

# Search (OT API)



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## Features

Please read information below to find out how goods search is performed and what search settings can be done.

## Trade provider

Trade provider is a service (or marketplace) for trading. Information about goods (titles, settings, configuration, etc.) and categories is sent to OT API from trade provider and then is broadcasted to website via OT API Key.

[Check available trade providers.](#)

Use [GetProviderInfoList](#) method to get list of available providers and information about them.

## Own catalog

"Warehouse" provider will be added with additional Goods from Stock Module. You can use it to create your own catalog and add any goods (either from available providers or your own).

[Read more about module](#)

## Search options and conditions

Each provider has its own set of search conditions. It can be varied depending on website goals. Use [GetProviderSearchMethodInfoList](#) method to get list of available search options and information what they support.

Search can be done by two methods: [SearchItemsFrame](#) and [BatchSearchItemsFrame](#). They are completely identical. Difference is that [BatchSearchItemsFrame](#) allows to get additional information right per one request besides search itself. Possible additional information will be described below.

Search conditions are also identical. They are sent into xmlParameters and presented by structure SearchItemsParameters (this structure can be found, for example, in [BatchSearchItemsFrame](#) under "xmlParameters" field by clicking on "Structure"). It has xml format (like other structure parameters). xmlParameters is obligatory as it defines what we are looking for. Examples will be described below.

## What is called search conditions

- The main search criteria: search phrase, category, vendor, brand.
- Additional search criteria: filters by characteristics, novelty of goods, and another different product's parameters.
- Sorting of search results.

From information about search methods you can get information what is available from these, and what variants are available.

## Getting information about search methods

- Using [GetProviderSearchMethodInfoList](#) allows get all possible methods of search.
- [GetAvailableProviderSearchMethodInfoListForSearchParameters](#) method allows get relevant methods of search by specified parameters.
- If to specify additional block AvailableSearchMethods, you can get information about search methods immediately with products searching.

In the following table you can see what can be known in information about search method and what search conditions it affects. For example, for search condition OrderBy (items sorting) can be found possible values from AvailableSorts field. In information about search method these parameters are in the table in one line.

## Comparison of search conditions and capabilities

The following table provides a comparative description of search methods as they appear in parameters structure and how they are presented in search methods description.

Parameter	Search methods			Search method information		
	Parameter name	Value example	Parameter description	Parameter title	Value example	Parameter description
<b>Provider</b>	Provider	Taobao	<p>Provider will be defined by other conditions (for example, categories) if provider was not explicitly specified in search methods. Search will be done by default provider if none of conditions defines provider.</p> <p>Search is impossible and will give an error if different search methods lead to different providers.</p>	Provider	Taobao	Provider ID
<b>Search method</b>	SearchMethod	Official	Default search method defined in settings is used if another one is not set.	SearchMethod	Official	Search method title
				DisplayName	Branded goods (Tmall)	Displayed search method title (in necessary language)
				Flags		List of search method features
<b>Goods quantity limitations</b>	UseOptimalFrameSize	true/false	<p>Feature of using optimal frame size instead of sent one.</p> <p>frameSize parameter is ignored and OptimalFrameSize parameter will be used from chosen search method if this condition was sent in true value.</p>			
				OptimalFrameSize	40	<p>Optimal number of requested goods (page size).</p> <p>Maximum possible search speed is available if such size of pages is used because it meets size of provider's pages.</p>
				MaximumFrameSize	200	<p>Maximum quantity of pages received for 1 query.</p> <p>It can work much faster when using optimum number.</p>

