KDE Standard Editor Kate

Let's Edit

Thanks to syntax highlighting and similar tricks, editing with KDE's "Swiss Army Knife" Kate can be fun. The editor can even cope with simple programming tasks. **BY STEFANIE TEUFEL & PATRICIA JUNG**

Linux Editors are ten a penny. Whether command line or GUI based, the wide selection ensures that everyone will find something to suit their individual needs. Even if you have a personal favorite, it may be worth your while to take a second look at *Kate* ("*K*DE's *A*dvanced *T*ext *E*ditor").

One of Kate's major features (and this is true of every KDE Kernel application) may well be the program's perfect interaction with the desktop.

You can concentrate on the job in hand and simply forget about trivial tasks, such as how to open files. Simply drag a file from the desktop, an FTP site you are accessing in Konqueror or even from a local directory currently on view and drop it into an active Kate window – and you are up and running. You can then view the open file and start the work that you have in hand.

No need to worry about installing this text tool as Kate belongs to the basic KDE package *kdebase*. You might also like to install the *kdeaddons* which will give you access to the various plugins.

But you need to launch the program before you can load a file. You can either launch Kate via the Start menu (Office / *Editors / Kate*) or the command line. The latter option is particularly useful for opening files directly from the Web. In this case you can connect to the Internet and use your favorite terminal emulation (how about *Konsole*?) to type a line such as the following:

```
kate http://linux01.gwdg.de/⤶
~steufel/index.html &
```

This should give you access to the index file on Stefanie Teufel's home page, as you can see in Figure 1. Of course you will be working with a local copy of the HTML code.

If you need more information on Kate's comamnd line prowess, you can satisfy your curiosity by typing *kate --help*. The *kate --help-kde* command is nice feature that tells you how to set the content of a (*--caption*) or even customize the icon of the program.

A Question of Taste

You can use the Settings / Configure Kate menu to tell Kate all about your personal preferences, in regard to color schemes for editing files, indenting and similar actions. Figures 2a and 2b show the dialog boxes for KDE 2 and 3.

The *General Options* section does exactly what its name suggests. If you want to restore the frames and views exactly as you left them in the previous editing session (*Restore View Configuration*), and optionally open the last file

you edited when you relaunch Kate – this is where you will find all the options that you need.

If you use KDE 3 you can additionally decide to edit any files you wish to open in a single (*Kate MDI*) window or separate (*Kate SDI*) windows. If you are not sure what all these options mean, you can simply right click on the text. The drop-down menu that then appears shows a single "What's This?" help item, as you can see in Figure 2b.

The next major item, *Editor*, affects the way content is displayed inside the Kate windows, allowing you to set the *Colors* and *Fonts*. However, you can also use this option to set your preferences for one of Kate's highlights – color display for source code that can be specially adapted to suit a large number of programming languages, such as C/C++, Java, Python, Perl or HTML. And it this Syntax *Highlighting* feature that makes Kate a fairly useful programming tool.

Highlights Cheaper by the Dozen

You can use Highlighting to define how and what Kate highlights. The dialog box contains two tabs: Defaults (or Default styles in KDE 3) and Highlight Modes. The first of these options allows you to modify the appearance of common elements and select a color scheme and typeface (bold, italic) for comments, strings and data types in your program code. Take your time with these settings – careful planning can make your life easier
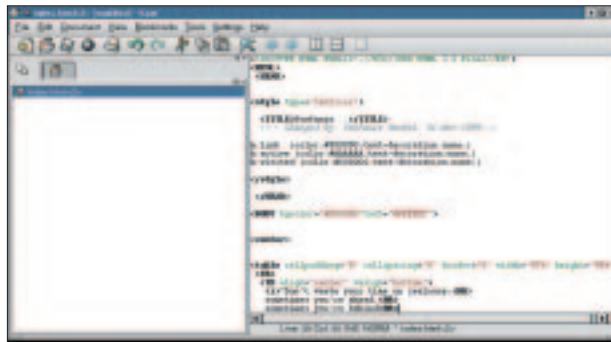

Figure 1: Out of the Internet into the Editor

when programming or designing web sites by providing you with a clear overview of the source code.

The *Highlight Modes* tab (see Figures 3a and b) allows individual settings depending on the selected programming or markup language. But don't panic – you do not need to individualize all the available options. Kate will simply use defaults for any elements that you have not individually configured.

