

Introduction

The purpose of dtSearch is to quickly find the information you need from hundreds or thousands of documents on a PC, network or CD-ROM.

Load dtSearch on your file server to give network users instant access to company archives, policy manuals, etc. Or create your own instant database from downloaded text. Fuzzy and phonic searching make dtSearch convenient for text with OCR or typographical errors.

dtSearch works by building an index that stores the location of words in your files. Once dtSearch has created an index, you can search through megabytes in a second. Since you will sometimes want to search files dtSearch has not indexed, dtSearch also does unindexed and "combination" searches across multiple directories, drives and indexes.

dtSearch has unlimited capacity. You can create an unlimited number of indexes, each holding up to 15,000 files of any length. dtSearch can search up to 25 indexes with a single search request. A scrolling list shows the words in any index for easy search formation. Search options include:

- Boolean (AND, OR, NOT);
- phrase (apple sauce or chocolate cake);
- wildcard (appl* sau?e and not cho*olate ca?e);
- proximity (appl* w/5 pear);
- segment (dear to sincerely contains John);
- macros (@ADDRESS contains elm street);
- file name/date;
- fuzzy (for text with typographical or scanning errors);
- phonic (to find similar-sounding words like principal for principle and Smythe for Smith); and
- stemming (to search for apply and find applies, applied and applying).

After a search, dtSearch provides a range of options for collecting and viewing retrieved documents. dtSearch will sort search results by document name, date, or number of hits (relevance). Users can browse retrieved files, jump directly to hits, or do a "search within a search" for other text.

dtSearch also generates search reports displaying each hit with the amount of context you request. dtSearch automatically inserts hypertext links so you can jump back and forth from your search report to the location of hits in the full documents.

dtSearch provides multiple options for using the information you find in a search. Cut, paste, annotate, edit or "launch" a file in its own word processor from within dtSearch. Tag files to print, copy or include in a search report.

Advanced users can take advantage of dtSearch's DDE interface (Windows version) and extensive batch script language to integrate dtSearch with other software and automate indexing and searching. dtSearch will even create a batch script. Other advanced user options include the creation of hypertext-linked databases and archive indexing. For developers interested in customizing dtSearch for CD-ROM or disk publication or for use as a front-end on a BBS, DT Software offers a Developer's Toolkit for Electronic Publishers.

dtSearch automatically recognizes all major word processor file formats.

dtSearch provides extensive support for non-English text. Users can customize the alphabet dtSearch uses to index and search files, the noise word list, and the stemming rules.

dtSearch's file server version runs on all major PC-based networks.

This manual covers both dtSearch for DOS and dtSearch for Windows. As much as possible, the menu options and dialog boxes in dtSearch for DOS and dtSearch for Windows are the same. dtSearch for DOS and dtSearch for Windows use exactly the same file formats, so you can use the same indexes and setup files for both versions.

System Requirements

dtSearch for Windows requires Microsoft Windows version 3.1 or later, a 386 or higher processor, and at least 2 megabytes of memory (4 megabytes recommended).

dtSearch for DOS requires DOS version 3.3 or later, a 286 or higher processor, and at least 2 megabytes of memory. dtSearch for DOS uses a DOS extender, which allows it to use memory above the lower 640k. On systems with 2Mb of memory or more, this eliminates problems running dtSearch in low-memory environments.

The DOS extender used in dtSearch for DOS is compatible with nearly all DOS environments in use today. Most users should be able to simply run dtSearch for DOS without altering their system configuration at all. If you experience problems, such as an "Insufficient Memory" message, see the README file included with dtSearch for a detailed discussion of compatibility issues. The most common problems are discussed below:

2 Mb systems

If your system has exactly 2 Mb of memory and you are using a disk-caching program such as SMARTDRV or PC-CACHE, the cache may not leave enough memory for dtSearch to run. Try reducing the cache size to 256k.

EMM386.EXE

The DOS extender in dtSearch is incompatible with one specific EMM386 setup: the version of EMM386 included with DOS 5.0 or Windows 3.1, when used with the NOEMS parameter. If you encounter this problem, edit your CONFIG.SYS file and look for a line like the following:

```
DEVICE=C:\DOS\EMM386.EXE NOEMS
```

Change NOEMS to FRAME=NONE, like this:

```
DEVICE=C:\DOS\EMM386.EXE FRAME=NONE
```

This problem has not appeared in more recent versions of EMM386.EXE.

QEMM.SYS

Some versions of QEMM have the same problem as the DOS 5 version of EMM386: "NOEMS" does not work with dtSearch, so just change "NOEMS" in your CONFIG.SYS to "FRAME=NONE."

Using dtSearch on a Network

Running dtSearch from a Shared Directory

To run dtSearch from a shared directory, install dtSearch on a directory that each user will have read-only access to. Use the DOS ATTRIB command to make each file read-only. (This avoids sharing violations on some networks.)

Each user will need a private, writable directory that dtSearch can use for temporary files and to store the user's setup files. This directory cannot be shared. The easiest solution is for each user to use a directory on his or her own local hard disk (such as C:\DTSEARCH) as a private dtSearch directory. The private directory can be on a network drive, but each user must have a separate private directory.

You can tell dtSearch what the private directory for a user is either through a command-line switch (/DIR) or an environment variable (%DTSDIR%).

1. /DIR Command-line switch

To tell dtSearch to use C:\DTSEARCH as the private directory, execute dtSearch with the /DIR switch, like this:

```
DTSEARCH /DIR C:\DTSEARCH
```

The /DIR switch also works with dtSearch for Windows. In Program Manager, set up the dtSearch for Windows program item as follows:

Description:	dtSearch for Windows
Command-line:	DTSWIN /DIR C:\DTSEARCH
Working directory:	C:\DTSEARCH

If you want private directories to reside on the network, and if your network is set up with an environment variable containing each user's name (%USER% or %USERNAME%), you can use that environment variable with /DIR, like this:

```
DTSEARCH /DIR H:\%USER%\DTSEARCH
```

This makes it possible for each user to have a private directory on the shared H: drive.

2. %DTSDIR% environment variable

An alternative to the /DIR command-line switch is to designate a private dtSearch directory by setting the %DTSDIR% environment variable in each user's AUTOEXEC.BAT file, like this:

```
SET DTSDIR=C:\DTSEARCH
```

Shared Setup Files

dtSearch looks for setup files in each user's private directory first and, if it does not find a file there, it checks the shared dtSearch directory. When dtSearch saves a setup file, it writes the file to the user's private directory.

This makes it easy to set up all users with a common initial configuration that they can then customize to suit individual preferences. To set up the initial configuration, do the following:

1. Run dtSearch directly from the shared network directory without the /DIR option, so all setup files will be stored in that directory.
2. Set up the configuration you want.
3. Exit dtSearch.
4. Use the DOS ATTRIB command to make the files in the dtSearch directory read-only.

See "[Setup Files](#)" for a list of dtSearch setup files.

If your network stores user names in an environment variable such as %USER% or %USERNAME%, enter this variable under User Name in the Preferences dialog box. dtSearch uses the User Name for informational purposes (for error messages) and is not required for network operation.

Shared indexes and documents

dtSearch can use network drives and supports multiuser access to indexes stored on networks. If an index is stored on a network drive, any user who has write access to the directory containing the index will be able to update the index in dtSearch. Any user who has read access to the index will be able to search the index or perform other functions (such as Verify Index and Copy Index) that do not require write access.

Multiuser access is permitted only when no one is modifying an index. If one user is updating or compressing an index, other users will be locked out. For this reason, write access to shared indexes should be limited as much as possible, preferably to one or two users. This will minimize locking out of other users while the index is being updated and will also protect the shared indexes from accidental erasure. Write and read access to shared indexes is controlled completely by the network's access permission settings.

dtSearch stores directory information using relative paths rather than absolute paths. This makes it easy to avoid drive mapping problems: just keep each index on the same drive as the documents indexed. See "[Relative Paths](#)" in the "Working with Indexes"

chapter for more information about this feature.

Quick Start -- Overview

This section of the manual is intended to help you get started using dtSearch (either the DOS or the Windows version). It explains very briefly how to search with and without a document index and how to build an index. Each of these subjects is covered in more detail in the rest of the manual.

Before you begin, you should install dtSearch on your hard disk. You should also have some documents on your hard disk to index and search.

dtSearch can perform three types of searches: index, unindexed, and combination:

- * An index search uses a document index to quickly identify documents that satisfy a search request. A document index is a type of database that dtSearch builds from a collection of documents. The database tells dtSearch where each word appears in each document, so that dtSearch can find documents containing a particular word or combination of words very quickly.
- * An unindexed search reads each file to be searched and checks whether it satisfies a search request. Unindexed searches are much slower than index searches but are useful as a way to include recently-created documents in a search.
- * A combination search is a search that combines an index search with an unindexed search.

Using menus, dialog boxes and help

When you start dtSearch, you will see the main menu bar at the top of the screen. The menu bar at the top of the screen lists: File, Edit, Search, Index, Window, Options, Help. Each of these is the name of a menu. To access a menu, move the cursor to the one you want and press ENTER or click on it with the mouse. A "pull-down" menu will appear below the menu bar at the top of the screen. To select an item from the menu, move the cursor to the one you want and press ENTER or click on it with the mouse. As you move the cursor to each option in a menu, a line at the bottom of the screen will briefly describe what the menu option does.

If you are viewing a document or search results, you can get to the main menu in any of the following ways:

- * Press F10.
- * Click on the main menu with the mouse.
- * Press ALT + the first letter of any of the menu options (for example, ALT-F to get into the File menu).

Most actions in dtSearch involve a dialog box, which is simply a box that appears on the screen listing information dtSearch needs in order to perform an action. Dialog boxes are explained in more detail below. For now, here is all you need to know to use dialog boxes in dtSearch (both the DOS and Windows versions):

- * If you have a mouse, you can select anything in a dialog box by clicking on it with the mouse.
- * To select or unselect something using the keyboard, press SPACEBAR.
- * To move to the next item in a dialog box, press TAB. To move back to the previous item press Shift-TAB.
- * If an item in a dialog box has a highlighted letter in it, you can press ALT + the letter to get to that item quickly.
- * In a list of options, use the arrow keys to move the cursor.
- * Press ESCAPE (or choose the Cancel button) to get out of a dialog box without doing anything.
- * Choose the OK button to do whatever the dialog box does.

To get help, just press F1 and use the cursor keys to move around the help screen that appears. See the manual section on help for more information.

Quick Start -- Unindexed Search

1. Choose Search in the main menu.
2. Choose Unindexed Search. The "Unindexed Search" dialog box will appear. This dialog box allows you to specify what you want to search for and where you want to search.
3. Choose Search Request to enter your search request. A basic search request consists of the words or phrases you want to search for, connected by:

AND	both words must be present
OR	at least one of the words must be present
NOT	the next word must not be present (use with AND or OR)
W/5	the words must occur not more than 5 words apart (you can use other numbers, such as W/10, W/20, etc.)

Examples:

apple and pear
apple w/5 pear
apple sauce w/5 grape juice
apple and (pear w/5 banana)
apple and not pear

4. Choose the Select Directories button to select the directories you want to search. A diagram of all of the directories on the current disk drive will appear. To select a directory, press SPACEBAR or click on it with the mouse. To select a directory and its subdirectories, press the plus ("+") key on the numeric keypad or double-click it with the mouse.

To see another disk drive, press CTRL + the letter of the drive you want, or use the mouse to click on the drive letter in the list of drives next to the directory tree. After you are done selecting directories, choose OK to save your selections.

5. Choose OK to start the search.

Quick Start -- Viewing Search Results

1. After a search is complete, a short menu will appear listing options for sorting search results (sort by name, date, number of hits, etc.). Pick one of the options, and the results of your search will appear in a window.
2. To view a document, move the cursor to the document you want and press ENTER, or double-click with the mouse on the name of the document. The document will appear in another window, overlaying the first.
3. To see the hits in a retrieved document, press F3. (In dtSearch for Windows, you can also use the Hit button.)
4. To close a window displaying a document or search results, press ESCAPE. To leave the window open and switch to another window, press TAB or click on the other window with the mouse.

Quick Start -- Indexing Documents

First, create an empty index:

1. Choose Index in the main menu and then choose Create Index (Basic) in the Index menu.
2. Enter the name of the index you want to create.
3. Choose OK to create the index.

Next, add documents to the index:

1. Choose Index in the main menu and then choose Add Documents to Index in the Index menu.
2. In the Select Index box, move the cursor to the index you want to add the documents to.
3. Choose Select Directories to select the directories containing the files you want to index. The directory selection box that appears works just like the one described above in "Searching without an index."
4. Choose OK to start adding documents to the index.

Quick Start -- Index Search

1. Choose Search in the main menu.
2. Choose Index Search.
3. Under Search Request, enter your search request.
4. Choose Select Indexes and check off indexes to search.
5. Choose OK to start your search.
6. See "[Viewing Search Results](#)," above.

Help on Help

When you are in a menu, a line of text at the bottom of the screen will briefly explain the purpose of each menu option as you move the cursor to it.

If you need more information about a dtSearch feature, you can access the hypertext help system at any time by pressing the F1 key or by choosing Help from the main menu. The help system provides a comprehensive manual, with an index and table of contents, that explains all of the features of dtSearch.

When you press F1, an explanation of the current function or menu option will appear. You can use the cursor keys to scroll through the help message.