				MaximumItemsCount	4000	Number of goods received by the same search methods. Change and define search conditions to receive more goods.
<b>Goods order</b>	OrderBy	Price:Asc	Default sorting set in settings will be used if value is not set or is not included into available.	AvailableSorts		List of available sorting in search method.
<b>Category</b>	CategoryId	16	Category ID for search.			
<b>Item title</b>	ItemTitle	dress	Search box for item title. If only item ID (item code) or link to provider's website page is indicated then only this item will be found and shown in search results (or empty if there is no such product).			
	LanguageOfQuery	ru	Search box language by item title. It is equal to language of goods query if not set. Autotranslation to provider language is done if it is not equal to provider language.			
<b>Vendor</b>	VendorId		Vendor ID	Vendor	true/false	If search by vendor is supported.
	VendorName		Vendor name			
<b>Vendor area</b>	VendorAreaId		Vendor area ID	VendorLocation	true/false	If search method supports vendor area.
<b>Vendor rating</b>				VendorRatingRange	true/false	If search method supports filter by vendor rating.
	MinVendorRating	5	Minimum value of vendor rating	MinVendorRating	1	Minimum value of vendor rating.
	MaxVendorRating	15	Maximum value of vendor rating	MaxVendorRating	20	Maximum value of vendor rating. <b>NOTE!</b> Maximum value of vendor rating varies from trade provider to trade provider. You can find it in provider's available search methods.
<b>Brand</b>	BrandId		Brand ID	Brand	true/false	If search method supports brands.
	BrandPropertyValueId		Brand Value ID (old parameter, use BrandId)			
<b>Price</b>	MinPrice	10	Minimum price	PriceRange	true/false	If search method supports filter by item price.
	MaxPrice	1000	Maximum price			

	CurrencyCode	CNY	Currency code for price range First showcase currency is default one. It is converted by reverse charge and courses into provider currency for search.			
Sales volume	MinVolume	100	Minimum sales volume	VolumeRange	true/false	If search method supports filter by sales volume.
	MaxVolume	500	Maximum sales volume			
				VolumeRangeLogic	None / Range / OnlyMin / OnlyMax	The logic of conditions by sales volume: range, only minimum, only maximum.
Item status (new, second-hand, unused)	StuffStatus	New / Unused / Second	Item status	StuffStatus	true/false	If search method supports filter by item status.
Item configurations (color, model, etc.)	Configurators		List of search features provided by structure.	Configurators	true/false	If search method supports item features.
				MultipleConfiguratorLogic	None / All / And	The logic of search method by several values of one feature.  Use in search of several values of one feature (for example, it is possible to output only red AND green or red OR green).
Item features	Features		List of item features.	Features		List of special filters supported by search method.
Search by photo	ImageUrl		Address of the image to search for goods	Module	Image	Photo search parameters are allowed only in the search mode, in which the Module property is equal to Image
	ImageFileId		Image File ID for Product Search  Used if the image you searched for was first uploaded via OTAPI.			
Output mode	OutputMode	Full / TotalCount / Provider	Search results output mode.  Usual search with goods output and all related information is done. Other variants: <ul style="list-style-type: none"> <li>TotalCount — output of only total number of goods without information about goods. It is thus possible to get total number without wasting time for processing goods themselves.</li> <li>Provider — output of only provider and search method without search itself. Provider and search method are defined on the basis of all search conditions and different settings.</li> </ul>			

	CategoryMode	Nothing / External / InternalLeaf / CurrentLevel	<p>Categories in search results output mode.</p> <p>There is categories list (not always) besides goods in search results. These categories include found goods. They are usually called clarifying categories. There are several variants of processing and output:</p> <ul style="list-style-type: none"> <li>• Nothing — no categories output (if they are unnecessary)</li> <li>• External — output of external categories as they are without cast to internal</li> <li>• InternalLeaf — external categories cast to internal final categories (in any place of catalog)</li> <li>• CurrentLevel — external categories cast to internal categories of current level or to root categories (if search was not by category) or to those inside category (if search was by category). Thus, clarifying categories never go beyond current level of directory view.</li> </ul>			
Old conditions	IsTmall	true/false	Feature of only Tmall goods choice.			

## Examples of parameters with search conditions and search requests

Example	xmlParameters value	Test request	Comment
20 items of Taobao provider	<pre>&lt;SearchItemsParameters&gt; &lt;Provider&gt;Taobao&lt; /Provider&gt; &lt;CategoryId&gt;0&lt; /CategoryId&gt; &lt;/SearchItemsParameters&gt;</pre>	<a href="#">Documentation example</a>	Method requires at least one of parameter (CategoryId, VendorName, VendorId, ItemTitle, BrandId, Configurators). Get RootCategoryId from <a href="#">GetProviderInfo</a> and pass it to CategoryId (for provider's root category search). <a href="#">Follow the link</a> to set up search's items count (and other parameters)
20 items of Alibaba1688 provider by 'Storage' search method	<pre>&lt;SearchItemsParameters&gt; &lt;Provider&gt;Alibaba1688&lt; /Provider&gt; &lt;CategoryId&gt;abb-0&lt; /CategoryId&gt; &lt;SearchMethod&gt;Storage&lt; /SearchMethod&gt; &lt;/SearchItemsParameters&gt;</pre>	<a href="#">Documentation example</a>	Search method is selected automatic (by instance key settings and search parameters) by default. Sometimes search method must be explicit. For example, search by reviews. <a href="#">More details about search methods.</a>
T-shirts search with system's optimal requested items count /number/batch (page size)	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;t-shirt&lt; /ItemTitle&gt; &lt;UseOptimalFrameSize&gt;&gt;true&lt; /UseOptimalFrameSize&gt; &lt;/SearchItemsParameters&gt;</pre>	<a href="#">Documentation example</a>	You can find more details about search with system's optimal requested items count/number/batch (page size) in paragraph " <a href="#">Goods quantity limitations</a> ". Pass any positive number into frameSize.

