



SEARCH REQUEST GUIDE

About this Document

An essential part of document and data review is keyword (search term, full-text) searching. With CloudNine Review, searches can be run on fields, document text, or both. This document identifies search types and options for building effective search requests.

Full Text (keyword) Search Requests

When building search requests, connectors combine multiple search terms and run searches based on specified parameters.

Boolean Connectors

Boolean connectors are used to join search terms and phrases to build search requests. There are three standard connectors: AND, OR, and NOT.

Examples

Search Request	Meaning
Apple and pear	Both words must be present.
Apple or pear	Either word can be present.
Apple and not pear	Only <i>Apple</i> must be present, pear will not.
Apple w/5 pear	Apple must occur within 5 words of pear.
Apple not w/5 pear	Apple must not occur within 5 words of pear.
Apple pre/5 pear	Apple must occur five or fewer words before pear.
Apple w/5 xfirstword	Apple must occur within the first five words of the document.
Apple w/5 xlastword	Apple must occur in the last five words of the document.

Using Parenthesis

Search requests that contain two or more connectors (and, or, not, etc.) should be grouped using parentheses to clarify what is being searched. Without clarification, a broader search request is performed. For example,

- Milk and cookies or cake could mean: (*milk and cookies*) or cake, or milk and (cookies or cake). This returns records where search results can be (1) *milk and cookies*, (2) *milk and cake*, or (3) *cake*.
- For more precise results, the search clause might be (milk and cookies) or cake, returning records that contain (1) both terms *milk and cookies*, and (2) all records with the term *cake*, regardless of whether the terms milk and cookies appear in the document.

For best results, always enclose expressions with connectors in parentheses.

Phrases

Use quotation marks (") when searching for phrases. This is especially important when the phrase includes a Boolean connector (and, or, not). For example,

- Clear and convincing evidence (no quotes) – will return results containing the terms, regardless of whether they are a part of the phrase.
- "Clear and convincing evidence" – returns document hits with the exact phrase only.

For best results, always wrap phrases in quotation marks.

AND

The AND connector is used to connect more than one term or phrase, both of which must be found in the document(s) retrieved. For example:

- Cash Flow **and** Equity – document records will contain both Cash Flow and Equity, in any order.

OR

The OR connector is used when you wish to search for two or more terms or phrases, of which at least one of the terms or phrases must be found in any of the documents retrieved. For example:

- Cash Flow **or** Equity – documents retrieved must have either Cash Flow, Equity, or both in them.

NOT

The NOT connector excludes specific search terms from search results. For example:

- Cash Flow **and NOT** equity: Returns all documents where the term Cash Flow is present and the term equity does not appear in the document.
- (Cash Flow and not equity) and Investment: Returns all documents with Cash Flow but not Equity, and the term Investment.

Not standing alone can be the start of the search request.

- NOT cash flow: Retrieves all documents that do not contain the term Cash Flow.

Proximity Searching

A proximity search finds search terms or phrases within a specified distance of another search term or phrase.

W/N Connector

The W/N search connector is a proximate search specifying that one word or phrase must occur within so many (N) words of the other. For example,

- Cash Flow w/10 Equity - The search terms must be within 10 words of each other.
- (Cash Flow or Equity) w/10 Investment - Either Cash Flow, Equity, or both must appear within 10 words of the term Investment
- “Clear and convincing evidence” w/25 verdict - The phrase “Clear and convincing evidence” must appear within 25 words of the term Verdict.

Directed Proximity (Pre/N)

Directed proximity searches specify the word or phrase that must appear **before** another word or phrase, based on “n” words (pre/”n”). For example:

- Cash flow pre/5 Equity - The term Cash flow must appear before Equity and within five words.
- “Clear and convincing evidence” pre/25 verdict - The phrase “clear and convincing evidence” appears before the term verdict and is within 25 words.

NOT W/N

The NOT W/ searches for a word or phrase not in association with another word or phrase.

- Cash flow NOT W/10 Equity

Unlike the W/ operator, NOT W/ is not symmetrical. The search is first run on the term *cash flow* and then excludes search hits where *equity* is too close to the term *cash flow*.

Positional Search

A positional search locates words or phrases that appear either at the beginning or end of a document, within a specified number of words (**w/n xfirstword** or **w/n xlastword**). For example:

- Cash flow w/20 xfirstword - the term must appear within the first 20 words of the document.
- Cash flow and equity w/10 xfirstword - the terms must appear within the first 10 words of a document.
- Cash flow and equity w/25 xlastword - The terms must both appear in the last 25 words of the document.