At the top of the help screen you will see a button bar listing the following options:

Contents	View help table of contents
Search	Search for a topic by keyword.
Back	Go back to a topic you were viewing earlier.
History	View list of topics you previously viewed.
<<	Go to the previous topic in the help file.
>>	Go to the next topic in the help file.

Some help topics contain hypertext links to other topics. These links will appear as highlighted words. To use a hypertext link, press TAB to move the cursor to the highlighted word and press ENTER, or click on the highlighted word with the mouse.

The help index is a list, in alphabetical order, of all of the help topics. To see the help index, choose Index from the Help menu. The table of contents is like the index except that it is organized like the table of contents of a book. To see the table of contents, choose Contents in the Help menu. In the index and table of contents, press TAB to see a highlighted bar marking the currently selected topic. To move the bar, use the TAB key. Press ENTER or click with the mouse to see the selected topic.

What is a Document Index?

A document index is a database that stores the locations of all of the words in a group of documents, except for noise words such as "but" and "if." Once you have built an index for a group of documents, dtSearch can use it to perform very fast index searches on those documents.

A document index is usually about one fourth the size of the original documents, although this may vary considerably depending on the number and kinds of documents in the index. However, to build an index, dtSearch needs free space (on the drive containing the index) at least equal to the size of the documents to index. This is because dtSearch creates temporary files during indexing.

To build an index of a group of documents:

1. Choose Create Index in the Index menu to create an empty index, and
2. Choose Add Documents to Index in the Index menu to add documents to the index.

Index Menu

Choose Index in the main menu to get into the Index menu. This menu lists options to

- * create an index,
- * create an index using advanced options,
- * add documents to an index,
- * compress an index,
- * create or execute a batch script
- * rename, copy, delete, or recognize an index,
- * display information about an index,
- * verify that an index is not damaged,
- * list the words in an index, and
- * create or change index libraries.

Creating an Index

There are two ways to create an index in dtSearch: a "basic" version and an "advanced" version.

Create Index (Basic)

Choose Create Index (Basic) in the Index menu to create a new index. A dialog box will appear containing a single space to fill in for the name of the index. Enter any combination of letters, numbers or punctuation up to 16 letters long. Choose OK to create the index.

Note: If you "create" an index that already exists, you will clear the previously existing index (the documents will, of course, be unaffected). dtSearch will ask you to confirm that you really want to do this.

Create Index (Advanced)

Choose Create Index (Advanced) in the Index menu if you want to use the advanced options listed below:

Path

This allows you to specify the directory where dtSearch will store the index. If you leave this blank, dtSearch will create the index in a subdirectory of the dtSearch directory. If you enter a directory name, the name should be different for each index. dtSearch will create a new directory for the index using the name that you supply. (The path does not have to be a subdirectory of your dtSearch directory.)

Store text with index

Set this checkbox if you want to create an archive index, which contains the text of indexed documents in compressed form. (See "Archive Indexes," below, for additional information on this option.)

Case sensitive index

Set this checkbox if you want dtSearch to take capitalization into account in indexing words. In a case sensitive index, "APPLE," "Apple," and "apple" would be three different words. For most users, this would be a very bad idea since most users would like to retrieve a document containing "Apple" in a search for "apple." This option is useful mainly for programmers who want to index case-sensitive source code.

Accent sensitive index

Set this checkbox if you want dtSearch to take accents into account in indexing words. In an accent sensitive index, "eclair" and "eclair" are two different words. Again, for most users this is not a good idea, since this option increases the chance that you will miss retrieving a document because an accent was omitted in one

letter. In an accent insensitive index, accents are stripped from letters according to the rules set up in your dtSearch alphabet file. See the manual section on the dtSearch ALPHABET utility for more information on this feature.

Adding Documents to an Index

To add documents to an index, choose Add Documents to Index in the Index menu. The Add Documents to Index dialog box will appear. In the upper left corner there will be a list of the indexes you have created. Pick the index you want to use from this list. Below is a brief summary of the options in the Add Documents to Index dialog box. These options are discussed in more detail in the rest of this chapter.

Select Directories

To select directories to be indexed, choose the Select Directories button. The "Select Directories" dialog box will pop up. Check off the directories you want to index and choose OK to save your selections. The directories you selected will be displayed in the Add Documents to Index dialog box.

Filename Filters

Under Filename Filters, enter file name filters (e.g., *.DOC, *.TXT, etc.) to use to select documents to add. If you leave this field blank, dtSearch will index all of the files in the directories you selected.

Under Exclude Filters, enter filters for any files you do not want to include in the index.

Compress Index

Check this box if you want dtSearch to compress the index after adding documents. Compressing an index can take a while, especially with very large indexes, but it makes searches much faster. You can also compress an index using the Compress Index option in the Index menu.

Update Files in Index

Check this box if the index already contains some documents, and you want dtSearch to reindex any documents that have been changed. dtSearch will check every document in the index and, if the document has been edited, will reindex the document. If the document no longer exists, dtSearch will remove it from the index.

Clear Index

Check this box if you want dtSearch to "clear" the index before indexing. "Clearing" an index is essentially the same as re-creating it. All information in the index will be erased.

When you are ready to begin indexing, choose OK.

In most cases, you will not have to worry about the file format of the documents being indexed because dtSearch will detect the format of each document automatically. However, some older word processor formats cannot be detected automatically. XyWrite, WordPerfect 4.2 and WordStar versions before version 4.0 fall into this category. To tell dtSearch how to recognize such documents, choose File Types in the

Options menu. (See the section on "File Types" in the "Options" chapter for more information about this feature.)

Tip: If you are indexing documents stored on floppy disks, you may find it useful to store the documents on each disk in a subdirectory named after the disk. For example, if you have disks labelled "SMITH" and "JONES," move the documents on the SMITH disk into a directory called "SMITH," and move the documents on the JONES disk into a directory called "JONES." This will help you to locate the documents after a search. You can see which disk has the documents you want by looking at the directory name in the search results window.

Selecting Directories to Index

The Select Directories to Index dialog box allows you to pick the directories you want dtSearch to index from a list of all of the directories on your computer. The left side of the dialog box displays all of the directories on one disk drive, with a check box next to each directory name. The right side of the dialog box lists all of the disk drives you can access.

- * To select a directory, click on it with the mouse, or move the cursor to it and press SPACEBAR.
- * To select a directory and its subdirectories, double-click it with the mouse, or move the cursor to it and press + (the plus sign).
- * To change disk drives, click on the drive letter with the mouse, or hold down the CTRL key and press the letter of the drive you want (for example, CTRL-D to switch to drive D).
- * To clear all selections for the current drive, choose the Clear Drive button. To clear all selections for all drives, choose the Clear All button.
- * To update the list of directories for a drive, choose the Reread Drive button. Reading the list of directories for a drive can be time-consuming. To save time, dtSearch keeps a copy of the directory tree for each drive and only updates it when you tell it to (by choosing this button). You should do this whenever you create a new directory and want to be able to index documents in that directory.

When you are done selecting directories, choose OK to save your selections.

Filename Filters

A filename filter is a pattern, like *.* , *.DOC, or FILE??10.DAT, that you can use to tell dtSearch which files you want it to search or index in a directory. For example, if you have a directory of word processing files, and want to search all of the files beginning with SMITH and having the extension DOC, you would use the filter SMITH*.DOC.

A "?" matches any single character, so SMITH?.DOC would match SMITH1.DOC, but not SMITH123.DOC.

An asterisk ("*") in a file name filter matches any number of characters, so SMITH*.DOC would match SMITH001.DOC, SMITHAAA.DOC, etc.

To use more than one filter, just list the filters, separated by spaces. Example:

```
SMITH*.DOC JONES*.DOC *.DAT
```

If you do not specify a filename filter, dtSearch will index all of the files in the directories selected.

"Exclude" filters work the same as ordinary filters. They just specify files that you do not want to include.

Compressing an Index

When you reindex a document that you have previously indexed, dtSearch marks the information about the old version of the document as "obsolete" but does not remove it from the index. Compressing an index removes this obsolete information from the index.

Even if you have not reindexed any documents, compressing an index may still be useful if you have built the index in several separate indexing jobs. Compress will reorganize the index for faster searching. If you have built an index in a single indexing job, compressing it will have no effect.

The major disadvantage of compressing an index is that it can take a long time, since dtSearch rebuilds the entire index when it compresses it.

There are two ways to compress an index.

- * First, you can tell dtSearch to compress an index after adding documents to it. To do this, check the Compress Index option in the Add Documents to Index dialog box.
- * Second, you can choose Compress Index in the Index menu, select the index you want to compress, and choose OK.

When dtSearch is compressing an index, you can halt compression by pressing the Cancel button. When you halt compression, dtSearch will restore the index to its uncompressed state.

Index Capacity

A document index can contain up to 15,000 documents. If you try to add more than 15,000 documents to an index, you will get an "Index is Full" message. However, you will still be able to reindex documents that are already in the index. When dtSearch reindexes a document that is already in the index, it treats the document as a new document and marks the old version of the document in the index as "obsolete." When you compress an index, obsolete documents are removed. If the total number of documents, including obsolete documents, exceeds 30,000, then you will have to compress the index before you can update it.

An index library is a collection of up to 25 indexes. Most people will only need a few indexes and so will not have to learn about index libraries. By default, dtSearch uses an index library called "IXLIB.ILB". If you need to use more than 25 indexes, then you can create additional index libraries. See the chapter on "Working with Indexes" for information about how to do this.

Indexing Binary Files

By default, dtSearch will index and search all files you have selected to be indexed. If a file is in a format that dtSearch does not recognize, dtSearch will index everything in the file, character by character, as if it were text. This can add a lot of garbage words to your indexes. These garbage words will make the index larger and will slow indexing and searching.

There are four ways to avoid indexing garbage words in binary files:

- (1) Keep text files in separate directories and only index files in those directories.

When you are indexing files, use filename filters to selectively include text files or exclude binary files. For example, if all of your WordPerfect documents have names ending in .DOC, you could index "*.DOC".

- (3) Choose Preferences in the Options menu and check the Do not index binary files checkbox in the Preferences dialog box. Files that dtSearch interprets as being binary will be ignored. Files in a word processor format that dtSearch does not recognize will be interpreted as binary and ignored.
- (4) Use the "Filtered Binary" file type. A "Filtered Binary" file is indexed using an algorithm that attempts to distinguish text from non-text data. The algorithm will greatly reduce the amount of garbage words indexed when you index a binary file. It will also greatly improve the appearance of binary files when you view them in dtSearch.

To use the Filtered Binary file type, choose File Types from the Options menu and choose "Add new item". The "Specify File Type" dialog box will appear. Choose "Filtered Binary" and, under "Filename Pattern," enter "*.*". This will tell dtSearch to interpret every document in a format that it does not recognize as a filtered binary file.

You can also enable the Filtered Binary format more selectively by entering a more specific pattern (such as *.DAT) under Filename Pattern.

To see the effect of the Filtered Binary format, use View File to view a binary file such as C:\COMMAND.COM, enable the Filtered Binary file type as described above, and then view C:\COMMAND.COM again.

See "File Types" in the Options chapter for more information about setting up file type specifications.

Archive Indexes

dtSearch can build an index of a group of documents that contains, as part of the index, a copy of the text of the documents indexed. The text is stored in compressed form. This means that you can index the documents, remove them from your hard disk, and still search and browse the text that you indexed.

An index that contains a copy of the text of the indexed documents is called an "archive" index. To create an archive index, choose Create Index (Advanced) in the Index menu and check the Store text with index checkbox.

An archive index does not compress and store the actual documents indexed. Instead, dtSearch extracts a copy of the text from each document and stores that text in the index. Thus, if you added a WordPerfect file called "SMITH.DOC" to an archive index, the text of SMITH.DOC would be stored in the index, but you could not extract SMITH.DOC itself from the index. (SMITH.DOC would remain unchanged on your hard disk.)

Note: Archive indexes are not a safe place to store your only copy of a document. If an archive index becomes damaged for any reason, you may not be able to extract the text from the index. (And in any case the archive stores only the text; there is no way to get the original document from an archive.) For this reason, you should always keep another copy of any text stored in an archive index.

Deleting an Index

Deleting an index does not affect the original documents. It just removes the index from your system. To delete an index, choose Delete Index from the Index menu, select the index to delete, and choose OK. dtSearch will ask you to confirm that you really want to delete the index.

Renaming an Index

To rename an index,

- * choose Rename Index from the Index menu,
- * select the index to be renamed,
- * enter the new name for the index, and
- * choose OK.

Note that the name of the directory in which the index is stored will not be affected.

Copying an Index

To copy an index,

- * choose Copy Index from the Index menu,
- * select the index to be copied in the Copy Index dialog box, and
- * enter a new name and directory for the copy. The name and directory of the copy must be different from the original index.

Like the directory specified in "Create Index (Advanced)," the directory that you copy an index to should not already exist. If the directory that you specify already contains an index, dtSearch will ask you to confirm that you want the new index to overwrite the old index. (A directory can only contain one index.)

Recognizing an Existing Index

Although dtSearch provides a way to copy indexes, you may in some cases wish to copy indexes using another program and then use dtSearch to search the indexes. For example, if someone created an index and gave you a copy, you might want to just copy the disk or disks using the DOS copy command. However, if you then tried to search that index with dtSearch, the index that you copied would not appear in the "Indexes to Search" list because your copy of dtSearch would not know about the index.

