

# dtSearch Desktop

# dtSearch Network

Version 7

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# Getting Started

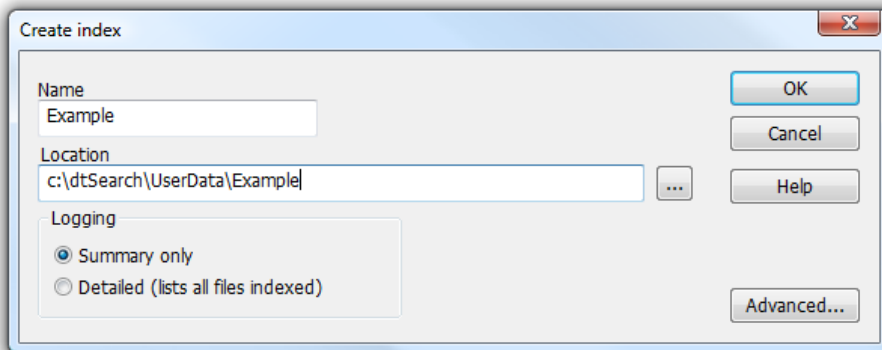
## Quick Start

---

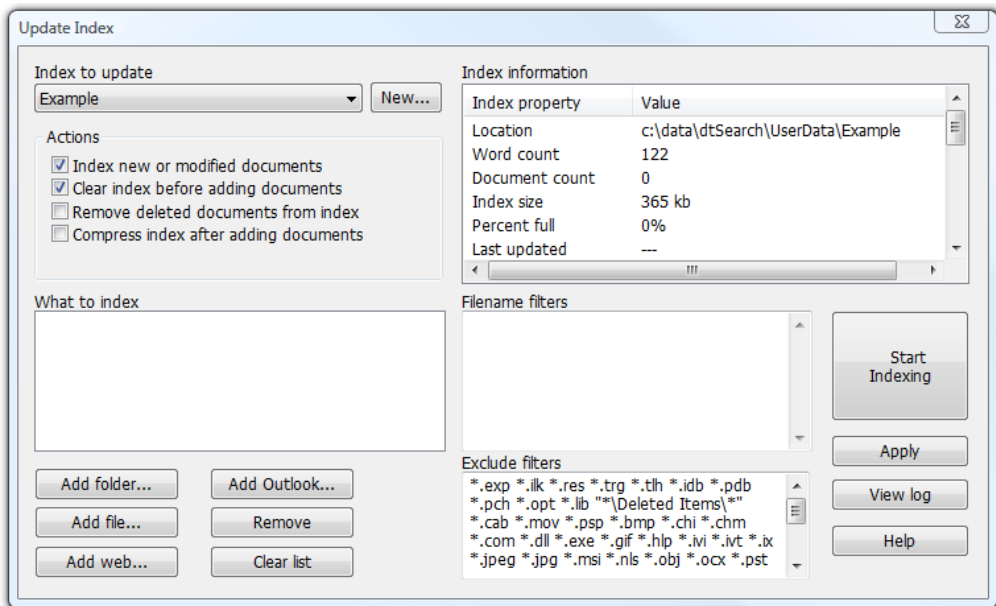
dtSearch can search terabytes of text in a second. It does this by building an index that stores the location of each word in your files. Therefore, to get started with dtSearch, the first step is to build an index of your documents.

### Indexing Documents

1. Click **Index > Create Index**.
2. In the **Create Index** dialog box, enter a name for the index and click OK.



- dtSearch will ask if you want to add documents to the index. Click **Yes** to go to the **Update Index** dialog box.



- Add documents to the index  
Click **Add Folder...** to add a folder to the list of folders to index.  
Click **Add Web...** to index a site using the dtSearch Spider.  
Click **Add Outlook...** to add folders from your Outlook profile to the index.
- Click **Start Indexing** to begin adding documents to your index.

### Updating an Index

If you edit your original documents, you will need to update your index to reflect the changes (otherwise, hit highlighting will be incorrect).

To update your index, click **Index > Update Index** (or press Ctrl+U). Check the **Index new or modified documents** box and the **Remove deleted documents** box, and then click the **Start Indexing** button.

To schedule automatic updates of your indexes, click **Index > Index Manager > Schedule Updates**.

### **Supported File Types**

For a list of the file formats that dtSearch supports, see "What file formats does dtSearch support" at <http://support.dtsearch.com>.

### **Indexing Large Document Collections**

For suggestions to improve indexing of large document collections, see "Optimizing indexing of large document collections" at <http://support.dtsearch.com>.

### **Searching using the Index**

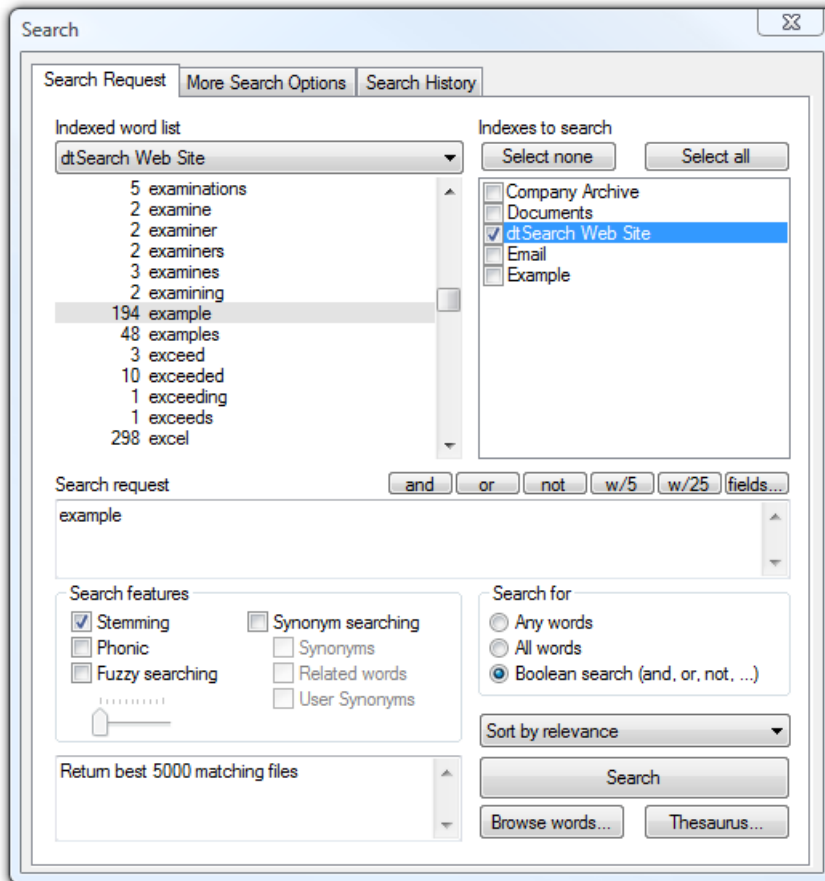
1. Click the **Search**  button on the dtSearch button bar, or press Ctrl+S, to open the **Search** dialog box.

#### **Indexes to search**

The top right of the dialog box shows a list of the indexes you have created; select one or more to search.

#### **Indexed word list**

The top left of the dialog box shows a list of the words in the currently selected index. If more than one index is selected for searching, you can select the index to display in the word list by clicking the down arrow above the word list.



2. Enter a search under **Search request**.
3. Select any items under **Search features** (such as fuzzy searching) that you want to use.
4. Click **Search** to begin the search.

## Search Types

### Any words or All words

Finds a list of words or phrases

- use "quotation marks" around phrases
- add + in front of any word or phrase to require it

- add - in front of any word or phrase or to exclude it
- examples:  
banana pear "apple pie"  
"apple pie" -salad +"ice cream"

### **Boolean search**

Finds a structured group of words or phrases linked by *and*, *or*, *not*, *w/*.

- examples:  
tart apple pie – the entire phrase must be present  
apple pie and pear tart – both phrases must be present  
apple pie or pear tart – either phrase must be present  
apple pie and not pear tart - only *apple pie* must be present  
apple w/5 pear – *apple* must occur within 5 words of *pear*  
apple not w/27 pear - *apple* must not occur within 27 words of *pear*  
subject contains apple pie – finds *apple pie* in a *subject* field
- use ( ) when a search includes two or more connectors:  
apple and pear or orange could mean (*apple and pear*) or *orange*,  
or it could mean *apple and (pear or orange)*

### **Search Features**

#### **Stemming**

Finds grammatical variations on endings, like *applies*, *applied*, *applying* in a search for *apply*

#### **Fuzzy searching**

Finds words even if they are misspelled. A search for *alphabet* with a fuzziness of 1 would also find *alphaqet*. With a fuzziness of 3, the same search would find both *alphaqet* and *alpkaget*

#### **Phonic searching**

Finds words that sound alike, like *Smythe* in a search for *Smith*

#### **Synonym searching**

Finds word synonyms using a comprehensive English language thesaurus or user-defined custom thesaurus terms

## Special Characters

? matches any single character

*appl?* matches *apply* or *apple*

\* matches any number of characters

*appl\*ion* matches *application*

~~ indicates numeric range

*14~~18* looks for *14, 15, 16, 17* or *18*

= matches any single digit

*p12==* matches *p1234*

### variable term weights

A number after a word assigns a specific positive or negative weight when ranking retrieved documents.

Example: *apple:5 salad:-2*

## More Search Options

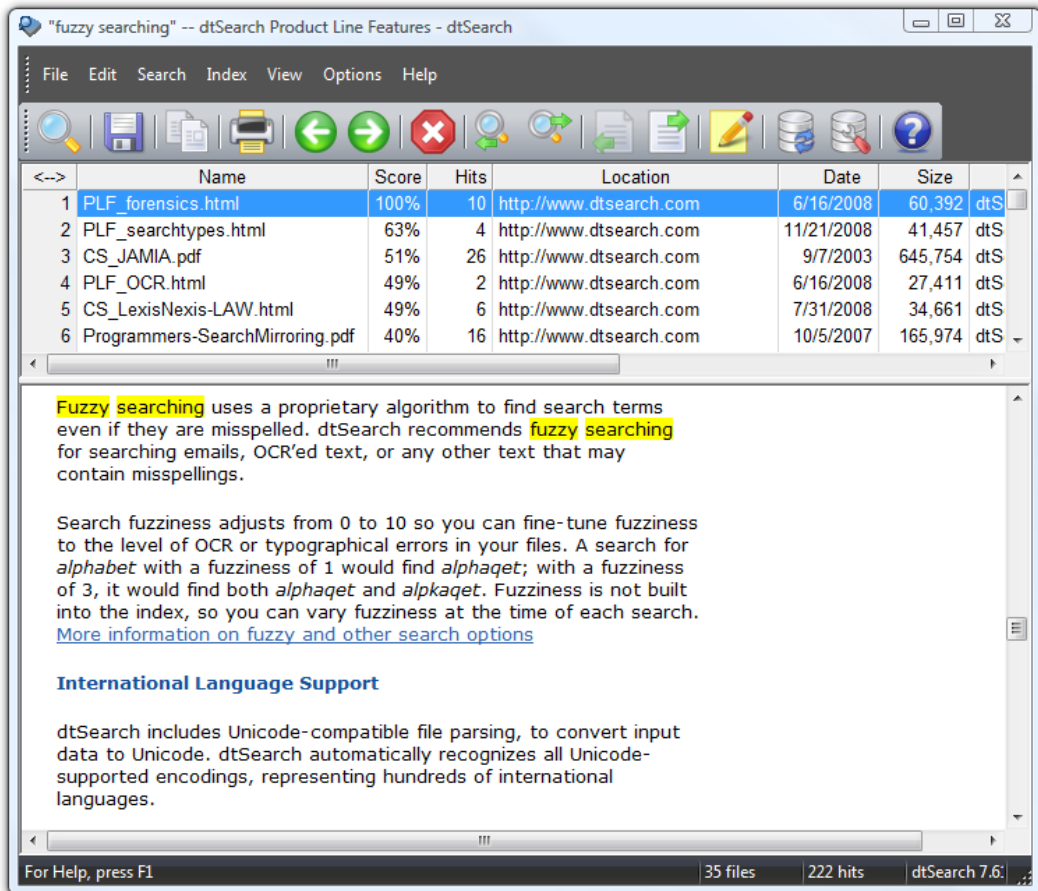
To search without an index, or to search by filename, date, or size, click the **More Search Options** tab.



To view or reuse a prior search request, click the **Search History** tab in the **Search** dialog box.


For information on forensic searching, see **Forensics-related features** at <http://support.dtsearch.com>.

## Viewing Search Results

After a search, dtSearch will display the results of the search. The top half of the dtSearch window will list all of the files retrieved in the search, and the lower half will show the first document in the list, with hits highlighted in yellow.



1. To select a document to view from the search results list, double-click on it.
2. To jump to the next hit in a document window, click **Next Hit**  on the button bar (or press SPACEBAR).  
Click the **Next Doc**  button (or press CTRL+SPACEBAR) to go to the next document.
3. To change the way search results are sorted, click on one of the column headers (**Name**, **Score**, **Location**, **Date**, etc.).

4. Click the **Launch**  button (or press F8) to open a document in the application associated with it. For example, a Word document would be launched in Microsoft Word.

See "Keyboard shortcuts" in the on-line help for a complete list of keyboard shortcuts.

## Create a Quick Summary of Your Search Results

An easy way to see the hits in all retrieved documents is to build a search report. A search report shows all hits along with the amount of context that you request.

1. Click **Search > Search Report**. The **Generate Search Report** dialog box will appear.
2. Enter the number of words (or paragraphs) of context that you want dtSearch to include in your search report and click OK to generate the report.
3. The search report will open in your word processor so you can edit or print it.

## Installing dtSearch on a Network

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To install dtSearch on a network, you can either set up dtSearch to run from a shared directory or you can install dtSearch on each user's computer. If dtSearch is installed separately on each user's computer, it will generally load faster because local disk access is faster. In either case, users can use shared index libraries or Recognize Index in the Index Manager to access shared network indexes.

On Windows networks with Microsoft CMS, you can also automatically deploy dtSearch. See "Automatic deployment of dtSearch on a network" in this manual for more information.

## Running dtSearch from a shared network folder

To set dtSearch up to run from a shared network folder,

1. Install dtSearch in a folder on the server that each user will have read-only access to.
2. Create shortcuts for network users to run dtsrun.exe.

- Use command-line options in the shortcuts to specify a private directory or shared index library for users.

## Command-line options

### **/dir <folder>**

The /dir command-line option specifies a location for the user's personal dtSearch folder, if one is not already set up for that user. If the /dir command-line switch is not provided, dtSearch will see that it is being run from a read-only directory and prompt the user for a folder to use for personal dtSearch settings. Using /dir prevents this prompt from occurring. Once a personal dtSearch folder is created, the location is stored in the registry and the user will not be prompted again for a dtSearch folder.

### **/lib <index library>**

The /lib command-line switch specifies a shared index library providing a list of indexes.

### **/cfg <options package>**

The /cfg command-line switch specifies a dtSearch options package file, providing a list of indexes as well as other settings (such as default stemming rules).

## Examples

Suppose dtSearch is installed in a network drive that all users see as P:\dtSearch. Assuming a standard installation, the dtSearch program files will be in P:\dtSearch\bin, and the network administrator's settings will be in P:\dtSearch\UserData. The network administrator has created some shared indexes, which will be listed in the index library P:\dtSearch\UserData\ixlib.ilb. The following shortcut will start dtSearch from any network workstation, with access to the indexes:

```
P: \dtSearch\bin\dtsearch.exe /dir c: \dtsearch6 /lib
P: \dtSearch\UserData\ixlib.ilb
```

Now suppose that instead the network administrator installed dtSearch in P:\Program Files\dtSearch. The shortcut should be modified to use quotation marks around all filenames, because of the space in "Program Files":

```
"P: \Program Files\dtSearch\bin\dtsearch.exe" /dir
c: \dtsearch6 /lib "P: \Program
Files\dtSearch\UserData\ixlib.ilb"
```

## Simple Index Sharing

dtSearch has a simple index sharing feature that lets you share indexes on a network without the need for any command-line switches. Instead, users just make a shortcut to dtsrun.exe in the shared dtSearch BIN folder and dtSearch will detect the shared indexes automatically. To use the simple index sharing feature:

1. Install dtSearch in a directory on the server that each user will have read-only access to.
2. Run dtSearch on the server and accept the default location for the UserData folder on the server. For example, if you install dtSearch to C:\Program Files\dtSearch, the UserData folder will go in C:\Program Files\dtSearch\UserData. This folder should also be read-only for network users.
3. Create indexes using the default index library, which will be named IXLIB.ILB and which will be stored in the UserData folder.

When a network user runs dtsrun.exe from the shared network folder, it will find the default index library and the user will automatically be able to search the indexes listed there.

