Lucene Index Settings For Product Search

Settings can be configured for Lucene in the CMS through Advanced Settings' 'Lucene Search Settings'.

Indexing	Index Settings	Role Settings	Boosting	Translations	Trim Words	Index Fields	Search Term Redirect	Help		
			Boost S	Spell Co Peri m Product Boost ource Value Min A:	orrect Unknown form Partial Word Partial Word S Enable Pro Value (suggest Threshold (sugg ssign Boost Valu	gest 5 - 20) : 5 les By Rank : 🗌		~		
	Product Boost Source Value Daily Calculation Time : C Enable Boost Words : Negative Boost Condition Codes (e.g. ONX) : Product Boost Source Calculation :									
				Produ	Time Scale : 30 based sort : dex Update : 60	days	<u>ত্</u>			
			_	Lucene Expression To E Il Columns to By	dex Update : 24 Start Time : 12: Code Match :	hours	<u> </u>			
Last Auto Partial Index update: 28-Oct-2021 12:05 PM Last Auto Full Index update: 16-Oct-2021 01:11 AM Update										

Following is a list of the available settings with an explanation of the purpose of each:

Setting	Purpose					
Enabled	Turns Lucene on or off. Tick checkbox to use Lucene for the Product Search.					
Is Disabled for Product Browse	Tick to disable Lucene when user is browsing products					
Spell Correct Unknown Words Only	"Did you mean" suggestions will only be suggested for words entered by users that do not appear in any product information. This can reduce unwanted "did you mean" suggestions					
	NOTE - It is recommended that this flag be turned on.					
Perform Partial Word Searches	Instructs the search engine to perform a partial word search. This can be useful if your customers often search for model numbers or product codes.					
	For example, searching for "100" would return any product whose product code starts with "100", such as 100023, 1001112, 100TEST, etc.					
	Because of the way Lucene processes partial word searches, any boost value applied to products will be removed. Therefore this feature should not be used when Product Boost or Boost Words are used, as the boost values will not be applied. Instead, rely on the Snowball Analyser to apply stemming to your searchable text.					
Partial Word Search Type	From the drop down list, select the partial word search type to use.					
Enable Product Boost	Tick for the Product.BoostSourceValue to determine the boost value for a product. Boost values are relative based on the range of BoostSourceValues, and are calculated as a value of 1 (no boost) to the maximum product boost. For a detailled explanation of product boosting, see Lucene Relevance Scoring And Boosting; Boost Words Maintenance.					
Maximum Product Boost Value	The highest boost value assigned to a product. This value will be assigned to the product with the highest Product. BoostSourceValue. All other products will be assigned values in the range 1.0 to this value.					
	(i) Recommended value for this setting is between 1.5 and 3.0.					

Boost Source Value Minimum	If a product has a BoostSourceValue less than this value, the product will not be boosted.						
Threshold	Recommended value for this setting is between 5 and 20.						
Assign Boost Values by Rank	When selected, boost values assigned to products are done based on the rank of the product's BoostSourceValue, rather than the actual BoostSourceValue						
	Checking this flag assigns boost values evenly from the lowest source value to the highest source value. If not ticked, the magnitude of the source value will impact the weighting of the boost value.						
	If a small percentage of your product range has extreme boost source values, tick this flag.						
Product Boost Source Value Daily Calculation Time	Enter a time the product boost source value will be calculated.						
Enable Boost Words	Tick to enable the use of boost words. When ticked, the indexer reads the "Boost words" table and will apply boost values to products containing certain words.						
	Products can be boosted based on whether their text contains certain values. For example, you might want to boost a certain brand of batteries, giving a boost factor of 2 to any battery containing the word "duracell". This means in a search for batteries, products with the word 'duracell' would be considered more relevant than products without it.						
	You can use also boost words to decrease the relevance of products. For instance, you can apply a boost factor of 0.2 to products containing the word "eveready", which would make those products less relevant.						
Negative Boost Condition Codes	A list of condition codes that will stop a product from receiving a boost (i.e. allows you to not boost products that are obsolete or no supply)						
Product Boost Source Calculation	This flag determines the method for calculating the Boost Source Value for products, which is used to calculate the Product Boost value for each product.						
	Available options are:						
	 Times Sold - The number of times a product has been purchased online during the time scale Click Through - The number of times users has clicked on a product in the search results product list to see detail on the product. during the time scale Custom - Allows for Commerce Vision to implement custom procedures for calculating boost source values where required 						
	NOTE - When the option is selected and the settings updated, the boost source values will be recalculated for all products. However, a full index rebuild is required before the updated boost source values will impact search engine rankings.						
Product Boost Source Time Scale	The time scale used to calculate the Boost Source Value for products, based on the "calculation" setting. Available options are:						
	7 days14 days21 days30 days						
Enable Non- relevance Based Sort	Tick to use non-relevance based sorting of results.						
Partial Index Update	Enter the frequency for a partial index update to be done. Partial updates will add new products, and update changed products in the index.						
Full Index Update	Enter the frequency for a full index update to be done.						
Lucene Full Daily Index Start Time	Enter the start time scheduled for the full index. Full updates are required to rebuild the product boost values and apply any new or changed index translations to all products.						

Regular Expression to Execute Product Code Match

By default, Lucene treats a space as a separator of words or expressions (characters that go together). If your product codes have one or more spaces between characters, e.g., 'CV - 100' and you want them to be searched as a single expression, add the pattern so that Lucene will correctly interpret it as a single code.

Here are some helpful symbols:

- ^: beginning of expression
- (): groups multiple characters together
- []: matches any character in the set

a-z

A-Z

- 0-9: character sets. To include upper and lower case letters in a search, add both sets.
- +: matches one or more of preceding character

\s: whitespace, e.g., space

For the example 'CV - 100' (and other codes with this pattern), we would enter the regular expression:

^([a-zA-Z0-9])+(\s-\s)

This tells Lucene Search to treat 'one or more aphanumeric characters' followed by a 'space', then a 'dash', then a 'space' as a single search string. (NOTE - There is no need to capture the rest of the expression after the second space.)

Spell Correct Unknown Words Only

"Did you mean" suggestions will only be suggested for words entered by users that do not appear in any product information. This can reduce unwanted "did you mean" suggestions.

It is recommended that this flag be turned on.

Related help

- Product Search with Lucene Search Text Engine
- Predictive Search
- Build or Rebuild the Lucene Search Index
- Lucene Relevance Based Search Set Up
- Set Up Lucene Index Fields