The Recognize Index function solves this problem. To recognize an index, select "Recognize Index" in the Index Menu. A dialog box will appear listing the files in the current directory and other directories you can select. Use the dialog box to locate one of the files in the index you want to recognize and choose OK. (dtSearch index files have names like "INDEX_R.IX" and "INDEX_F.IX". They always begin with "INDEX_" and end with ".IX".) dtSearch will look in the directory for the index, extract the information it needs to "recognize" the index, and add the index to the list of indexes in the current index library.

Index Information

To get information about an index, choose Index Information in the Index menu. A dialog box will appear displaying the following information about the currently selected index:

- * When it was created
- * When it was last modified or compressed
- * How much disk space it occupies
- * How many words it contains
- * How many documents it contains

The Index Information screen also lists the number of "Obsolete" documents. When dtSearch reindexes a document that is already in the index, it treats the document as a new document and marks the old version of the document in the index as "obsolete." When you compress an index, obsolete documents are removed.

Verifying an Index

To verify that an index is in good condition, choose Verify Index in the Index menu. As dtSearch examines the index, it will list every word, filename, and directory name in the index. When dtSearch is done verifying the index, it will tell you whether the index has been damaged.

List Words in Index

Choose List Words in Index in the Index menu to generate a list of all of the words in an index. Select the index you want to list and choose OK. A second dialog box will appear asking for the name of a file to store the words in. Enter the name of a file and choose OK or press ENTER.

Index Libraries

An index library is a collection of up to 25 indexes. dtSearch uses index libraries to record the names and locations of the document indexes that you create. When you select indexes to search, or pick an index to update, compress, etc., the list of indexes displayed comes from the current index library.

If you do not need to use more than 25 indexes, you do not need to worry about index libraries. (25 indexes will hold up to 375,000 documents.) dtSearch starts out with a library called "IXLIB.ILB" that will hold any indexes that you create.

If you need to use more than 25 indexes, choose Create Library in the Index menu to create a new library. A dialog box will appear allowing you to enter the name of the new library. Enter a name for the new library and choose OK. (The name of the library must end in ".ILB". If the name you enter does not end in ".ILB", dtSearch will automatically add ".ILB" to the name.) When you create a library, that library becomes your current library. The new library will be empty. To add indexes to the library, use Create Index, Copy Index or Recognize Index.

Use Change Library in the Index menu to change the current index library. When you select Change Library, a dialog box will appear containing the name of the current index library. To see the names of all of the index libraries you have created, enter "*.ILB" in the dialog box and press ENTER.

Relative Paths

By default, dtSearch uses relative, rather than absolute, paths in indexes and index libraries. For example, suppose your documents are in I:\CHRON\DOCS and your index is in I:\CHRON\INDEX. The absolute path for the documents would be I:\DOCS. The relative path from I:\CHRON\INDEX to I:\CHRON\DOCS would be ..\DOCS. The relative path is more flexible because, if you move the entire I:\CHRON directory to another location, such as J:\CHRON or I:\SMITH\CHRON, the relative paths would remain valid.

Paths in an index are stored relative to the location of the index. The table of indexes in an index library stores index directories relative to the location of the index library.

Relative paths are useful for shared indexes on networks when a physical drive uses a different drive letter for different users. (For example, if some users see it as S: drive and others see it as T: drive.) As long as documents reside on the same drive as their index, dtSearch can use relative paths to avoid such drive mapping problems.

Relative paths are also useful for text database publishers who want to distribute a package with text and an index. If the index is built using the Relative Paths option, users will be able to install the package on any drive and in any directory without affecting the validity of the index.

The only disadvantage to using relative paths is that, if you move an index to a different location and do not move the documents with the index, dtSearch may no longer be able to locate the documents because the relative path information will point to the wrong directories.

If you need to disable the Relative Paths option, edit your OPTIONS.DAT file to include the line "RelativePaths = No". Indexes created with Relative Paths disabled will store complete path information for every document.

Search Menu

Choose Search in the main menu to get into the Search menu. The Search menu offers three ways to search for documents:

- * Choose Index Search to search using one or more document indexes. An index search is the fastest way to search for documents. Before you can do an index search, you must first build an index.
- * Choose Unindexed Search to directly search files in one or more directories.
- * Choose Combination Search to combine an index search with an unindexed search.

The search menu also lists options to view previous search results or previous search reports. To view an old search or search report, choose Previous Search or Previous Search Report in the Search Menu. dtSearch will list all of the searches it has saved. Select the one you want to see and choose OK.

Search Tools

At the top of each search dialog box is a Search Tool box that can display any of the four search tools described below. To select one of the tools, use the Select Tool radio buttons to the right of the Search Tool box. The four search tools are described below:

Word List A scrolling list of the words in the index you have selected. Next to each word is a number, which is the number of times the word occurs in the index.

As you type in a search request, the scrolling list will display the words in the index that are closest to the word you are typing.

If you have selected more than one index to be searched, the highlighted index will be the one listed. You can select the index displayed in the Word List by clicking on the index you want to see in the Indexes to Search box.

Hints The basics of creating search requests.

History A list of your most recent search requests.

Next to each request is a pair of numbers, like "35/283," which tells you the number of files and hits that the request found.

Macros A list of macros you have defined.

Next to the search tools is an "Insert" button. Choose this button to insert a word, macro, or previous search request into the search request you are typing in.

Index Search

An index search uses one or more document indexes to do a search and is the fastest way to search for documents. (Before you can do an index search, you must first build an index. See the chapter on "Indexing Documents" for more information.)

To do an index search, choose Index Search in the Search menu. The Index Search dialog box will appear.

At the top of the dialog box is the Search Tools panel, which displays one of the following:

- Word List A list of the words in the index you have selected.
- Hints The basics of creating search requests.
- History A list of your most recent search requests.
- Macros A list of macros you have defined.

Next to the Search Tools panel are two buttons: Insert and Options button. Choose Insert to insert something from the Search Tools panel into your search request. Choose Options to access advanced searching options.

Just below the search tool panel is a box for you to type in your search request.

Choose the Select Indexes button at the bottom of the dialog box to select indexes to search. A dialog box will appear listing the indexes in your index library. Select the indexes you want to search and choose OK. The indexes you selected will appear in the Indexes to Search list.

Choose OK to start the search.

Unindexed Searches

In an unindexed search, dtSearch directly searches every file that you ask it to search, looking for documents that match your search request. Unindexed searches are much slower than index searches.

To start an unindexed search, choose Unindexed Search from the Search menu. The Unindexed Search dialog box will appear.

At the top of the dialog box is the Search Tools panel, which displays one of the following:

Hints	The basics of creating search requests.
History	A list of your most recent search requests.
Macros	A list of macros you have defined.

Next to the Search Tools panel are two buttons: Insert and Options button. Choose Insert to insert something from the Search Tools panel into your search request. Choose Options to access advanced searching options.

Just below the search tool panel is a box for you to type in your search request.

Choose the Select Directories button at the bottom of the dialog box to select directories to search. The Select Directories to Search dialog box will appear. Select the directories you want to search and choose OK. The indexes you selected will appear in the Directories to Search list.

Choose OK to start the search.

Combination Searches

A combination search is a search that combines an index search with an unindexed search.

To do a combination search, choose Combination Search in the Search menu. The Combination Search dialog box will appear.

At the top of the dialog box is the Search Tools panel, which displays one of the following:

Word List	A list of the words in the index you have selected.
Hints	The basics of creating search requests.
History	A list of your most recent search requests.
Macros	A list of macros you have defined.

Next to the Search Tools panel are two buttons: Insert and Options button. Choose Insert to insert something from the Search Tools panel into your search request. Choose Options to access advanced searching options.

Just below the search tool panel is a box for you to type in your search request.

Choose the Select Indexes button at the bottom of the dialog box to select indexes to search. A dialog box will appear listing the indexes in your index library. Select the indexes you want to search and choose OK. The indexes you selected will appear in the Indexes to Search list.

Choose the Select Directories button at the bottom of the dialog box to select directories to search. The Select Directories to Search dialog box will appear. Select the directories you want to search and choose OK. The indexes you selected will appear in the Directories to Search list.

Choose OK to start the search.

Selecting Directories to Search

The Select Directories to Search dialog box allows you to pick the directories you want dtSearch to search from a list of all of the directories on your computer. The left side of the dialog box displays all of the directories on one disk drive, with a check box next to each directory name. The right side of the dialog box lists all of the disk drives you can access.

- * To select a directory, click on it with the mouse, or move the cursor to it and press SPACEBAR.
- * To select a directory and its subdirectories, double-click it with the mouse, or move the cursor to it and press + (the plus sign).
- * To change disk drives, click on the drive letter with the mouse, or hold down the CTRL key and press the letter of the drive you want (for example, CTRL-D to switch to drive D).
- * To clear all selections for the current drive, choose the Clear Drive button. To clear all selections for all drives, choose the Clear All button.
- * To update the list of directories for a drive, choose the Reread Drive button. Reading the list of directories for a drive can be time-consuming. To save time, dtSearch keeps a copy of the directory tree for each drive and only updates it when you tell it to (by choosing this button). You should do this whenever you create a new directory and want to be able to search documents in that directory.

When you are done selecting directories, choose OK to save your selections.

Search Options

Choose the Options button in a search dialog box, or choose Search Options in the Options menu, to access the Search Options dialog box. This dialog box allows you to specify the following options:

Fuzzy Searching

Check this box if you want all of your searches to be "fuzzy" searches. Fill the level of fuzziness you want (from 1 to 10) in the Fuzziness box. If you want only some of your searches to be fuzzy, you can use the % character.

Phonic Searching

Check this box if you want all of your searches to be phonic searches. If you want only some of your searches to be phonic, you can use the # character.

Stemming

Check this box if you want dtSearch to use stemming in all searches. If you want only some of your searches to use stemming, use the ~ character.

If you have created your own stemming rules to replace the default rules provided with dtSearch, enter the name of the file containing the rules under Stemming Rules.

Options for Unindexed Searches

File name filters

Leave this blank to include all files. Otherwise, enter a list of filters (such as "*.DOC") separated by semicolons.

Exclude filters

If there are specific files you do not want included, enter a list of filters identifying those files.

Skip binary files

Check this box if you do not want dtSearch to search "binary" files (files that use a format that dtSearch does not recognize).

See "File Types" in the Options chapter for more information about handling unrecognized file formats.

Case sensitive

Check this box if you want the search to distinguish between lower and upper case letters, so that a search for "apple" would not find "Apple".

Accent sensitive

Check this box if you want the search to distinguish between accented and unaccented letters.

Sorting Search Results

After a search is complete, the "Display Search Results" dialog box will appear, listing several different ways to display the results of your search:

Name: Sort by name, in alphabetical order

Hits: Sort by number of hits (also called "relevance ranking")

Date: Sort by date of the document

Unsorted displays documents in the order they were found

Select the way you want to sort your search results and choose OK to display the results of your search. Choose Cancel to return to the main menu without viewing search results.

Search Requests (Overview)

This chapter describes the rules for composing search requests in dtSearch. The next chapter describes how to perform index and unindexed searches.

A search request consists of a group of words, phrases, or macros linked by connectors such as "AND" and "OR" that indicate the relationship between them.

If you use more than one connector, you should use parentheses to indicate precisely what you want to search for. For example,

apple and pear or orange

could mean "(apple and pear) or orange," or it could mean "apple and (pear or orange)." Here are some more examples:

- * apple and pear: both words must be present.
- * apple or pear: either word can be present.
- * apple w/5 pear: apple must occur within 5 words of pear.
- * apple and not pear: only apple must be present.
- * @addr contains 123: the segment @addr must contain 123.
- * xname "SMITH*.DOC": filename matches SMITH*.DOC.
- * xdate is 11/92: file was modified in November 1992.
- * apple w/5 xfirstword: "apple" must occur in the first five words.
- * apple w/5 xlastword: "apple" must occur in the last five words.

Noise words, such as "if" and "the" may not be included in searches.

Search terms may include the following special characters:

- ? match any character
- * match any number of characters
- % fuzzy search
- # phonetic search
- ~ stemming

Stemming and fuzzy and phonic searching can be enabled globally for all searches using the Search Options dialog box.

Words and Phrases

You do not need to use any special punctuation or commands to search for a phrase. Simply enter the phrase the way it ordinarily appears. You can use a phrase anywhere in a search request. Examples:

apple w/5 fruit salad

If a phrase contains a noise word, then you cannot search for it as a phrase, since the noise word will not be found. For example, you could not search for the phrase statue of liberty, since the noise word "of" will not be in the index. Instead, use the W/N connector to search for statue w/2 liberty.

Punctuation inside of a search word is treated as a space. Thus, "can't" would be treated as "can t," a phrase consisting of two words: "can" and "t". "1843(c)(8)(ii)" would become "1843 c 8 ii" (four words). (You can customize the way dtSearch handles punctuation in text by using the dtSearch ALPHABET utility.)

dtSearch uses two built in search words to mark the beginning and end of a file -- XFIRSTWORD and XLASTWORD. The terms are useful if you want to limit a search to the beginning or end of a file. For example, "apple w/10 XLASTWORD" would search for the word "apple" within 10 words of the end of a document.

Wildcards (* and ?)

A search word can contain the "wildcard" characters "*" and "?". A "?" in a word matches any single character, and a "*" matches any number of characters. The wildcard characters can be in any position in a word. For example:

appl* would match apple, application, etc.

cipl would match principle, participle, etc.

appl? would match apply and apple but not apples.