Search Features

CloudNine Review supports search features such as **fuzzy**, **stemming**, and **phonetic** searching. In the Advanced Search Builder of CloudNine Review, you can choose to turn on (check) any or all of the search features for full-text search requests.

Special characters may also be used with search terms. The following special characters are supported.

Character	Meaning	Example / Result
?	Single character wildcard. Matches any one character within the search term.	Appl? – the ? is replaced with a single character. Search results will return a five-letter word that starts with Appl. For example, Apple or Apply.
*	Matches any number of characters.	Appl* the * is filled in with any number of characters to complete the term. Search results will return all words starting with appl*. For example, Apple, Apples, Apply, Applied, Applies, applications, etc.
%	Fuzzy Search The % is selective. The number of % characters added determines the number of differences ignored when searching the term.	Ba%nana: Word must begin with ba, and have only one difference between it and banana. B%%nana: Word begins with b and has at most two differences from banana.
=	Matches any single digit	4=1 – finds three-digit numbers that start with 4 and end with 1. For example, 401, 411, 421, 431, etc.
#	Phonic search (sounds like)	#Smith – Will return words smith, smyth.
~	Stemming (variations of the word)	Fish~ - Finds words like fish, fished, fishing.
&	Synonym search	Fast& - Finds words such as 'fast' and 'quick'.
~~	Numeric range	15~~20 – Returns search hits for all numbers within the range: 15, 16, 17, 18, 19, 20.

Noise Words

Noise words are words such as *an*, *as*, *if*, *of*, *the*, *etc.*, that are so common they are not helpful when searching. To save time, noise words are not indexed and are ignored during searches. For example, if you search “*the car*” the search engine only searches for car.

Fuzzy Search

Fuzzy search finds words even if they are misspelled and is helpful for documents with typos or scanned documents that have been OCR'd to create text files. With CloudNine Review, there are two ways to add fuzziness to your searches:

1. On the Advanced Search Builder, create a full-text search and Add To the Search. Once the search is added, enable (Check) the Fuzzy search option. In the drop-down, select the level of **fuzziness** from 1-10. Levels 1-3 provide a more moderate level of fuzziness.
2. Use the % character to add a selective level of fuzziness. The position of the % characters determine how many letters at the start of the word have to match. For example:
 - a. Ba%nana: word must begin with ba and have at most one difference between it and banana.
 - b. Ba%%nana: word must begin with b and have at most two differences between it and banana.

Phonic Searching

A phonic search will look for words that sound like the word you are searching for and begins with the same letter. For example, a phonics search for Smith will also find Smithe and Smythe.

To search a word phonically, put a # in front of the word in your search request, for example, #smith.

Phonic searching is somewhat slower than other types of searching and tends to yield over-inclusive results. For best results, be selective when performing a phonics search.

Stemming

A Stemming search is used to extend a search term to include all grammatical variations of the term. For example, a search for apply would also return applies, applied, applying, etc. There are two ways to include stemming when searching in CloudNine Review.

1. In the Advanced Search Builder, enable the Stemming option for full-text search terms in your request. Activating the stemming feature broadens the search results without noticeably slowing down the process.
2. Selective stemming makes it possible to specify the search terms that will have a stemming search applied. To add stemming selectively, place a ~ character at the end of the word to perform stemming on that term only. Example: apply~.

Synonym Searching

Searches and finds words that have the same or similar meaning. The following are examples of synonyms:

- Fast and quick

- Happy, joyful, glad
- Begin and start.

In CloudNine Review, there are two ways to perform synonym searches.

1. In the Advanced Search Builder, enable (check) the Synonym option for the full text search clause.
2. Selectively perform a synonym search by placing the & character after the search term. For example, fast& or fast& w/5 motor.

Numeric Range Searching

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

- **12~~17**: search hits are returned for documents containing the numbers 12, 13, 14, 15, 16, and 17.

Notes:

- Numeric range searches include the upper and lower bound numbers, in this case, 12 and 17.
- Numeric range searches only work with integers greater than or equal to zero, and less than or equal to 2,147,483,648.
- In numeric range searching, decimal points and commas are treated as spaces. Minus signs are ignored. For example, -123,456.78 is interpreted as: 123 456 78 (three numbers). Using alphabet customization, the interpretation of punctuation characters can be changed. For example, if the comma and period are changed from space to ignore, then 123,456.78 would be interpreted as 12345678.