Start by selecting the programming or markup language in the drop-down menu *Highlight* at the top of the dialog box whose elements you need to redesign. Kate immediately shows the file suffixes and MIME types that will be assumed to be written in this language. Then use *Item Style* (*Context Style* for KDE 3) to select the element types for the current language whose aspects you would like to change.

If you are running KDE 2 you can use the drop-down menu under *Item* in the *Item Style* area (Figure 3a); KDE 3 offers a table whose cell contents can be modified by mouse click (Figure 3b).

If all these options are giving you a headache, it might be useful to take a look at an example. To change the appearance of HTML comments in Kate, select *HTML* in the drop-down menu *Highlighting*. For KDE 2 you need to select *Comments* in the *Element* drop-down (Figure 3a). Now click on the color buttons to define a color for displaying HTML comments and check the typefaces you require. KDE 3 also offers the same settings, but in a more organized fashion (see Figure 3b) allowing selections within the drop-down menu for individual lines.

You can also switch highlighting modes on the fly via the *Document / Highlight Mode* menu item. The developers even went to the trouble of categorizing the modes by main areas of use such as *Sources* for the classical programming languages like C, C++ and Java or *Markup* for markup languages like HTML or XML.

Those Configuration Options Keep on Coming

Like the Editor / Edit option in the Kate configuration dialog box (Figure 4; the corresponding dialog in KDE 3 has simply dropped one or two confusing options). In addition to the standard functions such as setting automatic line wrapping or the stripping of whitespace at the end of lines, Kate also offers a few gimmicks such as the Smart Home item. If you activate this function, the cursor moves to a position in front of the first character, instead of moving to the beginning of the line.
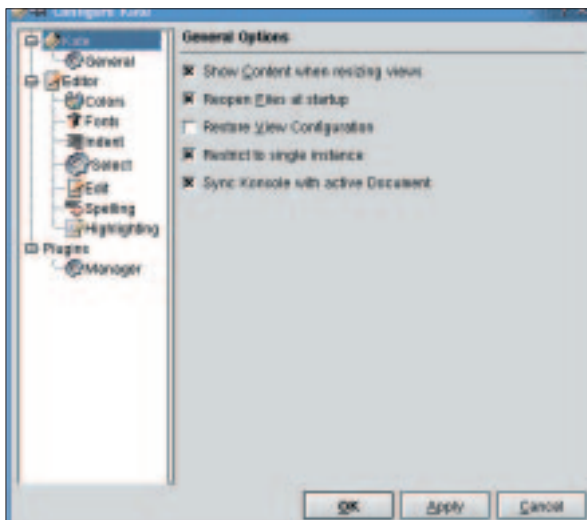

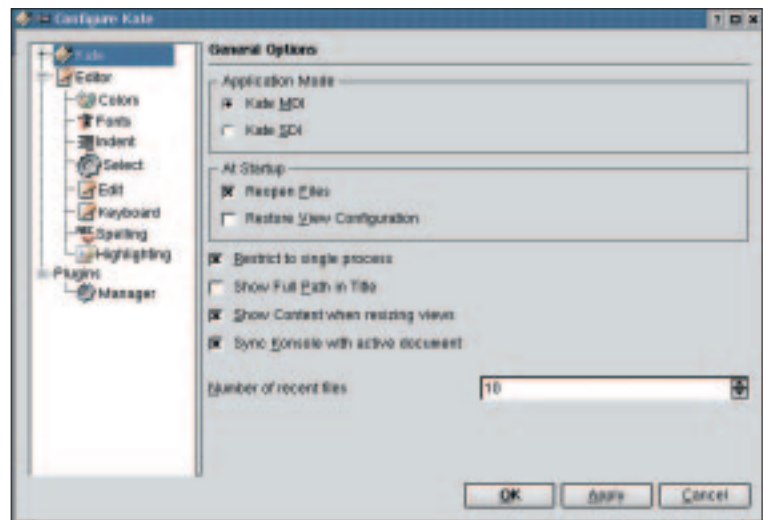**Figure 2a: Getting sorted: The Kate Configuration Menu for KDE 2 ...**

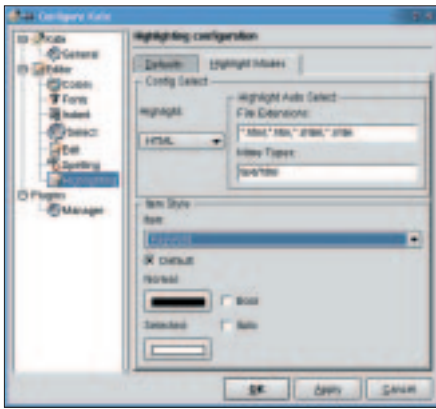**Figure 2b: ... and KDE 3 is nicely organized**