Use of the "*" wildcard character near the beginning of a word will slow searches somewhat.

Fuzzy Searching

Fuzzy searching will find a word even if it contains typos. For example, a fuzzy search for "apple" will find "apple." Fuzzy searching can be useful when you are searching text that may contain misspelled words. It is especially helpful when searching text that has been scanned using optical character recognition (OCR).

There are two ways to add "fuzziness" to your searches.

- * To make all of your searches fuzzy searches, check the Fuzzy searching checkbox in the Search Options dialog box and indicate the level of fuzziness (from 1 to 10) that you want.
- * You can also add fuzziness selectively using the % character. The number of % characters you add determines the number of differences dtSearch will ignore when searching for a word. The position of the % characters determines how many letters at the start of the word have to match exactly. Examples:

ba%nana Word must begin with "ba" and have at most one difference between it and "banana."

b%%anana Word must begin with "b" and have at most two differences between it and "banana."

Phonic Searching

Phonic searching looks for a word that sounds like the word you are searching for and begins with the same letter. For example, a phonic search for "Smith" will also find "Smithe" and "Smythe."

To ask dtSearch to search for a word phonically, put a # in front of the word in your search request. Examples: #smith, #johnson.

To make all of your searches phonic, check the "Phonic Searching" checkbox in the Search Options dialog box. Phonic searching is somewhat slower than other types of searching and tends to make searches excessively over-inclusive, so it is usually better to use the # symbol to selectively do phonic searches.

Stemming

"Stemming" tells dtSearch to find words with the same "stem" as the search word. For example, a search for "fish" would also find "fishing." A search for "applied" would also find "applying," "applies," and "apply."

If you want to use stemming in all of your searches, check the Stemming box in the Search Options dialog box. (By default, the box is checked.) Stemming does not slow searches noticeably and is almost always helpful in making sure you find what you want.

If you want to add stemming selectively, add a ~ at the end of words that you want stemmed in a search.

The stemming rules included with dtSearch are designed to work with the English language. These rules are in the file STEMMING.DAT. If you need to implement stemming for a different language, or if you want to modify the English stemming rules that dtSearch uses, you can create a new set of stemming rules to be used in place of STEMMING.DAT. See the STEMMING.DAT file for more information about how to do this.

Noise Words

A "noise" word is a word such as the or if that is so common that it is not useful in searches. To save space and time, such words are ignored in index searches. You can modify the list of words defined as noise words by editing the file "DTSEARCH.NOI." You can use the Edit File function (in the File Menu) to edit DTSEARCH.NOI, or you can use your word processor. If you use your word processor, make sure that you save the file as a DOS text file (with the name name, DTSEARCH.NOI, in the directory where dtSearch is installed) so that dtSearch can read it.

The words in DTSEARCH.NOI do not have to be in any particular order, and can include "wild card" characters such as * and ?. However, noise words may not begin with wild card characters.

Search connectors, such as AND, OR, etc., should always be listed as noise words since it is not possible to search for them.

When you create an index, the index will store its own copy of the noise word list. Changes you make to DTSEARCH.NOI will be reflected in future indexes you create but will not affect existing indexes.

AND Connector

Use the AND connector in a search request to connect two expressions, both of which must be found in any document retrieved. For example:

- * apple and pear would retrieve any document that contained both words.
- * (apple or banana) and (pear w/5 grape) would retrieve any document that (1) contained either the word apple or the word banana, and (2) contained the word pear within 5 words of the word grape.

OR Connector

Use the OR connector in a search request to connect two expressions, at least one of which must be found in any document retrieved. For example, "apple or pear" would retrieve any document that contained apple, pear, or both words.

W/N Connector

Use the W/N connector in a search request to specify that one word or phrase must occur within N words of the other. For example, "apple w/5 pear" would retrieve any document that contained the word apple within 5 words of pear.

The following are some examples of search requests using the W/N connector:

- * (apple or pear) w/5 banana: either apple or pear must occur within 5 words of "banana."
- * (apple w/5 banana) w/10 pear: apple must occur within 5 words of banana, and pear must occur within 10 words of both.
- * (apple and banana) w/10 pear: both apple and banana must occur within 10 words of pear.

Some types of complex expressions using the W/N connector will produce ambiguous results and should not be used. In general, at least one of the two expressions connected by W/N must be a single word or phrase or a group of words and phrases connected by the "OR" connector. For example:

- * (apple and banana) w/10 (pear or grape): both apple and banana must occur within 10 words of either pear or grape.
- * (apple and banana) w/10 orange tree: both apple and banana must occur within 10 words of the phrase "orange tree."

The following are examples of ambiguous search requests:

- * (apple and banana) w/10 (pear and grape)
- * (apple w/10 banana) w/10 (pear and grape)

If you enter an ambiguous search request, dtSearch will display a message warning you of the error.

NOT and NOT W/N

Use NOT in front of any search expression to reverse its meaning. This allows you to exclude documents from a search. For example,

apple sauce and not pear

would retrieve documents containing the phrase "apple sauce" and not containing the word "pear." Note the need for an AND to connect the NOT to the rest of the search request. NOT standing alone can be the start of a search request. For example,

not pear

would retrieve all documents that did not contain the word "pear." If NOT is not the first connector in a request, you need to use either AND or OR with NOT. Here are two more examples:

apple or not pear: retrieve documents that either (1) contain the word "apple," or (2) do not contain the word "pear."

not (apple w/5 pear): retrieve documents that do not contain the word "apple" within 5 words of the word "pear."

The NOT W/ ("not within") operator allows you to search for a word or phrase not in association with another word or phrase. For example,

apple not w/20 pear

would search for instances of the word "apple" more than 20 words away from the word "pear." It will also retrieve files containing "apple" with no instances of "pear."

Unlike the W/ operator, NOT W/ is not symmetrical. That is, "apple NOT W/20 pear" is not the same as "pear NOT w/20 apple." In the "apple NOT W/20 pear" request, dtSearch searches for the word "apple" and excludes cases where "apple" is too close to the word "pear." In the "pear NOT W/20 apple" request, dtSearch searches for the word "pear" and excludes cases where "pear" is too close to "apple."

Search Macros

Macros can be useful for:

- * abbreviating long names or phrases that you use frequently, or
- * abbreviating segment definitions in segment searches.

A macro may contain anything that can be part of a search request. A macro has two parts: a name, which you use to refer to the macro in search requests, and the expansion, which is what the macro is expanded to. For example, if you defined the macro "@IRC" to mean "internal revenue code," and then searched for "standard deduction w/3 @IRC," dtSearch would search for "standard deduction w/3 internal revenue code."

A macro name must begin with the "@" character (shift-2). This is how dtSearch distinguishes macro names from ordinary words in a search request.

Choose Macros in the Options menu to create or edit a macro. A dialog box will appear listing all of the macros you have created. To create a new macro, move the cursor to "<add new item>" and choose Edit. Move the cursor to an existing macro and select Edit to edit the macro.

When you choose Edit, a dialog box will appear with two spaces in it: one for the "Name" of the macro, and one for the "Expansion." Under Name, enter a single word (8 letters or less, beginning with "@") that you will use for this macro. Under Expansion, enter the meaning you want to assign to this macro. Choose OK to save your changes.

Segment Searches

A segment search is a search request that must be satisfied within a certain defined segment of a document. The segment is defined by words or phrases at the beginning and end of the segment.

The form of a segment definition is: beginning TO end, where beginning is the word or phrase that defines the start of the segment, and end is the word or phrase that defines the end of the segment. The only connector allowed in the beginning and end expressions in a segment definition is OR. Examples:

name to address

the segment begins with the word "name" and ends with the word "address."

name to (address or xlastword)

the segment begins with the word "name" and ends with the word "address" or the end of the file.

To search for an expression within a segment, use the CONTAINS connector. The expression in front of CONTAINS is the segment definition, and the expression following CONTAINS is what you are searching for. Examples:

- * (name to address) contains john smith
- * (address to phone) contains (oak w/10 lane)

If a document contains more than one instance of a segment, dtSearch will search each instance separately for text matching the search request.

Segment searches work well with documents that are broken into standardized segments. For example, a group of employee records might be in standardized documents formatted like this:

NAME: John Doe
ADDRESS: 123 Oak Lane
PHONE NUMBER: 555-1234
SOCIAL SECURITY NUMBER 000-00-0000
etc.

You can name segments using macros. In the above example, you could use the following macros:

@name: (name to address)
@addr: (address to phone number)
@phone: (phone number to social security number)

Then you could do a segment search like this:

(@name contains John Doe) and (@addr contains Oak)

The words in a segment definition ("name," "address," etc.) will not appear as hits after a search. Only the words being searched for in the segments ("John Doe," "Oak") will be highlighted.

Date and Filename Searches

To search for a file with a specific name, use XNAME. For example, if you want to find a file called FILENAME.EXT, search for:

```
xname "filename.ext"
```

The filename, like other search terms, can include wildcard characters ("*.TXT," "SMITH??.*", etc.) Unlike other search terms, a filename must be in quotation marks. This enables dtSearch to recognize special characters in the filename (such as the dot) that are treated as spaces in other search words. The filename cannot include a directory name or disk drive.

To search for a file that was last modified on, before, or after a certain date, use the XDATE search command, like this:

```
xdate is January 1, 1991  
xdate before January 1, 1991  
xdate after January 1, 1991
```

dtSearch can recognize a variety of date formats, such as: 1/1/91; 1/91; January 1, 1991; and Jan 1 91 (two-digit years are assumed to be in the twentieth century).

You can combine name and date searches with other types of searches using the usual search connectors. For example:

```
(xname "*.doc") and (xdate after 1/1/91) and (apple w/5 pear)
```

This would retrieve documents whose names end in .DOC, that were last modified after January 1, 1991, and that contain the word apple within 5 words of the word pear.

Viewing Search Results

After you do a search, a Search Results window will appear listing the documents that were retrieved by your search.

In dtSearch for DOS, a list of function keys will appear at the bottom of the screen when you are in a Search Results window. These function keys will work in dtSearch for Windows, but dtSearch for Windows also provides a button bar at the top of the Search Results window.

Choose Local Menu in the Window menu (F9) to pop up the Local menu for a search results window. This menu provides quick access to all commands that work with search results. All of the options listed below are available in the Local menu.

Finding Text

To search the list of files for something, choose Find in the Edit menu (F2). (Note: In a Search Results window, Find searches the list of documents, not the documents themselves.)

Copying Text

Choose Mark in the Edit menu (F6) to start marking text to copy to a file. Choose Copy in the Edit menu (F7) to copy the marked text.

Printing Text

Choose Print in the File menu to print the list of files. (To print multiple files, see "Selecting Files" below.)

Search Report

Choose Search Report in the Search menu to generate a search report listing all hits found in every retrieved document with a few lines of context. (To select specific documents for a search report, see "Selecting Files" below.)

KWIC

Choose KWIC in the Search menu to generate a "KWIC" view of a document listing all hits in the document with a few lines of context.

Selecting Files

If you want to print or copy multiple files, or see a search report, based on a few selected files rather than all of the files in the list, use SPACEBAR to select the files you want. A * (asterisk) will appear next to the file. To clear the *, press SPACEBAR again. To select all of the documents in the list, choose Select All Files in the Edit menu. To clear all selection marks from the list, choose Clear Selections in the Edit menu.

After selecting files, you can print, copy, or prepare a search report based on your selections.

Launching Files

Choose Launch to "launch" a document. If you have set up an application for the type of document you are viewing (for example, WordPerfect for a WordPerfect document), dtSearch will execute that application with the file you are viewing.

Cursor commands for the Search Results window

Top of list	Home,Home,Up
End of list	Home,Home,Dn
Page up	PgUp
Page down	PgDn

Menu and Window Commands

- * To get into the main menu, press F10 or click on the main menu with the mouse.
- * To get back to the Search Results window from the main menu or the local menu, press ESCAPE or click on the window with the mouse.
- * ESCAPE closes the Search Results window.
- * To view one of the documents in the list, move the cursor to it and press ENTER or double-click on the document with the mouse. The document you select will appear in a window overlaying the Search Results window.

Viewing a Retrieved Document

To view a file retrieved in a search, move the cursor to the file you want to see in the search results window and press ENTER. The document will appear in a new window overlaying the search results window. Hits from your search will be highlighted.

When you are viewing a retrieved document, you will see a list of function keys (in DOS) or a button bar (in Windows) similar to the one displayed in a Search Results window.

Choose Local Menu in the Window menu (F9) to pop up the Local menu for a retrieved document window. This menu provides quick access to all commands that work with retrieved document windows. All of the options listed below are available in the Local menu.

Finding Text

To search a document for a word or sequence of characters, choose Find in the Edit menu (F2).

Copying Text

Choose Mark in the Edit menu (F6) to start marking text to copy to a file.
Choose Copy in the Edit menu (F7) to copy the marked text.

Printing Text

Choose Print in the File menu to print the document.

Finding Hits

Choose Hit (F3) to search the document for the next hit from your search request.
Choose Next (F5) to see the next document retrieved in the search. Prev (Shift-F5) displays the previous document retrieved in the search.

Launching Files

Choose Launch (F8) to "launch" the document. If you have set up an application for the type of document you are viewing (for example, WordPerfect for a WordPerfect document), dtSearch will execute that application with the file you are viewing.

