HYPERTRACK

The Windows Help File Tracker

plus

HYPERDOC

WinWord to WinHelp Document Conversion Macros

by

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Overview of HyperTrack

HyperTrack -- expanding the capabilities of WinHelp

WINHELP.EXE
The MS Help Engine
that comes standard with
the Windows environmen t

1

HYPERDOC.DLL
Dynamic Link Library that acts
as the channel for WinHelp to
relay information to HyperTrack.

2

HYPERTRK.EXE
The HyperTrack application
that displays the current help
topic as well as allows user to
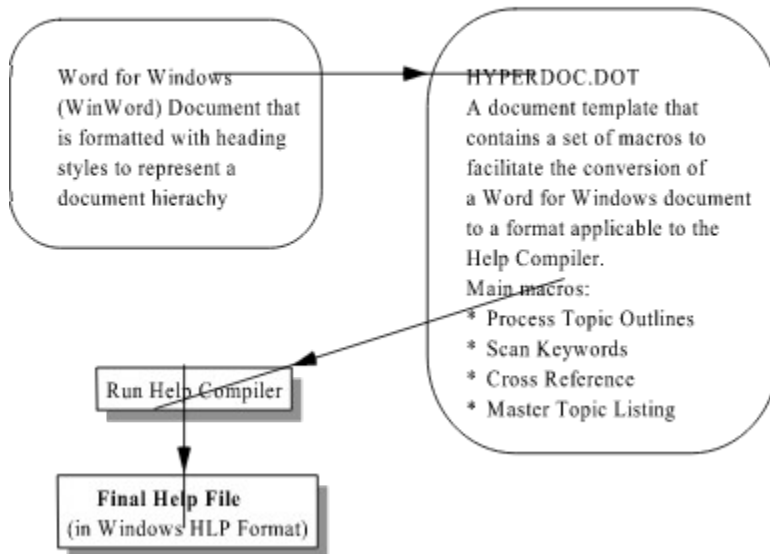navigate around the entire
help file.

3
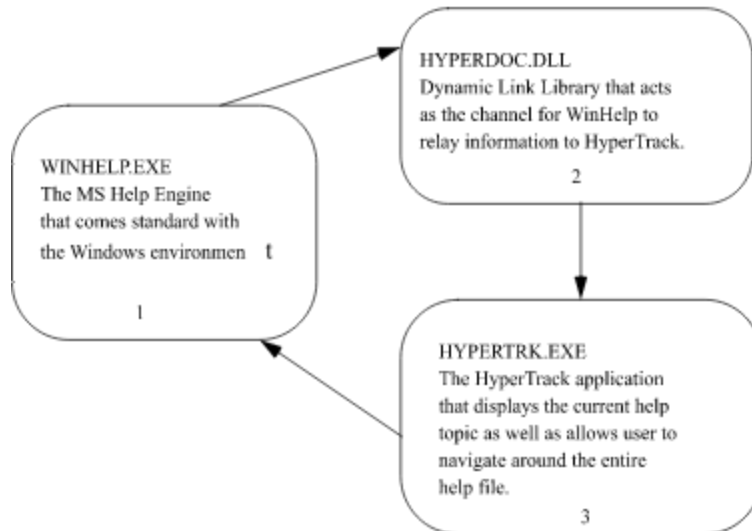
1.   The WinHelp environment already has the capacity to display information in hypertext.   It comes standard with browse, topic jumps, history function and search on keywords.

2.   The HyperDoc.DLL is used because it is the only way for a help file to interface with any other application.   It contains routines that are only linked to a program at runtime.

3.   The HyperTrack.EXE application enhances the hypertext   capabilities of WinHelp by providing a *dynamic Table of Contents* for all the topics in the help file.   It provides a navigation feature, enabling a user to jump to any topic within the help file by double clicking on its heading title.   At the same time, it provides a visual tracking of the current help topic by highlighting its heading title on the application window.   It is dynamic in its display because a user can choose to only view up to a certain number of levels in the document hierarchy and hide the lower levels.   Some key features of HyperTrack include the ability to list out all topics that contain the occurrence of any word being searched for, so the user is not limited to just the list of keywords that is a part of the WinHelp search function, as well as allowing the help file viewer to define their own topic groups dynamically.

Click here for more information on HyperTrack

Overview of HyperDoc

HyperDoc - Automating the creation of WinHelp files

Word for Windows (WinWord) Document that is formatted with heading styles to represent a document hierachy

HYPERDOC.DOT
A document template that contains a set of macros to facilitate the conversion of a Word for Windows document to a format applicable to the Help Compiler.
Main macros:
* Process Topic Outlines
* Scan Keywords
* Cross Reference
* Master Topic Listing

Run Help Compiler

Final Help File
(in Windows HLP Format)

The macros that are contained in the file HYPERDOC.DOT facilitate the easy conversion of a linear document to a hypertext document, using the Windows Help application.   It takes advantage of the format in a document based on *styles* to come up with a *hierarchical* structure, eg. Chapter heading -> Section heading -> Paragraph -> Sub Paragraph, etc.   Based on these headings for every topic in the document, a macro will insert the necessary codes and menu items to allow the Help Compiler convert them to a Windows Help file (*.HLP).   Cross references to other topics can be inserted by calling on the appropriate macro, as well as creating a master listing of all topics.   The end user can then view the converted document by successively clicking on the selection choices (or *hot spots)* for each menu level until he reaches the topic desired.

Click here for more information on HyperDoc

Installation and Getting Started

Make sure you exit and get back into Word for Windows after the following steps.

1. Copy the following files to your Word for Windows program directory (usually c:\ winword) :-
- **V1TBAR.BMP, V2TBAR.BMP, V3TBAR.BMP, V4TBAR.BMP** (for the customised toolbar to come out well)

2. Copy the following files to the directory where WINWORD.INI exists (usually c:\ winword) :-
- **HYPERDOC.DOT** (if there's an entry for DOT-path in the WIN.INI file then make sure that this template file is put there instead)

- **HYPERDOC.ICO** (for the help file's icon when it gets minimised) -- feel free to modify the icon if you want to.

3. Copy the following files to a directory that is somewhere in the system's path, eg. \ WINDOWS or \WINWORD :-
- **HYPERDOC.DLL** (contains subroutines needed by the HyperDoc macros as well as by HyperTrack)
- **HYPERTRK.EXE** (the HyperTrack application -- tracker for WinHelp)
- **HYPERDOC.HLP** (help file for the above modules)
- **HYPERDOC.HPJ** (help project file for HYPERDOC.HLP)
- **HYPERDOC.KEY** (keywords file for HYPERDOC.HLP)
- **HC.PIF** (PIF for the help compiler to work well)
- **HC31.BAT** (batch file for the help compiler)
- **HC31.EXE** (the help compiler for Windows 3.1)
- **HC31.ERR** (error message file for HC31.EXE)

The last two files HC31.EXE and HC31.ERR are not part of the zipped package. You can get them from Windows 3.1 SDK or Borland C++ Application Frameworks or from the WHAT.ZIP package available from most windows ftp sites.   If you cannot get a hold of them, just email me and I'll be glad to mail you a copy.