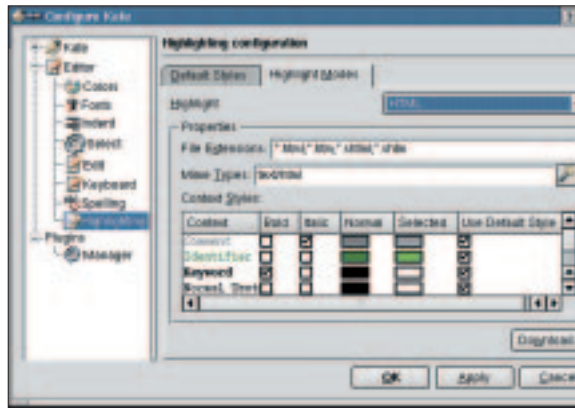**Figure 3a: Defining the appearance of comments in HTML documents with KDE-2**

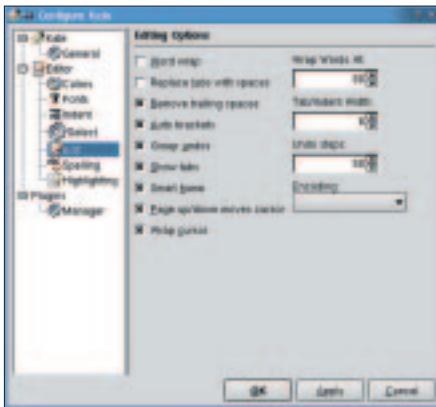**Figure 3b: KDE 3's configuration dialog is much tidier . Giving a cleaner layout overall**

Figure 4: Line Wrapping and Brackets
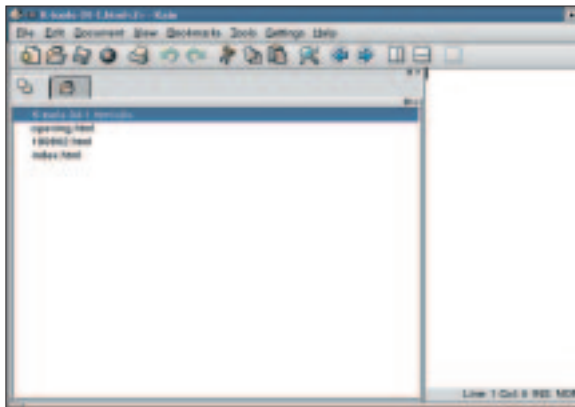

Figure 5: You can choose between files already opened...
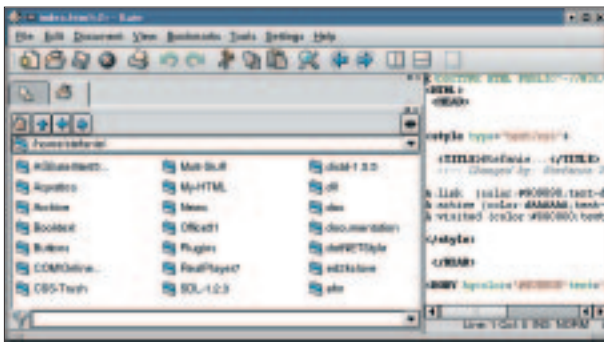

Figure 6: ... or files at other locations on your machine

Points of View

One of the major reasons for using Kate is the number of options for displaying or accessing files. This immediately becomes apparent if you open a file – as mentioned at the outset of this article. The left-hand side of the Kate window provides two tabs with other variants (Figure 5): a file list showing the currently opened files and the file selector that allows for easy browsing of the file system and helps you to locate the required files (Figure 6).

Incidentally, in KDE 3 you can click on the thicker border of these cards (just like

in other windows and the toolbox), drag them out of the Kate window and drop them on the desktop as a separate window.

Just as in Konqueror you can split the application windows in Kate to form multiple editor sub-windows. Split views (see Figure 7) are available via the menu items *View / Split Vertical* and *View / Split Horizontal*; a nice feature if you need to compare or transfer text between multiple documents.

The green dot in the status bar shows the window containing the cursor. To close a window you simply click on the square icon in the tool bar.

If you need access to the command line while editing, you will appreciate the fact that you can embed a terminal emulation window in the editor.

