continue to work on it. However, it will not be included in the project files. At this point Quanta+ changes the temporary name on the tab to the one you have chosen and it adds the file to the project view in the left window.

Error handling

Wherever there is work being done, gremlins won't be far away, leaving their calling cards in the form of **bugs**. Along with everyone else, HTML writers also suffer from the fact that computers have no imagination. Whatever task you give them, they perform it stolidly and without any feeling for accuracy. That is why a markup language like HTML has to follow very clear rules.

Checking this syntax is the job of a syntax checker, which reads the code and lists any errors it finds. The Quanta+ syntax checker gets to work once it has been called via Tools/ Syntax check or with the key combination Ctrl+P. Its output is displayed below the editor window. If you click on an error message in the debug window, Quanta+ will put the cursor right

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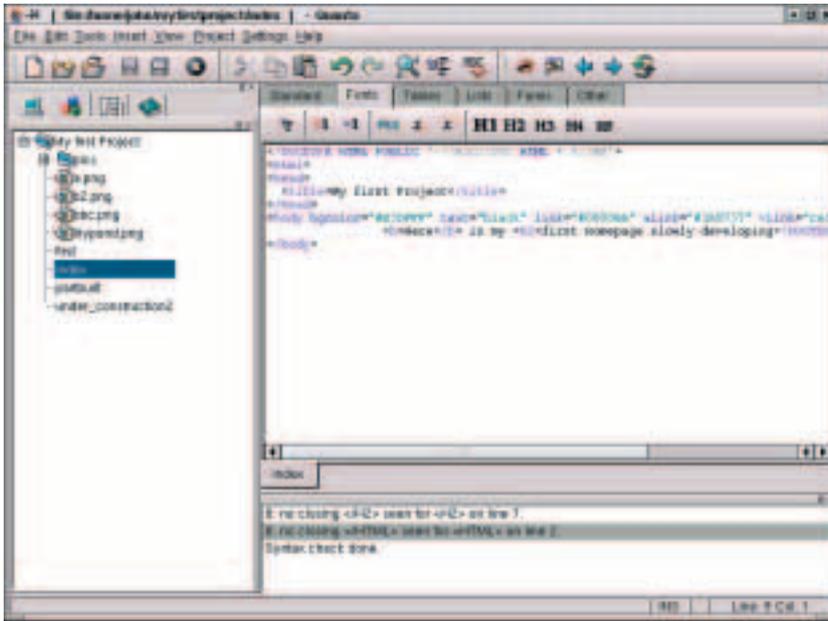


Figure 11: Pest control black list

on the appropriate spot. In addition, the faulty section of the HTML source text is positioned in the middle of the editor window. This enables you to spot missing tags quickly and to complete the text.

However, a syntax checker is not a panacea. Many errors remain hidden from it; often it will only indicate error sources indirectly at best. This is the point where you will need some imagination as well as experience for the debugging process. HTML normally makes things reasonably easy for you, though: faulty HTML produces a faulty display in the preview (and often in the browser as well).

Final upload

Despite the difficulties with the project wizard described above it is possible to copy a complete project with all its data to the target server without much fuss. Simply open the input window for your access data using Project/ Upload Project or F8. The project data is read in and you can then enter the destination of the homepage. Your password is only displayed as a series of asterisks. Normally port 21 is the right port for FTP file transfer. If there is an open Internet connection, clicking on the Upload button is enough to transfer the data to the Web server where it can then be admired through a browser.

Character Entities specialised code for characters which ensures that they will be displayed correctly anywhere in the world.

recode a command line utility that converts different character sets or formats into each other. In this particular case the character set iso-latin-8859-1 is converted into HTML format, referred to as latin1..h4. The option -d means that only the special characters in the text are processed, but not the angle brackets of the HTML tags.