If you want to make use the WinGIF application to display graphics interactively within you help file, you should also make sure that WINGIF.EXE is somewhere in the system path.

4. The rest of the files (the .DOC files and the .TXT files) you can copy them to any working directory you want.

5.	Edit the **WIN.INI** file and ensure the following line is found under the Microsoft Word 2.0 section:

	LoadToolbarBitmaps=1

	If its not there, you'll find a few character based toolbar buttons instead when you first open this HYPERDOC.DOC file, but the macro *Process Topic Outlines* will ensure the line is inserted after it is run.

When opening a help file, ensure that the project file (*.HPJ) and keywords file (*.KEY) is found in the same location in order for HyperTrack and the keyword search facility to work.

Disclaimer
Changes in Release 4 of HyperTrack

Disclaimer

The author (Kenneth Liew) will not be held responsible for any undesirable effects that may occur   from running any of the macros contained in the HYPERDOC document template.   Though it should never cause any terrible side-effects, you are still using it at your own risk.   The same goes for the HYPERTRACK application.

Changes in Release 4 of HyperTrack

- Enhanced graphical user interface -- the HyperTrack window now contains hierachical-listbox style bitmaps (similar to those in the File   Manager), enabling quicker and easier previewing of topics.

- Topics selected in the Search Window will automatically be tracked by the main window, so you can see the surrounding context of that topic.

- Ability to create and modify your own topic groups while viewing the help file, without need for recompilation! (Accessed under the Search Menu)

- These topic groups can then be saved for future use as well.   Adding   topics to the groups is just a matter of pressing the Ins key or clicking   both the left and right mouse buttons together on the main window.   Deleting   topics is simply by pressing the Del key or clicking both mouse buttons on   the Search Group window. Accessing the groupings of the current topic is   by holding Control and left clicking the mouse or press the G key.

- Ability to execute any Help Macro interactively while viewing, so you   can see the effects of it without having to recompile, eg. adding your own   buttons or accelerator keys, etc.   These macros can even be saved so they   can be automatically executed at startup time.

- Option to use HyperTrack colors or just stick with the system   colors when displaying topic titles on the window -- no problems blending   in with any screen background color.

- Ability to modify the hypertext colors (ie. the jump and   popup colors) in WinHelp itself through the Set Display Options.

- Improved word search dialog: double-clicking the search criteria   listbox removes the word if more are listed in it, else displays the result;   remembers the previous criteria used for searching, whether boolean OR/AND.

- Ability to view only distinct topics from the History List, since no   point seeing the same topic on the list more than once, together with ability   to save it for later reference (accessed under the Search Menu).

- Name of last opened help file will be saved in File menu,   allowing quicker reference back to previous file.

- The HyperTrack application now uses much less memory than previous releases, especially on large help files.

- Help files created with the HyperDoc macros will not automatically   resize back to their default dimensions (some users didn't like the   auto-resizing).

HyperTrack: revolutionising the WinHelp application

How to use HyperTrack
Summary of HyperTrack features
List of Short-Cut Keys in HyperTrack
Short-Cut Keys added for WinHelp
Performing Word Searches
Anticipated Improvements for Future Releases
See also **Overview of HyperTrack**

Things to watch out for when using HYPERTRACK:
- Notice which window is having the keyboard input focus (usually that window's caption colour will be highlighted).   Press the SpaceBar to toggle between focusing on the help file or Tracker.
- To quickly find out which file it is tracking, observe the Tracker's caption -- it shows the file name.   To find out the complete path, press I or select the File-Information menu.
- Get to know the Short-Cut Keys!

Click the Contents toolbar button to jump to the very first topic in this help document.

How to use HᴇᴘᴇʀTʀᴀᴄᴋ

Move the mouse to the area you want help on and click on it:
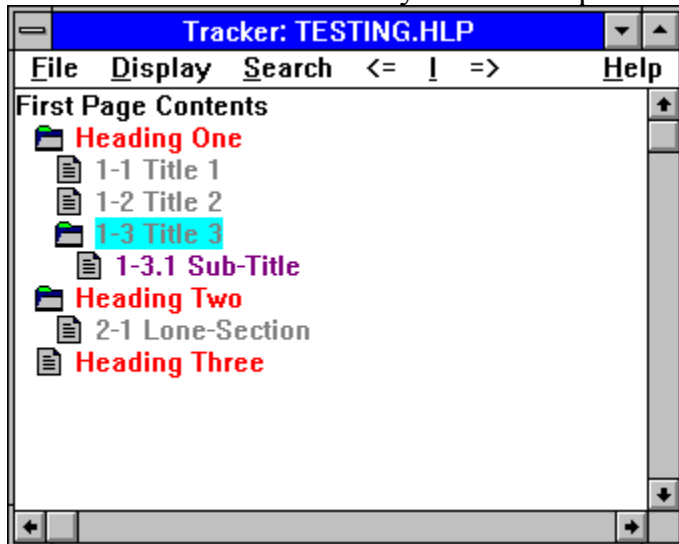
If you screen resolution is less than 800x600, some of the menu items will appear abbreviated:
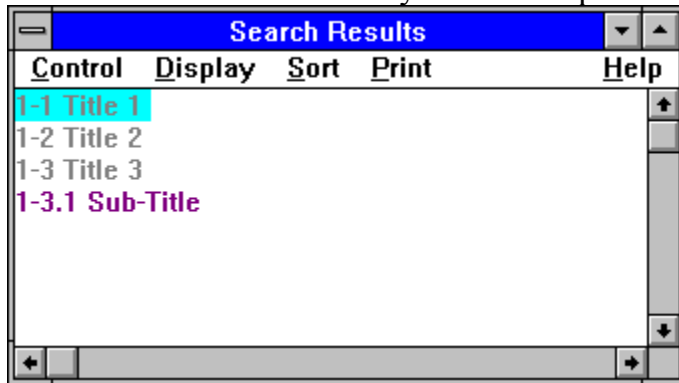S=Search, ?=Help

See also

How to use the Search window
List of Short-cut Keys
HyperTrack Topics
Summary of HyperTrack features

How to use the Search window

Move the mouse to the area you want help on and click on it:

```
┌─────────────────────────────────────────┬───┬───┐
│ ─ │         Search Results              │ ▼ │ ▲ │
├─────────────────────────────────────────┴───┴───┤
│  Control   Display   Sort   Print          Help  │
├──────────────────────────────────────────────┬───┤
│ 1-1 Title 1                                  │ ▲ │
│ 1-2 Title 2                                  │   │
│ 1-3 Title 3                                  │   │
│ 1-3.1 Sub-Title                              │   │
│                                              │   │
│                                              │   │
│                                              │ ▼ │
├───┬──────────────────────────────────────┬───┼───┤
│ ◄ │                                      │ ► │   │
└───┴──────────────────────────────────────┴───┴───┘
```

See also
HyperTrack Topics

Summary of HYPERTRACK features

- Master listing of **all** topics in a help file, suitably indented and/or colour coded to reflect hierarchy in the document.

