ZYLAB

For more information, please contact one of the ZyLAB offices.

Or see the Power User Manual (located on the Support site).

Search

1. Type your search statement in the box Search for.
2. Specify the Fuzzy Degree (the degree of closeness to your search statement).
3. Check, if necessary, the box Search in the last results.
4. To view all available indexes, click 'Show all indexes'.
5. Check the index(es) you want to search on.
   To (de)select all indexes, click 'Deselect all indexes'.
6. Click Search.

A set of files that match the search statement will appear.

Search Results

On the Result Page, each file listed contains one or more terms from the search statement. The files are ranked, based on (number of) Hits and Hitdensity.

Hits
Number of terms that are located in each file.

Hitdensity
Relative density of hits in a file. If, for example, you have 2 files with number of hits 4/4, and hitdensity 32/52. Then, the file with the higher density (52) is smaller.

Select
Check the box of each file you want to select.

Select All

Click 'Select all documents shown' to select all files listed.

Hide Fields
Click 'Hide all fields available' to hide the available fields.

Show Star Tree/Tree Map by group/order
Use the Star Tree buttons to search and analyze the files, using position, color, size and focus.
Use the Tree Map buttons to search and analyze the files, using hierarchical structures

Print
1. Select one or more files.
2. Click 'Print selected documents'.

Download
1. Select one or more files.
2. Click the 'Download selected documents' button.

The files will be downloaded as a ZIP file.

Send
1. Select one or more files.
2. Click 'Send selected documents'.

The files will be saved as a ZyMAILER document.

Edit document field values
1. Select one or more files.
2. Click 'Edit document field values of selected documents'.
3. Edit the field value(s).
4. Select
   - Don't Change,
   - Replace,
   - Add or
   - Delete

   from the listboxes before the field(s).
5. Click Ok.

Merge selected documents
1. Select two or more files.
2. Click 'Merge selected documents'.
3. Specify the order in which the files must be merged.
4. Click Merge.

Add selected documents to the TOC
1. Select one or more files.
2. Click 'Add selected documents to the TOC'.
3. Select a Table of Contents folder.
4. Click Ok.

Note: The files are not actually moved, only links to the files are made.

View a File

View a text file
1. Click on the file you want to view.
2. Use the buttons at the top and bottom of the file to navigate through and work with the file. Hoover with the mouse above a button to view its function.

Note: Each hit is highlighted.

View graphics linked to a text file

1. Click on the thumbnail (image file) at the end of the text file.
   The image is loaded onto your system.
2. Download the free Image Viewer to view the image.
   Or
   Use another image viewer, capable of showing TIFF Group IV files.

Start a new search

You can start a new search in the left pane. Check, if necessary, the box Search in the last results.

Contents

Contents shows you the table of contents. Here all new documents are stored, you can move them to the folder where you want to store them (moving of the documents is only possible in case you are working with the Webserver Enterprise Edition). In order to create a new folder the option 'Add new documents to the table of contents' was selected, while creating a new index (Create new index wizard (Step 4: Settings)). Or select this option once you created the index, via ZyINDEX > Build > Index Settings.

If you want to search on a selected branch, select 'Search in selected current branch only'.

History

View and re-execute the queries you have made in the past.

Vocabulary

View all searchable words and find all related documents.

Thesaurus

Broaden the scope of your search statement and include synonyms.

Concepts Search

Concepts are predefined complex search queries. Define often repeated searches as concepts in ZyFIND and save them for later use.

1. Select a concept.
   All concepts that are defined in the chosen index(es) are displayed.
2. Click OR or AND of the next concept you want to search on.
3. Repeat step 2 until finished.
4. Click Search.

Fields Search

1. Select the fields you want to search in and enter your query.
   All fields that are defined in the chosen index are displayed.
2. Combine the selected fields using AND or OR.

3. Combine the fields with full-text query using AND or OR.
   Note: First specify a full-text query.
4. Click Search.

All files that contain a search term within the area defined as the field are retrieved.

Subscriptions

Allows people who receive Alerts to edit their Alerts. The search queries can be adapted so the information send to the users will be the information they long for at the moment. It is also possible to subscribe to new Alerts and configure them.

Taxonomy

A taxonomy enables you to classify and manage your documents, based on hierarchical structures.

Star Tree/Tree Map

Star Tree presents each file as a node that can be clicked on to access the file or grabbed and pulled for better viewing of subfolders.

Tree Map enables users to compare nodes and sub-trees even at varying depth in the tree, helping users spot general patterns and exceptions.

Options

Change the way the results and documents are presented and displayed. Define the options and click Save. Select Load Default Settings to return to the original settings.