## Automatic deployment of dtSearch on a Network

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### System Requirements

Automatic deployment requires network software that can automatically deploy Windows Installer (MSI) files. If you are deploying to computers that all support Group Policy, you can use Group Policy Objects in Microsoft's Active Directory to do this.

Two MSI files are used for automatic deployment: the dtSearchDesktop.msi file, which contains the program files, and the dtSearchPolicy.msi file, which contains the settings for your network installation. These files can be deployed and redeployed separately, so you can upgrade your dtSearch installation without losing your settings, and you can update your settings without the need to reinstall dtSearch.

Note: Some users may require updated versions of certain Windows components to use dtSearch Desktop. If dtsrun.exe does not start correctly, please see this article on the dtSearch web site for links to download the updated components: <http://support.dtsearch.com/faq/dts0187.htm>.

## Steps to deploy dtSearch

1. Obtain the dtSearchDesktop.msi file that installs dtSearch Desktop.
2. Create one or more shared index libraries on a network share.
3. Create one or more shared indexes on a network share.
4. Create a dtSearchPolicy.msi file that will configure your users' machines with information about the location of the shared index libraries.
5. Use Active Directory or Microsoft SMS to deploy the dtSearchDesktop.msi and dtSearchPolicy.msi files to your users.

Each of these steps is described below.

### 1. Obtain the dtSearchDesktop.msi file that installs dtSearch Desktop

dtSearchDesktop.msi will be on your dtSearch CD, in a subfolder named for the version number. If you only have the dtSearch download file, open the file in Winzip or any other ZIP-compatible program to extract dtSearchDesktop.msi. (The download file is in ZIP format even though it is an .exe file.) Copy the dtSearchDesktop.msi file to a network folder.

### 2. Create one or more shared index libraries on a network share

An index library is just a list of index locations. Once you create a shared index library, you can add indexes to it later and users will automatically see the updated list. To create an index library, click **Index > Index Manager > Index Library Manager**, and click **Add Library** to create an empty index library.

### 3. Create one or more shared indexes on a network share

Click **Index > Create Advanced** to create a new index and specify that it should be added to the shared library that you created in the previous step. You can also use Index Library Manager to add existing indexes to the shared library, as long as these indexes are also in a network folder.

### 4. Create a dtSearchPolicy.msi file

To create a dtSearchPolicy.msi file, click **Options > Create Group Policy...** in dtSearch Desktop. A dtSearchPolicy.msi file can specify the following settings:

### **Serial number**

You can use a single serial number to register as many user installations as your license covers. Providing a serial number in the Group Policy file eliminates the need for users to enter serial numbers themselves.

### **Shared index libraries**

Specify the index libraries that should be included with this Group Policy. Once the index libraries have been set up, you can add or remove indexes in the libraries, and network users will automatically see the updates in their Search dialog box.

### **Specify where each user's settings should be stored**

When first installed, dtSearch will prompt a user for the location of the folder for the user's settings. Specifying the folder in the Group Policy eliminates the need for this prompt.

After setting up the Group Policy, click **Save As** to save the .MSI file to a location on your network that your users will be able to access.

## **5. Use Active Directory or Microsoft SMS to deploy the dtSearchDesktop.msi and dtSearchPolicy.msi files to your users.**

When the steps above are done, you will have two MSI files in a network folder: dtSearchDesktop.msi (the program files), and dtSearchPolicy.msi (the settings for your network). Using Microsoft SMS or Active Directory, you can automatically install these MSI files on all or part of your network. It does not matter which MSI file is installed first, and you can uninstall and reinstall, or redeploy, either MSI file without affecting the other.

## **Command-Line Options**

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### **dtSearch Programs**

<b>Program</b>	<b>Purpose</b>
dtsearchw.exe	dtSearch Desktop/Network
dtsrun.exe	Launcher to start dtSearch Desktop/Network
dtindexerw.exe	dtSearch Indexer (32-bit)
dtindexer64.exe	dtSearch Indexer (64-bit, requires 64-bit version of Windows)
dtinfo.exe	dtSearch diagnostic tools

## dtSearch Desktop Options

Switch	Purpose
/lib [index library]	Specify a shared index library to use
/dir [folder]	Specify a UserData folder to use for settings files
/cfg [options package]	Specify an options package file to use
/xl	Do not use index libraries other than the one specified on the command-line

The /xl command-line switch is used with the /lib or /cfg switch to prevent indexes other than the ones specified on the command-line from being visible in dtSearch.

The /dir command-line switch has no effect if a dtSearch folder already exists on the computer. It is used when running dtSearch from a network to specify a default local folder to use for dtSearch settings. See "Installing dtSearch on a Network" for more information.

## dtSearch Indexer Options

Switch	Purpose
/i [index path]	Specify the index to be updated
/a	Index new or modified documents
/c	Clear the index before adding documents
/cat	Enable caching of text in the index (when used with /c)
/cad	Enable caching of original documents in the index (when used with /c)
/r	Remove deleted documents from the index
/recog [index path]	Recognize an index (can be combined with /c to create an index and recognize it)
/o	Compress the index after adding documents

Filenames or directories that contain spaces should be quoted in command lines. If the path to dtIndexerw.exe contains a space, it should also be quoted, like this:

```
"C:\Program Files\dtSearch\dtIndexerw.exe" /i
"C:\Program Files\dtSearch\UserData\MyIndex" /c /a
```

## Keyboard Shortcuts

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### Document Windows

Key	Purpose
Ctrl+Shift+Up or Ctrl+Plus	Zoom in
Ctrl+Shift+Down or Ctrl+Minus	Zoom out
Spacebar	Next hit in document
Backspace	Previous hit in document
Tab	Switch to search results window
Ctrl+Spacebar	Next document in search results
Ctrl+Backspace	Previous document in search results
Ctrl+Home	Top of document
Ctrl+End	End of document
Ctrl+K	Advanced copy
Ctrl+P	Print document or, if text is selected, print selected block

### Search Results Windows

Key	Purpose
Enter	Open current document
F8	Launch current document
Tab	Switch to document window
Ctrl+P	Print document or, if text is selected, print selected block

### Search Dialog Box

Key	Purpose
Alt+1	Select Search Request pane
Alt+2	Select More Search Options pane
Alt+3	Select Search History pane

## Other Keyboard Shortcuts

<b>Key</b>	<b>Purpose</b>
Ctrl+S	Search
Ctrl+Shift+S	Search in a new window
Ctrl+H	Search History
Ctrl+I	Index Manager
Ctrl+U	Update Index



# Indexes

## What is a Document Index?

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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*.

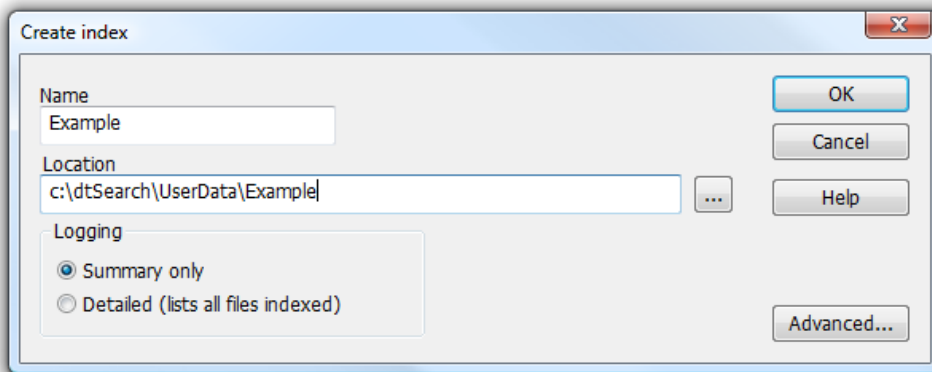
Once you have built an index for a group of documents, dtSearch can use it to perform very fast searches on those documents.

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. In general, the more documents in the index, the smaller the index will be as a percentage of your original documents.

## Creating an Index

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Menu option: **Index > Create Index**



### **Name**

Enter the name of the index as it should appear in the Search dialog box.

### **Location**

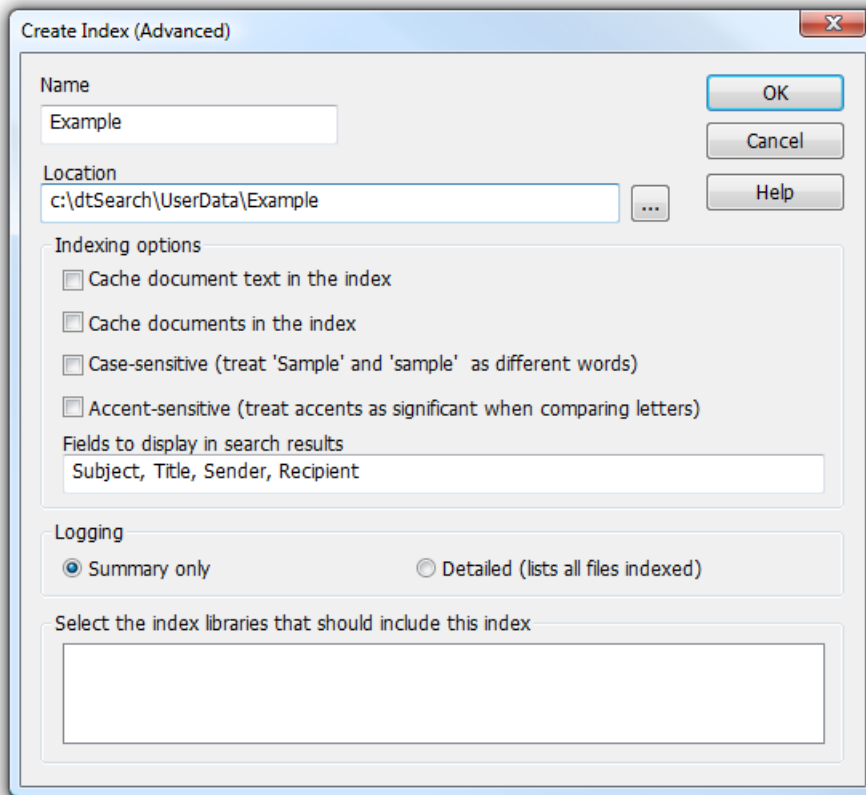
Enter the directory where dtSearch should store the index. By default, dtSearch will create indexes in your "UserData" folder. To specify a different location, click Options > Preferences > Indexing Options.

## Logging

A **Summary only** log shows the number of files added or removed and a list of any files that could not be indexed. A **Detailed** log adds a list of every file added to the index.

## Advanced Options

Menu option: **Index > Create Index (Advanced)**



**Cache document text in the index****Cache documents in the index**

dtSearch indexes can store documents in either, or both, of two ways: (1) the entire original file can be stored, or (2) just the text of the file can be stored. Stored documents and text are compressed using ZIP compression. Storing the *text* of documents makes generation of search reports much faster, especially generation of the brief hits-in-context snippet in search results. For more information, see: **Caching Documents and Text in an Index**

**Case-sensitive**

Check this box 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. This option is not recommended because most users would like to retrieve a document containing *Apple* in a search for *apple*.

**Accent-sensitive**

Check this box if you want dtSearch to take accents into account in indexing words. Again, for most users this is not recommended, because this option increases the chance that you will miss retrieving a document if an accent was omitted in one letter.

**Fields to display in search results**

List the names of fields in your documents that you want to include in the search results list, along with other document properties such as the filename and date.

**Select the index libraries that should include this index**

When you create a new index, it is usually added to your default index library. The Create Index (Advanced) dialog box lets you add the index to other libraries in one step. This can be useful when you are sharing indexes on a network.

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**Caching Documents and Text in an Index**

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In addition to storing word locations to enable fast searching, dtSearch indexes can also store the text of documents to make them open faster after a search. dtSearch indexes can optionally store documents in either, or both, of two ways: (1) the entire original file can be stored, or (2) just the text of the file can be stored. Option settings in the "Create Index (Advanced)" dialog box enable these features when an index is created.

Storing the *text* of documents makes generation of search reports much faster, including generation of the brief hits-in-context synopsis in search results.

Storing *complete documents* is useful in situations where the documents may not be accessible at search time, or where access to the documents may be slow or unreliable. Examples include:

- Indexes of web sites created using the dtSearch Spider
- Indexes of Outlook message stores
- Indexes of network shares that may be offline or inaccessible for other reasons

### Performance Implications of Caching Documents and Text

*Search speed:* No effect.

*Search reports:* Substantially faster if text is stored; no effect if only complete documents are cached.

*Opening documents after a search:* Can be substantially faster if complete documents are cached, and if access to the original documents is slow (for example, on a web site).

*Indexing speed:* Indexing will be slower due to the need to compress and store additional data in the index.

*Index size:* Cached documents and text are compressed using ZIP compression.

### Security Implications of Storing Documents and Text

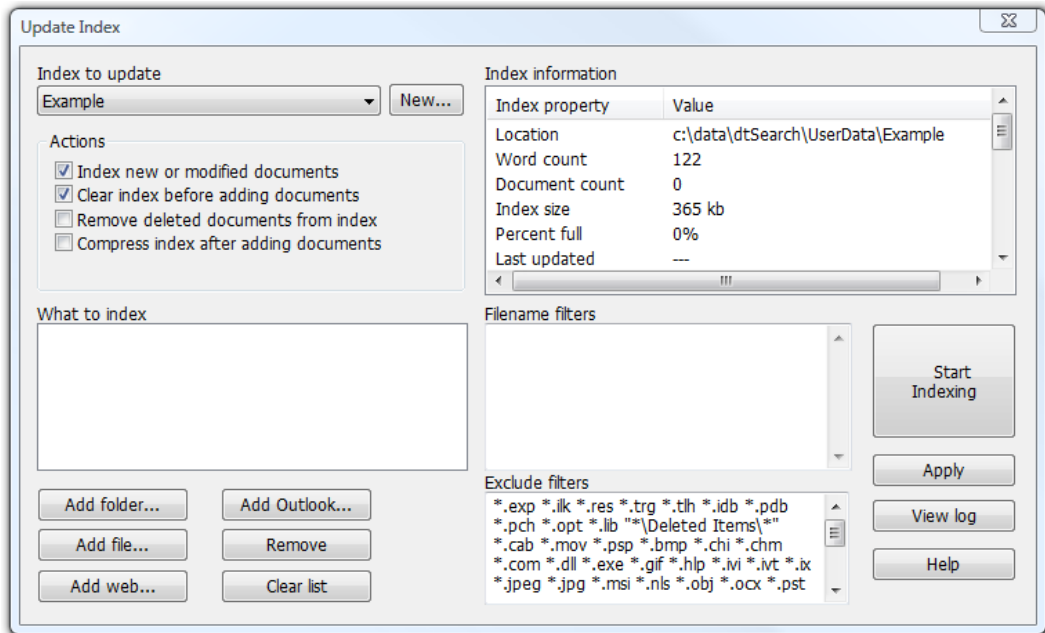
A user who is able to search an index will also be able to open any documents that are cached in the index. Therefore, if documents are subject to security restrictions, the same security restrictions should apply to the index folder, if the documents are being stored in the index.

## Indexing Documents

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### To add documents to a new index:

1. Click **Index > Create Index** to create the new index. Enter the name of the index to create and click OK.
2. dtSearch will ask if you want to add documents to the index. Click **Yes**.



3. In the Update Index dialog box, click **Add Folder...** or **Add File...** to add folders or files to be indexed. You can also drag and drop files or folders from Explorer into the Update Index dialog box. A "<+>" after a folder name means that subfolders will also be indexed. Right-click a folder name to add or remove the <+> mark.
4. (Optional) Under **Filename filters**, enter filters (\*.DOC, \*.TXT, etc.) to select documents to add. If you leave this blank, dtSearch will index all of the files in the directories you selected. Under **Exclude filters**, enter filters (such as \*.EXE) for any files you do not want to include in the index.
5. Click **Start Indexing**.

### To update an existing index:

1. Click **Index > Update Index**.
2. Select the index to update from the list.
3. Make any changes to the list of folders to be indexed. Click **Remove** to remove a folder or **Add Folder...** to add a folder.

4. Check **Index new or modified documents** if it is not already checked.
5. If you have deleted or moved some files that were in the index and you want to remove them from the index, check **Remove deleted documents from index**.
6. If you have updated the index several times, you may want to check **Compress index after adding documents**. Compressing an index removes obsolete document information from an index. It can take a while (dtSearch completely reconstructs the index) but it makes the index smaller and makes searches faster.
7. Click **Start Indexing**.

### To rebuild an index:

To tell dtSearch to rebuild an index, check the **Clear index before adding documents** box, check the **Index new or modified documents** box, and click **Start Indexing**.

### To update multiple indexes:

To update more than one index at a time, click **Index > Index manager...** and then click the **Update Multiple Indexes...** button. Check the box next to each index to be updated, and check the boxes indicating the tasks to be performed, and click **Start Indexing**.