To do so, you just select *Settings / Show Console* (or *Show Terminal Emulator* in KDE 3) in the menu, and Kate will immediately display an

integrated console like the one in Figure 8.

Daily Business

Working with Kate is not much different from working with any other editor. You can modify, insert and copy to your heart's desire. If you want to save the file you are working on or possibly print it, check out the File menu. If you need to copy, insert or search for something, check out the Edit menu instead (see Figure 9). This menu also allows you to access a specific point in the current document Goto line... or to backtrack to a former version using Undo.

This is the place to look for those search functions. One of Kate's special features is the *Find Next* option that allows you to continue to search for a search key you entered previously. Also the corresponding function *Find Previous* does the same thing, only this time in the opposite direction.

If you stumble across a few typos while browsing a document, you can use Kate's integrated spellchecker to check those documents with purely textual content (Figure 10). The tool you need for this job is accessed via the *Edit / Spelling...* menu in KDE 2 and via *Tools / Spelling...* in the Kate version for KDE 3.

It is just as easy to specify the format when saving the current document – the options are Macintosh, Unix or DOS-Text. The difference between these three is the end-of-line character, which is either **CR**, **LF** or both. Just let Kate know how you want to handle this point via *Document / End of Line.*

One of Kate's useful features is the option of bookmarking the documents

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GLOSSARY

CR/LF: *"Carriage Return" (originally referred to the carriage on a typewriter) and "Line Feed" are the two ASCII characters that are embedded in a file to indicate the end of a line. They are normally invisible in text editors apart from the obvious effect of starting a new line.*
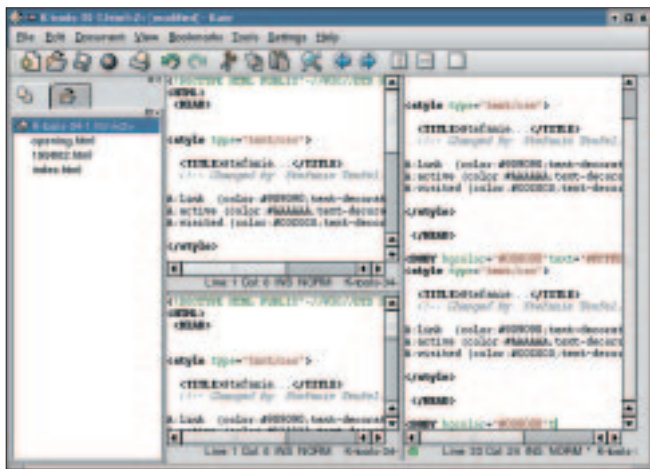
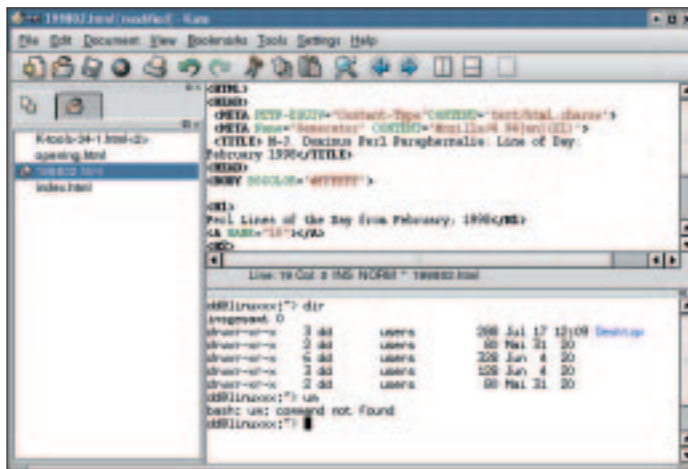Figure 7: Different viewpoints in split view mode

Figure 8: Kate and Konsole

you are working on. Bookmarks in the text allow you to jump quickly to a pre-defined point. First, select View / Show Icon Border in the menu. You can left click on this column to attach a paper clip (Figure 11). Your bookmarks are then listed with the line number and a text excerpt under Bookmarks in the menu, where you can select them directly.

Just like most KDE programs Kate allows you to assign keyboard shortcuts for

Figure 9: Some items in the Edit menu for KDE 2 have found a new home in KDE 3

Figure 10: Now, how do you spell that?

various actions and activities. In KDE 2 you simply select Settings / Configure Key Bindings… and in KDE 3, Settings / Configure Shortcuts. KDE 3 additionally – and confusingly – offers another setting in the configuration menu (Settings / Configure Kate.). The Editor / Keyboard item can only be used to configure keyboard shortcuts for cursor movements in the current document, whereas Shortcuts refers to the application itself (opening and closing files, spell checking and so on. If you happen to be too lazy to define your own preferences, you can refer to Table 1 for an overview of default keyboard mappings.