Sort 20 items of Taobao provider by descending price	<pre>&lt;SearchItemsParameters&gt; &lt;Provider&gt;Taobao&lt; /Provider&gt; &lt;CategoryId&gt;0&lt; /CategoryId&gt; &lt;OrderBy&gt;Price:Desc&lt; /OrderBy&gt; &lt;/SearchItemsParameters&gt;</pre>	Documentation example	More details about available sorts.
20 items of Taobao provider sorted by descending reviews count	<pre>&lt;SearchItemsParameters&gt; &lt;Provider&gt;Taobao&lt; /Provider&gt; &lt;CategoryId&gt;0&lt; /CategoryId&gt; &lt;SearchMethod&gt;Reviews&lt; /SearchMethod&gt; &lt;OrderBy&gt;ReviewCount: Desc&lt;/OrderBy&gt; &lt;/SearchItemsParameters&gt;</pre>	Documentation example	Available with "Reviews" module only. More details about available sorts.
Search t-shirts by descending sales count	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;t-shirt&lt; /ItemTitle&gt; &lt;OrderBy&gt;Volume:Desc&lt; /OrderBy&gt; &lt;/SearchItemsParameters&gt;</pre>	Documentation example	More details about available sorts.
Search by internal category identifier otc-4	<pre>&lt;SearchItemsParameters&gt; &lt;CategoryId&gt;otc-4&lt; /CategoryId&gt; &lt;/SearchItemsParameters&gt;</pre>	Documentation example	
Search by Taobao provider's category identifier 50000671	<pre>&lt;SearchItemsParameters&gt; &lt;Provider&gt;Taobao&lt; /Provider&gt; &lt;CategoryId&gt;50000671&lt; /CategoryId&gt; &lt;/SearchItemsParameters&gt;</pre>	Documentation example	
Search by Alibaba1688 provider's category identifier	<pre>&lt;SearchItemsParameters&gt; &lt;CategoryId&gt;abb-1031918&lt; /CategoryId&gt; &lt;/SearchItemsParameters&gt;</pre>	Documentation example	

<p>Searching for the first 100 items for "red t-shirt" query</p>	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;red t-shirt&lt; /ItemTitle&gt; &lt;/SearchItemsParameters&gt;</pre>	<p>Documen- tation example</p>	
<p>Search in original language: T</p>	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;T&lt;/ItemTitle&gt; &lt;LanguageOfQuery&gt;zh-chs&lt; /LanguageOfQuery&gt; &lt;/SearchItemsParameters&gt;</pre>	<p>Documen- tation example</p>	
<p>Search in russian language - "red t-shirt"</p>	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt; &lt;/ItemTitle&gt; &lt;LanguageOfQuery&gt;ru&lt; /LanguageOfQuery&gt; &lt;/SearchItemsParameters&gt;</pre>	<p>Documen- tation example</p>	
<p>Search in english language – red t-shirt</p>	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;red t-shirt&lt; /ItemTitle&gt; &lt;LanguageOfQuery&gt;en&lt; /LanguageOfQuery&gt; &lt;/SearchItemsParameters&gt;</pre>	<p>Documen- tation example</p>	
<p>Search in english by phrase (without translation on chinese): 3D Vision</p>	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;3D Vision&lt; /ItemTitle&gt; &lt;LanguageOfQuery&gt;zh-chs&lt; /LanguageOfQuery&gt; &lt;/SearchItemsParameters&gt;</pre>	<p>Documen- tation example</p>	
<p>Search by article: 583346884671</p>	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;583346884671&lt; /ItemTitle&gt; &lt;/SearchItemsParameters&gt;</pre>	<p>Documen- tation example</p>	
<p>Search by link from Alibaba1688</p>	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt; https://detail.1688.com /offer/530220113667.html &lt;/ItemTitle&gt; &lt;/SearchItemsParameters&gt;</pre>	<p>Documen- tation example</p>	