## Notes

### Supported File Types

For a list of the file formats that dtSearch supports, see "What file formats does dtSearch support" at <http://support.dtsearch.com>.

### Indexing Large Document Collections

For suggestions to improve indexing of large document collections, see "Optimizing indexing of large document collections" at <http://support.dtsearch.com>.

### UNC Paths

To index documents using UNC paths rather than mapped letter drives, select folders under **Network Neighborhood** in the **Add Folder** dialog box. You can also convert a folder in the **What to index** list to UNC format. To convert a folder name to UNC format, right-click the folder name you want to convert and choose **Make UNC** from the menu that pops up.

### Subfolders

A "<+>" after the folder name indicates that subfolders will also be indexed. To remove the <+> mark after a folder name, right-click on the folder name and choose **Do not index subfolders** from the menu that pops up.

### Disk Space

An index is usually about one-third to one-fourth the size of the original documents, though this can vary depending on the number and type of documents.

### Indexing Documents on Removable Drives

When an index contains documents stored on floppy disk or other removable media such as a CD-ROM, make sure that **Remove deleted documents from index** is not checked when you update the index. 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 labeled 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 search results.

### Relative Paths

When documents are on the same drive as the index, dtSearch will automatically use relative paths to store document locations. If you add c:\Sample\Documents\smith.doc to an index in c:\Sample\Index, the index will store the document path as ..\Documents\smith.doc.

### Noise Words

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A noise word is a word such as *the* or *if* that is so common that it is not useful in searches. To save time, noise words are not indexed and are ignored in index searches. To modify the list of words defined as noise words, click **Options > Preferences > Letters and Words**, and click the Edit button next to the noise word list name.

The words in the noise word list do not have to be in any particular order, and can include wildcard characters such as \* and ?. However, noise words may not begin with wildcard characters.

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

## Scheduling Index Updates

---

Menu option: **Index > Index Manager > Schedule Updates**

To update an index automatically:

1. Click the **Schedule Updates** button in Index Manager.
2. Click **New Task** to create a new index update task. (You can also click **Modify Task** to change a pre-existing task or click **Delete Task** to remove a task.)
3. Select the indexes to be updated from the list, and check the indexing actions to be scheduled.
4. Click the **Next >>** button. The indexing task will open in the Windows Task Scheduler. Click the **Schedule** tab to set up the schedule for this task.

To access scheduled tasks directly, click **Start > Control Panel > Administrative Tools > Task Scheduler**.

For each task, Task Scheduler lists the "Last Result". A value other than zero indicates an error. If the error code is 8D (141), dtSearch does not have a folder set up for your personal settings. To fix this, run the dtSearch Desktop search program and specify a location for your dtSearch files. For more information, see Settings Files. If the error code is 8F (143), the index could not be accessed, which may be because of a network or security issue or because the index is damaged or missing.

# Indexing Web Sites

## Using the Spider to Index Web Sites

---

To index a web site with dtSearch, click **Add web** in the **Update Index** dialog box. You can do this multiple times to add any number of web sites to an index. To modify a web site in the Update Index dialog box, right-click the name in the **What to index** list and select **Modify web site**.

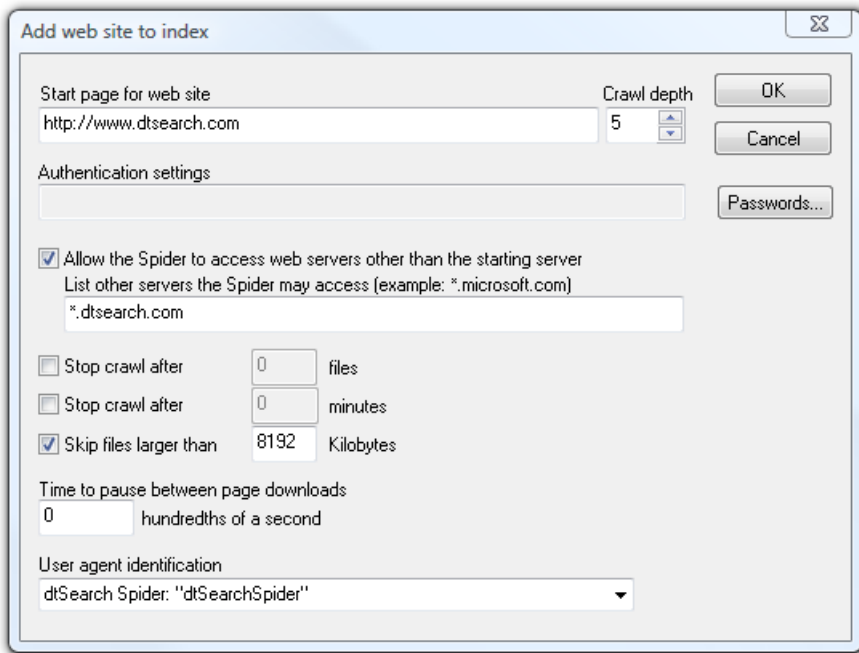
When indexing using the Spider, it is usually a good idea to enable caching of documents and text in the index, so dtSearch can highlight hits from the cached data. This ensures that you can search and browse results even if you cannot access the site.

To index an entire web site using a sitemap, enter the URL of the sitemap as the start page. Example: <http://www.example.com/sitemap.xml>. dtSearch supports XML and compressed (.gz) sitemaps. For more information on sitemaps, see <http://www.sitemaps.org>.

If you have problems accessing the site using the Spider, try changing the "User agent identification" to Internet Explorer. Some sites vary their appearance based on the user's browser, and if the site does not recognize the user agent name, it may return incorrect pages or fail to respond.

### Limiting the Spider

To limit the Spider to particular areas of the site, use the Filename filters and Exclude filters in the Update Index dialog box. A filter with a / will be matched against the complete URL, so a filter of `*/OnlyThisOne/*` would limit the indexer to documents under the "OnlyThisOne" folder. The Spider will also obey any instructions in a robots.txt file on the web site or in a robots meta tag. For more information on robots.txt and robots meta tags, see <http://www.robotstxt.org>.



### **Starting page for web site**

This is the first page dtSearch will request from the site to start the crawl. Usually this will be the home page of the web site.

### **Crawl depth**

The crawl depth is number of levels into the web site dtSearch will reach when looking for pages. When dtSearch indexes a web site, it starts from the page you specify, indexes that page, and then looks for links from that page to other pages on the site. For each of those pages, it looks for links to still more pages. With a crawl depth of zero, dtSearch would index only the starting page. With a crawl depth of 1, dtSearch would index only pages that are directly linked to the starting page.

### **Authentication settings and Passwords...**

If the site requires authentication, click **Passwords...** to set up a username and password.

### **Allow the Spider to access web servers other than the starting server**

By default, the Spider will not follow links to servers other than the starting server. For example, if the start page for the crawl is [www.dtsearch.com](http://www.dtsearch.com), the Spider will not follow links to [support.dtsearch.com](http://support.dtsearch.com). To enable the Spider to follow links to other servers, check this box and list the other servers to include. You can use wildcards to specify the server names to match. For example, \*.dtsearch.com would match [www.dtsearch.com](http://www.dtsearch.com), [support.dtsearch.com](http://support.dtsearch.com), and [download.dtsearch.com](http://download.dtsearch.com).

### **Stop crawl after \_\_\_ files**

Use this setting to limit the number of pages the Spider should index on a web site.

### **Stop crawl after \_\_\_ minutes**

Use this setting to limit the amount of time the Spider will spend crawling pages on a web site.

### **Skip files larger than \_\_\_ kilobytes**

Use this setting to limit the maximum size of files that the Spider will attempt to access.

### **Time to pause between page downloads**

Requiring the Spider to pause between page downloads can reduce the effect of indexing on the web server.

### **User agent identification**

Some web sites behave differently depending on the web browser being used to access them. For these sites, you can use the **User agent identification** to specify a user agent name (for example, Internet Explorer) for the Spider to use, so the Spider will index the same view of the web site that users see with a web browser.

## **Spider Options**

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Menu option: **Options > Preferences > Spider options**

## Spider Options

**Spider options**

- Automatically log on to web sites on my local area network.
- Logon even if a site only supports non-secure authentication methods.
- Do not prompt for a password if access to a site is denied
- Use Internet Explorer to download web pages
- Log the links found on each page in spiderlog.txt

Folder to use for temporary files (if blank, the Windows TEMP folder will be used)

Timeout limit for downloading pages (seconds)

### **Automatically log on to web sites on my local area network**

When you index web sites on your local area network, dtSearch can attempt to log on to the sites using your Windows username and password. Un-check this box if you would prefer not to use your Windows username and password to log on this way.

### **Logon even if a site only supports non-secure authentication methods**

Some web sites only support "Basic" authentication, a type of authentication that requires your password to be sent across the internet without encryption. Un-check this box to prevent dtSearch from logging on to a site that does not support secure authentication methods.

### **Do not prompt for a password if access to a site is denied**

If the dtSearch Spider receives an "Access denied" response from a web site when it tries to download a page, and if no password is found for the site in the web site options, then the Spider will prompt for a user name and password to access the page. Check this box to prevent password prompts so that the Spider will continue without interruption.

### **Use Internet Explorer to download web pages**

The dtSearch Spider will use the WinHTTP library to download web pages, unless this box is checked. Use this option if you want the dtSearch Spider to use your Internet Explorer browser settings to access the internet (for example, to use a proxy server).

### Log the links found on each page in spiderlog.txt

To determine how the Spider found a particular page or file on a web site, check this box before indexing the site. After the index is built, the file spiderlog.txt in the index folder will contain a list of every link found on every page indexed.

### Folder to use for temporary files

By default, dtSearch will use a sub-folder under your Windows "TEMP" folder for temporary files downloaded by the Spider. You can specify a different location here if there is not enough space on the disk drive where your TEMP folder is located.

### Timeout limit for downloading pages

This is the maximum amount of time that you want the Spider to wait for a web page to download before giving up and moving on to the next page.

## Spider Passwords

Menu option: **Options > Preferences > Spider passwords**

The screenshot shows a dialog box titled "Spider passwords". On the left, there is a list box labeled "Web site" with "Sample Web Site" selected. To the right of the list box are several input fields and checkboxes. The "Web site name" field contains "Sample Web Site". The "Server" field contains "www.spider.com". There are two checkboxes: "Login using a form on a web page" and "Ask for password when needed", both of which are unchecked. The "Username" field contains "username". The "Password" field contains "password". Below these fields are two more input fields: "Form data to use for login" and "Login URL". To the right of the "Form data to use for login" field is a "Login..." button. Above the "Web site name" field are three buttons: "New...", "Delete", and "Rename...".

You can use the **Spider passwords** settings to store a user name and password for sites that require login. Note that any password information you store this way will be accessible to anyone else who uses this computer, or who has access to your files.

### **Server**

This is the name of the server where the web site is located. This should be the domain name only, without the "http://" or any filename or folder information.

### **Login using a form on a web page**

Check this box if the web site uses an HTML form for logging in. Click **Login...** to have dtSearch automatically capture the settings used to login to this site.

### **Ask for password when needed**

Check this box to have dtSearch prompt for a password when a site requires you to log in. You will have to enter the password each time you index the site, and dtSearch will not save your password information.

### **Username**

### **Password**

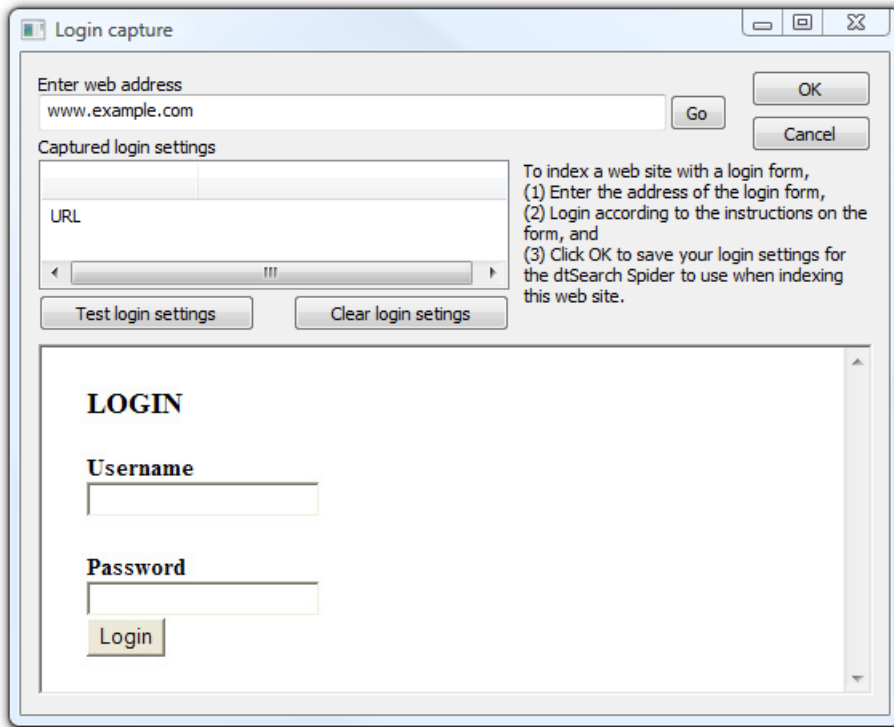
These are the username and password to login for this server. If you leave this setting blank and check the **Ask for password when needed** box, then dtSearch will ask for a username and password when it accesses the site, if a password is needed. If you fill in a password, dtSearch will remember the password so you can index or search on this server without entering a password each time.

Note: Passwords are saved without encryption, so anyone who has access to your computer may be able to read them.

## **Login Capture**

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Menu option: **Options > Preferences > Spider passwords > Login...**



Some web sites require you to fill out a web form to login and gain access to the site. The **Login capture** dialog box provides a way to have dtSearch automatically capture all of the information on this form, so you can use the Spider to index the site.

To have dtSearch capture your login information for a web site:

- (1) Enter the address of the login form under **Enter web address** and click **Go** to navigate to the login page. If the window is not large enough to see the login page, you can resize the **Login capture** dialog box to make it larger.
- (2) Login according to the instructions on the form.
- (3) Click OK save the captured settings.

After you login, you will see your username, passwords, and any hidden form variables listed under **Captured login settings**.

Note: Passwords are saved without encryption, so anyone who has access to your computer may be able to read them.



# Sharing Indexes on a Network

## Creating a Shared Index

---

Any dtSearch index that is located on a network drive can be shared with other users. To create a shared index, click **Index > Create Index** and under **Location** specify a location that other network users will be able to access.

Once the shared index is created, other users can use **Index > Recognize Index** to access the index.

To share multiple indexes, you can either use a shared index library or you can create a shared options package that includes the indexes to share.

**Drive Mapping.** To avoid possible drive mapping problems, build an index on the same drive as the documents it indexes. This prevents drive mapping problems because dtSearch uses relative paths rather than absolute paths in indexes.

**Read/Write Privileges.** Write and read access to shared indexes is controlled by folder permission settings. If an index is stored on a network drive, any user who has write access to the folder 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) that do not require write access.

**Concurrent Access.** dtSearch allows any number of users to search an index at the same time. Only one user at a time can update or compress an index, so when a user is updating an index, other users will be able to search but not update the index.

## Sharing Option Settings

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Menu option: **Options > Create Options Package**

An options package is a file that you can use to share some or all of your dtSearch option settings, such as macros or file segmentation rules, with other users on a network. An options package can also contain links to shared indexes.

### Creating an Options Package

To create an options package,

1. Select the type of package you want to create.

A **Temporary** package lets other users run dtSearch with the settings you specify without changing their own settings. When a user opens a temporary package, dtSearch will apply the settings in the package only during that session, and will leave the user's own settings unchanged after dtSearch exits. A temporary package is a good way to give other users access to your indexes and settings without requiring them to change their own settings.

A **Permanent** package will change the user's personal dtSearch settings to match the ones you added to the package. Settings such as macros or stemming rules will replace any settings the user already has. Indexes included in the package will be listed in a new index library that will be placed in the user's UserData folder. A permanent package gives network administrators an easy way to distribute a set of option settings throughout an organization.

2. Select the indexes to include in the package. The package will store the location of each index that you select, but will not include any of the index contents. Therefore, indexes selected should all be in shared network locations.
3. Select the option settings to include in the package. Any of the following settings can be included: stemming rules, user thesaurus, macros, file type definitions, file segmentation rules, text field definitions, external viewer settings, and display options.
4. Click OK to create the package.

### Using an Options Package

To use an options package, browse to it in Windows Explorer and double-click on the name of the package.

When you open a "temporary" package, dtSearch will open with the settings in the package. The Search dialog box will contain only the indexes listed in the package.

When you open a "permanent" package, dtSearch will tell you which settings will be changed. You can then decide to (1) accept the changes, (2) run dtSearch with the changed settings on a temporary basis (as if the package was a temporary package), or (3) exit without changing anything.