Look for
Choose from the listbox to search the ZyIMAGE query, all words, any of the words or exact phrase.

Date
Select a date to define the period to search in.

Results per page
Select the maximum number of files you want to display in the View Page.

Control which page will be viewed first
Choose whether you want to view the first page of a file, or the first hit within a file.

Rank Search results on
Define the way files are ranked. You can choose between Number of hits, Hitdensity, File size, File date, Comment, File Name and File path.
Choose between Ascending and Descending.

Choose what to display, and which image quality to use
Choose the files you want displayed: images and/or original format.
Specify whether search statements must be highlighted, and whether the document properties must be shown.
Choose the image quality. You can choose between low, medium, high, 200% enlarged, 280% enlarged, 400% enlarged and TIFF.

Define the **Maximum number of indexes to show** and the **Number of querybox rows**.

Remember query history
Choose from 'No', 'Only when something is found' and 'Always'.

Search Tools
Select the Search Tools you want to be available for the Web Client.

Search tool to show at start up
Select a search tool to open the Web Client with at start up. You can choose from Contents, History, Vocabulary, Thesaurus, Concepts, Fields, Subscriptions, Taxonomy, e-Discovery Management, Document Management and Reference.

Search result options
To view keywords in context, select Use kwic style.
To view results, based on relevance ranking, select 'Show relevance ranking'.

KWIC options
If you selected 'Use kwic style', define the Display type, and define the maximum number of contexts and words around the keyword.

Document Basket

Collect documents from several result pages.

You have searched one or more indexes.

1. Select one or more documents from the available search results.
2. Click 'Add selected documents to the Document Basket'.
3. The document you added, are shown in a separate window.
   You can either close this window and continue searching,
   or you can choose one of the following options:
   - Select All
   - Download
   - Show Fields
   - Print
   - Edit Fields
   - Empty Basket
   - Delete from Basket

Upload

Add (zip)files to an index.

1. Select an index.
2. Click Upload.
3. Click Browse to locate the correct document or zipfile.
   If you are uploading a zipfile,
   select 'Process contents of ZIP file'.
4. Select a folder in which the documents must be stored,
   and/or create a subfolder.
5. Optionally, define fields.
6. Click Upload.

You have uploaded a document or zipfile to an index. If you uploaded a zipfile, it is extracted, and hash codes are generated (of the individual documents and the set of documents). The index will be automatically updated, after which

the documents are full-text searchable. Also, emails will be sent to other (members of) user groups added to the Web Client, notifying them of updates (if ZyALERT is installed).

Log out user

Log out, and be redirected to the Register page.

Search Techniques

You can search for anything in the text of your documents, using our many search techniques.

Learning to make effective searches is the most challenging part of "finding." With the wide range of techniques, you can carry out almost any kind of search. On some occasions your quests for information will be exploratory in nature; you will want to acquire a sense of the "universe" of available information. At other times, you will make very precise searches to locate a limited amount of specific information.

To make effective searches you need to become thoroughly familiar with all search techniques. Examples demonstrate not only how to use each technique, but also how to combine them into complex search statements.

Refer to each search technique for further information:

- Content words and phrases
- Wild cards
- Boolean operators
- Positional operators
- Precedence and parentheses
- Number range operator
- Quorum operator
- Separators
- Fuzzy Lookup
- Search Rules and Conventions

Content words and phrases

The simplest search statement contains a single content word or character string. For example, to retrieve all information in your files about Chicago, type the search statement:

chicago

directing ZyIMAGE Web Server to retrieve every source document with the word **chicago.**

A content phrase consists of two or more content words appearing together, that is, without intervening operators such as AND or OR. ZyIMAGE Web Server treats content phrases as one entity. The search statement:

chicago cubs

retrieves only those files with cubs immediately following chicago. A phrase can contain one or more noise words, for example:

Billy the Kid

ZyIMAGE Web Server ignores the noise word, the, in this phrase. If you want to search for two words that do not form a phrase, connect them with a Boolean operator, either AND or OR, for example:

cleveland OR detroit

ZyIMAGE Web Server will retrieve all documents that mention one or both cities. Refer to Boolean operators for additional information.

