

**Manual for wxHelp 2.0:  
A hypertext help system for wxWindows**

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wxHtml classes Copyright (c) Andrew Davison 1996.

## 1. Introduction

### 1.1. What is wxHelp?

wxHelp is a help system for wxWindows programs running under X and Windows 3. It allows the programmer to develop hypertext, browsable help which may be invoked using the API supplied with wxWindows (see the wxWindows user manual and **wxHelpInstance** class). Like Windows 3 help, it allows the user to click on words and phrases to see more detail, and search for topics matching a keyword. Unlike Windows 3 help, ASCII files may be marked up interactively using edit mode, and the system runs under both X and Windows.

Version 2.0 of wxHelp uses HTML files instead of XLP files. It uses a special index file, extension HTX, to allow searching on topics. HTX files can be generated by hand, or by Tex2RTF using the `htmlIndex` option.

Many thanks to Andrew Davison who wrote the wxHtml classes used in wxHelp 2.

### 1.2. How to use wxHelp

When installing wxHelp, set the environment variable `WXHELPPFILES` to be the list of directories you wish wxHelp to search when loading a file. wxHelp also searches the directories in the `PATH` variable.

To invoke wxHelp, start it on the command line with an optional filename, e.g.

```
% wxhelp -f help.html
```

There is also a `-server` switch for specifying the numeric identifier used by programs connecting to wxHelp (see later).

A contents page should appear, with highlighted blocks of text, some of which are mouseable (click with the left mouse button). Clicking on these takes you to other parts of the help file.

Above the main text area is a panel with buttons for commonly-used operations, and a menu bar. When you load an HTML file, wxHelp looks for a `.htx` index file with the same root name, and loads it if found.

### 1.3. Command buttons

- Contents -- displays the first section, normally a contents page.
- Search -- pops up a dialog box. The user may type a string (or an asterisk) into the text item, press **Do Search**, and click one of the matching section headings displayed in the listbox.
- Back -- goes to the previously-visited section or block. This works across different files, since the recorded history includes file names.

### 1.4. File format

The file format is HTML, plus an optional HTX index file.

For HTML syntax, see the sample file `primer.htm`.

The HTX format is an ASCII file comprising of a number of lines with the following syntax:

```
phrase | filename | label
```

where `phrase` is the indexed phrase, `filename` is the HTML filename, and `label` is the HTML label to go to.

## **1.5. Generation of wxHelp files**

The program **Tex2RTF** generates `.html` and `.htx` files from LaTeX documents. You can also create HTML files by hand, or using a number of tools now available.

Tex2RTF is available at:

```
ftp.aiai.ed.ac.uk/pub/packages/tex2rtf  
http://www.aiai.ed.ac.uk/~jacs/tex2rtf.html
```

## 2. Invoking wxHelp from programs

There are two main ways in which wxHelp may be used by other applications. The simplest is via the API (Application Programmer's Interface) included with the wxWindows system, as documented in the reference manual under **wxHelpInstance**. The other method is to use the DDE (Dynamic Data Exchange) commands on which the API is built. The only reason for doing this might be to access wxHelp from non-wxWindows applications running under Windows 3.1 (such as Visual Basic programs).

Under UNIX, the service name (the identifier for connecting to a DDE server) is generated at random by the API and passed to wxHelp when running it by specifying the `-server` switch. This is not fool-proof but usually doesn't result in a socket clash.

Under Windows, the service name is always assumed to be "4000", since there is only ever one instance of wxHelp running under Windows (a restriction of large model programming).

Listed below are the commands that wxHelp implements by means of a string sent to it using the **Execute** DDE command. Each string comprises an initial command letter followed by a space, followed by an argument, for example "f help.html".

- **b**  
Display block command. The argument is interpreted as a long integer indicating the block id at which the file is to be displayed.
- **f**  
Load file command. The argument is interpreted as a filename, and the current directory, WXHELPPFILES variable and finally PATH variable are searched for the file. If the file is still loaded, it is not reloaded, so this command may be used to ensure that a subsequent display command refers to the correct file.
- **k**  
Keyword search command. The argument is interpreted as a string for matching against section headings. If only one matching section is found, it is displayed, otherwise the search dialog is shown for the user to make a selection.
- **s**  
Display section command. The argument is interpreted as an integer starting from 1 indicating the section number to be displayed. -1 means display from the top (by convention, the contents page).

### 3. Problems with wxHelp

Here are some of the problems yet to be resolved.

- When you click on a link that doesn't exist, wxHelp hangs.
- Sometimes links are not sensitive.
- Scrollbars can be incorrectly set.
- On UNIX (Solaris 1.x and 2.x), often crashes in OnEvent when clicking on a link. Needs a bit of work...