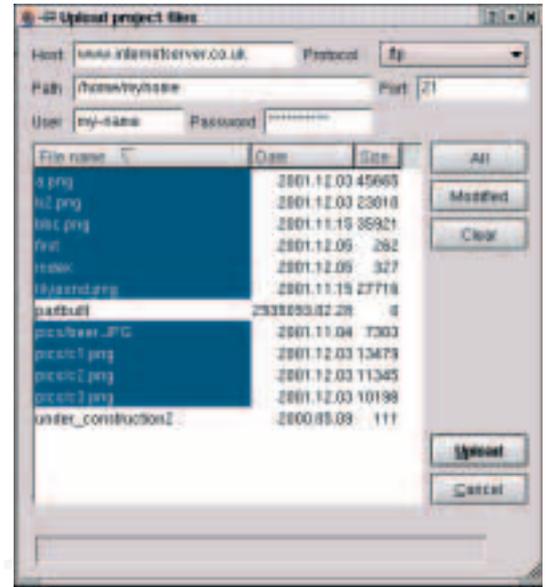


Figure 12: Going live

User-defined functionality

Is the functionality offered by Quanta+ not enough for you? Then select the menu item Configure actions under Settings. This kicks off an extensive dialog, which not only lists the existing functions but also enables you to configure Quanta+ according to your requirements (Figure 13).

On the left are the functions that have already been defined. If you highlight an item on this list, relevant information is provided on the right. Each of these functions belongs to one of three categories: Tag, Script or Text. Tag lets you define additional HTML tags, while the Text function lets you store frequently used text, such as a personal copyright notice.

Since Quanta+ does not offer any facility for converting unusual characters into **character entities**, we are going to use the Actions configuration dialog to add this functionality to the application. Most Linux

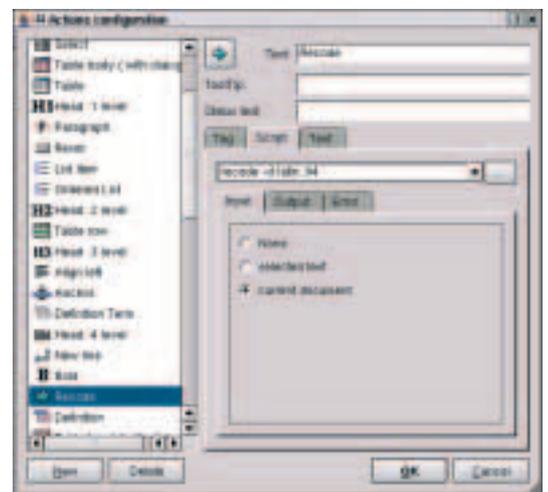


Figure 13: Confusing diversity

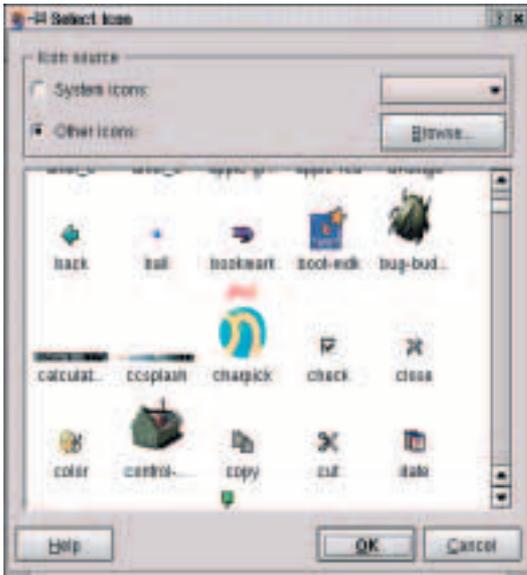


Figure 14: Icons help you get your bearings

installations contain **recode**, a command line application that seems to be made for this task.

Click on the New button on the left (Figure 13). A blank function appears in the action list, symbolised by a blue dot. Enter a name in the upper form field (for example Recode) and select the Script tab. Into the blank text field, enter the command

```
recode -d latin1..h4
```

This information did not appear out of thin air, by the way, but rather from a quick look at the recode manpage.