Wild cards

Wild card symbols added to content words lend a great deal of flexibility to search statements. Use wild cards to search for prefix, root and suffix, and to find variations in spelling of a word. ZyIMAGE Web Server uses two wild card symbols: **?** and ***.**

Question mark (**?**) replaces a single character, for example:

b?rn, retrieves *born* and *barn* and *burn.*
?andy retrieves *candy* and *dandy* and *sandy.*

You can use more than one question mark in a word, for example:

sh??e retrieves *shore* and *shade.*

When you use **?** the program retrieves only files containing words with exactly the same number of characters. For example, a search for **6060** without a wild card would not retrieve the zip code, *60607.* A search for **60607** would retrieve only that zip code. Searching for **6060?** would retrieve zip codes *60600* through *60609.*

Asterisk (*****) replaces zero or more characters, for example:

***vert** retrieves *convert* and *revert.*

Use care when crafting search statements with multiple character wild cards to avoid results not related to the search topic. For example, to find information about automobiles, the search statement, **auto***, would retrieve *auto, automobile,* and *automotive.* It would also retrieve *autobiography, autocracy* and *autograph.* A more specific search statement would be **auto OR automo***.

Boolean operators

A search statement with only one content word retrieves every file containing that word. When you want to use more than one term in a search statement, insert operators between terms to indicate a relationship. ZyIMAGE Web Server retrieves only files that meet the conditions of that relationship. You can use OR , AND and NOT .

The Search Operator OR

OR instructs the program to retrieve files with at least one term from the search statement. OR enlarges the search topic; use it to look for terms that have similar meaning, or refer to similar subjects. The search statement:

car OR transportation

retrieves all files with one or both terms: *car* or *transportation.* This search statement is more thorough and complete than if either word were used alone.

You can combine use of wild card characters with the OR operator in search statements containing content words with similar meaning for more complete results.

universit* retrieves both *university* and *universities*

If the search topic is higher education in general, this is a better search statement:

college OR universit* OR higher education

The Search Operator AND

The operator AND searches for files with terms found on both sides of AND in the search statement. While the operator OR broadens the search topic, AND narrows the topic. Use AND to connect terms with different meanings. Using this search statement:

new england AND north dakota

Retrieved files contain at least one mention of each phrase. In this search statement:

conservation OR irrigation

retrieved files need contain only one term from the search statement, although they may contain both. AND searches for occurrences of terms on both sides of the operator; retrieved files must contain both.

The Search Operator NOT

Use NOT to narrow the search topic. NOT stipulates that retrieved files must **not** contain the word immediately following NOT in the search statement. You can use NOT with AND or OR to form a single operator between two content words, for example:

bark AND NOT tree

You can use NOT alone when joining two content words, for example, **ball not bat**. In this example, NOT alone is equivalent to AND NOT.

To find all files with no mention of cars, use the search statement:

NOT cars

To locate information about cars but not used cars, use the search statement:

(cars) AND NOT used cars

Note: The order of content words in the search statement affects the result. Consider this statement:

used cars AND NOT cars

The program would retrieve no files, because every file referring to *used cars* also refers to *cars.*

Positional operators

The WITHIN Operator: W/n

W/n limits the search to content words that appear within a defined range (n) in either direction. AND, OR and NOT retrieve files if search statement terms appear anywhere in the same text file. Within *n* means that n-1 words can intervene. "**N**" can be any integer from 1 to 16,382. Do not use a comma to punctuate the integer, as in the previous sentence.

When combining the **W/n** operator with other positional operators, the Within n relationship applies to adjacent components. Using the following as a search statement:

blue sky w/10 green grass w/10 clear water

in the retrieved text file, *blue* must be adjacent to *sky; sky* must be within 10 words of *green; green* must be adjacent to *grass; grass* must be within 10 words of *clear; clear* must be adjacent to *water.*

The WITHIN operator is especially useful when searching long documents. The search statement, **lincoln AND illinois**, retrieves a file even if *Lincoln* appears on page one and *Illinois* on page twenty. The search statement, **lincoln W/10 illinois**, requires that one word be within ten words of the other. This helps ensure that search terms are contextually related.

Example of W/n

Compare the following search statements for retrieving information from a company's internal sales reports:

client AND complaint

defines a broader search topic than:

client W/10 complaint

The AND operator retrieves any file with the term, client, if complaint is also present. When the operator W/10 replaces AND, the program retrieves only files that mention client within ten words of complaint.

Note: The position of content words connected by W/n does not affect search results. For example, **1983 W/8 tax*** defines the same search topic as **tax* W/8 1983.**

A special use of W/n combines it with one of these separators: sentence (EOS), paragraph (EOP) or page (EOG) to carry out a search with this format: **term1 W/n/sep term2**; for example:

Minnesota W/3/EOP Maine AND fishing

This search statement would retrieve files that mention *fishing,* and where *Minnesota* appears within three paragraphs of *Maine.* In another example:

Supreme Court W/5/EOG civil rights

in retrieved files the phrase, *Supreme Court* would be within five pages of the phrase, *civil rights.*

In this use of W/n, instead of counting individual words, the program counts lines or sentences or paragraphs or pages to meet the criterion represented by "n."