Cursor commands

Top of document	Home,Home,Up
End of document	Home,Home,Dn
Beginning of line	Home,Left
End of line	Home,Right or End
Page up	PgUp
Page down	PgDn

Menu and Window Commands

- * To get into the main menu, press F10 or click on the main menu with the mouse.
- * To get back to this window from the main menu or from the local menu, press ESCAPE or click on the window with the mouse.
- * To close a window, press ESCAPE. To leave the window open and switch to another window, press TAB.
- * See "[Viewing Multiple Windows](#)" for more information on viewing documents and search results in overlapping windows.

Local Menu

When you are viewing or editing a file or viewing search results, a retrieved document, a search report, or a Kwic view, press F9 (or click on the word "Local") to pop up the "Local" menu for the window you are in. You can also get into the Local menu by choosing "Local" in the Window menu.

The Local menu lists all of the things you can do with the window you are in. The Local menu is different for each type of window. For example, the Local menu for a search results window includes an option to generate a search report. The Local menu for a retrieved document includes an option to skip to the next document retrieved in the search. In the Local menu, you can move the cursor and select items just as you would in other dtSearch menus.

Finding Text in a Window

Choose Find (or press F2) to search for any text in a displayed document. dtSearch will ask you for the text to search for. Type in the text you want to find and choose OK. Find is like the search function in your word processor -- you can search for words, spaces, punctuation, etc. Capitalization is ignored, and the * and ? characters are searchable like any other characters (they are not treated as wildcards). If you use Find in a Search Results window, it will search the list of filenames, modification dates, etc., as it appears on the screen.

Find starts searching after the line that the cursor is on, so you may wish to move to the top of the document before beginning a search. Find will bring you to the beginning of the line containing the text searched for.

Finding Hits

After you have done a search and you have a retrieved document on the screen, choose Hit (or press F3) to quickly find the next hit from your search request in the document. For example, if you had searched for "apple and (pear w/5 banana)," pressing the F3 key while viewing a document would cause dtSearch to locate the next occurrence of one of the words "apple," "pear," or "banana" in the document you are viewing.

Find Hit will only find words that match a search request. In the above example, Hit would only find instances of "pear" within five words of "banana."

Kwic View

The "KWIC" ("Key word in context") function will display only the part of a document that contains terms matching your search request. When you are in a search results window, move the cursor to the name of the document that you want to see and choose KWIC in the Search menu. dtSearch will ask how many lines of context you want. This is the number of lines surrounding each hit that you want to see. Enter the number of lines that you want and choose OK.

A window will pop up over the search results window displaying a KWIC view of the document you selected. You can use most of the same browsing and menu commands in a KWIC window as you can in a retrieved document. Press F9 to pop up the local menu.

You can also see all of the document by moving the cursor to the name of the document and pressing ENTER or by double-clicking on the document name with the mouse. In addition, a file displayed in KWIC mode contains highlighted line and page markers to show where in the document the text appeared. These highlighted markers act as hypertext links into the full text of the document.

For example, suppose that you are viewing a document in KWIC mode and see a block of text with a marker "[Page 10 Line 15]." If you move the cursor to the marker and press ENTER (or double-click with the mouse), a window displaying the full document will pop up over your KWIC view, positioned to line 15 of page 10. To return to the KWIC view, press ESCAPE.

Search Reports

A search report lists each hit found in each of the documents retrieved in a search with a few lines of context surrounding it. It is like a combined KWIC view of every document retrieved in a your search. To create a search report, you must be in a Search Results window.

- * Choose Search Report from the Search menu.
- * The Search Report dialog box will pop up. In this dialog box, enter the number of lines of context you want surrounding each hit and choose OK.

You can create a search report including only a few selected files in a search results list. To do this, press SPACEBAR to mark the files you want included before you create the search report. A * (asterisk) will appear next to each selected file.

Search report windows use the same commands and function keys as KWIC windows.

Viewing Multiple Windows

In dtSearch, the space between the menu bar at the top of the screen and the bar at the bottom of the screen describing the current menu option is a workspace, like a desktop, that you can use for searching and browsing documents. As with a desk surface, you can place several documents on the surface and move them around so you can see the one that you want to read. Menus and dialog boxes will pop up over the desktop, but the underlying documents will remain until you remove them.

You can add search results windows, document windows, KWIC views, and search reports to the desktop.

- * Use TAB or the mouse to switch from one window to the next. (Use SHIFT-TAB to switch back.)
- * To close the window you are in, press ESCAPE.
- * To "cascade" your windows (rearrange them so that they overlap), choose Cascade from the Window menu.
- * To "tile" your windows (rearrange them so that they do not overlap), choose Tile from the Window menu.

Example

For an example of how to use multiple windows in dtSearch, try the following:

- * Do a search, then move the cursor to the name of a document and press SPACEBAR. The document you selected will appear.
- * Now press TAB. The search results window will appear, overlaying the document you were viewing.
- * Move the cursor to a different document and press SPACEBAR again. The new document will appear on top of the search results and the other document.
- * Press TAB repeatedly and each of the three windows will appear on top of the others in turn.
- * Press ALT-W to get into the Window menu and choose Tile. You will see all of the windows you have created arranged so that they do not overlap. Press TAB to move among the windows.
- * Press ALT-W again and this time choose Cascade. Now your windows will be arranged so that they do overlap. (To move or resize the windows, see below.)

* Finally, press ESCAPE three times to close each of the windows.

NOTE: Cascade and Tile rearrange only the windows existing on the desktop when these options are selected. If you add additional windows, you must choose Cascade or Tile again if you want to rearrange the new windows.

Resizing and Moving Windows

Click on the square in the upper left corner of the window (or press ALT-hyphen, e.g., ALT + the hyphen ("-") key) to pop up the Control menu. Choose either Move or Size and use the cursor keys to move the window or resize the window. Choose Maximize to "zoom" the window.

Printing a File

When you are viewing search results, a retrieved document, a KWIC view, or a search report, you can print the contents of the window you are viewing by choosing Print from the Local menu. Print will print the entire document, not just what appears on the screen.

When you select Print, the Print dialog box will appear. The Print dialog box allows you to set page length, width, and margins, headers, footers, and page numbering.

If you want to print to a file instead of to the printer, check the Print to File box. After you choose OK, dtSearch will ask for the name of the file to print to.

To select the printer to use, choose Printer Setup in the File menu.

In a Search Results window, you can select some or all of the files listed for printing. Use SPACEBAR to select the files you want. A * (asterisk) will appear next to the file. To clear the *, press SPACEBAR again. To select all of the documents in the list, choose Select All Files in the Edit menu. To clear all selection marks from the list, choose Clear Selections in the Edit menu.

Using the Mouse

In dtSearch for Windows, all document windows have the same basic structure. Surrounding the window is a frame. When the window is on top, the top of the frame will be blue (if you have a color monitor); otherwise, it will be white.

In the upper left corner, there will be a small square. Click on this square to activate the standard Windows Control menu, which contains options for closing, moving, resizing, or maximizing the window.

In the upper right corner, there will be a triangle. Click on this triangle to zoom the window, or to unzoom it if it is zoomed.

On the right edge will be a scroll bar. Click on the arrows or on the bar itself to scroll up and down in your document.

To resize a window, move the cursor to the bottom or one of the side edges of the window (the cursor will change to a double arrow), hold down the left mouse button and drag. To move the window, click on the top and drag.

At the top of the window, there will be a button bar listing commonly used functions. Click on any of these buttons to activate the function indicated.

Click the right mouse button to pop up the local menu listing things you can do with the current window.

Edit Menu

Choose Edit in the main menu to get into the Edit menu. The Edit menu lists options to mark and copy text.

- * To save a block of text from a file you are viewing, choose Mark to start marking the text
choose Copy to copy it to a file.
- * To save an entire file, choose Copy File.
- * To copy (or print) multiple files in a Search Results list, use Select File, Select All, and Clear Selections to select the files you want to copy.
- * To search the file you are viewing for a word or other sequence of characters, choose Find Text.

Marking and Copying Text

a. Marking

dtSearch provides three ways to mark text to be copied:

- * Choose Mark (F6) to start marking, then move the cursor to the end of the block.
- * Click on the start of a block and drag the mouse, holding the mouse button down, to the end of the block.
- * Move the cursor to the start of the block, hold down the SHIFT key to start marking, and move the cursor to the end of the block

b. Copying

Once you have marked text, choose Copy (F7) to copy the text to a file or, in Windows, to the clipboard. The Copy Text dialog box will appear, asking where you want to copy the text. If you ask to copy the text to a file that already exists, dtSearch will ask whether you want to overwrite the file or append the text to it.

The Copy Text dialog box also contains options allowing you to annotate the text you are copying.

Include filename

Check this box if you want the name of the file the text is copied from to appear at the top of the text.

Include page and line number

Check this box to add the page and line where the text appeared in the original document.

Annotation

In this box, you can enter a brief note to be copied with the text.

c. Editing

After you have collected text using Mark and Copy, you can edit it using Edit File in the File menu. Press ALT-F to get into the File menu (you do not have to close the window you are viewing) and choose Edit File. dtSearch will ask for the name of the file you want to edit. Enter the name of the file you used to store the copied text. An editor will then pop up allowing you to edit the text you copied. See "Editing a File" in the "File Menu" chapter for information about editing files using this editor.

You can switch between the editor and your other windows. In dtSearch for DOS, use TAB and SHIFT-TAB. In dtSearch for Windows, the editor is a separate program

(the Windows NOTEPAD editor) so use ALT-TAB to switch between the editor and dtSearch.

Copying a File

Choose Copy File in the Edit menu to copy the file you are viewing. The Copy File dialog box will appear. At the top of the dialog box will be the name of the file you are viewing. Below it will be a space where you can enter the name for the copy. To copy the file, enter a name and choose OK.

If the filename you enter already exists, dtSearch will ask if you want to overwrite the existing file. To suppress this message, clear the "Confirm Overwrites" check box.

To copy multiple files in a Search Results list, select the files you want to copy (press SPACEBAR to select a file) and then choose Copy File. Since you will be copying more than one file, enter a directory rather than a filename in the dialog box.

You can use Copy File to save search results or search reports for later viewing. To save search results or a search report, use Copy File and enter a name for the file to create. Then, when you want to see the search results or search report again, use View File to view the file you created. dtSearch will recognize that the file is a search results or search report file.

Selecting Files to Copy or Print

In a Search Results window, you can select multiple files to print, copy, or summarize in a search report.

- * To select a file, move the cursor to it and press SPACEBAR (or choose Select File in the Edit menu). A * (asterisk) will appear next to the file. To clear the *, press SPACEBAR again.
- * To select all of the documents in the list, choose Select All Files in the Edit menu.
- * To clear all selection marks from the list, choose Clear Selections in the Edit menu.

After selecting files, you can print, copy, or prepare a search report based on your selections.

- * Choose Print in the File menu to print the selected files.
- * Choose Copy File in the Edit menu to copy the selected files to a directory,
- * Choose Search Report in the Search menu to prepare a search report containing hits found in the selected files,.

Batch Indexing and Searching

Batch mode indexing allows you to create, update, and compress a document index by running dtSearch from the DOS command line or from a DOS batch file. Batch mode indexing can be useful if, for example, you want to perform a complex and time-consuming series of tasks every night to update your indexes. Batch mode indexing and searching is available in dtSearch for DOS only.

To set up a batch indexing job, first create a "script" that lists the tasks that you want dtSearch to perform. A script is a text file that lists a series of indexing commands that dtSearch will carry out.

The easiest way to create a script is to use the Create Batch Script option in the Index menu. When you select this option, a dialog box will appear that is almost identical to the "Add Documents to Index" dialog box.

Fill out the box exactly as you would if you were updating an index. See the section on "Adding Documents to an Index" in the "Indexing Documents" chapter for more information about the options in the Create Batch Script dialog box.

When you are done setting up the indexing job, choose OK to create a script. A dialog box will pop up asking for the name of the script to create. Enter a name for the script and choose OK. dtSearch will then store all of the information you have provided (the index to update, the directories to index, etc.) in a script file that you can run later.

To run the script that you created, choose Execute Batch Script in the Index menu, enter the name of the script to execute, and choose OK.

To run the script from the command-line, type the following at the DOS prompt:

```
DTSEARCH /SCRIPT MYSCRIPT.JOB
```

where "MYSCRIPT.JOB" is the name of your script. You should be in the directory where dtSearch is installed when you do this. If you created the script in a different directory, you will need to supply the full pathname of the script, e.g., C:\WHATEVER\MYSCRIPT.JOB. dtSearch will then perform the indexing task you specified.

dtSearch will record any errors encountered during the job in a file called MYSCRIPT.LOG. Errors and informational messages will not be displayed on the screen, since dtSearch assumes that batch jobs will run without someone watching them. After a batch indexing job, you should check the log file to see if any errors occurred.

This is all that you need to know to set up basic batch indexing tasks. For information on advanced script commands and the dtSearch DDE interface, see

BATCH.DOC.

The File Menu

Choose File in the main menu to get into the File menu. The File menu lists options to

- * view a file.
 - * edit a file,
 - * print a file.
 - * launch an application.
 - * create a DOS Shell (DOS version only),
- or
- * exit dtSearch.

Viewing a File

To view a file, choose View File in the File menu. A dialog box will appear asking for the name of the file you want to view. Type in the name of the file and press ENTER. The file will appear in a window.