- Can choose to **display** only topics up to a **certain level**, complete with bitmap graphic aids -- very helpful if there are many topics to navigate through.

- **Highlights** exactly which **topic** the help file is currently displaying (no more being lost in *hyper-space*, wondering where in the document you are).

- Ability to perform **search on every word** in the document, with some boolean searching capabilities. (new for Release 2)

- Ability to **print multiple** help file **topics** at one go. (new for Release 3)

- Handles **user defined topic groups**, ie. while viewing, the user can dynamically create and modify topic groupings that can be preserved for later usage. (new for Release 4)

- Supports **two help windows**: allows you to view any topic on the main window by double clicking the left mouse button, while right clicking displays the topic on the secondary help window -- no longer having to keep switching between two topics especially if both are closely related!

- Fully **customable display** -- how much to indent each level, line separation, colours for each topic level.

- **Automatic resizing** according to size of current help windows -- the entire screen is well used up.

- Ability to **search on strings** in a topic title, rather than just keywords -- eg. by just specifying doc the search window will display all topic titles that contain the string doc, like ..document.., ..documentation..., ..doctor..., etc...

- True **Up One Level** handling of topics -- you can always jump to the next upper level in the document hierarchy.

- Lots of very useful **short-cut keys** -- can navigate through an entire help file without bothering with the mouse.

See also <u>Changes in Release 4</u>

List of Short-Cut Keys in HYPERTRACK

Notice that it is optional to press the **Ctrl** key for those functions that use the alphabet set.

Function (and where in the menu)	**Key**
Alternates between setting the focus on the HyperTrack main window and the Search Results window.	Tab
Alternates between setting the focus on the main help window and HyperTrack main window.	SpaceBar
Collapse the number of levels to display. (Display menu as well as <= symbol)	**C** Ctrl-C
Display the HYPERTRACK help file topic.	**F1** or **H** or **?** or Ctrl-H
Displays the selected topic on the main help window.	Enter
Displays the selected topic on the secondary help window.	Ctrl-Enter
Distinct listing of history topics. (Search menu)	**L** Ctrl-L
Expand by one the number of levels to display (Display menu, as well as => character)	**X** Ctrl-X
Jump to last topic.	End
Minimise the HyperTrack application.	ESC key
Move Down to Next Level.	Ctrl-Right
Move the selected topic Up 1 Level. (Display menu, as well as U character)	**U** Ctrl-U
Move Up to Previous Level.	Ctrl-Left
Move down one topic.	Down Arrow
Move up one topic.	Up Arrow

Move up or down the topics according to screen size.	Page Up Page Down
Move up or down topics of the same level.	Ctrl-Up Ctrl-Down
Print help topics. (File menu)	**P** Ctrl-P
Quit the HyperTrack application. If help wasn't called before by another application, it'll also close the help window. (File menu)	**Q** Ctrl-Q
Reposition the HyperTrack window so that it fits nicely to the left of the main help window and below the secondary window. (Display menu)	**R** Ctrl-R
Run a Help Macro. (File Menu)	**M** Ctrl-M
Scroll screen to left.	Left Arrow
Scroll screen to right.	Right Arrow
Scroll up or down the topic window.	Ctrl-PageUp Ctrl-PageDown
Search for a string among all topic titles. (Display menu)	**T** Ctrl-T
Search for a word anywhere in the document. (Display menu)	**S** Ctrl-S
Sets the display options. (Display menu)	**O** Ctrl-O
Sets the input focus on the secondary help window.	**N**
Show all the levels in document. (Display menu)	**A** Ctrl-A
Show the help file's information. (File menu)	**I** Ctrl-I

Show up to 1,2 or 3 heading levels in document.	**1**, **2**, **3**
Toggle between showing the context strings all the topics. (Display menu)	Ctrl-E **E**
Toggle to Keeps Focus, ie. the HyperTrack application doesn't lose the input focus even after you press Enter to display a topic on the Help window -- useful for quickly browsing through the help file. (Display menu)	**F** Ctrl-F
Toggles between setting the application window as the Top-most Window. (Display menu)	**W** Ctrl-W

Short-Cut Keys added for WinHelp

Besides the normal key assignments in the WinHelp application (those that are underlined in the toolbar buttons -- remember that you don't need to press Alt for them, eg. **U** shows up one level, **O** displays the current topic on the secondary window, etc...) there are a few others to added:

These only apply if your help file was created with the Load HyperTrack option.

Function	Key
Alternate between setting the focus on the main help window and HyperTrack main window.	SpaceBar
Close the current window (whether the secondary or the main help window).	**Q**
Display the current topic on the secondary window.	**O**
Display help on using HYPERTRACK.	**H**
Display the list of topic groups, highlighting those related to the current help topic.	**G**
Display the previous or next topic on the secondary window.	Ctrl-Left Ctrl-Right
Display the Up 1 Level topic on the secondary window.	Ctrl-**U**
Select multiple topics for printing.	**P**
Search for a word anywhere in the document.	**W**
Set the input focus on the main help window.	**M**
Set the input focus on the secondary help window.	**N**

You can modify these key assignments or add in your own by adapting the help project file (.HPJ) before running the Help Compiler.   Have a look in the macro Initialise Files, which first creates the HPJ files....

Performing Word Searches

To search for all the topics that contain a certain word, select *Search Words* from the HYPERTRACK display menu or press S.   Here are the options for the Word Search Dialog box:

Word to Search for: This is the word that you are searching for.   As you type, you'll see the list-box below it highlight the nearest matching word.

Add to Criteria: To add the word being searched for to the list-box that contains the Search Criteria.

Remove from Criteria: To remove the current word selected in the Search Criteria list-box .

OR / AND Conditions: These option buttons allow you to select whether the words listed in the Search Criteria will be combined using either boolean OR (which will list all topics that contain at least one of those words) or boolean AND (which will list only topics that contain all the words listed).