<p>Search by vendor: maxmartin</p>	<pre>&lt;SearchItemsParameters&gt; &lt;VendorId&gt;maxmartin&lt; /VendorId&gt; &lt;/SearchItemsParameters&gt;</pre>	<p><a href="#">Documen- tation example</a></p>	<p>Value of VendorId (vendor identifier) can be found in any item's information.</p>
<p>Search t-shirts by minimal vendor's rating 19</p>	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;t-shirt&lt; /ItemTitle&gt; &lt;MinVendorRating&gt;19&lt; /MinVendorRating&gt; &lt;/SearchItemsParameters&gt;</pre>	<p><a href="#">Documen- tation example</a></p>	
<p>Search by brand's name: vero moda</p>	<pre>&lt;SearchItemsParameters&gt; &lt;BrandId&gt;29902&lt;/BrandId&gt; &lt;/SearchItemsParameters&gt;</pre>	<p><a href="#">Documen- tation example</a></p>	<ul style="list-style-type: none"> <li>• Brand identifier (BrandId) can be found in any item of this brand. For example, by <a href="#">BatchGetItemFullInfo</a> method. You can find any item of selected brand by using <a href="#">demo-site</a> search.</li> <li>• Search by brand from administration panel (internal brand) - <a href="#">documentation example</a>.</li> <li>• Search brand by <a href="#">SearchOriginalBrandsFrame</a> (administrator's method): pass brand name into 'name', sessionId from <a href="#">AuthenticateInstanceOperator</a> method.</li> </ul>
<p>Search t-shirts by price interval: from 10 to 40 yuan</p>	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;t-shirt&lt; /ItemTitle&gt; &lt;CurrencyCode&gt;CNY&lt; /CurrencyCode&gt; &lt;MinPrice&gt;10&lt;/MinPrice&gt; &lt;MaxPrice&gt;40&lt;/MaxPrice&gt; &lt;/SearchItemsParameters&gt;</pre>	<p><a href="#">Documen- tation example</a></p>	<p>Selection includes items with promotion price (PromotionPrice). Currency (if not explicit) gets from administrators panel (first currency from list) and converts.</p>
<p>Search t-shirt by USD equivalent price not exceed 3</p>	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;t-shirt&lt; /ItemTitle&gt; &lt;MaxPrice&gt;3&lt;/MaxPrice&gt; &lt;CurrencyCode&gt;USD&lt; /CurrencyCode&gt; &lt;/SearchItemsParameters&gt;</pre>	<p><a href="#">Documen- tation example</a></p>	<p>Get currency code (CurrencyCode) by using <a href="#">GetCurrencyInstanceList</a> or <a href="#">GetInstanceCurrencyInfoList</a> methods.</p>
<p>Search t-shirt with minimal sales count of 50</p>	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;t-shirt&lt; /ItemTitle&gt; &lt;MinVolume&gt;50&lt;/MinVolume&gt; &lt;/SearchItemsParameters&gt;</pre>	<p><a href="#">Documen- tation example</a></p>	