This command line alone does not do the trick, however. The command has to know what it is going to be processing, what to do with the result and how to handle errors. You can control these action on the Input, Output and Error tabs. Since we are going to process entire HTML documents we will specify current document as the input source. The Output tab offers even more options. We shall choose replace current document – after all, we want the edited version of the document to appear on the Web. In the selection dialog for the Error tab we are going to opt for have any error messages displayed in the Message Window.

Clicking on OK would make our new function ready to use. However, the user cannot be expected to work out what the function is for from a blue dot. To fix this, click on the icon with the blue dot in the Actions configuration dialog to the left of the Text field. The selection dialog allows you to choose a more meaningful icon (Figure 14). Quanta+ provides its own icons. If these are not agreeable then a system directory such as `/opt/kde2/share/apps/quanta/toolbar` will offer additional choices.

To access these, click on Other icons/ Browse. Naturally, you are free to create your own icons with an icon editor.

All we need now is a button, so that we can call the Recode function by clicking on the toolbar. Open a dialog window under Settings/ Configure Toolbars (Figure 15) to customise your Quanta+ toolbars. The upper drop-down menu gives you the choice of whether to insert the new tool button into one of the application toolbars or into one of the tabs above the editor window.

Below this, you'll find a split view with available actions listed on the left and those that are actually linked (and therefore visible) on the right. Arrows in the middle enable you to add or remove individual elements. Up or down arrows allow the individual elements to be re-positioned.

Our Recode function fits in well with the Editor Toolbar, which up to now contains actions such as cut, copy and paste, undo and spellcheck. Locate our Recode script in the left window, then highlight it and move it onto the list of actions displayed on the toolbar by clicking on the blue arrow pointing right. If its position is not to your liking highlight the element again and move it to the required position using the up or down arrow.

Click on Apply to transfer the icon into the toolbar. Quanta+ even ensures that your new tool is included in the list which lets you define keyboard shortcuts, found under Settings/ Configure key bindings.

Experienced users, above all, will appreciate this facility for customised extensions. However, Quanta+ is worth a closer look for anyone in search of a bit of support from a modern GUI, although it will disappoint those hoping for drag and drop Web page creation.

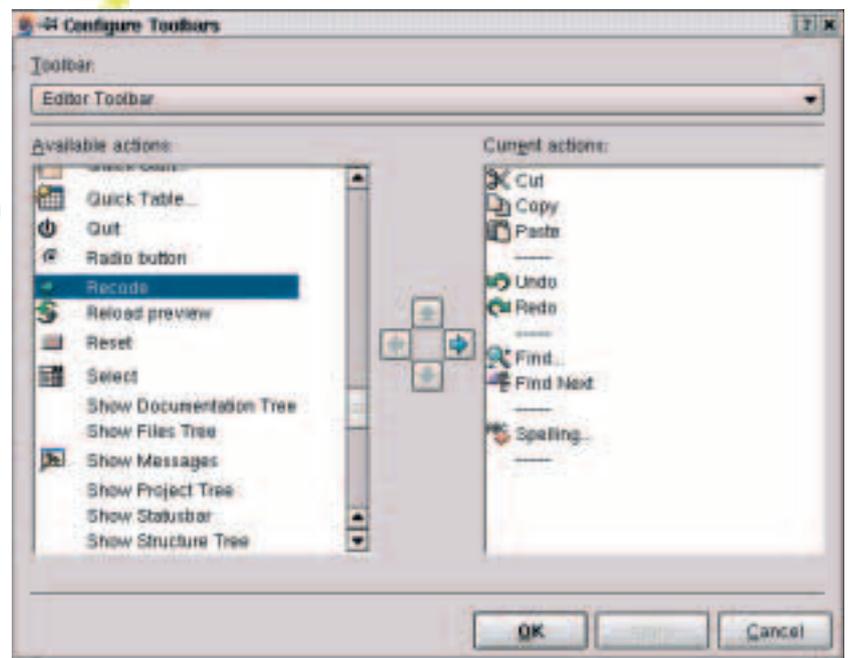


Figure 15: Extension potential – the toolbar

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