Show Results: To show the Search Result window that will display all the topics that fulfil the Search Criteria.   Notice that the Search Dialog stays as the top most window all the time even if you display help topics from the Search Result window.

Clear Previous Search Results: This option button causes the next query made to clear the topics already displayed on the Search Result window.

Reset: This button will clear both the Search Criteria list-box as well as the Search Result window.

Search on Title Headings: To perform searches on strings within the title headings instead.

Close: To close this Search Dialog box.

Keep this Dialog Box Visible: This button when selected causes the Dialog Box to remain as the top-most window even when it is not having the input focus.

Anticipated Improvements for Future Releases

- History function that will be preserved even after quitting WinHelp, hence even allowing some analysis on document usage, ie. what topics were encountered and how often, in what sequence, etc.

- Ability to play sound and other multimedia files.

- Any other suggestions that you may give -- the more registrations there are coming in, the more motivated I'll be to implement them.

HyperDoc: the *easy* way to produce help files from existing documents

Summary of HyperDoc Features
Document Preparation
Tips for Creating Help Files with HyperDoc
Steps for creating a basic help file with HyperDoc
Acknowledgments

See also
Detailed Description of HyperDoc Macros
Toolbar buttons for HyperDoc
Overview of HyperDoc
Click the Contents toolbar button to jump to the very first topic in this help document.

Summary of HYPERDOC Features

- Automatically assigns context strings, topic titles, keywords and browse sequences for the help file.

- Able to use heading styles other than the standard heading 1, heading 2, etc... for describing the heirachical structure of the document; hence you can use styles like *Chapter, Section,* etc.

- Automatically splits up the words in a title heading to individual keywords, optionally leaving out certain common occurring words like *where, about,* etc..

- Generation of a Master Listing for **all** topics in the file, with context string, title, keywords and browse sequence numbering.

- Extremely easy to jump to any topic in the file with the *HyperTrack* application, and then either edit any items or insert a phrase as keywords for that topic.

- A Help Project File (HPJ) will be automatically created, with various customable options including title, compression and window size.

- Cross References to other topics can be generated painlessly and quickly, with the help of *HyperTrack*, with automatic searching for matching titles, matching phrases throughout the document as well as comments for the cross references.

- Graphics can be inserted with various options, saving file size with external references and auto insertion of full bitmap path names in project file.

- Map section generated automatically, allowing the help file to be called from any Windows application.

- Bullets and other symbol characters are supported (converted to corresponding characters).

- Ability to run macro minimised (so that you can do something else in the meantime) or with screen echo off (to increase execution speed).

- A whole bundle of extremely useful macros provided to increase productivity and joy in using Word for Windows, coupled with customised toolbar buttons and short-cut keys.   See <u>Other Useful Macros</u>.

- Convenient way to pre-process FAQ files by automatically assigning styles to them. See <u>Pre-Process FAQ files</u>.

See also <u>Overview of HyperDoc</u> and <u>Detailed Description of HyperDoc Macros.</u>

Document Preparation

First and foremost, these macros are designed for use under Microsoft Word for Windows™(or Winword for short) Version 2.x only.   Therefore it should be obvious that the input document (ie. the existing linear document) must be in Winword 2 format, which fortunately Winword has the ability to convert from with its powerful file conversion functions.   Once that is done the document must be attached to the template HYPERDOC.DOT.

In order to use the macros, the document must first employ the use of Styles as the heading for every topic (ie. the sections in the document).   For example in this document, "**HYPERDOC: THE EASY WAY TO PRODUCE HELP FILES...**" is set to the style "Heading 1", and so is "**DETAILED DESCRIPTION...**", while "**Overview of Hyperdoc**", "**Document Preparation**" and "**Process Topic Outlines**" are set to "Heading 2".   Titles with Heading 1 are known as having a document hierarchy level of 1.

Remember that if your document contains styles that are **not** part of the standard heading styles and you want to consider them as part of the document hierarchy, de-select the Use Default Heading Styles option in the Setup Options dialog box.

Following are common pitfalls to watch out for:

Heading styles must only be on one line
First line of document should not be part of document hierarchy
Inconsistent Styles or Heading levels

Heading styles must only be on one line

The length for each heading / title must be for **one line** only.   That means that the heading lines with the same style name:

<div align="center">

Chapter 2
FIELD AND BASE REPAIR

</div>

must be converted (by yourself -- you can't expect a macro to do it reliably for all cases...) to something like:

<div align="center">

Chapter 2   FIELD AND BASE REPAIR

</div>

with the line ending with just one paragraph mark and the appropriate style applied to it (eg. Chapter Heading).   If not, the macro will think that the two (or more) lines represent more than one topic heading and will really screw things up.

First line of document should not be part of document hierarchy

The very first line of the document (usually some sort of document title) should **not** have a style that is to be part of the document hierarchy.   This is because the processing macros will need as its first section a place to insert the top level menu or in other words the first page contents.   Hence in this document, the text that appear before the paragraph **"INTRODUCTION"** are of the Normal style, instead of being in any of the heading styles.

However, if you do have the first line in a style that is part of the document hierarchy, then you'll be prompted whether to abort or simply insert a blank line above it.   For the latter case, it'll be necessary for you then to insert some text to make the final help file look meaning full for its startup topic.

Inconsistent Styles or Heading levels

By default, the when processing the document, HyperDoc will check that the document has heading levels that are consistent, ie. progress from one level to the next without jumps.   However, if heading levels like

        heading 1   (or any other style that represents the level)

              heading 2

                heading 4

are found, then a warning message will be shown if you selected the <u>Warn If Inconsistent Style Found</u> option during the setup dialog.   If the warning is not shown or if you select OK to continue even if that inconsistent style was found, then the heading 4 title will simply be assumed to be of level 3 in the document hierarchy instead, ie. the macro will adjust its level number to be appropriate for that location.

This means that for all documents, there **must** be titles with styles in the first heading level, or else the help file will come out quite awkward.

Tips for Creating Help Files with HʏᴘᴇʀDᴏᴄ

What you see in Winword vs. what appears finally
Use the proper HyperTrack Loading option
Remove the Keep With Next paragraph attribute for Popup Windows
Use Cross Reference macro to create new topic groups
Consider using Undo Process macro to preserve Cross References
Remember to distribute Project and Keyword Files with Help File
More Customisation?

What you see in Winword vs. what appears finally

Remember that WinHelp displays the document in 100% zoom mode, so if you want to check whether the font size is big enough or not, click on the toolbar button.   To bring back to Page Width zoom, just press CTRL-SHIFT-V.