## Index Library Manager

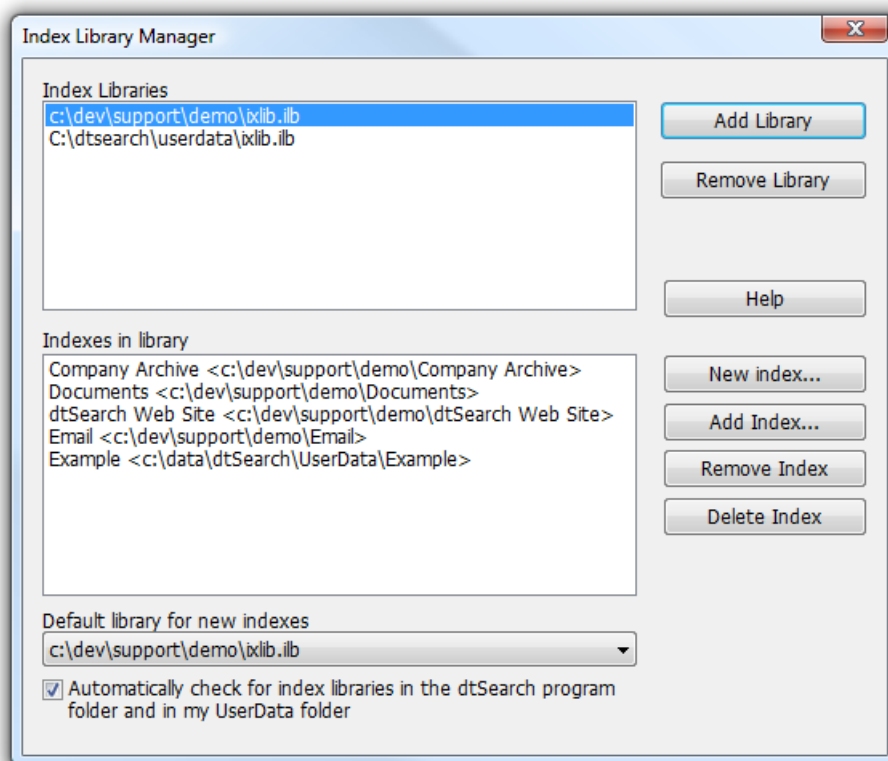
Menu option: **Index > Index Manager > Index Library Manager**

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 your index libraries.

If you are not sharing indexes on a network, you can ignore index libraries. dtSearch starts out with a library called IXLIB.ILB that will hold any indexes that you create.

Most commonly, index libraries are used to create a shared list of indexes on a network drive. Another way to share indexes is to create a shared options package that includes index references.

### Using the Index Library Manager



To **create a new index library**, click **Add Library** and enter the name of the library to create.

To **add a link to a shared network library**, click **Add Library** and browse for the shared library to add. When you find the correct library, click the **Open** button and the library will be added to your list of index libraries, and any indexes in that library will appear in your "Indexes to Search" list in the Search dialog box.

To **remove a link to a shared network library**, highlight the library to remove and click **Remove Library**. The library will not be deleted; it will just be removed from the list of libraries you are using in dtSearch.

To **add an index to the currently-selected library**, click the **Add Index...** button. Browse for the index to add and click **Open** when you find any of the files in the index (they will be named INDEX\_I.IX, INDEX\_N.IX, etc.).

To **remove an index from the currently-selected library**, highlight the index to remove in the list of indexes, and click **Remove Index**. To remove an index and delete it from the disk, click **Delete Index** instead of **Remove Index**.

## Default Library for New Indexes

Use the drop-down list at the bottom of the Index Library Manager to specify the index library to put new indexes into.

## How to Set up Shared Indexes

1. Make a shared index library on the network. To do this, click the **Add Library** button to create a new index library named "Common" or "Shared".
2. Select this library as the "Working" library so you can add indexes to it.
3. If you already have indexes on the network to share, click **Add Index...** to add each of the indexes to the Common library.
4. Close **Index Library Manager** if it is open and create the indexes to share on the network. Ideally, each index should be on the same drive as the documents that it indexes, so drive mapping complications can be avoided. Each of the indexes you create will be added to the "Common" or "Shared" library.
5. Have each user link to the shared library.

You can also use command-line switches to specify a shared index library. See "Installing dtSearch on a Network" in this manual for more information.

## Automatically Detected Libraries

Each time it runs, dtSearch automatically checks for an index library named IXLIB.ILB in your dtSearch "BIN" folder and in your "UserData" folder (the folder where your dtSearch personal settings are stored). To prevent dtSearch from doing this, un-check the box in Index Library Manager with the label **Automatically check for index libraries in the dtSearch program folder and in my UserData folder.**

## Searching Using dtSearch Web

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dtSearch Web is a web server-based version of dtSearch. You can use dtSearch Desktop to search indexes on a dtSearch Web server, if the server administrator has set up the indexes to be accessible this way.

To access dtSearch Web indexes using dtSearch Desktop,

1. Open your web browser and go to the search form for the web site that you want to access.
2. Look for a **Get index library** link on the search form and click on it. If the link is not there, the administrator who set up dtSearch Web on the server did not make the indexes accessible through dtSearch Desktop.
3. When you click on the link, your browser will download a small text file named dtSearchWeb.ilb. Save this file anywhere and open it by clicking on it in Windows Explorer.
4. dtSearch Desktop will open and the indexes provided by the server will be listed in the Search dialog box with "(web)" next to them.

Once you have done this, your list of indexes in dtSearch will include the dtSearch Web indexes. To search the indexes, select them in the Search dialog box along with any other indexes that you want to search. To remove some of the indexes, or to rename them in your index library, use **Index Manager**.

Searches using dtSearch Web indexes will be similar to searching using local indexes, with a few differences. Because the index is located on a web server, the scrolling list of index words will be blank when you select a dtSearch Web index. When you click on a document in search results, the method used to highlight hits in the document will be determined by the web server, so any customizations you have done using the Display Options dialog box will not appear.



# Working with Indexes

## Index Manager

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Menu option: **Index > Index Manager**

The Index Manager enables you to get information about each index you have created. To see information about an index, move the cursor to it.

Buttons in the Index Manager let you create, update, recognize, delete, rename, verify, or list the contents of an index.

## Recognizing an Existing Index

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Menu option: **Index > Index Manager > Recognize Index**

Recognize Index enables you to add an existing index to your index library, making it accessible for searching or indexing. This can be useful on a network if you want to be able to search an index that another user created on the network.

Use the **Recognize Index** 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\_V.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.

## Deleting an Index

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Menu option: **Index > Index Manager > Delete Index**

Deleting an index does not affect the original documents. It just removes the index from your system. To delete an index, click the **Delete** button in the Index Manager, select the index to delete, and click OK.

## Renaming an Index

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Menu option: **Index > Index Manager > Rename Index**

To rename an index, click the **Rename** button in the Index Manager dialog box, select the index to be renamed, enter the new name for the index, and click OK. Note that the name of the directory in which the index is stored will not be affected.

## Compressing an Index

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When you reindex a document that you had 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 and also optimizes the index for faster searching.

To compress an index, check the **Compress index after adding documents** box in the **Update Index** dialog box.

## Verifying an Index

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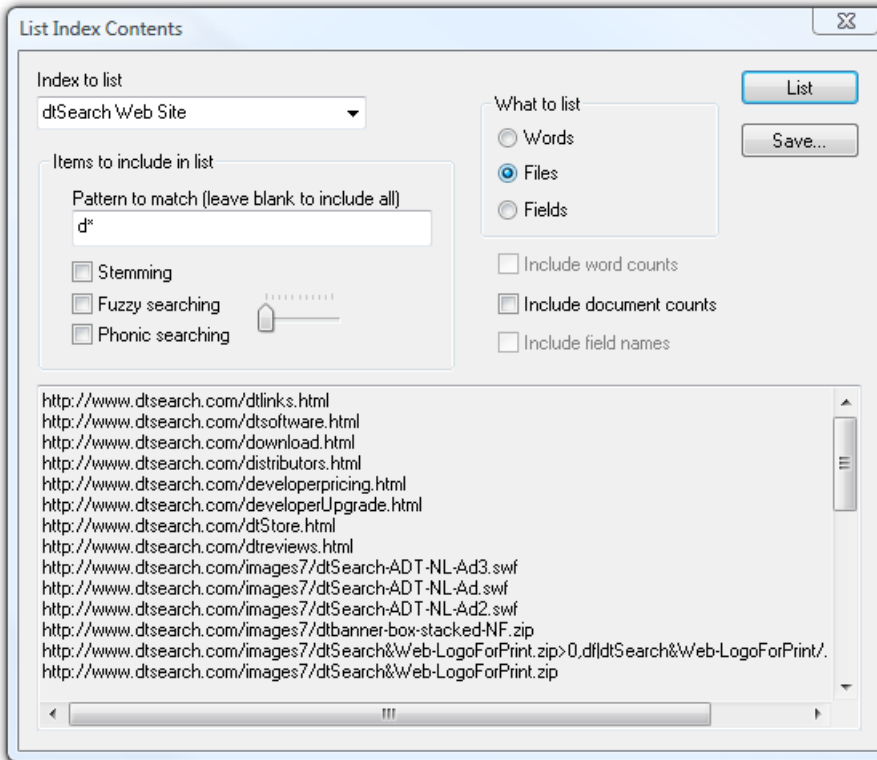
Menu option: **Index > Index Manager > Verify Index**

To verify that an index is in good condition, click the **Verify** button in the Index Manager dialog box. 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 Index Contents

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Menu option: **Index > List Index Contents**



To see a list of words, files, or fields in an index, click the **List** button. To save the list to a text file, click the **Save...** button. If the list is very long, only partial results will appear in the display window due to memory limitations, but the list saved to disk when you click **Save...** will be complete.

### Pattern to match

To limit the list to certain words or names, enter the pattern to match here. You can use the \* and ? wildcard characters and you can also use stemming, fuzzy searching, and phonic searching, just as in the **Search** dialog box.

### Include word counts

Check **Include word counts** to see the number of times each word occurs next to the word in the list.

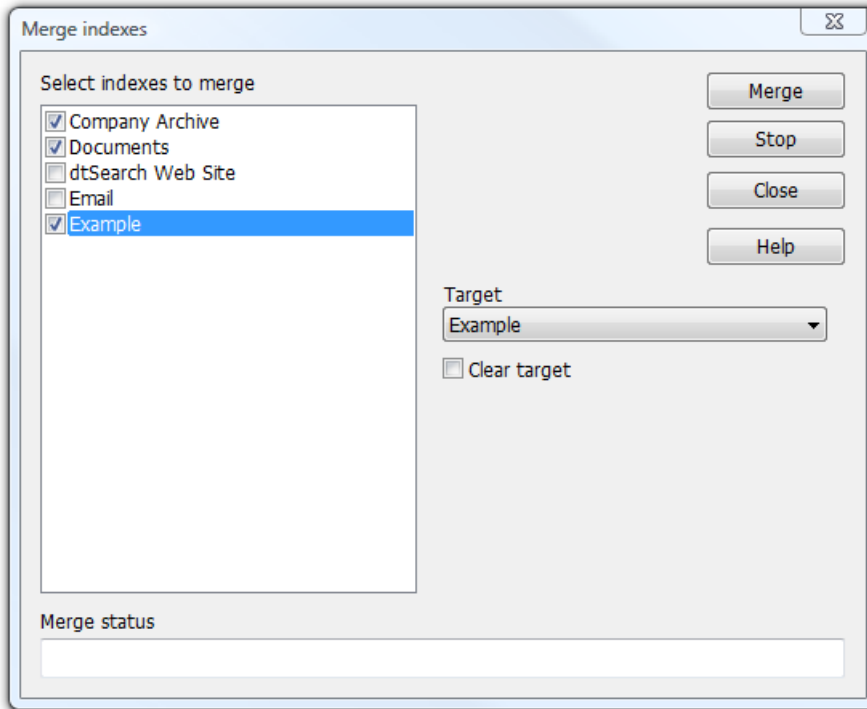
### Include field names

Check this box to see the fields that each word is found in.

## Merging Indexes

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Menu option: **Index > Index Manager > Merge Indexes**



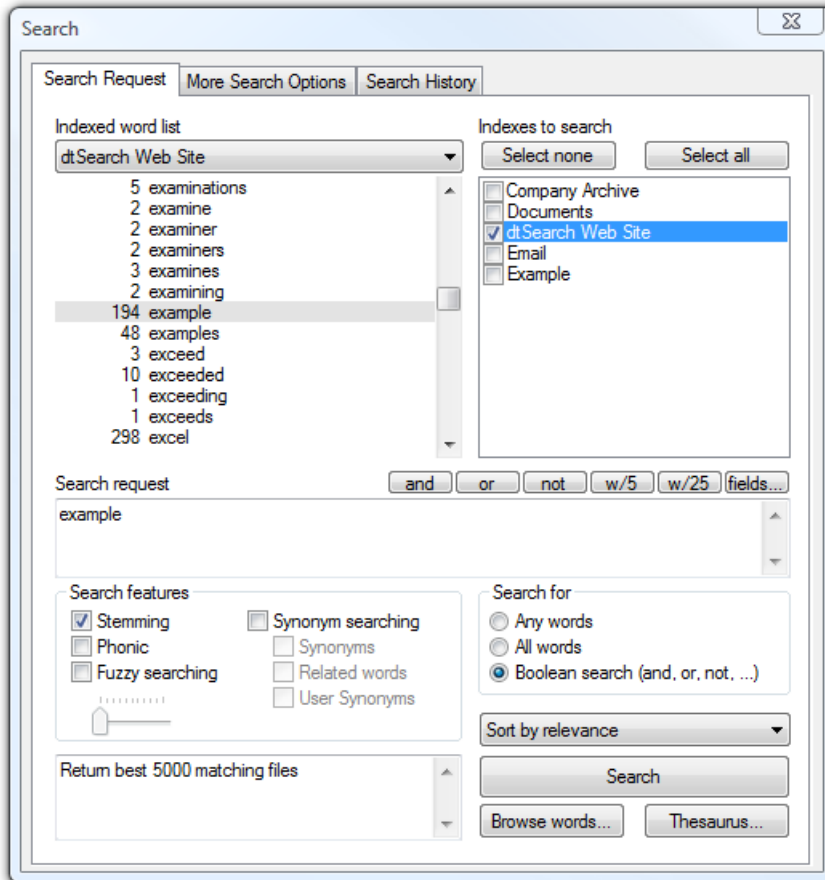
To merge two or more indexes into a single index,

1. Choose the indexes to merge from the list.
2. Choose the index that you want the indexes merged into from the list under **Target index**. This list includes all of the indexes selected for merging.
3. To erase the contents of the target index before the merge, check **Clear target**.
4. Click **Merge** to start merging the indexes.

Merging multiple indexes into a new, empty index is generally faster than merging into an index that already contains data, unless the amount of data being merged is small relative to the size of the target index.

# Searching for Documents

## Using the Search Dialog Box



### First, tell dtSearch where you want to search

1. Under **Indexes to search**, click on the name of each index you want to search.
2. **To search without an index**, click the **More Search Options** tab and then click the **Add Folder...** button to select the folders to search. Under **Unindexed and combination search**, select whether you want to combine the unindexed search with an index search.

- 3. To limit your search by filename, date, or size**, click the **More Search Options** tab and then enter the criteria for your search. The **More Search Options** tab also provides a way to limit the number of files retrieved to the most relevant.

### **Next, tell dtSearch what you want to find**

1. Click the **Search Request** tab.
2. Select one of the three search types:
  - A *boolean* search request consists of a group of words, phrases or macros linked by search connectors such as AND and OR to precisely indicate the relationship between them.
  - An "*any words*" search request consists of an unstructured natural language or "plain English" query. In a natural language search request, words such as AND and OR are disregarded. Use quotation marks to indicate a phrase, + (plus) to indicate a word that must be present, and - (minus) to indicate a word that must not be present.
  - An "*all words*" search is like an "any words" search except that all of the words in the search request must be present for a document to be retrieved.
3. Enter a search request in the space provided.

4. Select the search features to use in your search.

**Stemming** searches other grammatical forms of the words in your search request. For example, with stemming enabled a search for *apply* would also find *applies*.

**Phonic searching** finds words that sound similar to words in your request, like *Smith* and *Smythe*.

**Fuzzy searching** sifts through scanning and typographical errors.

**Synonym searching** tells dtSearch to use a thesaurus to find synonyms of words in your search request. dtSearch provides three ways to perform synonym searching:

Check **Synonyms** to find synonyms using the WordNet concept network included with dtSearch.

Check **Related words** to find related words from the WordNet concept network.

Check **User synonyms** to find synonyms that you have defined in your own thesaurus.