Search t-shirt with minimal first lot 5	<pre>&lt;SearchItemsParameters&gt; &lt;Provider&gt;Alibabal688&lt; /Provider&gt; &lt;ItemTitle&gt;t-shirt&lt; /ItemTitle&gt; &lt;MinFirstLot&gt;5&lt; /MinFirstLot&gt; &lt;/SearchItemsParameters&gt;</pre>	Documentation example	Alibaba1688 only.
Search t-shirt with maximal first lot 1 (equals to retail order)	<pre>&lt;SearchItemsParameters&gt; &lt;Provider&gt;Alibabal688&lt; /Provider&gt; &lt;ItemTitle&gt;t-shirt&lt; /ItemTitle&gt; &lt;MaxFirstLot&gt;1&lt; /MaxFirstLot&gt; &lt;/SearchItemsParameters&gt;</pre>	Documentation example	
Search t-shirts by condition (new)	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;t-shirt&lt; /ItemTitle&gt; &lt;StuffStatus&gt;New&lt; /StuffStatus&gt; &lt;/SearchItemsParameters&gt;</pre>	Documentation example	Actually we have 2 conditions right now: 'new' and 'used'. New: new Second: used
Search by attribute: red coloured XL size t-shirt	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;t-shirt&lt; /ItemTitle&gt; &lt;Configurators&gt; &lt;Configurator Pid=" 20509" Vid="28317" /&gt; &lt;Configurator Pid=" 1627207" Vid=" 13535612018" /&gt; &lt;/Configurators&gt; &lt;/SearchItemsParameters&gt;</pre>	Documentation example	Search attributes for selected item by using <a href="#">BatchGetItemFullInfo</a> (example's item - id 646674173023) (<Attributes> ) <ItemAttribute Pid="20509" Vid="28317"> (for XL size) <ItemAttribute Pid="1627207" Vid="13535612018"> (for "red" colour) With additional information block 'SearchProperties' pass ( <a href="#">more details about additional information blocks</a> )
Search t-shirts with discount	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;t-shirt&lt; /ItemTitle&gt; &lt;Features&gt; &lt;Feature Name="Discount " &gt;true&lt;/Feature&gt; &lt;/Features&gt; &lt;/SearchItemsParameters&gt;</pre>	Documentation example	List of available features can get from documentation's <a href="#">paragraph #2</a> .

Search t-shirts in stock	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;t-shirt&lt; /ItemTitle&gt; &lt;Features&gt; &lt;Feature Name="IsStock" &gt;true&lt;/Feature&gt; &lt;/Features&gt; &lt;/SearchItemsParameters&gt;</pre>	<a href="#">Documentation example</a>	
Search TMall t-shirts	<pre>&lt;SearchItemsParameters&gt; &lt;ItemTitle&gt;t-shirt&lt; /ItemTitle&gt; &lt;Features&gt; &lt;Feature Name="Tmall" &gt;true&lt;/Feature&gt; &lt;/Features&gt; &lt;/SearchItemsParameters&gt;</pre>	<a href="#">Documentation example</a>	
Search items with reviews after purchase in "dress" category	<pre>&lt;SearchItemsParameters&gt; &lt;CategoryId&gt;162104&lt; /CategoryId&gt; &lt;SearchMethod&gt;Reviews&lt; /SearchMethod&gt; &lt;Features&gt; &lt;Feature Name=" PurchasedItemReviews" &gt;true&lt;/Feature&gt; &lt;/Features&gt; &lt;/SearchItemsParameters&gt;</pre>	<a href="#">Documentation example</a>	Available with "Reviews" module only.
Search by image	<pre>&lt;SearchItemsParameters&gt; &lt;ImageUrl&gt; https://img.alicdn.com /imgextra/il/529782397 /01CN01qnZeTY1TZs3xAcmOv_ !!529782397.jpg &lt;/ImageUrl&gt; &lt;/SearchItemsParameters&gt;</pre>	<a href="#">Documentation example</a>	Can search by image URL or by uploaded through API file: <a href="#">more details about search by image</a> .

## Search results description

Search results are presented by [OtapItemSearchResult](#) structure, fields' description is shown below.

Parameter	Description
Items	List of found goods with full number of goods
Categories	List of categories containing searched goods (clarifying goods)
Brands	List of brands containing goods (clarifying brands)
TranslatedItemTitle	Text by which goods were really searched (translated to provider language)
Provider	Provider in which search was done

SearchMethod	Search method used for search
CurrentSort	Real current sorting
CurrentFrameSize	Real current frame size (page)
MaximumPageCount	Maximum number of pages in search
IsFoundByItemId	If true, then search results contain 1 product found by code or link

## Additional blocks of information in BatchSearchItemsFrame

It is possible to get additional information for one OTAPI request using [BatchSearchItemsFrame](#). List of additional blocks is available in blockList parameter separated by commas. Result is [BatchItemSearchResult](#) including usual [OtapItemSearchResult](#) and also all properties for additional information.

Block name	Description
SubCategories	get all subcategories if search by category
SearchProperties	get filters by characteristics/properties
RootPath	get path to root if search by category
Vendor	get information on seller if search by seller
Brand	get information on brand if search by brand
Category	get information on category of search by category
HintCategories	get appropriate categories for title if search by text
AvailableSearchMethods	get list of appropriate matching data for search methods parameters and all information on them