Choose Local Menu in the Window menu (F9) to pop up the Local menu for the document window. This menu provides quick access to all commands that work with document windows. All of the options listed below are available in the Local menu. Some are also available as function keys or, in dtSearch for Windows, the button bar at the top of the window.

Finding Text

To search a document for a word or sequence of characters, choose Find in the Edit menu (F2).

Copying Text

Choose Mark in the Edit menu (F6) to start marking text to copy to a file.
Choose Copy in the Edit menu (F7) to copy the marked text.

Printing Text

Choose Print in the File menu to print the document.

Launching Files

Choose Launch (F8) to "launch" the document. If you have set up an application for the type of document you are viewing (for example, WordPerfect for a WordPerfect document), dtSearch will execute that application with the file you are viewing.

Cursor commands

Top of document	Home,Home,Up
End of document	Home,Home,Dn
Beginning of line	Home,Left
End of line	Home,Right or End
Page up	PgUp
Page down	PgDn

Menu and Window Commands

- * To get into the main menu, press F10 or click on the main menu with the mouse.
- * To get back to the window from the main menu, press ESCAPE or click on the window with the mouse.

- * To move from one window to the next (i.e., if you are viewing more than one file or if there are search results on the screen), press TAB. SHIFT-TAB moves to the previous window.
- * ESCAPE closes a window.
- * See "[Viewing Multiple Windows](#)" for more information on viewing documents and search results in overlapping windows.

Editing a File

dtSearch for Windows contains a built-in way to access the Windows NOTEPAD editor. This editor cannot edit files in word processor formats such as WordPerfect or Ami Pro. It will only edit DOS text files. The editor provides limited editing capabilities, intended mainly for jotting down notes to accompany text clipped from documents. (To clip text from a document, use the Mark and Copy functions, which are explained in the chapter on "Viewing Search Results.")

To edit a file, choose Edit File from the File menu. The Edit File dialog box will appear. Enter the name of the file that you want to edit and choose Open. The Windows NOTEPAD editor will pop up over dtSearch with the file you specified. See your Windows documentation for information about using NOTEPAD.

Printing a File

When you are viewing a file, you can print the file you are viewing by choosing Print from the File menu. Print will print the entire file, not just what appears on the screen.

When you select Print, the Print dialog box will appear. The Print dialog box allows you to set page length, width, and margins, headers, footers, and page numbering. The dialog box is the same for DOS and Windows, with the following exceptions:

If you want to print to a file instead of to the printer, check the Print to File box. After you choose OK, dtSearch will ask for the name of the file to print to. To select the printer to use, choose Printer Setup in the File menu.

DOS Shell

Choose DOS Shell in the File menu to access DOS from within dtSearch. When you start a DOS shell, dtSearch removes most of itself from memory to leave room for any programs you may want to run from DOS. The dtSearch screen will disappear and a DOS prompt will appear.

To return to dtSearch from a DOS shell, type "EXIT" at the DOS prompt and press ENTER. The dtSearch screen will reappear, as it was before you entered the DOS shell.

Launching Applications

dtSearch provides an easy way to use dtSearch to edit a file that you have retrieved in a search, using the word processor that you used to create the file. This is called "launching" a program.

When you launch a program in dtSearch for Windows, the program will appear in a window overlaying dtSearch. You can return to dtSearch after you are done using the program, or you can leave both programs on the screen and switch back and forth between them using the mouse or ALT-TAB.

To launch a program from within dtSearch, you must first tell dtSearch about the program. To do this, choose Applications in the Options menu. After you have set up an application in dtSearch, you can press F8 (or click on "Launch") while viewing a document belonging to the application, and dtSearch will launch the application with the document.

You can also launch an application directly. To do this, choose Launch Application the File menu and choose the application you want to launch.

Setting up an Application

Choose Applications in the Options menu to associate groups of files with applications so that you can "launch" a retrieved document in the application that created it. The Applications dialog box will appear.

- * To define a new application, select "<add new item>" and choose the Edit button.
- * To edit an application that you set up previously, move the cursor to it and choose the Edit button.

A dialog box will appear allowing you to specify the following for each application:

Name

The name that will appear in the list of applications.

File to Execute

The name of the file to run to start this application. For example, if you have WordPerfect 5.1 in a directory called C:\WP51, you would enter C:\WP51\WP.EXE (the name of the WordPerfect program).

Directory to Run in

The "home" directory for this application. Enter a directory here if you want dtSearch to run the application in a specific directory. If you leave this blank, dtSearch will not change directories before running the application.

Command Line Options

Enter any command line switches (e.g., "/s", "-d", etc.) that you want dtSearch to use when launching this application. This is optional.

Run as

Under "Run as" is a list of five different ways an application can be run:

DOS Normal: dtSearch will remove itself from memory and run the program. dtSearch will return after the program is done.

DOS Quick: dtSearch will attempt to run the program without removing itself from memory. This will only work if the program requires very little memory.

Windows Normal: dtSearch will launch the program in Windows.

Windows Minimized: dtSearch will launch the program in Windows as an icon.

Windows Maximized: dtSearch will launch the program in Windows, full-screen.

Filename Filter

The filter to use to match files with this application. If you leave this blank, all files will be included. This filter is similar to the filters in the Add Documents to Index dialog box, except that it can include drive and directory specifications, such as:

- *\WP42* Matches anything in a directory named WP42
- C:*.DOC Matches any filename ending in ".DOC" on drive C:

File Type

The file format that is associated with this application. If you select "Any," all files will be included.

dtSearch matches files with applications using a combination of the file type and the filename filter. If you specify both, both must match. If you specify "Any" for the file type, only the filter is checked. If you leave the filter blank, only the file type is checked.

If more than one application could match a file, dtSearch will prefer the one that can run in the current environment (i.e., DOS or Windows). For example, if you defined "WordPerfect for DOS" and "WordPerfect for Windows" as two applications associated with WordPerfect files, dtSearch would launch WordPerfect for Windows under Windows and WordPerfect for DOS under DOS.

Here is an example of how to set up WordPerfect 5.1 for DOS as an application and launch it:

- * Choose Applications in the Options, move the cursor to "<add new item>" and choose OK.
- * Under Name, enter "WordPerfect"
- * Under File to Execute, enter "C:\WP51\WP.EXE" (assuming that WordPerfect is installed in C:\WP51).
- * Under Directory to Run in, enter "C:\WP51".
- * Under Run as, choose DOS Normal.
- * Leave Filename Filter and Command Line Options blank.
- * Under File Type, choose WordPerfect.
- * Choose OK to get back to the Applications dialog box and then choose OK in that dialog box.

After you have done this, you can press F8 while viewing any WordPerfect document and you will be able to edit the document in WordPerfect.

The Options Menu

The Options menu lists options to:

- * Create and edit macros.
- * Define applications that you can launch.
- * Define the file types for word processors that dtSearch cannot recognize automatically.
- * Change the format for the display of search results.
- * Select a new alphabet file.
- * Specify other preferences.

Screen Colors

Choose Colors in the Options menu to change the way dtSearch displays documents and menus. The Colors dialog box will appear. The first column will list types of screen objects that you can modify (Menus, Dialog Boxes, File Viewers, etc.). When you select a screen object from the first column, the second column will list all of the parts of the object, such as the scroll bar, normal text, selected text, etc.

When you choose an item from the second column, a box to the right of that column will display the current color setting for the item. On a monochrome monitor, a list of monochrome screen attributes (underline, highlight, etc.) will appear in this box. On a color monitor, a sample of each possible foreground and background color will appear. Use the arrow keys or the mouse to select the color you want for the screen item, then press TAB (or use the mouse) to select another item to modify.

After you are done changing the colors, choose OK to save your changes. To restore the default colors, choose Default Colors in the Options menu.

File Types

dtSearch recognizes most file formats automatically. If you are indexing only word processing files that dtSearch supports and can automatically recognize, you can disregard this section. These include:

- * Ami Pro
- * Ascii or DOS Text
- * dBASE .DBF
- * Microsoft Works
- * Microsoft Word
- * Microsoft Word for Windows through version 6.0
- * Microsoft Rich Text Format
- * Multimate Advantage II
- * Multimate version 4
- * WordPerfect 5.0, 5.1, and 6.0
- * WordPerfect 5.1, 5.2, and 6.0 for Windows
- * WordStar version 4.0 or later
- * WordStar 2000

If you are indexing other types of files, dtSearch provides a way to specify, using filename filters, how you want dtSearch to process the files. For each filter, you can specify a "File Type" that tells dtSearch how you want the file to be handled. The file types fall into three groups:

Older word processors

If you are indexing files that use older file formats that cannot be recognized automatically, use these file types to tell dtSearch how to recognize the files. These formats are: WordPerfect 4.2, WordStar versions before 4.0, and XyWrite.

ASCII and ANSI

Windows programs use the "ANSI" character set instead of the "ASCII" character set used in DOS. The two character sets are mostly the same but the ANSI character set handles accented letters differently from the ASCII character set. This is not a problem for word processor files because dtSearch can detect the file format and handle the file correctly. However, for plain text files created with a Windows program such as Notepad, dtSearch has no way to know whether the file is ANSI or ASCII. The ASCII and ANSI file types provide a way to specify this.

Filtered Binary

This File Type enables you to index files in formats that dtSearch does not recognize or that contain a lot of non-text data, such as .EXE files and spreadsheets. "Filtered Binary" tells dtSearch to use an algorithm that attempts to extract just the text from the file. To see the effect of the "filtered binary" format, use View File to view a binary file such as C:\COMMAND.COM, enable the filtered binary file type (with a filename filter that would include C:\COMMAND.COM), and

then view C:\COMMAND.COM again.

To set up a file type specification, choose File Types in the Options menu. The File Types dialog box will appear.

- * To set up a new file type, select "<add new item>" and choose the Edit button.
 - * To edit a file type that you set up previously, move the cursor to it and choose the Edit button.
- A dialog box will appear asking you to specify the following:
- * Type: Choose the file type you want to set from the list in the dialog box. The file types are explained above.
 - * Filename Filter: Enter a filename filter (i.e., "*.DOC") that will identify files having that format. For example, you can tell dtSearch that any file whose name matches "*.W42" is a WordPerfect 4.2 document.

The filename filter used in this dialog box is similar to the filter in the Add Documents to Index dialog box, except that it can also include directory and disk drive specifications, such as:

\WP42 Matches anything in a directory named WP42
C:*.DOC Matches any filename ending in ".DOC" on drive C:

You must enter a filename filter for each file type you want to set up, even if the filter is just "*.*".

Before using the file type information, dtSearch will try to detect the format itself. Therefore, no matter what file type specifications you enter, dtSearch will recognize formats such as WordPerfect 5.1 that it can detect automatically.

dtSearch checks the filename filters in the order that you created them and uses the first one that matches.

Search Results Format

Choose Search Results Format in the Options menu to modify the format dtSearch uses to display search results. A dialog box will appear listing all of the items that can be displayed in search results. Select the ones you want to be displayed and choose OK to save your changes. The only limitation on your ability to customize search results is that either the name of the retrieved file or its "title" (the first few words in the file) must be displayed.

By default, dtSearch will display for each file the number of hits, name, directory, modification date, and title.

Preferences

Choose Preferences in the Options menu to change the following options:

Tab size

This is the width of a tab in a file displayed in a document window. For most word processors, this will be specified in the document. However, for ASCII text files, the value specified here will be used.

Quiet mode

Check this box if you do not want a "beep" every time dtSearch displays an information or error message.

Do not Index binary files

Check this box if you want dtSearch to skip binary files when indexing. See the chapter on indexing documents for more information about this feature.

ENTER key means... (DOS version only)

Use this option to specify how you want the ENTER key to affect dialog boxes in dtSearch for DOS. Under this item are two choices: "Go to next item" and "Select OK button."

If you select the first choice, the ENTER key will take you to the next item in a dialog box, unless the cursor is on a button. If the cursor is on a button and you press ENTER, the button is pressed.

If you select the second choice, the ENTER key will work the same way it works in Windows. Pressing ENTER in a Windows dialog box is always the same as pressing the OK button. Instead of using ENTER to get from one item to the next, Windows users have to use TAB or the mouse. If you prefer this, choose the "Select OK button" option.

User Name

Enter your name here if you will be using dtSearch on a network. If your network supports use of an environment variable such as %USER% or %USERNAME% to identify users, you can enter that environment variable here.

Choose Font

To change the font that dtSearch uses to display documents, search results, and search reports, choose Choose Font in the Options menu. A dialog box will appear listing all of the fonts available on your system, attributes for each (bold, light, italics), and the available sizes. Select the font, attribute, and size you want and choose OK.

Choose font will not affect windows already on the screen.

Setup Files

dtSearch stores user setup information in the following files:

APPS.DAT	Table of applications (for launching)
ANSI.DAT	Table for converting between the Windows (ANSI) and DOS (ASCII) character sets
DESKTOP.DAT	Window layout preferences (DOS version only)
ENGLISH.ABC	Alphabet definition file for English-language text
FILETYPE.DAT	Table of file type specifications
MACROS.DAT	Table of user-defined macros
OPTIONS.DAT	User-specified preferences.
SRCHDIRS.DAT	List of directories to search (unindexed search)
SRCHIX.DAT	List of indexes to search (indexed search)
STEMMING.DAT	Stemming to rules to apply in stemming words for searches

OPTIONS.DAT is a file that dtSearch uses to store your preferences about screen colors, fonts, etc. Most users will never need to access the file directly, but some advanced configuration options can only be changed by editing the OPTIONS.DAT file.

