

Search Requests (Overview)

OnDemand 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
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 (peach and banana)

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

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.

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

OnDemand 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, OnDemand searches for *apple*

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

Noise Words

A noise word is a word such as *the* or *if* that is so common that it is not useful in searches. To save time, noise words are not indexed and are ignored in index searches.

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

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** in the search dialog box to enable stemming for all of the words in your search request. 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~*

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*

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*.