Plugged in

Plugins make Kate a special editor. The developers decided on this design to make the editor as

quick as possible and to maintain a small footprint on the one hand, and to provide as much functionality as possible for the users on the other hand. This allows the users freedom of choice on the amount of ballast that they want to load when launching Kate.

You can select the plugins Kate should load for you by accessing Settings / Configure Kate / Plugins / Manager (Figure 12). If this window is empty, you will need to load the plugins by installing the kdeaddons package.

To load a plugin (provided it has been installed and is recognized by Kate), you simply click on the plugin's name in the Available Plugins section, and then on the right arrow button. The plugin immediately appears in the Loaded Plugins area on the right.

To remove a plugin simply select its name and click on the left arrow button. To immediately activate a plugin, simply
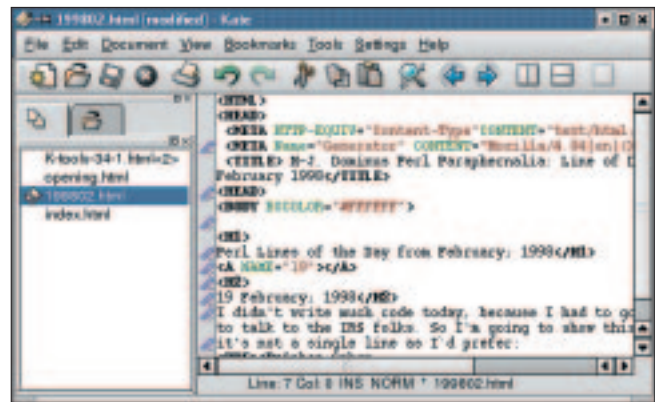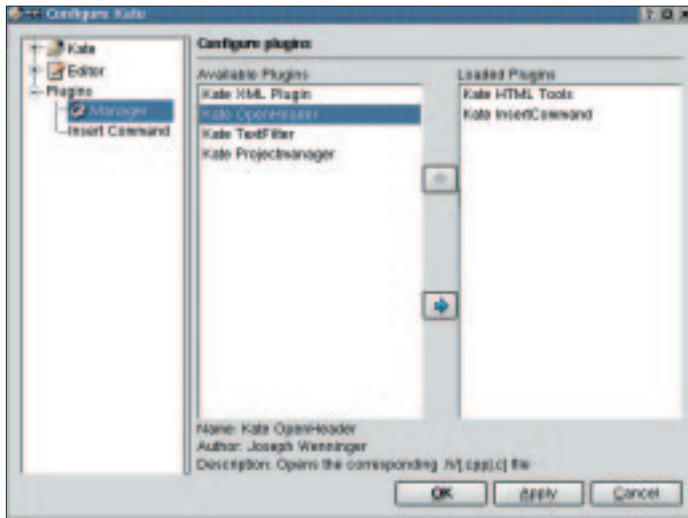

Figure 11: Virtual bookmarks

Figure 12: Choosing a plugin

click on the Apply button; you will be able to work with the selected plugins immediately.

If a plugin offers some other additional configuration options, as in the case of Insert Command Plugin, you can select these options as a subitem of the Plugin configuration item. The subordinate item for the plugin, Insert Command allows you to set the number of commands that Kate will place in history.

The plugin itself inserts shell output in the current document. You can launch the plugin via the Edit menu. Just select the Insert Command, to display a dialog window like the one in Figure 13, where you can enter the desired command and the directory where you want it to run. Kate will take care of everything else, as you can see in Figure 14.

If you intend to use Kate for editing HTML documents, you might also be interested in the Kate HTML Tools. This plugin provides the additional HTML Tag functionality via your Edit menu. If you select this item, a window like the one in Figure 15 appears, where you can type the name of an HTML tag (such as title). Kate will then take care of placing the necessary parentheses, start (<title>)

and end tags (</title>) at the current position in the document. HTML authors will be pleased that the developers have assigned the keyboard shortcut [Alt -] to this function.

KDE 3 users will discover that the XML plugin has already been integrated, but this is the only new plugin available in this version. C and C++ programmers will find the "Kate OpenHeader" plugin that adds the item OpenHeader in the file menu useful. Selecting this item opens the .cpp or .c file for the header file that is currently being edited and vice-versa.