The tab stops in WinHelp are different from Winword, and so is its right margin.   In fact its right margin depends on the width of the help window, unless you have a table in it. Try using hanging indents as in this document for listing of bulleted items.

Use the proper HyperTrack Loading option

If your help file is intended to be called by an application ie. using the WinHelp function to load up specific topics, make sure you select the <u>Load Minimised</u> option under the <u>Set Run + HyperTrack Options Dialog</u> when running the <u>Process Topic Outlines</u> macro. This will prevent the HYPERTRACK application from automatically initialising the help topic to the first page contents.

If you are creating a small help file (like say under 10 topics), then it may be unnecessary to have the HyperTrack application loaded up.   This will enable the help file to be distributed alone but none of the added functions of HyperTrack will be available, like the Up 1 Level button or the search on every word feature.

Remove the Keep With Next paragraph attribute for Popup Windows

Due to a bug in WinHelp, topics with the title defined using the Keep With Next attribute (found under the Format-Paragraph menu) will not display properly when used for popup windows.   All the heading titles are automatically set with this attribute when the Process Topic Outlines macro is run so if you want to use any topics as a popup window, you'll have to remove that attribute from that topic's   heading line.

Use Cross Reference macro to create new topic groups

If you want to create useful topic groups, for example in this case create a group of topics all related to *Cross References*, you can call the <u>Cross Reference</u> macro after selecting a phrase.   The new topic created at the end of the document can then be used like a new topic but references to it must be done manually since the Tracker would not know about it.   The only way the Tracker could know about it is if you insert the proper title headings to it and then run the <u>Process Topic Outlines</u> macro on the document again.   The context string for it will usually begin with **topic4popup1**, meaning topic for popup and a counter as to how many of them are around.

Consider using Undo Process macro to preserve Cross References

If you've performed a lot of Cross References and then find that you need to run the Process Topic Outlines macro again, you may want to *consider* using the Undo Process macro to remove all the footnote characters before running it.   However, if you add in new topics or rearrange the document structure, you may find that some of the cross references may be invalid and hence require the context string attached to it to be changed (either manually or you can call the Cross Reference macro again).   You can use the table listing of topic titles and context strings from the Master Topic Listing macro as a guide to help you find the right references.

Remember to distribute Project and Keyword Files with Help File

If you want to use the HYPERTRACK application with your help file, remember to keep the project file created (*.HPJ) in the same location as your help (*.HLP) file.   Also if you want to have the feature to search for all words, you'll need to run the Scan Keywords macro on the processed file and distribute the resultant (*.KEY) file.

More Customisation?

If you want to further customise your help files, feel free to modify the help project (*.HPJ) files, eg. to add or remove some of the buttons, add in extra short cut keys, etc. Since most of the macros in the HyperDoc template are not read-only, you can adapt them to your own situations.   If you require further customisation both of the macros or the HyperTrack application, feel free to contact me and I will do my best to help.

If you need any assistance or have any comments, please feel free to contact me on the address listed under Registration and Support.

Steps for creating a basic help file with HyperDoc

Listed below are the minimum steps required to create a help file with the HyperDoc macros from an existing Winword document:

| Attach Winword document to HYPERDOC.dot | → | Execute the Process-Topic-Outlines macro |

Execute the Scan-Keywords macro

| Execute the Run-Help-Compiler macro | → | To view, execute the Open-Help-File macro |
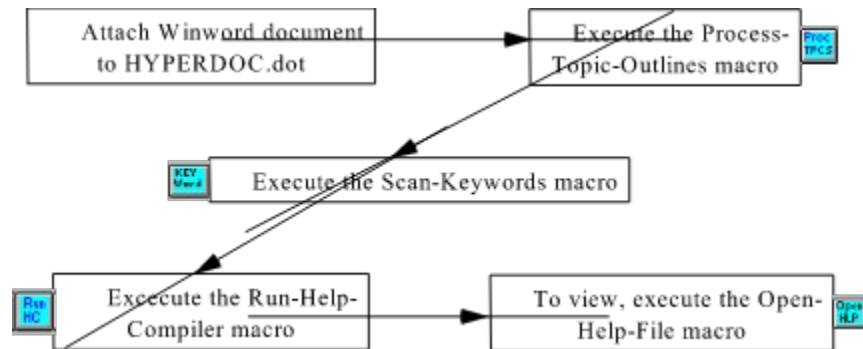
Any other macros that you want to execute, they should be done between steps 3 and 4.

If you want to have cross-linkages between different topics, you can run the <u>Cross Reference</u> macro.   To create a listing of all the topics in the help files together with their context strings, browse sequences and keywords, use the <u>Master Topic Listing</u> macro.
To insert new topics, eg. for pop-up windows, use the <u>Insert Help Topic</u> macro.

Acknowledgments

Much credit would go to Roger Hadcraft of Monash University (author of *Dr Help)* who first showed it was possible to automate the creation of help files from Winword files. The Microsoft *Windows Help Authoring Template (WHAT)* files also provided a great deal of assistance; in fact the macros InsertMacroHotspot, EditMacroHotspot, InsetTopic, EditTopic and StartOfTopic are taken directly from there.

Detailed Description of HyperDoc Macros

The following are the macros used.   They are all found under the **Help** section of the Microsoft Word screen title (located at the right end of the title bar). Most of them can also be accessed by clicking on the <u>toolbar buttons</u>

<u>Process Topic Outlines</u>

<u>Jump To Topic</u>

<u>Edit Topic</u>

<u>Scan Keywords</u>

<u>Master Contents And Listings</u>

<u>Cross References</u>

<u>Insert Helpfile Graphic</u>

<u>Undo Process</u>

<u>Insert Macro Hotspot</u>

<u>Insert Topic Keywords</u>

<u>Insert Help Topic</u>

<u>Run Help Compiler</u>

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See also **<u>HyperDoc Topics</u>**

Process Topic Outlines

This macro can be run by clicking on the ![icon] toolbar button, by pressing the keys (CTRL-SHIFT-P) or selecting the option under the Help sub-title.   Please ensure that you've read the "**Document Preparation**" section first before running this macro.   After that, this macro should be run, before most of the others, because it performs the necessary formatting on the document.

After the macro has completed, you will find all sorts of funny characters added (most of them are actually footnote markers) as well as a hard page break inserted at the start of each topic.   These are needed for the Help Compiler afterwards.   If everything went well, then you should find the file saved under a name which you specified under the setup options.

ProcessTopicOutlines Setup Options
Customise Keywords Dialog Box
Set Run + HyperTrack Options Dialog Box

ProcessTopicOutlines Setup Options

Name of File to Save As: Allows you to specify the name to save the processed file as -- if you don't want the extension BAK, use something else and it should be automatically set for the next time.