5. Click **Search** to start the search.

## Sorting Options

### Sort by relevance

By default, dtSearch sorts retrieved documents by their relevance to your search request. Weighting of retrieved documents takes into account: the number of documents each word in your search request appears in (the more documents a word appears in, the less useful it is in distinguishing relevant from irrelevant documents); the number of times each word in the request appears in the documents; and the density of hits in each document.

### Sort by date

Select date sorting to get the most recent documents that match your search request, rather than the most relevant.

### Sort by hits

Sorting by hits uses a simple count of the number of hits in each document (with no automatic term weighting) to rank retrieved files.

After the search is over, you can re-sort the results by clicking the column headers in the search results list.

## Search Tools

### Word List

At the top of the search dialog box is 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 list will scroll to the word you are typing. If you have selected more than one index to be searched, you can pick the index listed in the word list from the drop-down list on top of the word list.

### Fields

Click the **fields...** button to see a list of the searchable fields in the selected indexes.

### Browse words

Click the **Browse Words...** button to see how dtSearch will search for words using fuzzy searching, phonic searching, stemming, or synonym expansion.

### Thesaurus

Click the **Thesaurus...** button to browse the thesaurus.

### Search history

Click the **Search History** tab to see a list of your most recent search requests.

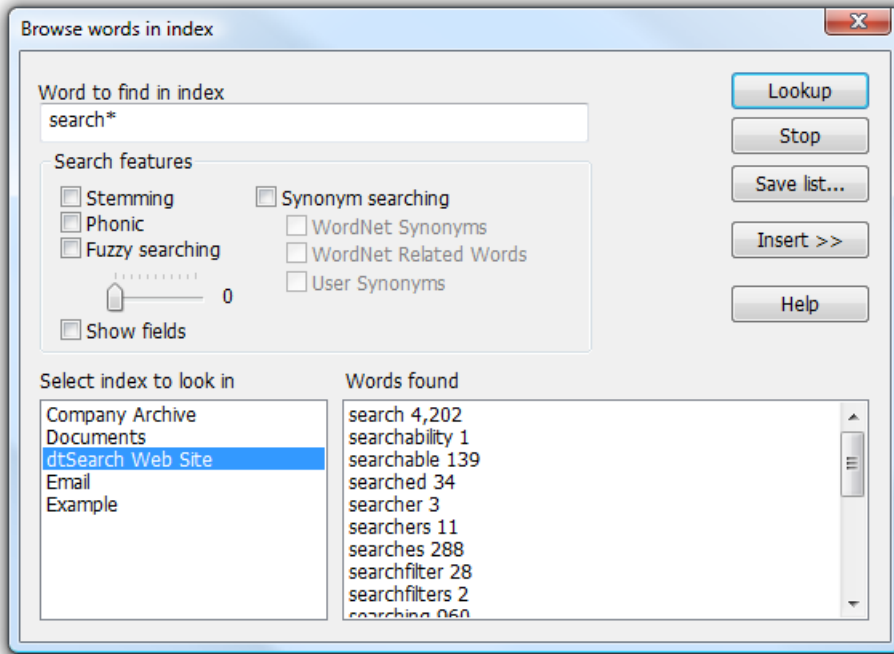
### Searching within a previous search

After a search, click **Search > Search within these results** to do another search of just the documents retrieved in your previous search. You can also use **Search within these results** to search within the results of a search that you open from **Search History**.

## Browse Words

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Menu option: **Search > Search > Browse Words**

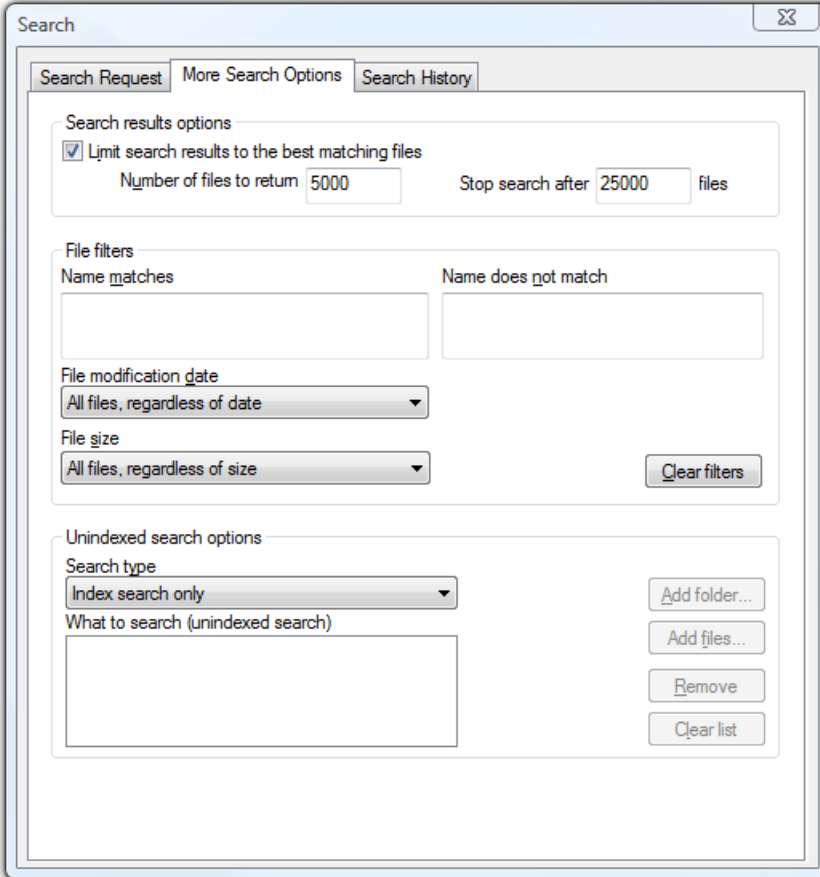


Click **Browse Words...** in the search dialog box to see how dtSearch matches words in your search request with words in the index, using any combination of wildcards and fuzzy, phonic, stemming, or thesaurus search options. To see a list of matching words:

1. Type in the word you want to look up. The word can contain the wildcards \* or ?.
2. Choose an index.
3. Select search features (see below).
4. Click **Lookup...**

To save the list of words in a file, click **Save list**.

## More Search Options



The screenshot shows the 'More Search Options' tab of the dtSearch interface. It is divided into three main sections:

- Search results options:** A checked checkbox labeled 'Limit search results to the best matching files'. Below it are two input fields: 'Number of files to return' with the value '5000' and 'Stop search after' with the value '25000' files.
- File filters:** Two text input fields for 'Name matches' and 'Name does not match'. Below these are two dropdown menus: 'File modification date' set to 'All files, regardless of date' and 'File size' set to 'All files, regardless of size'. A 'Clear filters' button is located to the right.
- Unindexed search options:** A dropdown menu for 'Search type' set to 'Index search only'. Below it is a text input field for 'What to search (unindexed search)'. To the right are four buttons: 'Add folder...', 'Add files...', 'Remove', and 'Clear list'.

### Limit search results to the best matching files

Check this box and enter a number under **Number of files to return** to have dtSearch return a limited number of items in search results. If you do not check the box, dtSearch will return *all* of the documents that match a search request.

Enter a number for the **Stop search after \_\_\_ files** setting to make the search halt when this many files have been found. For example, if **Number of files to return** is 5,000, and **Stop search after \_\_\_ files** is 25,000, then the search will proceed until at 25,000 files are found, and the best-matching 5,000 of these will be returned in search results.

## File Filters

The **File filters** in the Search dialog box enable you to limit a search to files with a certain name, modification date, or size.

### Name matches

Enter a filename filter like \*.DOC. To specify a folder name, enter a filter like this: \*\`FolderName`\\*

### Name does not match

To exclude documents enter a filter like \*.EXE.

### File size

Enter the maximum and/or minimum file size range (in bytes) for your search.

### File modification date

Select the type of date comparison you want (between two dates, before a date, after a date) and enter the relevant date or dates in the boxes following the comparison. Enter the date in the format appropriate for your location (MM/DD/YYYY in the U.S.).

You can leave any of these fields blank. To clear all of the fields, click **Clear filters**.

## Unindexed Searching

dtSearch can search without an index, and can combine indexed and unindexed searches in a single request. To search without an index, select the type of search to be performed under **Search type** (indexed search only, unindexed search only, or a combination of both types). Click **Add Files...** or **Add Folder...** to select files or folders to be included in the unindexed search.

## Search History

---

Select the **Search History** tab to see a list of prior searches. The list at the top shows the last 100 searches you have done. Below the list is the search request and list of files retrieved for the currently-selected search.

Click **Delete** to delete a search from your search history.

Click **Delete All** to delete all searches from your search history.

To open a prior search in dtSearch, click the **Open** button.

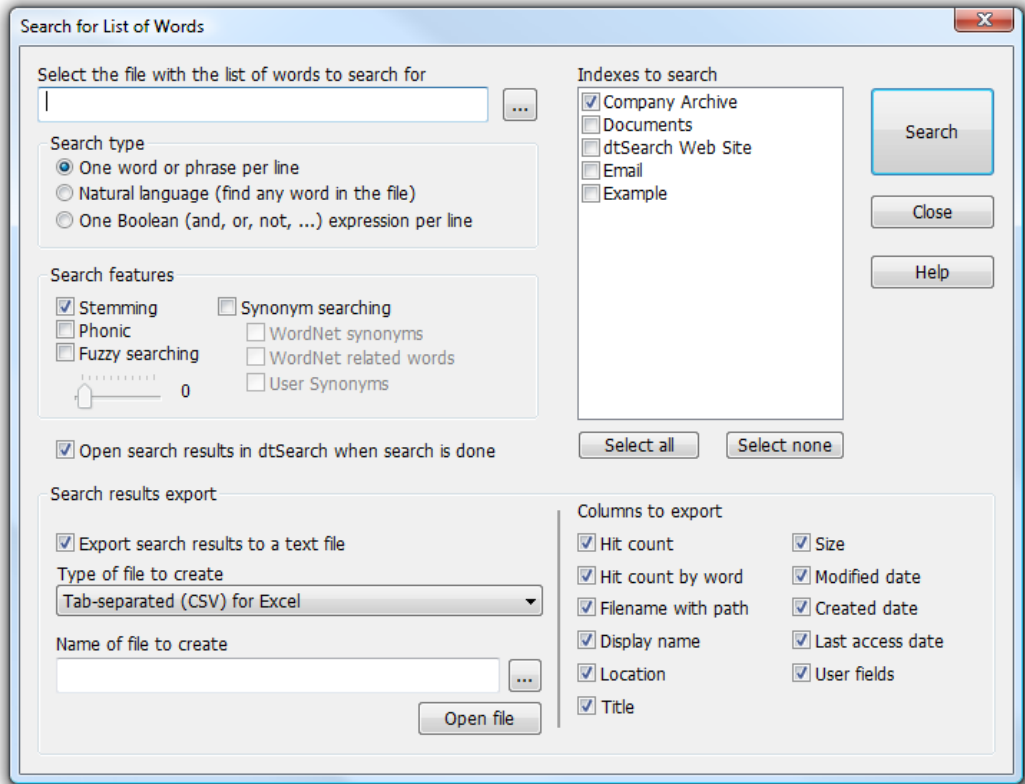
Click **Insert** to re-use a search request from a prior search.

To search within the results of a previous search, open the previous search and then click **Search > Search within these results**.

## Searching for a List of Words

---

Menu option: **Search > Search for List of Words**



The **Search for List of Words** dialog box provides a way to search for a long list of words, and create a list of matching files, in a single step. The list of words can be in any of the file formats that dtSearch supports. To search for a list of words,

1. Create the word list in any of the file formats that dtSearch supports, such as Microsoft Word, Excel, etc.
2. Click **Search > Search for List of Words...**

3. Enter the name of the file with the list of words. To browse for the file, click the ... button. If some of the words in the list are not English words, the word list file should be in a format that is able to store Unicode text, such as Microsoft Word or Excel, or the Unicode text format.
4. Under **Search type**, select the option that describes the type of search request in the text file. dtSearch will search for documents containing any of the words or phrases in the list.
  - One word or phrase per line** - The text file contains a series of lines, each of which contains a single word or phrase.
  - Natural language** - Treat the entire contents of the file as a single natural language search request.
  - One Boolean (and, or, not, ...) expression per line** - The text file contains a series of lines, each of which contains a single boolean search request. dtSearch will search for documents containing any of the boolean expressions in the list.
5. Under **Search features**, select search options to use in the search (stemming, fuzzy searching, etc.)
6. Select the type of search results that you want from the search.

Check **Open search results in dtSearch** to see the search results list in dtSearch Desktop, just as you would after a search using the Search dialog box.

Check **Export search results to a text file**, and enter a filename under **Name of file to create**, to get a plain text listing with all of the documents matching the search request. To export the list to Excel, leave the file type as "Tab separated (CSV) for Excel", which is the default.

If the search finds a very large number of files, the list of files in the text file will be complete, and the search results in dtSearch Desktop will display the best-matching 5,000 documents.

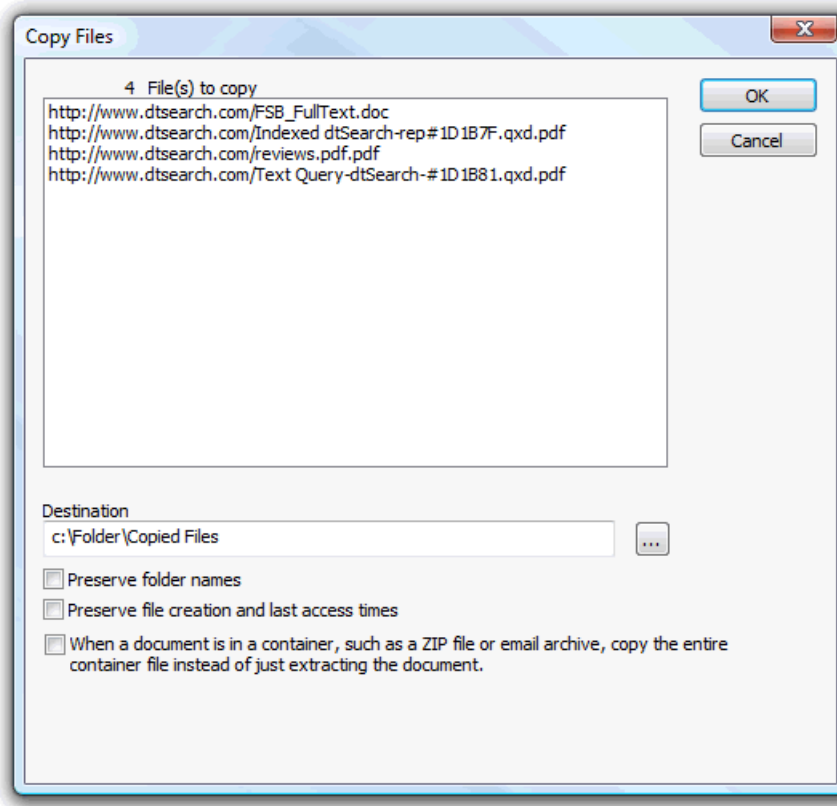


# Search Results

## Copying Retrieved Files

---

Menu option: **Edit > Copy File...**



After a search, you can copy all or some of the retrieved documents to a folder. To copy files listed in search results,

1. After the search, select the documents that you want to copy.
2. Click **Edit > Copy File...**
3. Enter a folder to store the copied files under **Destination**

Check the **Preserve folder names** box to include the folder name of each document in the destination path. Otherwise, all files will be copied to the same folder without path information.

The file modification date of each copied file will be the same as the original.

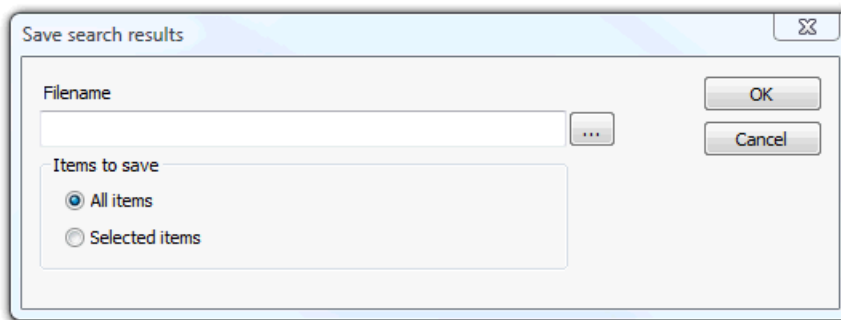
Check the **Preserve file creation and last access times** box to transfer the creation and last access dates to the copied file as well.

If an index was created with caching of documents enabled, **Copy File** will copy the document from the cached version stored in the index. Additionally, because dtSearch does not store last access dates in the index, only the last modified and creation dates are preserved.

## Saving Search Results

---

Menu option: **File > Save Search Results As...**



After a search, you can save search results in XML or comma-separated values (CSV) format.

Click **File > View File...** to reopen search results that you have previously saved in XML format. (You can also find previous searches in the Search History.)