The Kate Project Manager adds a menu called Project which you can use to maintain simple programming projects, while the Kate text filter filters and thus

Figure 15: Creating HTML tags made simple

replaces the text selected by reference to a shell commmand entered via the new menu item (Edit / Text filter..). But take care using this plugin in KDE 3; when we forgot to select a text passage to filter, Kate crashed when running on SuSE 7.2.

Kate does not have a lot to offer in the way of third-party plugins at present, although a single plugin for Python programmers is available from [1]. The trick is, to keep your eyes open. ■

Figure 13: The Insert Command plugin dialog box in KDE 2

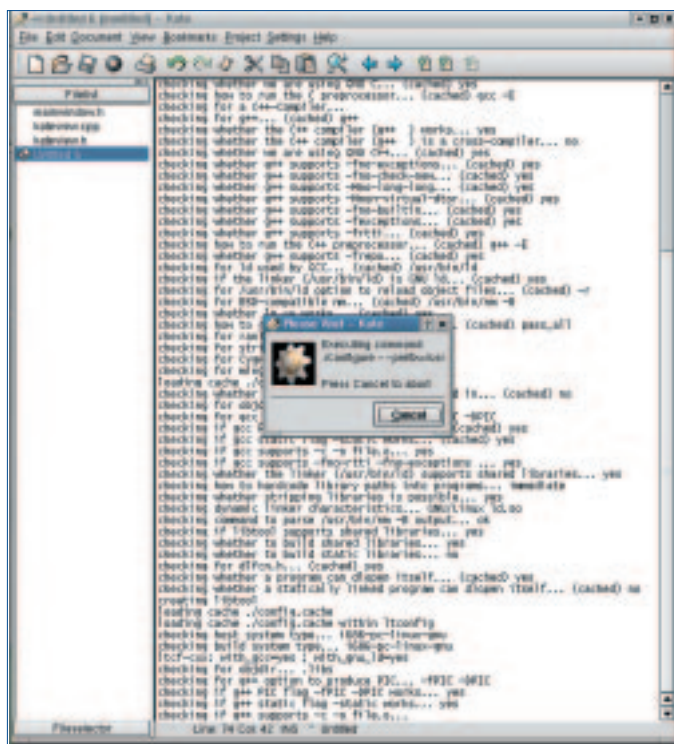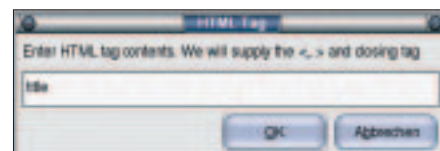**Figure 14: Inserting the output from a configure script in a Kate document**

INFO

[1] Third-Party-Plugins for Kate: *http://www.kde.org/kate/3rdparty.html*

Table 1: Default Keyboard Mappings

Key	Description
[Ins]	Toggles between Insert and Typeover modes. In Insert mode the editor writes the text entries at the current cursor position and moves the text right of the cursor to the right. In Typeover mode the characters right of the cursor are over written by the new text entries.
[Left arrow]	Moves the cursor one character to the left.
[Right arrow]	Moves the cursor one character to the right.
[Up arrow]	Moves the cursor one character up.
[Down arrow]	Moves the cursor one character down.
[Page up]	Moves the cursor one page up
[Page down]	Moves the cursor one page down.
[Backspace]	Deletes the character left of the cursor.
[Home]	Moves the cursor to the start of the line.
[End]	Moves the cursor to the end of the line.
[Del]	Deletes the character right of the cursor (or the selected text).
[Shift-Left Arrow]	Selects the text one character to the left.
[Shift-Right Arrow]	Selects the text one character to the right.
[F1]	Help (not pre-defined in KDE 3).
[F7]	Show Console.
[F6]	Show Icon Border.
[Ctrl-F]	Open Search Dialog box.
[F3]	Continue Search forwards.
[Shift-F3]	Search for previous instances of last search string.
[Ctrl-C]	Copy the selected text to the clipboard.
[Ctrl-N]	Create a new document.
[Ctrl-P]	Print current document.
[Ctrl-F4]	Close current editor window.
[Ctrl-R]	Search and replace.
[Ctrl-G]	Goto line...
[Ctrl-S]	Save current document.
[Ctrl-V]	Pastet content from clipboard.
[Ctrl-X]	Cut selected text and copy to clipboard.
[Ctrl-Z]	Undo last step.
[Ctrl-Shift-Z]	Redo last step.