<u>Don't Save Now:</u> Select this if you do not want to save the original file yet. However it will still be saved under another name as specified on the above field, unless it was deliberately blanked out.

<u>Use Default Heading Styles:</u> With this option selected, the macro will assume that the document hierarchy is determined by the styles *heading 1, heading 2,* and so forth. If your document has other styles that you want to consider as part of the document hierarchy (eg. Chapter, Section, etc..) then make sure that you de-select this option.

<u>Warn If Inconsistent Style Found:</u> With this option selected, the macro will prompt if it comes across a style that does not conform to the standard document hierarchy (eg. from a *heading 1* topic, it comes across a *heading 3* topic, instead of a *heading 2* topic first).

<u>Name of Default Heading Style:</u> Used to define the default name of heading levels in the document, eg. *heading* 1, *heading* 2, etc..(relevant if you're using a different language) This section is only applicable if the <u>Use Default Heading Styles</u> option is set.

<u>Customise Menu Style:</u> Select this button to change the default style for topic menus (ie. the titles that will be listed as choices for the user when navigating through the help file).

<u>Title for First Topic:</u> This field defines the title of the very first topic in the help file, and by default it is *First Page Contents*.

<u>Customise Words to Exclude as Keywords:</u>
This button allows customisation of words that will be included as keywords in the help file. Refer also to <u>Customise Keywords Dialog</u>.

<u>Set Run + HyperTrack Options:</u> Select this button to control how the macro will be run as well as options to load up HyperTrack. Refer also to <u>Set Run + HyperTrack Options Dialog</u>.

Customise Keywords Dialog Box

The main combo box contains the list of words that will **not** be included as keywords (ie. words that appear in the *Search* dialog) of the help file.   Usually will contain common occurring words like those in the default list.   Feel free to add or delete any words from the list by selecting the appropriate push button and when satisfied, select OK.   If you select Cancel, the macro will terminate.

<u>Don't Split Keywords:</u>   If you decide that you do not want to split up the topic titles into individual words, then select this button.

<u>Minimum Length of Keywords:</u>   This edit box determines the minimum length of words that will be considered to be split up as keywords.   Eg. if its set to 5, then common words like *"that, are, more"* will be excluded.   Note that if its set to less than 5, you may have to add more to the list of words to be excluded.

Set Run + HyperTrack Options Dialog Box

Run Minimised: This will cause the Microsoft Word application to be reduced to an icon as the macro is run -- able to speed things up (less need for screen redraw) as well as allows you to do something while it hums along.   It will be restored back to normal size when the macro finishes.

Lock Screen Updates: This option freezes the application screen window in order to speed things up, and makes sure that it is not in maximised position, also giving you an opportunity to do something else while it is silently at work.

Note that for the two above options, while the macro is running, the mouse pointer will be as an hourglass, but you should still be able to click on other applications (depending how fast is your machine).   However, they are NOT very reliable and may cause the computer to hangup.... so be warned!!

Show Elapsed Time: If you want to know how long the macro took to complete, you can select this option.

Save after `<num>` topics: Determines how often the macro will perform a save to disk file for the document being processed (usually to prevent running out of memory for large files).

HyperTrack Options:

Load Automatically: Select this if you want the Helpfile Tracker (*HyperTrack*) to be loaded up every time the help file is run.   This would be the default option for help files that are intended as a hypertext viewing environment.

Load Minimised: Select this if your helpfile will be called by an application ie. for context-sensitive help (as in the case for this help file).   If you select this option, you may find that when you terminate HyperTrack, the help window is still around.

Don't Load at all: Select this if you do not want your help files to rely on the HyperTrack application.   This will enable your help files to be distributed without the Hyperdoc.dll and Hypertrk.exe files as well as its HPJ files.   The Process Topic Outlines will work faster with this option since it will not insert the !DisplayText() macro for each topic.

Jump To Topic

Called by CTRL-SHIFT-J, clicking the toolbar button, or by selecting it under the Help sub-menu.
This macro enables you to jump to the start of any topic within the processed file.   It calls up the *HyperTrack* application to do so.

Edit Topic

Called by CTRL-SHIFT-E, clicking the toolbar button, or by selecting under the Help sub-menu.
This macro, taken directly from Windows Help Authoring Template, allows you to edit any aspect of the topic you are currently at.   However, you should **not** modify the context string, which has already been set by the ProcessTopicOutline macro when it was first run.   Use it to modify the topics that you've created manually (eg. with the Insert Help Topic macro).

Scan Keywords

Accessed by clicking on the ![KEY] toolbar button, pressing CTRL-SHIFT-K, or selecting it under the Help sub-menu.   It can only be called after running <u>Process Topic Outlines</u>. This macro scans through the entire document line by line and processes every word in it, excluding those that are less than a certain length and some common occuring ones.   You have the option to set those words to exclude when the macro fires up.   After it has completed successfully, it creates a file with the extension .KEY that is used by the HYPERTRACK application.

Master Contents And Listings

Accessed by clicking on the toolbar button, pressing CTRL-SHIFT-T, or selecting it under the Help sub-menu.   It can only be called after running Process Topic Outlines.

This macro enables you create a complete listing of ALL the topics in your document, ie. those that have a heading style that is part of the document hierarchy.   If lists the number, title, context string, keywords, and browse sequence of all topics. After the macro has finished you'll be prompted to save it under the name with default extension IDX.   This will then be useful if printed out and kept for reference when establishing cross-linkages/references to other topics, especially in producing hot-spots within bitmaps, since the context-strings there will have to be entered in manually.

Cross References

Once the <u>Process Topic Outlines</u> macro has successfully completed you can insert Cross References to other topics within the document.   If you want a word or phrase to be linked to another topic, just Double-Underline it (simple way is by selecting the phrase and then press CTRL-D), as in <u>Process Topic Outlines</u>.   You should consider using the <u>Select Word</u> macro (F2 key) to select only the current word without trailing spaces. Once they have been double underlined, call up the Cross Reference macro using either the toolbar button, key strokes CTRL-SHIFT-X or select under the Help sub-menu. After the macro has finished, its a good idea to save the file again.

If you only want to process one phrase and make it a hypertext link to other topics, just select that phrase (no need to underline it) and immediately call the macro.   This macro can be run as often as you want.   When multiple targets are selected, topics that refer to itself are automatically left out, so you won't get cases when you're in a topic and you find yourself selecting a jump back to the same place.

You can still run this macro even on a *clean*, unprocessed document **if** it was processed at least once by the Process Topic Outlines macro, ie. a HPJ file has already been created for it.