Search results saved in CSV format can be opened in Excel or other programs that can import CSV data.

Check the **Selected items** box to save only selected items from search results in the file.

## Selecting Items in Search Results

---

To select all items in search results, click **Edit > Select All**.

To clear all selections, click **Edit > Clear All Selections**.

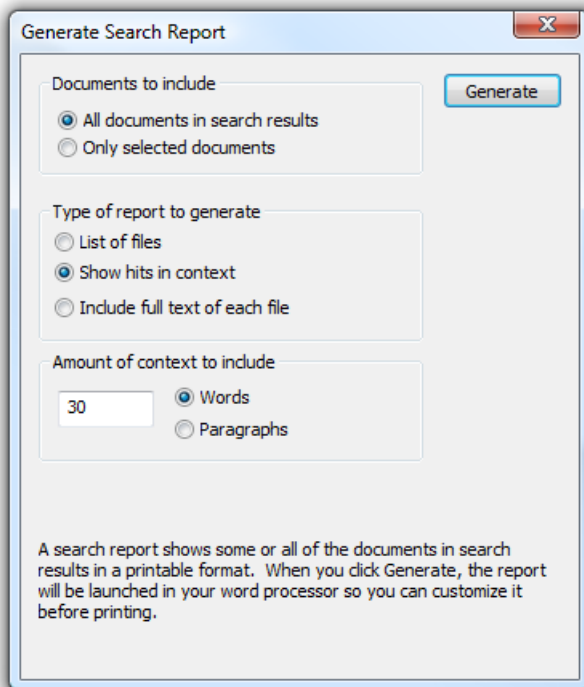
There are two ways to select individual items in search results:

(1) Hold down the Ctrl key and click on a filename to select it, and hold down the Shift key and click on a filename to select all of the files between that filename and the previously-clicked filename.

(2) If you prefer to use checkboxes, click **Options > Preferences > Search Results**, and check the box to include checkboxes in search results. This will add a checkbox next to each item in search results, making it easier to select individual items from a long list of retrieved files.

## Search Reports

Menu option: **Search > Search Report**



A search report lists each hit found in each of the documents retrieved in a search with a specified number of words or paragraphs of context surrounding it.

To create a search report from a Search Results window, choose **Search Report** from the Search menu, enter the amount of context (words or paragraphs) you want surrounding each hit in your report, and click **OK**. To include selected files in a search results list, hold down the CTRL key and click on the files you want included, then choose **Search Report** from the Search menu.

After dtSearch generates a search report, it will open the search report in your word processor so that you can edit or print the report.

To change the layout of search reports, edit the SearchReportTemplate.rtf file in your dtSearch templates folder.

# Search Requests

## Search Requests (Overview)

---

dtSearch supports three types of search requests:

An "any words" search is any sequence of text, like a sentence or a question. In an "any words" search, use quotation marks around phrases, put + in front of any word or phrase that is required, and - in front of a word or phrase to exclude it. Examples:

```
banana pear "apple pie"  
"apple pie" -salad +"ice cream"
```

An "all words" search request is like an "any words" search except that all of the words in the search request must be present for a document to be retrieved.

A "boolean" 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. Examples:

Search Request	Meaning
apple and pear	both words must be present
apple or pear	either word can be present
apple w/5 pear	<i>apple</i> must occur within 5 words of <i>pear</i>
apple not w/12 pear	<i>apple</i> must occur, but not within 12 words of <i>pear</i>
apple and not pear	only <i>apple</i> must be present
name contains smith	the field <i>name</i> must contain <i>smith</i>
apple w/5 xfirstword	<i>apple</i> must occur in the first five words
apple w/5 xlastword	<i>apple</i> must occur in the last five words

If you use more than one connector (and, or, contains, etc.), 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)*. For best results, always enclose expressions with connectors in parenthesis. Example:

```
(apple and pear) or (name contains smith)
```

Noise words, such as *if* and *the*, are ignored in searches.

Search terms may include the following special characters:

Character	Meaning
?	matches any character
=	matches any single digit
*	matches any number of characters
%	fuzzy search
#	phonic search
~	stemming
&	synonym search
~~	numeric range
##	regular expression

To enable fuzzy searching, phonic searching, synonym searching, or stemming for all search terms, check the boxes under **Search features** in the search dialog box.

## Words and Phrases

---

To search for a phrase, use quotation marks around it, like this:

apple w/5 "fruit salad"

If a phrase contains a noise word, dtSearch will skip over the noise word when searching for it. For example, a search for *statue of liberty* would retrieve any document containing the word *statue*, any intervening word, and the word *liberty*.

Punctuation inside of a search word is treated as a space. Example: *can't* would be treated as a phrase consisting of two words: *can* and *t*. *1843(c)(8)(ii)* would become *1843 c 8 ii* (four words). (To customize the way dtSearch handles punctuation in text, see Alphabet Customization.)

## 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*.

*ap\*ed* would match *applied*, *approved*, etc.

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

The = wildcard matches any single digit. For example: *N===* would match *N123* but not *N1234* or *Nabc*.

## Fuzzy Searching

---

Fuzzy searching will find a word even if it is misspelled. For example, a fuzzy search for *apple* will find *appple*. Fuzzy searching can be useful when you are searching text that may contain typographical errors (such as emails), or for text that has been scanned using optical character recognition (OCR). There are two ways to add fuzziness to your searches:

1. Check **Fuzzy searching** in the search dialog box to enable fuzzy searching for all of the words in your search request. You can adjust the level of **fuzziness** from 1 to 10. (Usually values from 1 to 3 are best for moderate levels of error tolerance.)
2. 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*

Check **Phonic searching** in the **Search features** section of the search dialog box to enable phonic searching for all of the words in your search request. Phonic searching is somewhat slower than other types of searching and tends to make searches over-inclusive, so it is usually better to use the # symbol to do phonic searches selectively.

## Stemming

---

Stemming extends a search to cover grammatical variations on a word. For example, a search for *fish* would also find *fishing*. A search for *applied* would also find *applying*, *applies*, and *apply*. There are two ways to add stemming to your searches:

1. Check **Stemming** under **Search features** in the search dialog box to enable stemming for all of the words in your search request. (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.
2. To add stemming selectively, add a ~ at the end of words that you want stemmed in a search. Example: *apply~*

The stemming rules included with dtSearch are designed to work with the English language. These rules are in the file *stemming.dat*. To implement stemming for a different language, or to modify the English stemming rules that dtSearch uses, edit the *stemming.dat* file. See the *stemming.dat* file for more information.

## Synonym Searching

---

Synonym searching finds synonyms of a word that you include in a search request. For example, a search for *fast* would also find *quickly*. To enable synonym searching, check the **Synonym searching** box in the Search dialog box. You can also enable synonym searching selectively by adding the & character after certain words in your request. Example: *improve& w/5 search*

dtSearch provides three ways to perform synonym searching:

Check **Synonyms** to find synonyms using the WordNet concept network included with dtSearch.

Check **Related words** to find related words from the WordNet concept network.

Check **User synonyms** to find synonyms that you have defined in your own thesaurus.

## Numeric Range Searching

---

A numeric range search is a search for any numbers that fall within a range. To add a numeric range component to a search request, enter the upper and lower bounds of the search separated by `~~` like this:

```
apple w/5 12~~17
```

This request would find any document containing *apple* within 5 words of a number between *12* and *17*.

### Notes

1. A numeric range search includes the upper and lower bounds (so *12* and *17* would be retrieved in the above example).
2. Numeric range searches only work with integers greater than or equal to zero, and less than 2,147,483,648
3. For purposes of numeric range searching, decimal points and commas are treated as spaces and minus signs are ignored. For example, *-123,456.78* would be interpreted as: *123 456 78* (three numbers). Using alphabet customization, the interpretation of punctuation characters can be changed. For example, if you change the comma and period from **space** to **ignore**, then *123,456.78* would be interpreted as *12345678*.

## Field Searching

---

When you index a database or other file containing fields, dtSearch saves the field information so you can perform searches limited to a particular field. For example, if you index an Access database with a *Name* field and a *Description* field, then you could search for *apple* in the *Name* field like this:

```
Name contains apple
```

In addition to databases, dtSearch automatically recognizes metadata in supported file types. For a list of supported metadata formats, see "What file formats does dtSearch support" at <http://support.dtsearch.com>.

To see a list of all of the fields defined in your index, click the **fields...** button in the Search dialog box.

Field searches can be combined using AND, OR, and NOT, like this:

```
(City contains (Portland or Seattle)) and (Address
contains (Washington))
```

The parenthesis are necessary to ensure that dtSearch interprets the search request correctly.

To search for text that is not in any field, search for *//text contains (search request)*. The *//text* field name means "not in any field".

### Alternative field searching syntax

An alternative syntax for field searches is to add the field name and *::* in front of each word, like this:

```
(City: : Portland or Ci ty: : Seattle) and
(Address: : Washi ngton)
```

The alternative syntax can be used where the boolean syntax is not possible, such as in "all words" or "any words" searches and file conditions.

### Nested Fields

Some file formats such as XML support nesting of fields. Example:

```
<record>
  <name>John Smi th</name>
  <address>
    <street>123 Oak Street</street>
    <ci ty>Mi ddl eton</ci ty>
    . . .
```

In dtSearch, a search of a field includes any fields that are nested inside of the field, so the XML file above would be retrieved in a search for any of the following:

```
record contains oak
address contains oak
street contains oak
```

To specify a specific subfield of a field, use */* to separate the field names, like this:

```
record/address contains oak
address/street contains oak
record/address/street contains oak
```

Put a */* at the front of the field name to specify that it cannot be a sub-field of another field:

```
/record/name contains Smi th
/name contains Smi th
```

The second search request above would *not* match the XML example because, while it contains a "name" field, the name field is a sub-field of the record-field. A search for /name specifies a "name" field at the top of the field hierarchy.

Finally, you can use // to specify any number of unspecified intervening fields, like this:

```
/record//city contains Middleton
```

## Segment Searches

You can also define a field at the time of a search by designating words that begin and end the field, like this:

```
(beginning to end) contains (something)
```

The *beginning TO end* part defines the boundaries of the field. The CONTAINS part indicates the words or phrases you are searching for in the field. The only connector allowed in the beginning and end expressions in a field definition is OR. Examples:

```
(name to address) contains john smith  
(name to (address or xlastword)) contains (oak w/10  
lane)
```

The field boundaries are not considered hits in a search. Only the words being searched for (*john smith, oak, lane*) are marked as hits.

---

## 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 pie and poached pear* would retrieve any document that contains both phrases.

*(apple or banana) and (pear w/5 grape)* would retrieve any document that (1) contains either *apple* OR *banana*, AND (2) contains *pear* within 5 words of *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 pie or poached pear* would retrieve any document that contained *apple pie, poached pear*, or both.

## 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 *apple* within 5 words of *pear*. The following are examples of search requests using W/N:

```
(apple or pear) w/5 banana
(apple w/5 banana) w/10 pear
(apple and banana) w/10 pear
```

The pre/N connector is like W/N but also specifies that the first expression must occur before the second. Example:

```
(apple or pear) pre/5 banana
```

Some types of complex expressions using the W/N connector will produce ambiguous results and should not be used. 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)
```

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 OR. Example:

```
(apple and banana) w/10 (pear or grape)
(apple and banana) w/10 orange tree
```

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

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 *apple* within 10 words of the end of a document.

## 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. Example:

```
apple sauce and not pear
```

NOT standing alone can be the start of a search request. For example, *not pear* would retrieve all documents that did not contain *pear*.

If NOT is not the first connector in a request, you need to use either AND or OR with NOT:

apple or not pear  
not (apple w/5 pear)

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

apple not w/20 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 *apple* and excludes cases where *apple* is too close to *pear*. In the *pear not w/20 apple* request, dtSearch searches for *pear* and excludes cases where *pear* is too close to *apple*.

## Variable Term Weighting

---

When dtSearch sorts search results after a search, by default all words in a request count equally in counting hits. However, you can change this by specifying the relative weights for each term in your search request, like this:

apple: 5 and pear: 1

This request would retrieve the same documents as *apple and pear* but dtSearch would weight *apple* five times as heavily as *pear* when sorting the results.

## Search Macros

---

Menu option: **Options > Preferences > Macros**

Macros can be useful for abbreviating long names or phrases that you use frequently, or abbreviating field definitions in field searches. A macro can 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. A macro name must begin with the @ character in search requests.

For example, if you define the macro @IRC to mean *internal revenue code*, and then search for *standard deduction w/3 @IRC*, dtSearch will search for *standard deduction w/3 internal revenue code*.



# Options

## Indexing Options

---

Menu option: **Options > Preferences > Indexing options**

**Indexing options**

- Index document properties
- Index filenames as text
- Index HTML scripts, styles, links, and comments
- Index numbers
- Enable numeric range searching (makes indexes larger)
- Index hidden content in Office documents (such as macros)
- Index NTFS Summary Information streams
- Index field names in XML files
- Index field attributes in XML files
- Ignore common HTML field names (<P>, <I>, <B>, etc.) in XML data
- Index attachments in PDF files
- Automatically recognize dates, email addresses and credit card numbers in text

Default location for new indexes

c:\dtSearch\UserData

### **Index document properties**

If checked, dtSearch will index document summary information fields in Office, PDF and WordPerfect documents and META tags in HTML files.

### **Index filenames as text**

If checked, dtSearch will append the filename of each document to the end of the text during indexing, so that text in a filename will be searchable like other document text.

### **Index HTML scripts, styles, links, and comments**

Normally HTML scripts, styles, links and comments are not indexed and dtSearch will index only visible text and META tags in HTML files. Check this box to make these hidden HTML elements searchable.

### **Index numbers**

If your documents contain a lot of numbers and you do not expect to want to search for them, clear this checkbox to make dtSearch exclude numbers from your index. This will make your indexes smaller and will speed indexing.

### **Enable numeric range searching**

By default, dtSearch indexes numbers both as text and as numeric values, which is necessary for numeric range searching. Use this flag to suppress indexing of numeric values in applications that do not require numeric range searching. Numbers will still be searchable as text if the **Index numbers** option is checked. This setting can reduce the size of your indexes by about 20%.

### **Index hidden content in Office documents (such as macros)**

In addition to the normally visible text, Office documents can contain a wide range of other embedded data, such as macros, viruses, or other embedded documents. Check this box to make these items visible in dtSearch.

### **Index NTFS Summary Information streams**

Check this box to have dtSearch index NTFS Summary Information data for each document indexed. NTFS Summary Information properties are created when you right-click a document in Windows Explorer and enter values in the Summary Information fields (Author, Subject, etc.)

### **Index field names in XML files**

#### **Index field attributes in XML files**

Check these boxes to have dtSearch index field names or field attributes in XML files. If both boxes are unchecked, dtSearch will only index field values in XML.

### **Default location for new indexes**

By default, indexes will be created in your dtSearch UserData folder. You can specify a different location here. (In the Create Index dialog box, you can override this setting for each index that you create.)

### **Automatically recognize dates, email addresses and credit card numbers in text**

Check this box to have the dtSearch indexer scan for anything that looks like a date, email address, or credit card number during indexing. With this option enabled, you can search specifically for text matching credit card numbers, email addresses, or ranges of dates. See: **Automatic recognition of dates, email addresses, and credit card numbers** in this manual.

## **Letters and Words**

---

Menu option: **Options > Preferences > Letters and words**

**Letters and words**

Alphabet file  
default.abc ... Edit...

Noise word list  
noise.dat ... Edit...

Maximum word length  
32

Hyphens

- Treat hyphens as spaces (index "first-class" as "first" and "class")
- Treat hyphens as searchable (index "first-class" as "first-class")
- Ignore hyphens (index "first-class" as "firstclass")
- All three

Insert word breaks between Chinese, Japanese, and Korean characters in text.

Changes to the hyphenation, noise word list, and alphabet settings take effect when you create a new index and will not affect existing indexes.

### Alphabet file

The alphabet file determines how dtSearch interprets certain characters in your documents (Unicode characters in the range from 32-127). Other character properties are set to conform to the Unicode Standard and cannot be modified. The default alphabet file included with dtSearch is DEFAULT.ABC.

To modify the alphabet file (for example, to make a character such as + searchable) click the **Edit...** button.

### Noise word list

The noise word list contains words that are generally too common to be useful in searching (such as *the*).

### Maximum word length

This is the number of letters dtSearch will consider when indexing long words.

### Hyphens

By default, dtSearch treats hyphens as spaces in indexed text and in search requests. For example, "first-class" would be treated like "first class." This option provides a way to select alternative treatments.

## Insert word breaks between Chinese, Japanese, and Korean characters in text

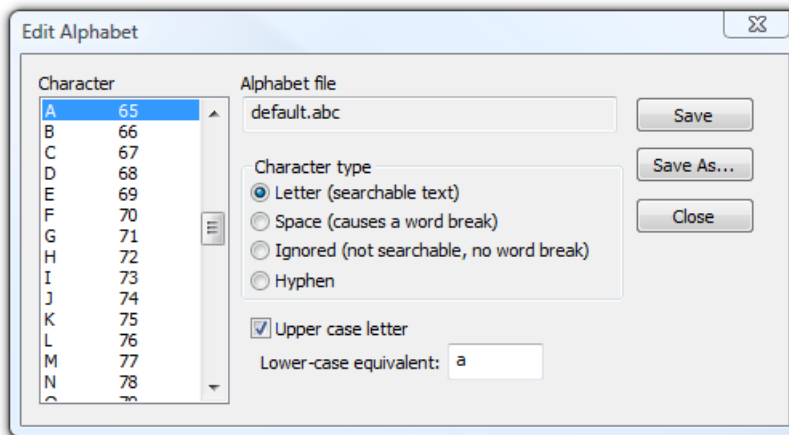
Check this box if you are searching Chinese, Japanese, or Korean documents that do not contain word breaks.

Some Chinese, Japanese, and Korean text does not include word breaks. Instead, the text appears as lines of characters with no spaces between the words. Because there are no spaces separating the words on each line, dtSearch sees each line of text as a single long word. To make this type of text searchable, enable automatic insertion of word breaks around Chinese, Japanese, and Korean characters, so each character will be treated as single word.

## Alphabet Customization

---

Menu option: **Options > Preferences > Letters and words**



The Edit Alphabet dialog box displays a list of all of the characters and how dtSearch classifies each one. dtSearch classifies characters into four categories: letter, space, hyphen, and ignore.

- Letter**                      A searchable character. 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 character that causes 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.

- Ignored** A character that is disregarded in processing text. For example, if you classify the period as ignore instead of space then dtSearch would process U.S.A. as one word: USA.
- Hyphen** Hyphen characters can receive special processing in dtSearch. By default, only the '-' is defined as a hyphen. To specify the rules for processing hyphens, click Options > Preferences > Indexing Options.

For characters that are letters, you can specify whether the character is a lower case or upper case letter.

Only characters in the Unicode range 33-127 can be modified using Alphabet Customization. Other character properties are determined by the Unicode specification. See [www.unicode.org](http://www.unicode.org) for more information about Unicode.

## Filtering Options

Menu option: **Options > Preferences > Filtering options**

**Filtering options**

Binary files

Do not index

Filter text

Index as plain text

Exclude filter list for new indexes