The Precedes Operator: P/n

Use of **P/n** is similar to **W/n** with the added stipulation that the term preceding **P/n** in the search statement must also precede in any retrieved files within *n* range. Using this search statement:

physical education P/100 fitness

The program retrieves files meeting two conditions:

1. *physical* must be adjacent to *education.*
2. *education* must precede *fitness* within 100 words.

2.

The operator TO

Use TO to search for occurrences of a term falling between two other terms. In the following search statement:

sales TO product {results}

The program searches for occurrences of *results* falling between occurrences of *sales* and of *product.* This technique is similar to a proximity search, but much more powerful. It highlights only the term, *results,* in retrieved files. *Sales* and *product* are not objects of the search, except as delimiters of the range for locating the term, *results.*

Precedence and parentheses

When you use two or more operators in a search statement, ZyIMAGE Web Server must give one operator precedence over the other to resolve the meaning of the statement. It evaluates a statement in an order determined by operator precedence, but you can always override normal order of evaluation by using parentheses, which have precedence higher than any operator.

ZyIMAGE Web Server observes the following operator precedence from highest to lowest. Operators at the same level in the list are of equal precedence. The program evaluates them from left to right in a search:

- NOT
- OR
- W/n P/n
- AND
- TO

Why Use Parentheses?

Parentheses give you explicit control over the order of evaluation in complex search statements. When you use parentheses to group terms around operators, ZyIMAGE Web Server interprets contents within parentheses as one unit. The use of parentheses is identical to that of algebra. We recommend that you always use parentheses when designing complex search statements (more than two operators). This helps ensure that searches function as expected.

Examples of Parentheses

To search for information discussing cars or synonyms for cars and also sales, use parentheses:

(cars AND sales) OR car dealer

First ZyIMAGE Web Server searches for all files that contain one term within parentheses. Then from that group it selects only those files that also mention the other term.

You can use multiple sets of parentheses within one search statement:

(disk drive AND printer AND modem) OR (sales AND revenue AND profit)

The program retrieves files with all terms from at least one set of parentheses within the search statement. You can also nest parentheses, for example:

((cars AND trucks) OR trains) AND (ships OR submarines)

Note that AND is the primary operator. Only files that satisfy conditions on both sides of the statement are retrieved. If you had used OR as the primary operator, the program could retrieve files that satisfy conditions on only one side of the statement.

Examples of Precedence Ordering

Because OR has precedence over AND, ZyFILE interprets the search statement:

chicago OR los angeles AND new york

to be the same as

(chicago OR los angeles) AND new york

and looks for files that mention either *Chicago* AND *New York*, or *Los Angeles* AND *New York.*

Parentheses can override precedence, for example:

chicago OR (los angeles AND new york)

Because parentheses have highest precedence ZyIMAGE Web Server locates only files that mention either *Chicago* only or, both *Los Angeles* AND *New York* or, all three. It would not retrieve files that contain *New York* alone or *Los Angeles* alone.

Number range operator

You can search for numbers both as "terms," that is, alphanumeric character strings and as numeric values. To locate a number as a term without regard to its value, enclose it in double quotes in the search statement, for example:

jones and "60615"

Use this search statement to retrieve letters to someone named *Jones* whose zip code is *60615.*

If you omit the quotation marks, the program would search for the value, *60615,* and all equivalent values, for example, *60615.00*. When you use quotes, the search is limited to that enclosed character string.

You can use these math operators in number range searches:

- **<** less than
- **< =** less than or equal to
- **=** equal to
- **< >** not equal to
- **>** greater than
- **> =** greater than or equal to

The following are examples of number range search statements:

> = 65 w/10 social security

> 21 AND high school graduate

Use number range search statements to locate a value falling between two other values in the following format:

> or > = lower value : < or < = higher value

For example, the following search statement:

>1 : <10

would locate every number in the index meeting both conditions:*greater than 1 and less than 10*, whether integer or decimal. Searches of this type take time to execute, because every number must be looked at. If your document collection has more than a few thousand numbers, this kind of search takes too long, and may error out due to lack of system resources.

The search statement, **< > 5**, is treated as identical to **NOT 5**.

Quorum operator

The quorum operator searches for a specified number of terms within a search statement from one to all in the following format:

n of {term, term, ...}

where *"term"* is a single character string or a phrase. With the following search statement:

3 of {history, english, social studies, geography, humanities,psychology}

you could search a collection of resumes to locate applicants prepared to teach in a certain number of fields from a range of options.