OPTIONS.DAT is in Ascii format (similar to the WIN.INI file) and is located in your dtSearch directory. To edit it, you will need a program that can edit and save plain Ascii text files.

Note: dtSearch saves an internal copy of your setup information and saves it to OPTIONS.DAT when it exits. If you edit OPTIONS.DAT while dtSearch is running and then exit dtSearch, dtSearch will save the old version of OPTIONS.DAT over the new version. If you want to use the dtSearch Edit File option to edit OPTIONS.DAT, use Save As to save the edited version under a different name (such as OPTIONS.NEW) and then copy OPTIONS.NEW over OPTIONS.DAT after you exit dtSearch.

See OPTIONS.DOC for more information about the contents of the OPTIONS.DAT file.

Alphabet Customization

dtSearch includes a utility called ALPHABET.EXE that allows you to customize dtSearch to work with character sets other than U.S. English. ALPHABET works by editing tables that dtSearch uses to process text. ALPHABET is very flexible and allows you not only to designate characters as searchable or not searchable, but also to specify what the rules are for capitalization and for converting between accented and unaccented characters.

Most users should never have to use ALPHABET since they can work with the default alphabet file. Unless you are using non-English text and need to customize the handling of accents, umlauts, etc., there is no reason for you to bother with ALPHABET.

If you do need to use ALPHABET to customize character set information for your system, please read the entire manual chapter on the ALPHABET utility you begin, especially if you have WordPerfect (you may save a lot of time by doing this).

To customize the way dtSearch handles characters, first set up a new alphabet file using ALPHABET and then choose Alphabet in the Options menu in dtSearch to make dtSearch use the new alphabet.

Alphabet Files

An alphabet file contains two tables: an alphabet and a WordPerfect table. The alphabet contains general information about each character (whether it is a letter, space, hyphen, or ignore character, whether it has an accent or is lower case, and the unaccented and upper case equivalent). The WordPerfect table contains the conversion table for WordPerfect characters. Both of these are described in more detail below.

Note: dtSearch can only use one alphabet file at a time. If you change the alphabet file after indexing some documents, you should delete the index and rebuild it since it will no longer be valid with the modified alphabet file.

Character Types

Every IBM PC compatible computer uses a character set containing 256 letters and symbols. The first 128 characters in the set (numbered from 0 to 127) are called the ASCII character set and are the same for all PCs. The 128 ASCII characters include the letters of the English alphabet (a-z and A-Z), the digits (0-9), punctuation, and certain other characters.

The other 128 characters (numbered from 128 to 255) differ from one PC to another, depending on the language that the PC is set up to use. For example, on one PC, character number 150 might be an accented "e," while on another it could be an "O" with two dots above it.

A dtSearch alphabet table classifies each character into one of four types: "letter," "space," "hyphen," and "ignore."

- | | |
|--------|---|
| letter | A "letter" is any character that you want to be able to search for. All of the characters in the alphabet (a-z and (A-Z) and all of the digits (0-9) should be classified as letters. |
| space | A space is any character that you want to cause a word break. For example, if you classify the period (".") as a "space" character, then dtSearch would process "U.S.A." as three separate words: "U" "S" and "A". |
| hyphen | A hyphen causes special handling of the words surrounding it. Usually only two characters get classified as "hyphen": the ASCII hyphen ("-") and the underscore ("_"). dtSearch indexes a hyphenated word as four different words to cover all possible ways to search for the word. "Full-text" would be indexed as "full," "text," "fulltext," and "full-text." |
| ignore | An ignored character is disregarded in processing text. If you classify the period as "ignore" instead of "space," then dtSearch would process "U.S.A." as one word: "USA". |

Windows Character Set

Microsoft Windows uses its own character set, called the "ANSI" character set. Certain Windows word processors, such as Lotus Ami Pro, use the ANSI character set rather than the ASCII character set for storing text. dtSearch handles ANSI characters in documents by converting them to their ASCII equivalents.

The default table dtSearch uses to convert documents using the ANSI character set is in a file called ANSI.DAT, which is included with dtSearch. If you are working with non-English language text in Windows-based word processors, you will probably want to generate an ANSI.DAT table customized for your system. To do this, remove ANSI.DAT from your dtSearch directory and then run dtSearch for Windows. dtSearch for Windows will see that ANSI.DAT is missing and generate a new copy of the file using information supplied by Windows.

Letter Types

dtSearch alphabet tables store additional information about characters that are classified as letters. The table will indicate which letters are upper and lower case, and it will also indicate which letters have accents. For lower case letters, the table will contain an upper case equivalent. For accented letters, the table will contain an unaccented equivalent.

dtSearch uses these equivalents when you build an index or do a search. When you create an index, you can specify whether you want the index to be "case insensitive" and whether you want it to be "accent insensitive." A case insensitive index converts all text to upper case in the index, so that "Apple," "apple" and "ApPIE" would all be treated the same as "APPLE." If an index is case sensitive, "Apple," "apple," and "APPLE" would be regarded as three different words. If you are working with normal text, a case-sensitive index would be a very bad idea since, when you enter a search for "apple," you would generally not want to miss a document containing "Apple." Case sensitive indexes may be useful, however, for programmers indexing program code.

Similarly, an "accent insensitive" index strips the accents from text in the index, so that letters with cedillas, tildes, etc. are converted to their unaccented equivalents. It is generally best to make indexes accent insensitive since this minimizes the chance that you will miss retrieving a document because of a forgotten accent.

WordPerfect Conversion Tables

WordPerfect documents can contain special characters from one of twelve different WordPerfect character sets. This allows WordPerfect documents to contain characters, like accented letters, mathematical symbols, and Greek letters, that are not in the basic ASCII character set.

WordPerfect defines over 1500 special characters, which are divided into groups of up to 250 characters each. The groups are called "Character Sets." The WordPerfect character sets are: Ascii, Multinational 1 (accents and accented letters), Multinational 2 (more accents), Box Drawing, Typographic Symbols, Iconic Symbols, Math/Scientific, Math/Scientific Extension, Greek, Hebrew, Cyrillic, Hiragana and Katakana, and User Defined. Take a look at the appendix of your WordPerfect manual to see what the character sets look like.

To handle WordPerfect characters, dtSearch needs to be able to tell how each WordPerfect character should be displayed on your system. To do this, dtSearch uses a conversion table that allows you to specify how you want each of the WordPerfect special characters to be indexed and displayed in dtSearch. This conversion table is separate from the alphabet table described above. When dtSearch encounters a WordPerfect special character, it first uses the WordPerfect conversion table to determine what the character means, and then uses the alphabet table to determine how the character should be indexed. For example, if dtSearch finds character number 62 from WordPerfect character set 1 in a document, it will look it up in the table and see that this corresponds to an "O" with two dots over it. It will then look in the alphabet table to determine whether this character is a letter, whether it is upper or lower case, and whether it has an accent.

Creating an Alphabet File

The ALPHABET utility contains three top-level menus: File, Alphabet, and WordPerfect. The File menu allows you to open, close, save, or rename an alphabet file. Once you have opened a file, you can use the Alphabet menu to modify the alphabet or use the WordPerfect menu to modify the WordPerfect table.

Editing the Alphabet

When you open an alphabet file, a window will appear on the screen that allows you to edit the alphabet in the file. Characters are divided into seven groups: upper-case letters, lower-case letters, accented upper-case letters, unaccented lower-case letters, spaces, hyphens, and ignored characters.

To modify the characteristics of a character, move the cursor to it (or click the mouse on it). A dialog box will appear allowing you to specify the following:

- * Whether the character is a letter, space, hyphen, or ignored character.
- * Whether the character is lower case or accented.
- * If the character is lower case or accented, what the upper case and unaccented equivalents would be for the character.

Set Alphabet to Default

If you select "Set to default" in the Alphabet menu, ALPHABET will generate the default DOS alphabet for your computer. Since DOS does not know whether a character is accented or not, most accented letters will be classified as unaccented in the default alphabet. If you want dtSearch to be able to correctly handle accent-insensitive indexes, you will need to edit the resulting alphabet to include information about accents.

Generate using WordPerfect

This option is somewhat complicated to use, but it provides a very powerful shortcut to customizing an alphabet for your system. WordPerfect includes a file called CHARACTER.DOC, which lists every character in the WordPerfect character set. This file is in WordPerfect format and you can edit it like any other WordPerfect document. To generate an alphabet using WordPerfect, you would do the following:

1. Retrieve CHARACTER.DOC into WordPerfect.
2. Press CTRL-F5 ("Text In/Out"), 1 ("DOS Text"), 1 ("Save"). This will allow you to save CHARACTER.DOC in DOS Text format.

3. Enter a name that is not the same as CHARACTER.DOC. Call it something else, like "CHARS.TXT". (Otherwise you will overwrite your existing CHARACTER.DOC file.)
4. Exit WordPerfect. Do NOT save the file. (You have already saved it in CHARS.TXT as a DOS Text file.)
5. Run ALPHABET and open a file for the alphabet you want to create.
6. Choose Generate using WordPerfect in the Alphabet menu and, under File to generate from, enter the name of the file you just created (i.e., CHARS.TXT). ALPHABET will analyze the CHARS.TXT file and produce an alphabet for your system based on the file.

How does this work? When WordPerfect saves a file in DOS Text format, it converts the WordPerfect special characters in the file to the appropriate equivalent characters for the your computer. Thus, the resulting CHARS.TXT file is a table showing, for each of the special WordPerfect characters, what the is equivalent character on your computer. ALPHABET knows how to read this table and use it to deduce which characters on your computer are letters, accented letters, upper case letters, etc. The resulting alphabet is usually very close to what you will want (there may be one or two misplaced characters, which you can clean up by hand).

Generate printable chart

This command simply generates a printable chart listing information about each character in an alphabet. This is useful if you want to keep a record of the changes you have made.

Creating a WordPerfect Table

The ALPHABET utility allows you to modify the way dtSearch treats special characters in WordPerfect documents by editing the WordPerfect character conversion table in an alphabet file. Note that the WordPerfect character table is separate from the alphabet table described above. Changes to the WordPerfect character table do not affect the alphabet settings (i.e., which characters are "letters," "ignore," etc.).

To modify the WordPerfect character conversion table in an alphabet file, you must first open an alphabet file in the ALPHABET utility. (Choose Open in the File menu.) Then choose Edit Character Sets in the WordPerfect menu to edit the WordPerfect character conversion table. A dialog box will appear with a list of the WordPerfect character sets on the bottom and a chart showing the currently selected set on the top.

The chart showing the currently selected character set is drawn in exactly the same format used in the appendix of the WordPerfect manual, so you can easily compare the appearance of the characters on the screen with the chart in the manual. Characters that ALPHABET does not know how to display on your system will appear as a question mark ("?").

To see one of the character sets, press TAB to get into the list of character sets and then use the cursor to select the one you want, or just click on the name of the character set you want with the mouse. The chart will display the character set you have selected.

To change the appearance of a character, move the cursor to it and press ENTER, or click on the character with the mouse. A dialog box will appear that will allow you to select a character to be used to represent the WordPerfect character you selected.

At any time, you may restore the default values for the WordPerfect Conversion table by pressing the "Restore Default" button in the dialog box. Any changes you have made will be lost.

As with alphabet customization, ALPHABET provides a powerful shortcut to customizing the WordPerfect table for your system, again using the WordPerfect CHARACTER.DOC file. Follow the procedure described above to create a CHARS.TXT file, and then do the following:

1. In the WordPerfect menu, choose Edit Character Sets.
2. Choose Generate in the WordPerfect Character Tables dialog box.
3. A dialog box will appear asking for the name of the file to generate from. Enter the name of the CHARS.TXT file you created. ALPHABET will deduce from the table in CHARS.TXT how each member of the WordPerfect character set should appear on your system.

After you have modified the WordPerfect table you can test it by viewing the CHARACTR.DOC file in dtSearch.

Hypertext Documents

A dtSearch hypertext document is an Ascii text file that begins with the words "dtSearch Hypertext" on the first line. This text is not displayed in dtSearch and is used only to signal that the rest of the document should be interpreted as hypertext.

dtSearch can view, index, and search hypertext documents like any other type of document. Hypertext links will appear highlighted when a document is viewed. Hypertext links can point to another document, a particular point in another document, or can launch another program (such as a graphics viewer).

15.1 Hypertext Links -- Basic

Hypertext links have the following format:

Sample text. @Highlighted text@^other.doc^ More text

In the example above, the text between the @ marks is highlighted and the text between the ^ marks is the hypertext link associated with the highlighted text. Pressing ENTER while the cursor is on the highlighted text would tell dtSearch to display other.doc.

15.2 Hypertext Links -- Complex

A hypertext link can be a simple filename, as in the above example, or it can be more complex. More complex links contain a series of the following items:

*F name	Name of the file to view
*W count	Position cursor after <count> words in the file.
*E command	"Launch" the command
*C	Close the current window. If a link does not contain a *C, a new window will pop up over the current window when the user chooses the link.

If a link does not supply a full pathname, dtSearch will assume that the file is in the same directory as the file being viewed. For example, if C:\JOE\DOCS\FIRST.DOC contains a link to "SECOND.DOC", dtSearch will assume that SECOND.DOC is in C:\JOE\DOCS.