```
*.exp *.ilk *.res *.trg *.tlh *.idb *.pdb *.pch
*.opt *.lib "**\Deleted Items\*" *.cab *.mov
*.psp *.bmp *.chi *.chm *.com *.dll *.exe *.gif
*.hlp *.ivi *.ivt *.tx *.jpeg *.jpg *.msi *.nls *.obj
```

---

Advanced filtering options

Languages to include

English

Western European Languages

Middle-Eastern Languages (Hebrew, Arabic, Syriac, Thanaa)

Other European Languages (Cyrillic, Armenian, Georgian, Greek)

Arabic

Block size for segmenting data in large binary files (in kilobytes)

Minimum size of text segments to include from filtered data

Overlap blocks (so text that crosses a segment boundary will be searchable)

Extract blocks as HTML (adds comments identifying the original location of each sequence of text filtered from the original data)

Allow filter to insert word breaks

Use filtering to index corrupt or encrypted documents

Use filtering to index all documents (not recommended except for forensics use). Please see the documentation before using this option.

### Binary files

A binary file is a file that has a format dtSearch cannot recognize and that does not appear to be a plain text file. Use the **Binary files** setting to specify whether you want dtSearch to index these files as plain text, skip them entirely, filter out only the text, or index only the filenames.

### Exclude filter list for new indexes

When an index is created, dtSearch will use this option setting to initialize the list of filename filters to be excluded from the index.

## Advanced Filtering Options

Binary files are files that dtSearch does not recognize as documents. Examples of binary files include executable programs, fragments of documents recovered through an "undelete" process, or blocks of unallocated or recovered data obtained through computer forensics. Content in these files may be stored in a variety of formats, such as plain text, Unicode text, or fragments of .DOC or .XLS files. Many different fragments with different encodings may be present in the same binary file. Indexing such a file as if it were a simple text file would miss most of the content.

The dtSearch filtering algorithm scans a binary file for anything that looks like text using multiple encoding detection methods. The algorithm can detect sequences of text with different encodings or formats in the same file, so it is much better able to extract content from recovered or corrupt data than a simple text scan.

Each binary file is first divided into blocks, and then the text is extracted from each block using the **Advanced filtering options** settings. Each block is given a filename based on the original document, the block number, the range of bytes in the file, and the language settings. Example:

```
sample.bin #16 @4194303 - 4456704 (0, 1, 2)
```

This name identifies the 16th block extracted from sample.bin, covering the range of data from offsets 4194303 to 4456704 in the input file. The numbers in parenthesis encode the language settings used to extract the text from this block.

The options described below apply only to text that is indexed as binary data using the filtering algorithm. These options have no effect on indexing text in recognized document formats such as Word, Excel, PDF, etc.

**Languages to include**

The **Languages to include** setting is used to help the filtering algorithm to distinguish text from non-text data. It is only used as a hint in the algorithm, so if the text extraction algorithm detects text in another language with a sufficient level of confidence, it will return that text even if the language was not selected.

**Block size**

The **Block size** setting specifies how each input file is divided into blocks before being filtered. For example, if you specify a block size of 100 kilobytes, then a 1000 kilobyte file would be indexed as 10 separate blocks. Very large block sizes can make extraction of documents slower after a search (because more data has to be extracted to view a block), so block sizes over 1 Mb are not recommended.

**Overlap blocks**

Overlapping blocks prevents text that crosses a block boundary from being missed in the filtering process. With overlapping enabled, each block extends 256 characters past the start of the previous block.

**Extract blocks as HTML**

Extracting blocks as HTML has no effect on the text that is extracted, but it adds additional information in HTML comments to each extracted block. The HTML comments identify the starting byte offset and encoding of each piece of text extracted from a file. To see the comments, right-click anywhere in the text of a block that was retrieved in a search and select "View source".

**Minimum size of text segments**

The minimum text segment size specifies how many text characters must occur consecutively for a block of text to be included. At the default value, 6, a series of 5 text characters surrounded by non-text data would be filtered out.

**Allow filter to insert word breaks**

The filter can automatically insert word breaks where appropriate (for example, where there is a lower-case letter followed by a capital letter) and break up very long consecutive streams of letters.

**Use filtering to index corrupt or encrypted documents**

This option applies the filtering algorithm to attempt to recover text from corrupt or encrypted documents, instead of just skipping these files during indexing. (By default, dtSearch will skip documents that are corrupt or encrypted, and will report a list of these files in the index update log. Only unencrypted text will be recovered from encrypted documents.)

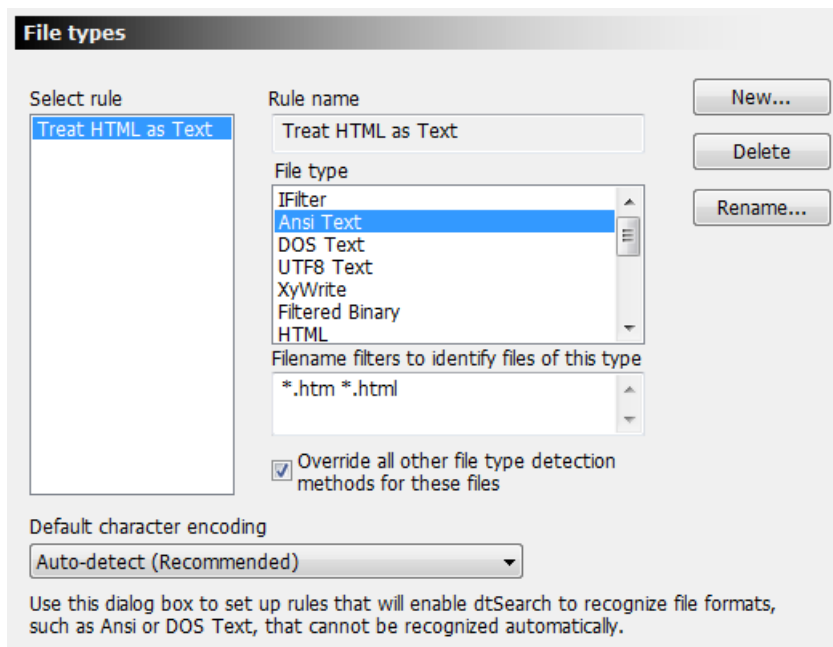
### Use filtering to index all documents

This option applies the filtering algorithm to index all documents, whether or not they appear to have a recognizable file format. This option is not recommended for most users. It will cause dtSearch to scan all files for segments of recognizable text, using the filtering algorithm only. This type of scan can find data that was intentionally hidden or accidentally left in documents such as text in unused streams in Microsoft Word or Excel files. However, this type of scan will miss data that is only accessible through a file format-aware scan of a document, such as compressed data in a PDF file. Therefore, this option should only be used in combination with a standard file format-aware index.

## File Types

---

Menu option: **Options > Preferences > File types**



dtSearch recognizes most file formats automatically. If you are indexing only files such as word processor documents that dtSearch supports and can automatically recognize, you can disregard this section.

If you are indexing other types of files, dtSearch provides a way to specify how you want dtSearch to process the files. For each filter, you can specify a rule that tells dtSearch how you want the file to be handled. You can also use file type rules to override the default handling of some files. For example, you could make a rule to require \*.html to be indexed as text, if you want to be able to search HTML tags.

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 Microsoft Word that it can detect automatically.

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

### To set up a file type specification

1. Click **New...** to create a new item, and enter a name to identify it
2. Under **File type**, select the file format that the rule should select.
3. Under **Filename filters**, enter filters to identify files with this format.
4. Check the **Override all other file type detection methods for these files** box if you want dtSearch to always apply the rule, even if a document appears to have a different format.

### IFilters

IFilters are components that enable various Microsoft search products, such as Microsoft Index Server, to extract text from documents. For example, when you install Microsoft OneNote, an IFilter is installed to enable searching of \*.one files. To tell dtSearch to use installed IFilters to process some of your files, set up a rule in the file type table and under **File type**, select "IFilter".

IFilter support only works on systems with the Microsoft component query.dll installed. Most Windows computers will have this component. For information on products that include query.dll, see <http://support.microsoft.com/dllhelp>.

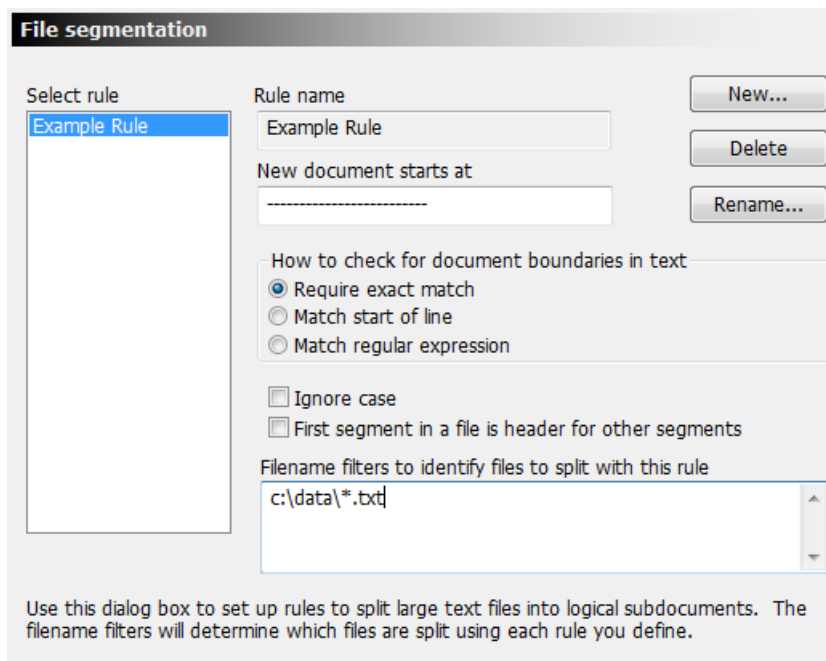
## Default character encoding

Plain text files, some older word processor files, and HTML files written in languages other than English use a character encoding to specify the meaning of characters in the range from 128 to 255. For example, a Russian document might have the CP1251 encoding, which uses these characters for Cyrillic letters. By default, dtSearch will try to automatically detect the encoding of these types of documents based on an analysis of the contents. If you find that the auto-detection is not working for your documents, you can specify the encoding that dtSearch should assume for documents that do not specify one. To do this, select an encoding from the drop-down list under **Default character encoding**.

## File Segmentation Rules

---

Menu option: **Options > Preferences > File segmentation**



The File Segmentation Rules dialog box provides a way to tell dtSearch that certain text files should be indexed as many subdocuments instead of treating each file as a single large document.

The maximum supported size for each individual segment is 16 Mb.

---

You can set up any number of rules specifying how groups of files will be subdivided. Each rule includes the following elements:

**Rule name**

The name of a rule is used only to identify it in the File Segmentation rules dialog box.

**New document starts at**

This is a marker that indicates when a new document begins. For email message files, this is often part of a message header such as "Date:" or "From:". To avoid incorrectly splitting a message, this marker should be as unique as possible.

**How to check for document boundaries in text**

Each line of a file will be compared against the marker under **New document starts at**. Three types of comparison are available:

**Require exact match** -- The entire line must exactly match the marker.

**Match start of line** -- The start of the line must match the marker.

**Match regular expression** -- The marker is interpreted as a regular expression. A document boundary occurs when the marker is found anywhere in a line. To require a marker to begin at the start of a line, precede it with the ^ character.

**Ignore case**

Match a document boundary even if the capitalization does not match.

**First segment in a file is header for other segments**

Check this box to have dtSearch insert the first segment in a file in every following segment. This option is useful when segmenting XML or HTML files, because it allows the HTML or XML header to be repeated for each segment.

**Filename filters**

For each rule, a filename filter determines which files the rule applies to. If more than one rule could apply to a particular file, the first one to match the filename is the one applied.

Documents processed with file segmentation must be text files, XML, or HTML. If you use file segmentation with XML or HTML files, use the **First segment in a file is header for other segments** checkbox to make sure that the XML or HTML header is repeated for each segment.

In search results, each subdocument in a segmented document will have a name that identifies the location of the subdocument in its disk file.

## Text Fields

Menu option: **Options > Preferences > Text fields**

The screenshot shows the 'Text fields' configuration window. It features a 'Select field' list on the left with 'Subject' highlighted. The main area contains several settings for the 'Subject' field: 'Field name' is 'Subject', 'Display in search results' is unchecked, 'Beginning of field' is 'Subject:', 'End of field (\$\$\$ = end of line)' is '\$\$\$', and 'How to check for field boundaries in text' is set to 'Require exact match'. The 'Where to look for this field' section includes 'Lines of each file to check for this field' set to '0' and 'Filename filters (\*.txt, \*.wpd, ...)' set to '\*.txt'. Buttons for 'New...', 'Delete', and 'Rename...' are located on the right side of the window.

Text fields are fields that dtSearch can extract from documents based on markers in the text. For example, you could create a "Subject" field that contains everything from the word "Subject:" to the end of the line. A field definition will apply to documents indexed after you have defined the field.

To create a new field, click **New...** and enter the name of the field.

### Display in search results

If you check this box, the field will appear as a column in search results.

### Beginning of field

Enter text that identifies the start of this field. The text can be any combination of letters or symbols.

### End of field

Enter text that identifies the end of this field. To indicate that a field ends at the end of the line, enter \$\$\$ here.

## How to check for field boundaries in text

There are three ways dtSearch can check for the field boundaries you specify: **Ignore case** ("Example" would match "EXAMPLE", "example", etc.), **Require exact match**, and **Match regular expression**.

## Where to look for this field

You can tell dtSearch to only check for a field in a certain number of lines of each file, and you can enter filename filters to disable scanning for a field except in files matching the filters.

## Search Options

Menu option: **Options > Preferences > Search options**

The screenshot shows the 'Search options' dialog box. It is divided into two main sections: 'Search dialog box' and 'Search limits'.  
In the 'Search dialog box' section, there are two font settings: 'Search dialog box font' and 'Search request and text edit'. Each has a text input field, a checked 'Use default' checkbox, and a 'Choose Font...' button. Below these is a checked checkbox for 'Auto-complete search terms on SPACE or ) key. (With this option off, you can still use Shift-SPACE to auto-complete a search term.)'  
In the 'Search limits' section, there is a checked checkbox for 'Limit search results to the best-matching files'. Below this are three input fields: 'Number of files to return' (set to 5000), 'Stop search after' (set to 25000) with the unit 'files' to its right, and 'Maximum number of unique words to match before halting a search' (set to 250000).

## Search dialog box font

Use the **Search dialog box font** setting to change the font in the search dialog box to a font different from your system default. For example, you may want to use the Arial Unicode MS font (included with Microsoft Office) so that you can search for words in languages that your default system font cannot display. To change one of the fonts, un-check the **Use default** box and then click the **Choose Font...** button to select a font.

### Auto-complete search terms

Check this box to have dtSearch automatically complete your search terms as you enter a search request. When you press SPACE or ), dtSearch will find the word in the index that starts with the letters you have typed so far, and insert that word in the search request. For example, you could type "examp" and a space and dtSearch would insert "example" in your search request. With this setting off, you can still auto-complete search terms by pressing Shift-SPACE.

### Search Limits

#### Limit search results to the best-matching files

Check this box and enter a number under **Number of files to return** to have dtSearch return a limited number of items in search results. If you do not check the box, dtSearch will return all of the documents that match a search request.

Enter a number for the **Stop search after \_\_\_ files** setting to make the search halt when this many files have been found. For example, if **Number of files to return** is 5,000, and **Stop search after \_\_\_ files** is 25,000, then the search will proceed until at 25,000 files are found, and the best-matching 5,000 of these will be returned in search results.

This setting is also accessible in the Search dialog box on the **More Search Options** tab.

#### Maximum number of unique words to match before halting a search

The limit on the number of unique words to match affects very broad wildcard searches. For example, if you search for "s\* or t\* or r\*" in a very large index, the search might match hundreds of thousands of unique words, resulting in a "Too many words retrieved in index" error message. This setting lets you increase the number of word matches dtSearch will find before automatically halting a search. Unless you search for a term like \*a\*, it is very unusual to get anywhere near this limit even with huge databases, because the number of words you retrieve is generally a function of the specificity of the search rather than the size of the database.

## Search Results Options

---

Menu option: **Options > Preferences > Search results**

You can also right-click the <--> symbol in the top right corner of search results to change these settings.

Search results

Items to include in search results

- Row number
- Checkbox
- Relevance score
- Hit count
- Location
- Modification date
- Modification time
- Title
- Size
- Type
- Index retrieved from
- First hits in context

Window layout

Horizontal split  
 Vertical split

Column sizes

Size columns to fit content

Search results font

Use default Choose Font...

Synopsis Color...

Default format

- Always find the first hit when opening a document
- Automatically open the first document in search results
- Display the PDF Title as the filename for PDF files
- Display the HTML <TITLE> as the filename for HTML files.
- Disable JavaScript when displaying a retrieved HTML document
- Remember sort order from previous search

Number of search results lists to keep

### Items to include in search results

Check an item to add it to the columns displayed in search results.

### Always find the first hit when opening a document

Check this box to have dtSearch jump right to the first hit when a file is opened.

### Automatically open the first document in search results

If this box is not checked, the document pane will be blank after a search until you double-click a document in search results.

### Display the PDF Title as the filename for PDF files

### Display the HTML <TITLE> as the filename for HTML files

HTML and PDF files have "Title" property that usually provides a more informative name than the filename. For example, rpt2002.html might have the title "2002 Annual Report". Check this box to see the title rather than the filename in the search results list. (You can still see the filename for any item in search results by hovering the mouse over it and looking at the status bar at the bottom of the dtSearch window.)

### **Disable JavaScript when displaying a retrieved HTML document**

Some HTML files have JavaScript that will generate errors when the HTML is viewed outside of its normal context. Check this box to disable JavaScript in HTML files when they are displayed in dtSearch. (This setting only affects the display of a file in dtSearch and will not affect the original document.)

### **Remember sort order from previous search**

By default, dtSearch sorts search results according to the sort setting in the Search dialog box, which has options to sort by relevance, hit count, or date. After a search you can click the column headers in search results to sort by other document properties, such name or size. Check this box to have dtSearch remember this sort order and apply it to subsequent searches.

### **Window layout**

Choose whether you want to see search results on the left and documents on the right (vertical split) or search results on top and documents below (horizontal split).

### **Column sizes**

Choose how you want dtSearch to size columns when search results open.

**Size columns to fit window** ensures that the columns will fit in the window without horizontal scrolling, even if some columns are too small to display all of the text.

**Size columns to fit content** ensures that all columns are large enough for their content.

**Remember column widths** tells dtSearch to remember manually-resized search results column widths.

You can click the <--> symbol in the upper left corner of search results to automatically resize columns to fit the window or the content. Each time you click the <--> symbol it will switch between the first two methods of resizing.

### **Search results font**

Choose the font to use for the search results list.

### **Synopsis color...**

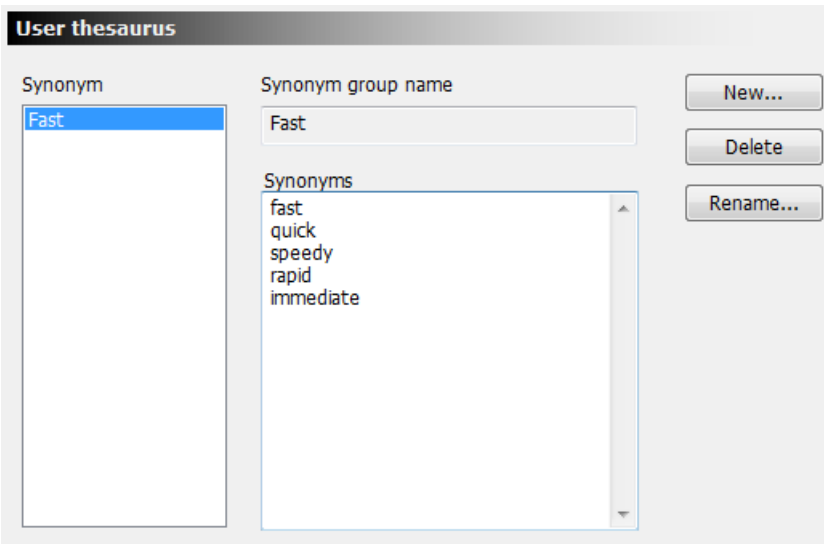
If the **First hits in context** box is checked under **Items to include in search results**, then dtSearch will display, after each item in the search results list, a line with the first few hits in the document in context. Use this setting to change the background color for this line of text.

### **Number of search results lists to keep**

Enter the number of previous searches you want dtSearch to save, so you can see them in Search History.

## User Thesaurus

Menu option: **Options > Preferences > User Thesaurus**



A synonym group is a group of words or phrases that dtSearch treats as equivalent when performing a search. For example, if you define a synonym group to include *improve*, *ameliorate*, *amend*, *better*, and *help*, then a search for *improve* would also find any of the other words in the group.

Synonym searching works in combination with other search features like stemming. If you enable both synonym searching and stemming in the above example, a search for *amending* would also find *improving*, *helped*, etc.

To create a synonym group:

1. Click the **New...** button in the **User Thesaurus** tab of the Preferences dialog box and enter a name for the synonym group. The name you select has no effect on searching and is just used to identify the group.
2. Enter the words and phrases in the synonym group, one word or phrase on each line.

To edit an existing group:

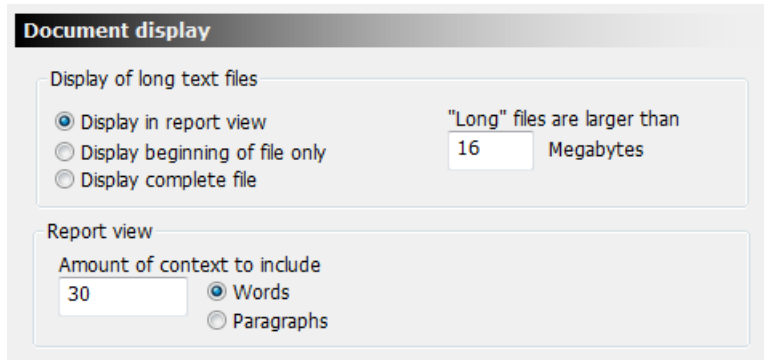
1. Click on a group in the list. The synonyms in that group will appear in the **Synonyms** list.

2. Edit the list, adding or deleting words or phrases as needed.

## Document Display

---

Menu option: **Options > Preferences > Document display**



### Display of long text files

Very large text files can take a long time to open in the dtSearch viewer. By default, documents larger than 16 megabytes will open in "Report" view, which shows each hit with a specified amount of context. To switch between the report view and the full text of the document, press CTRL+R or click **View > View as Report**.

### Report view

A report view of a document shows just the hits with the amount of context you specify, either in paragraphs or words. (dtSearch can also generate a search report, which shows the hits from all documents in the search in a document that opens in your word processor.)

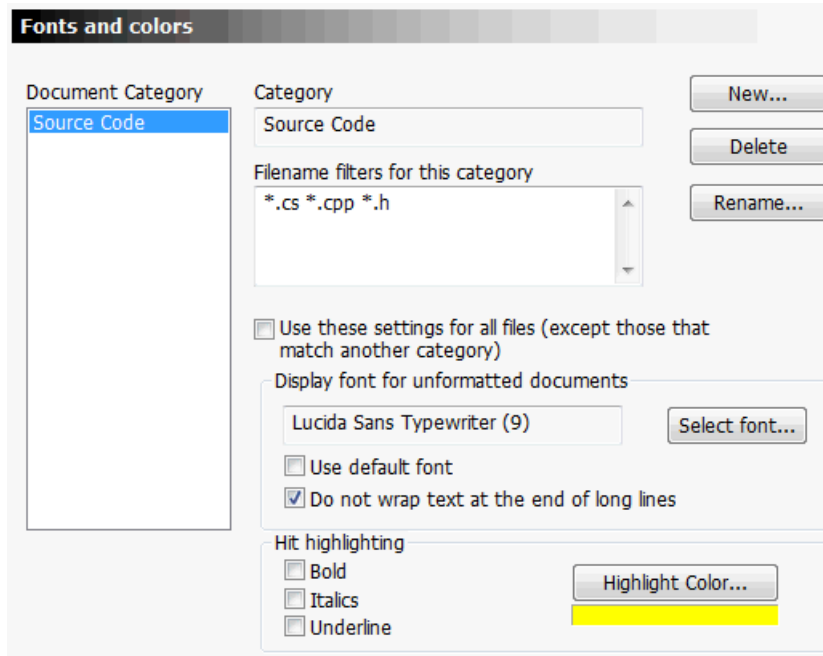
### Automatically update hit locations when opening documents with out-of-date index information

If a document was modified since it was last indexed, or if it was indexed with an older version of dtSearch, then word locations in the index for the document may be out of date. Check this box to ensure that hit highlighting appears correctly after a search, even when index information is out of date.

## Document Fonts and Colors

---

Menu option: **Options > Preferences > Fonts and colors**



The **Fonts and colors** settings let you modify the format dtSearch uses to display retrieved files. You can set different display options for different categories of documents. For example, you could have all files with a .CPP or .H extension displayed using the Courier font, and use Arial for other documents.

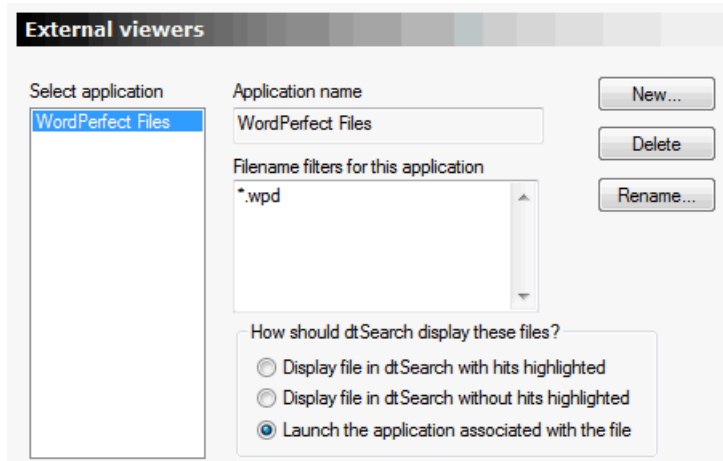
### To create a new document display category

1. Click **New...** and enter a name for the category.
2. Under **Filename filters**, enter filters like \*.doc that identify the documents to be covered by this category. If you check the **Use these settings for all files** box, the category covers any documents that do not fall into one of the other categories.
3. Either select a font or check the box to use your web browser's default font. The font you select will only apply to documents that do not already have font formatting, such as text files.
4. For some file types, such as reports formatted as text or program source code, "wrapping" the text at the end of long lines makes the file harder to read. Check the **Do not wrap text at the end of long lines** box to tell dtSearch to display these files without word wrapping.
5. Under **Hit highlighting**, select the features that you want to use to identify hits.

## External Viewers

---

Menu option: **Options > Preferences > External viewers**



Use the **External Viewers** dialog box to tell dtSearch how you want your documents to be displayed. The default is to display documents using the built-in dtSearch viewers. To specify a different viewing method, click **New...** in the dialog box and enter a name for the application or document type, then enter one or more filename filters identifying the documents, and click on one of the three viewing options:

1. **Display file in dtSearch with hits highlighted.**
2. **Display file in dtSearch without hits highlighted.** dtSearch will display the file using Internet Explorer or an Internet Explorer plug-in.
3. **Launch in the application associated with the file.**

## Settings Files

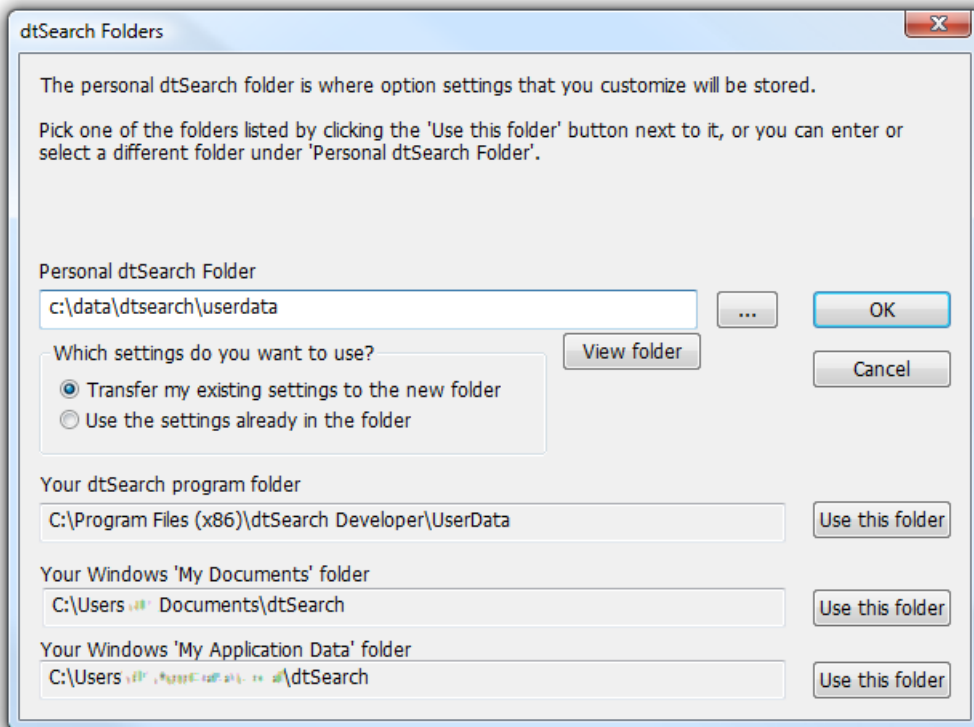
---

Menu option: **Options > Change dtSearch folder**

Your Personal dtSearch Folder is where dtSearch options files and search results are saved. When you run dtSearch the first time, dtSearch will ask where you want to put this folder. The default location is a "UserData" folder located under your dtSearch program folder (for example, c:\Program Files\dtSearch\UserData).

A separate option setting controls the default location for new indexes. See Indexing Options for information on this setting.

The Personal dtSearch Folder can be specified on the command-line by using the /dir command-line switch.



### Transfer my settings to the new folder

Select this option to copy settings from an existing folder to the new folder. Any settings in the new folder will be replaced.

### Use the settings already in the folder

Select this option if the new folder already has a set of options files that you want to use.

Files in this folder include:

File	Purpose
default.abc	Alphabet definition file
extview.xml	External viewer options
fields.xml	Text fields definitions
filetype.xml	File type specifications

fileseg.xml	File segmentation rules
macros.xml	User-defined macros
stemming.dat	Stemming rules
thesaur.xml	User-defined thesaurus entries

Your UserData folder is usually a folder named UserData under the dtSearch program folder. To find out where your UserData folder is, click **Options > dtSearch Folder**.

A "template" folder under the dtSearch program folder contains template files:

File	Purpose
SearchReportTemplate.rtf	Template used to generate search reports.
SearchListTemplate.rtf	Template used to make a printable list of search results items.

If you change these template files, save the changed versions in your UserData folder rather than in the templates folder. Otherwise, they may be overwritten the next time you install or upgrade dtSearch.

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