When n = 1, the program converts the expression within brackets to a series of content words joined by OR, and retrieves a text file, even if it contains only one term from the search statement, for example:

1 of {mechanical drawing, drafting, prototype design, modeling}

When n equals the number of terms within brackets, the expression is converted to a series of ANDs, and a text file is retrieved only if it contains all terms from the search statement, for example:

3 of {word proc*, desktop pub*, spreadsheet}

Separators

ZyIMAGE Web Server recognizes these separators:
EOP end of paragraph
EOG end of page
EOS end of sentence
EOL end of line
EOG end of page

They limit a search to a physically defined range of a text file. In this sense, they are similar to proximity search statements.Separators are very useful when combined with the TO operator. For example,use the search statement:

experience TO EOP {(driver or chauffeur) and >= 3}

to locate resumes of persons with a minimum of three years' experience as a driver.

To locate a single paragraph that includes two terms, use a search similar to this:

EOP TO EOP {economic and policy}

Note: If you want to search for any of the separators as text strings, enclose them in quotes, for example, "EOG". If you do not do this, the search results will contain every file that has the End Of Page marker, which is, of course, every file.

Fuzzy searches

A fuzzy search can locate all occurrences of a word, plus all other words that are "close" in spelling to the original word. You specify the degree of closeness to the original word.

Examples of Fuzzy

Think of fuzzy search in terms of how similar one word is to another. To change one word into another, you can add, delete and replace single characters. A single degree is one change of one character. For example:

To change "commuter" into "computer" requires one replacement: the second "m" with "p." One degree.

To change "computw" into "computer" requires one replacement and one addition: replace "w" with "e"and add "r." Two degrees.

To change "coinputer" into "computer" requires one replacement and one deletion: replace "i" with "m,"and delete "n." Two degrees.

The higher the degree, the greater the margin of error; the lower the degree, the less leeway is allowed in matching a search term with words in your files.

Degree of Fuzzy

Degree of Fuzzy ranges from 1 to 4 by default. We recommend that you set Degree to 2 for searching normal text. This provides for mistakes that occur in scanned text because of broken and joined characters. If you need to search for long words, set Degree to 3 or 4.

An additional constraint takes into account the length of the word you are searching for, to prevent the retrieval of too many irrelevant shorter words. This constraint limits the degree for a specific word to be the lesser of the Fuzzy Degree setting and 0.5 times the word's length. For example if you set Fuzzy Degree to 4 and the search term is six characters long, the actual Degree of Fuzzy will be 0.5 X 6 = 3 rather than 4.

Search rules and conventions

1. With the exception of **NOT,** place operators only between search terms, and never at the beginning or end of a search statement.
2. Use NOT in conjunction with a single content word, for example: **NOT car**
   NOT may never appear at the end of a search statement. You may also use NOT with a phrase in parentheses, for example: **NOT (new york)**
3. With the exception of NOT, two operators cannot appear in sequence in a search statement. You can use the NOT operator with AND and OR, that is, **AND NOT** and **OR NOT.**
4. Because all operators are noise words, you cannot use them as content words in search statements. For example, the search statement, **and OR or** will not be accepted.
5. ZyIMAGE Web Server is not case sensitive; it regards uppercase and lowercase letters as identical. We show operators in upper case for emphasis and clarity.
6. An operator can appear more than once in a search statement.
7. The **W/n** operator must include an integer in the range 1 to 16,382, followed by a space and a content word. Omit comma in integer.
8. You can use one term to retrieve both the hyphenated and non-hyphenated spellings of a term; for example, the search term:
   - **database** retrieves *database* and *data-base*, but not data base
   - **data-base** retrieves *data-base*, but not database and data base
   - **data base** retrieves *data-base* and *data base,* but not database.

When a multi-syllable word begins near the end of a line, a word processor may force hyphenation. ZyIMAGE Web Server can find such a word in either its hyphenated or non-hyphenated form. As a side effect of this capability, searches with duplicate words in series also find single occurrences of that word; for example, the search statement, **sing sing**, would find single occurrences of *sing* as well as the phrase, *sing sing.* The program recognizes words with normally appearing hyphens, for example, Winston-Salem.

9. ZyIMAGE Web Server recognizes all printable characters in the ASCII character set.
10. ZyIMAGE Web Server ignores a sentence-ending period and other trailing punctuation marks, when a space or a carriage return follows. The program recognizes periods when followed by a character, as in *I.B.M.* or in *292.004*. It treats apostrophes as null characters, and ignores them.