Examples:

^*F smith.doc *W 500 **^

View smith.doc with the cursor positioned after the 500th word. Do not close

the current window when the user selects the link.

```
^*F smith.doc *C **^
```

Close the current document and open a window displaying smith.doc.

```
^*E c:\viewer\view.exe image1.pcx **^
```

Launch "view.exe" and have it display image1.pcx.

15.3 Changing the marker characters

Since dtSearch uses ^ and @ to recognize hypertext links, these characters cannot be used in document text. If you need to use ^ or @ in document text, you can use the LinkMark and TargMark commands to specify different marker characters. Example:

```
.LinkMark #
```

```
.TargMark ~
```

LinkMark is @, the character used to mark highlighted text. TargMark is ^, the character used to indicate the "target" of a hypertext link.

15.4 Titles

The .title command in a document changes the way the title of the document is displayed in dtSearch. Normally, the title of the window displaying a document is the filename. If a hypertext document contains a .title command, the supplied title will replace the filename. Example:

```
.title Instruction Manual -- Chapter 1
```

Program Limits and Requirements

1. Program limits: Indexes

- * A single index may contain up to 15,000 documents. There is no limit on the number of indexes you can have.
- * There is no limit on the number of words or paragraphs that a document can contain.
- * An index library can hold up to 25 indexes, and there is no limit on the number of index libraries you can create.

2. Program limits: Searches

- * A search word can be up to 32 letters long.
- * A search request can be up to 180 characters long.
- * You can have up to 25 macro definitions.

3. System requirements:

- * dtSearch for DOS will run on an IBM-compatible computer with a 286 or higher processor, at least 2 Mb of memory available, a hard disk, and DOS version 3.3 or higher.
- * dtSearch for Windows requires Windows version 3.1 and a 386 or higher processor. It will not run under Windows version 3.0.
- * dtSearch can use network drives and supports multiuser access to indexes stored on network drives.

4. Document Types

dtSearch can index and search documents in the following formats:

- * Ami Pro
- * ASCII or DOS Text
- * dBASE .DBF
- * Microsoft Works
- * Microsoft Word
- * Microsoft Word for Windows through version 6.0
- * Microsoft Rich Text Format
- * Multimate Advantage II
- * Multimate version 4
- * WordPerfect 4.2, 5.0, 5.1, and 6.0
- * WordPerfect 5.1, 5.2, and 6.0 for Windows
- * WordStar through version 6
- * WordStar 2000
- * XyWrite

Using the Filtered Binary file type, dtSearch can index, search, and display text from spreadsheets and other unrecognized file formats.

Error Messages (A-E)

"Application table is full"

You can define up to 7 applications in dtSearch. If you attempt to add more, this message will appear.

"Cannot copy an index onto itself"

You have asked dtSearch to copy an index, and either (1) the directory to copy it to is the same as the directory the index currently occupies, or (2) the name of the index to copy is the same as the new name for the copied index. When you copy an index, the name and directory for the new index must be different from the name and directory of the existing index.

"Cannot overwrite protected file type"

This message will appear if you attempt to use Edit File to edit a document that dtSearch recognizes as a word processing document. To protect against accidental destruction of original documents, dtSearch considers all files with special formatting codes that it recognizes (such as WordPerfect files) to be "protected." dtSearch will not overwrite such files.

"Directory xxx already contains index yyy"

A directory can only hold one index. If you try to use Create Index to create a second index using the same directory name, this message will appear.

"Error launching application"

dtSearch tried to execute a program and the program returned an error code. This means that something went wrong in the launched program.

"Error(s) in search request -- CONTAINS without a TO"

A segment search has the form beginning TO end CONTAINS contents. The beginning TO end part defines where dtSearch should search, and the contents part is what dtSearch should look for. If you leave out the "TO" part, dtSearch has no way to know what the segment to be searched is.

"Error(s) in search request -- Illegal use of the TO connector"

The TO connector is used to define a segment for a segment search. The format for a segment definition is beginning TO end, where beginning marks the beginning of the segment and end marks the end. Both parts of the segment definition may consist only of words, phrases, and the OR connector -- other connectors are not

permitted in segment definitions. Thus, "(apple or pear) to (grape or fish)" is legal; "(apple and pear) to (grape or fish)" is not.

"Error(s) in search request -- Illegal use of W/N connector"

Some search requests using the W/N connector are ambiguous or impossible to evaluate. See the manual section on the W/N connector for more details.

"Error(s) in search request -- Invalid date"

dtSearch will display this message if it finds XDATE in a search request without a valid date after it. Likely causes of this error are a misspelled month, a missing year, or a missing BEFORE, AFTER, or IS connector. A valid date search looks like one of the following:

- XDATE IS date
- XDATE BEFORE date
- XDATE AFTER date

"Error(s) in search request -- Missing words"

This message appears when you have left one or more words out of a search request. Example: "apple and pear and"

"Error(s) in search request -- Parentheses do not balance"

This just means that you have left out an opening or closing parenthesis in a search request.

"Error reading WordPerfect file"

WordPerfect files occasionally become corrupted due to disk problems or WordPerfect bugs. When dtSearch reads a WordPerfect document, it checks for errors in the file and displays this message if it finds any. Note: You can generally fix a corrupted WordPerfect document by (1) getting the most recent release of WordPerfect and (2) retrieving the document into WordPerfect, scrolling to the end of the file, and saving it.

"Error running script"

This message will appear after you have executed a batch script and errors occurred. Check the log file created during execution of the script to see what happened. (The log file will have the same name as the script file but it will end in ".LOG".)

Error Messages (F-M)

"File xxx is not a script file"

You have attempted to execute a file using the /SCRIPT option, and dtSearch determined that the file was not a batch script. All dtSearch batch scripts must begin with the words "DTSEARCH SCRIPT."

"Index already exists"

If you try to create an index that already exists in a different directory, this message will appear. If you are trying to create a new index, try using a different name for the new index, or (if you do not want the old index) deleting the old index. If you are trying to re-create an existing index, make sure the directory you have selected is the same one that you used to create the original index.

"Index has version 1.x format"

"Index has version 2.x format"

You have asked dtSearch to search or update an index created by an old version of dtSearch. dtSearch cannot use these indexes.

"Index is full"

An index can hold up to 15,000 documents. If you try to add more than 15,000 documents to an index, you will get this message. (You can still reindex documents already in the index.)

Even if you have less than 15,000 documents, you may still get this message if you have reindexed some documents without compressing the index. When you reindex a document, dtSearch adds information about the new document to the index but does not remove information about the earlier version. For example, if you have 10,000 documents in an index and you reindex them several times without compressing the index, you may get an "Index is full" message because the index will still contain information about obsolete versions of the documents. If you want to see how many obsolete documents are stored in an index, use the "Index Information" option in the Index menu. Use Compress to clean obsolete documents from your index.

"Index library is full"

An index library can hold a maximum of 25 indexes. If you try to create, copy, or recognize an index when you have reached this limit, you will get this error message. Try either deleting any indexes that you do not need, or creating a new index library to use for the new index.

"Index too large to fit on drive"

You have asked dtSearch to copy an index and there is not enough space for the index on the drive where it is to be copied.

"Indexing was interrupted. Index is unusable."

If dtSearch is interrupted while updating an index, the index becomes damaged and cannot be used. Delete the index and rebuild it.

"Invalid disk drive"

This means that you have asked dtSearch to access a disk drive that does not exist on your computer.

"Macro is circular"

A circular macro is one that references itself, directly or through other macros. Such a macro would expand infinitely if used in a search request.

"Macro not found"

dtSearch assumes that any search term beginning with the "@" character is a macro name. If it does not find a macro with this name, this message appears.

"Missing file"

One of the files that dtSearch needs is missing. Try re-installing dtSearch to restore the missing file.

Error Messages (N-S)

"No application to launch"

You have tried to "launch" an application with a file, and dtSearch was unable to match the file with an application. When you launch an application with a file, dtSearch checks the type and name of the file you launched against the applications you set up in your applications table. If dtSearch cannot find a match, this message will appear. Try checking the application you intended to launch by choosing Applications in the Options menu to make sure the application was set up correctly.

"No files retrieved"

Your search did not retrieve any documents.

"No files to index"

This means that you tried to add some documents to an index, but either you did not specify any files to be added or all of the files were already in the index.

"Noise word used in search request"

A noise word is a word like "the" or "if" that is so common that it is not useful in searching. This message will appear if one of the words in a search request is a noise word in the index you are searching. See the manual section on noise words for more information.

"Not enough memory"

dtSearch did not have enough memory to perform a requested action. If you have a relatively small amount of memory available, you may get this message when you try to do a search or update an index while you are viewing documents or search results on the screen.

"Not enough space to compress or update index"

dtSearch did not find enough disk space available to update or compress an index. dtSearch requires free space of about one-third the size of a group of files to index those files. To compress an index, dtSearch requires free space at least equal to the size of the index to be compressed. If you get this message, try removing some files from the disk or moving the index to a disk drive with more space available. Also, try indexing smaller groups of files.

"Not found"

You have used Find (F2) to search for text in a document, and the text was not found.

"Printer error"

"Printer out of paper"

"Printer not responding"

"Printer not selected"

"Printer timeout"

The printer did not respond correctly when dtSearch tried to print something. Check the cables and make sure the printer is turned on, selected, has paper in it, and is not jammed. dtSearch reports the problem that DOS told it about, but sometimes either the printer or DOS does not report the problem correctly. For example, you may get a "Printer out of paper" error message when the printer is not turned on.

"Search request is too long"

It is possible, using macros, to generate search requests longer than the 180-character maximum. When this happens, you will get a "Search request is too long" error message.

Error Messages (T-Z)

"To create an index, you must enter a name for the index"

You have used Create Index to create a new index and did not enter a name for the index.

"Too many files retrieved -- search halted"

By default, dtSearch will halt a search after 99 files have been retrieved. If you would like to change this number, choose Preferences in the Options menu and change the value for Search limit.

"Too many words retrieved in index"

Your search request contained extremely broad search terms, such as "(r* w/5 s*) and t*," that matched several hundred words in an index. Try using more specific search terms.

"Unable to access drive"

You have asked dtSearch to access a disk drive and there is some problem with the disk drive. If you were trying to access a floppy disk drive, make sure that there is a disk in the drive, that the disk is correctly inserted, and that the drive latch is closed. If you were trying to access a hard disk drive, the drive you requested may not exist or there may be a problem with your hard disk.

"Unable to access ..."

"Unable to read ..."

dtSearch cannot find the file or directory you specified. Check that the file or directory name is correct and that you are using the right disk or disk drive.

"Unable to create ..."

"Unable to write ..."

"Unable to save ..."

dtSearch cannot write to or create the file or directory you specified. Check that the file or directory name is correct and that you are using the right disk or disk drive. These messages may also appear when a disk is full.

"Unable to access index"

dtSearch was unable to find the index where it was supposed to be. The most likely cause for this message is that part or all of the index was accidentally deleted or moved.

"Unable to use directory. Use the /dir command-line option to specify a different directory."

On a network, each user must have a private directory to use for temporary files. You have asked dtSearch to use a directory that another user is using. See "Using dtSearch on a Network."

"You must create an index before using this command"

You have tried to execute a command that cannot be used unless you already have an index to work with. Choose Create Index (Basic) in the Index menu to create an index.

"You must have a document or search results window open to use this command"

You have tried to use a command that works with one or more document or search results window (such as Print, Local Menu, Cascade Windows, or Tile Windows) and there are no windows currently open.

Technical Support

For technical support on dtSearch, please contact the Advanced Support Group:

Telephone: (314) 965-5630
FAX: (314) 966-1833
BBS: (314) 966-1833
CompuServe: 70304,3642

You can reach DT Software, Inc., at (703) 521-9427, by mail at 2101 Crystal Plaza Arcade, Suite 231, Arlington, Virginia 22202, or on CompuServe at 72607,3323.

How to Order a Site License

Site licensing enables companies, departments, government agencies, etc., to equip their personnel with software at greatly reduced cost. The company purchasing a site license (the licensee) typically provides a single point of contact for shipping, technical support, upgrades, etc., and we (the licensor) provide a single master of the diskettes and manual.

A site license for dtSearch for DOS or dtSearch for Windows costs \$500 plus \$75 per user. A combined DOS/Windows site license is also available for \$500 plus \$100 per user. This site license enables each licensed user to use both dtSearch for DOS and dtSearch for Windows.

To order a dtSearch site license, please contact the Advanced Support Group:

Telephone:	(800) 788-0787
FAX:	(314) 966-1833
BBS:	(314) 966-1833
CompuServe:	70304,3642

You can reach DT Software, Inc., at (703) 521-9427, by mail at 2101 Crystal Plaza Arcade, Suite 231, Arlington, Virginia 22202, or on CompuServe at 72607,3323.

How to Order dtSearch

To order dtSearch, please contact the Advanced Support Group:

Telephone: (800) 788-0787
FAX: (314) 966-1833
BBS: (314) 966-1833
CompuServe: 70304,3642

Prices:

dtSearch for DOS:	\$149.00
dtSearch for Windows:	\$149.00
Both:	\$199.00
LAN -- 5 Concurrent Users	
DOS only	\$650.00
Windows only	\$650.00
DOS and Windows	\$800.00

You can reach DT Software, Inc., at (703) 521-9427, by mail at 2101 Crystal Plaza Arcade, Suite 231, Arlington, Virginia 22202, or on CompuServe at 72607,3323.

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