<u>Using the Tracker for Cross References</u>

Using the Tracker for Cross References

When you select the <u>Cross Reference</u> macro, the HyperTrack program will be called up to assist you in select the topic you want quickly and effectively.   When first started, it will try to search for the currently selected phrase among the list of all topic headings.

- To add in other topics to be part of the links by double-clicking the selected topic or press the Ins key from the keyboard.
- To remove/delete a topic from the list on the Search Results window, right-click the selected topic or press the Del key.
- To insert comments for that topic (text that will appear next to a menu item in the help file, usually to provide some initial summary of what that topic is about), left-click on the selected topic or press Enter from the keyboard.

Insert Helpfile Graphic

If you have any graphic images you want to insert into or reference to the document, call this macro.   It can be accessed through the ![toolbar icon] toolbar button or   under **Insert** sub-menu or CTRL-SHIFT-G.   The following options apply:

<u>Use WinGIF application:</u>   Allows the graphic file to be accessed indirectly using the *WinGIF* application (which is a shareware product).   This will save a disk space since the graphic will not be inserted into the help file but will be accessed only when WinGIF calls it.   Formats allowed are BMP, PCX or GIF.

<u>Insert Bitmap indirectly:</u>   This will cause the bitmap to be inserted into the help file at compile time, so you won't be able to see the graphic in Winword but only in the help file.   This is the only way to insert bitmaps with hotspots (SHG files).

<u>Insert into Document:</u>   This simply inserts the graphic directly into the Winword document.   Though this is useful for small pictures, it may cause some memory problems during compilation if the graphic files are too big.

Undo Process

Attempts to remove all the changes made to the original document by the Process Topic Outlines macro.   Use this if you want to restore the processed file to its original state, eg. after adding in many Cross References you decide you want to insert new topics and have to call the Process Topic Outlines macro again.   Press CTRL-SHIFT-U or select it under the Help sub-menu.

Insert Macro Hotspot

Called by CTRL-SHIFT-I or by selecting it under the Help sub-menu.
This allows you to insert Help-Macro hotspots within the document.   Acknowledgments
go to the Windows Help Authoring Template (WHAT) authors for the macros.

Insert Topic Keywords

This macro splits a selected phrase into individual words and inserts them as keywords for the current topic.   You'll have the option to control the words that are actually included by selecting the <u>Excluded Certain Words</u> check box and selecting the button <u>Set Exclude Words</u>.   This enables you to leave out certain common occurring or non-specific words from being listed under the Search window in the final Help file.

Insert Help Topic

This macro is also taken directly from Windows Help Authoring Template.   It allows you to insert a new help topic anywhere within the file.   You should only use this macro to insert additional topics eg. for popup windows that you cannot include in your original document.   See also the <u>Edit Topic</u> macro.

Run Help Compiler

Once you made the necessary processing on the help file, you can run this macro using the toolbar button, or under the Help sub-menu.

This macro will save the file in Rich Text Format (RTF), allow you to set certain options, and then calls the Help Compiler, which takes the current document and churns out a Windows Help (.HLP) file.   The following describes the options that you can set before calling the help compiler:

<u>Main Window Title:</u>   This is the text that will appear in the caption of the main help window, which by default will be the name of the current document's title as what appears in the summary information.

<u>Secondary Window Title:</u>   Text for the caption of the secondary help window.   This secondary window will appear on the top right of the screen while the main window will take up most of the left screen.

<u>Main Window Size:</u>   The two fields (<u>Width</u> and <u>Height</u>) describe the sizing of the main help window in units of screen pixels out of 1023, ie. the maximum width and height of the screen is assumed to be 1023 irregardless of the actual screen resolution.   The WinHelp system automatically scales it to the real screen resolution so that if you specified 1023, it will take up the full width or height of the screen irregardless of the display resolution.

<u>File Compression:</u>   This option list box allows you to select what type of compression will be applied when compiling the help file; High can result in up to 50% compression but creates a *.PH file in the process which stores commonly occurring phrases; Medium compresses up to around 40% or less but doesn't create a *.PH file (the default method); while None obviously creates the largest help file, with no compression applied.

<u>Use Colours for Tracker Headings:</u>   This check box sets up the HyperTrack program to display different colours for different topic heading levels, eg. all Level 1 headings will be in red, etc..

Open Help File

Accessed by pressing CTRL-SHIFT-L or clicking the toolbar button or selecting it under the Help sub-menu.

This macro will display the Help file that is produced after it has been compiled, eg. if this document is called HYPERDOC.DOC, then after running the above macros, you will get the file HYPERDOC.HLP created.   Since this macro is not write-protected, you can modify it to display the Help file using the WinHelp windows function call instead.   This is useful if the file has the option to run HyperTrack minimised when loaded.

Other Useful Macros

The HYPERDOC.DOT template comes with a whole lot of other useful macros that will make life much easier not only for creating help files but also for every use of Word for Windows. Feel free to explore all the other macros listed under ToolsMacros (by pressing CTRL-SHIFT-M).   They are not copy-protected so you can modify them to if you want. I'm only listing out a few of them here:-

Change Directory (as well as Open and Delete files)
Toggle View Style Name Area
Toggle View Hidden
Jump To Page (the dynamic way)
Dynamic Zoom (the easiest way to change view)
Dos Shell
Copy Macro
Select Word
Pre-Process FAQ files

Change Directory (as well as Open and Delete files)

This allows you select a directory to change to as well as what default extension to open file as.   Even allows you to delete files.

Called under the File sub-menu or the toolbar button.

Toggle View Style Name Area

Toggles between seeing the style names on the left of the document or not -- no more hassles about having to switch to outline mode, though that is still useful when checking the consistency of your document styles.   Accessed through CTRL-SHIFT-N keystrokes, under View sub-menu or toolbar button.

Toggle View Hidden

Toggles between seeing hidden text in the document.   Accessed through View sub-menu or CTRL-SHIFT-H.

Jump To Page (the *dynamic* way)

Allows you to easily jump to any page in the document with the help of a scroll bar. Also allows jumping to any bookmarks or to the previous location. Accessed with the F5 key or toolbar button. Note that selecting the Sample button will bring you to the specified page but the status bar in the bottom will **not** be updated.

Dynamic Zoom (the *easiest* way to change view)

Allows you to easily control the View Zoom percentage of the document -- must see it to believe it.... accessed with CTRL-SHIFT-Z key or toolbar button.   Note that selecting the <u>Sample</u> button will bring about the specified zoom value but the status bar in the bottom will **not** be updated.

Dos Shell

Allows you to start a MS-DOS shell session.... accessed under File sub-menu.   It assumes that you've got the file DOSPRMPT.PIF somewhere in the path.   Feel free to modify it to any Operating System shell you want.

Copy Macro

Allows you to copy a macro from one template to another..... accessed with CTRL-Y or use ToolsMacros to select manually.

Select Word

Allows you to select only the word where the insertion point is at, **without** the spaces at the end.   Very useful if you want to underline only that word but can't stand the ugly extension of it to the next word.... use the F2 function key.

Pre-Process FAQ files

Pre-process Frequently Asked Questions (FAQ) text files by putting in the appropriate heading styles on it.   Make sure you check out the actual macro code itself to get it customised for the particular FAQ file.....access by selecting the ToolsMacro list box.

List of all Key Assignments under HYPERDOC

To find out all the key assignments under the HyperDoc template, just run the **FilePrint** command and under the <u>Print:</u> field, instead of *Document* select *Key Assignments* and then print it out.

Registration and Support

If you are having an evaluation copy, you need to register if you use it for more than 10 days.   The unregistered version of HYPERDOC is limited to handling up to 30 topics while the registered version should be able to handle up to 900 topics, unless you run out of memory first.

To register, please print the following section or the file REGISTER.TXT and send the payment to me at my home address.

REGISTRATION FORM
For HyperDoc and HyperTrack
Release 4   December 1993

Name: _____

Company: _____

Address: _____

                              _____

                              _____

Phone No: _____

E-mail address: _____

Transmission: ___ email   ___ 3.5" disk   ___5.25" disk

Payment enclosed: $_____   (remember to include extra for disks and also if you

                              want the source code as well)

Cost:
The *HyperDoc* macros and the *HyperTrack* application are **not** freeware programs -- they are shareware.   The author has spent more than 300 hours in research, design, coding, debugging and documentation.   Hence in return all I'm asking for is a meagre sum for me to keep developing this powerful hypertext system.   For basic registration, the cost will be
either   **US $25**
or   **AUD $35**   in bank cheque or money order.
If you are sending cash, it'll only cost you US$20, since it's less of a hassle for me.

Delivery:

If you have an email address, I would prefer to send you the registered version via e-mail. However, if you can only manage diskettes, then you'll need to pay an extra $5 for postage and handling.

Contact:

The most convenient way for me to keep in touch with you will be through e-mail, until 12th December 1993.   The following is my email address in Melbourne, Australia:

s892831@yallara.cs.rmit.oz.au

Home address: (normal mail, until 10th December 1993)

> **13 Stawell St.**
> **Coburg**
> **VIC 3058**
> **AUSTRALIA.**
> Ph: + 613-354-2490

After 12th December 1993,   I can be contacted via normal mail at

> 220, Jalan Raja Kam,
> Canning Garden,
> 31400 Ipoh, Perak,
> MALAYSIA.
> Ph: + 605-573-304

If after registering you have any queries about building help files or even programming in Windows, feel free to ask me and I'll try my best to assist in any way possible.

Special Offer for Source Code

Special Offer for Source Code

If you are interested in how all the HyperDoc macros work or want to customise them yourself, I'll be willing to send it to you at the cost of US$70 (or AUD$100).

If you want the source code for the HyperTrack program and the DLL module (which was written in Borland C++), it'll cost you US$120 (or AUD$150).

As a special offer for both the source codes (WordBasic and C++), I'm offering it at US$150 (or AUD$200).   With both these source codes, you can not only customise it to your heart's content but probably even adapt it to other word processing environments (like WordPerfect or AmiPro) and you can then make even more $$ out of it.......
Developers of other WinHelp authoring systems may want to use adapt the HyperTrack concept into their help files so having the source code will be quite essential.

Thank you for you support.

Kenneth Liew
December 1993

Short-Cut Keys

List of Short-Cut Keys in HyperTrack

Short-Cut Keys added for WinHelp

List of Short-cut Keys

List of Short-Cut Keys in HyperTrack

Short-Cut Keys added for WinHelp

Cross Reference

Use Cross Reference macro to create new topic groups

Consider using Undo Process macro to preserve Cross References

Cross References   **Describes the macro**

Using the Tracker for Cross References

These menu items act as toolbar buttons and they perform the task of collapsing the displayed levels [<=] or expanding the displayed levels [>=] by one.
Alternatively, you may choose to use the numbers on the keyboard 1, 2 or 3 to show only up to those heading levels, or click on the [I] item.

The File menu allows you to open another help file for display or get information about the current file.

Print Topics prompts for a range of topics to print and then spools them to the printer.   To view the topic numbers, select the *Show Context Strings* option under the Display menu.

Run Help Macro will execute a help macro on the current help file.

The Display menu allows you to customise how you want the window to look like, eg. setting colors, indentation, etc.

The Reposition Window function will reposition and resize the Tracker according to the current help windows that are active.

The Search menu allows you to perform
* comprehensive word searches
* search on title strings
* topic groupings
* distinct history listing

The caption bar shows the help file that it is currently tracking.   Press the I key for more detailed information about the help file.

These folder-like bitmaps are for controlling how many topic levels to show.
📂 Means there are more levels below being shown.   Click on it to hide the lower levels.
📄 Means this topic level is a leaf node, ie. no topics are under it.
📁 Means there are more levels below that are not currently shown.   Click on it to show the lower levels.

This is the main work space for HyperTrack.   It displays the list of topics in the help file and is usually color coded to distinguish between the heading levels.
When used in viewing help files, you left double click the topic to view on the main help window, while right clicking will show it on the secondary window.
The current topic displayed on the helpfile will be highlighted.

- To customise the screen, select *Set Display Options* from the Display menu.
- To print out help topics, select *Print...* from the File menu.

Click **here** for description about level buttons.

Display: This menu item allows you to customise the way the search results appear. **Show Context Info** will show the topic context string as well as how many hits for the current search criteria.

Control: This menu item allows you to save/edit the current entries in the search window to a group that can be recalled later.   You can also perform a new search here.

Sort: This menu item allows you to choose in what order the topics will be displayed. To show how many hits for each search criteria, select the Show Context Info under the Display menu.

Print: This menu item will spool out to the printed the help topics currently listed on this Search Results window.

This area shows the results of the last search option.   It shows the same colors as the main Tracker window but may or may not be indented.   If you double click on a line, it'll show the help topic for that title.   See also the <u>display</u> and <u>sort</u> menu items.

The main HyperDoc macros:

Other useful macros:

A windows application that attaches itself to the WinHelp engine, providing various features not present in normal help files. Its main window shows a *dynamic* table of contents of the document being displayed, which would have been processed by the HyperDoc document template.

A Word for Windows document template that automates the creation of windows help files.   The help files generated can then be viewed either by themselves or together with <u>HyperTrack</u>.

HyperTrack and HyperDoc are the two components that make up a comprehensive development system for creating Microsoft Windows help files.