Schema Tabular Documentation for the Bing Search API

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Introduction

You can use the Bing Search API to get search results in six categories, *Web*, *Image*, *Video*, *News*, *Related Search*, and *Spelling Suggestions*. You can request one or multiple categories in a single query. A search category is also known as a *service operation*.

This document provides the following information about each service operation:

- The service URI
- Input parameters and their options
- Results

Note: The Bing Search service supports fixed queries. Some queries might include required input parameters. For more information about query types, see Fixed and Flexible Query Types on MSDN.

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Service URI

The service root URIs for each of the Bing Search API subscription types are shown in the following table.

Subscription type	Service root URI
Bing Search API	https://api.datamarket.azure.com/Bing/Search/
Bing Search API - Web Results Only	https://api.datamarket.azure.com/Bing/SearchWeb/

The full service URI is expressed using elements of the OData specification. Some notes:

- You'll need to place your query text (and other string parameters) inside single quotation marks. Because single quotation marks need to be URL encoded before being used in a web request, you'll want to use the encoded equivalent (%27) instead. For example:

  https://api.datamarket.azure.com/Bing/SearchWeb/Web?Query=%27Xbox%27

  It is best to URL encode the entire query text, including the quotation marks that surround it. For example:

  https://api.datamarket.azure.com/Bing/Search/Web?Query=%27New+Xbox+Games%27

  This way, if you've got any characters in your query that require URL encoding (such as spaces), they'll be properly handled as well.

- You can use the parameters in the following table to specify the number of results you want, where to start in the result set (that is, pagination), and the result format.

Parameter	Description
$top	Specifies the number of results to return. The default is 50 for Web, Image, and Video searches, 15 for News.
Example: https://api.datamarket.azure.com/Bing/Search/Web?Query=%27Xbox%27&$top=10	
$skip	Specifies the starting point offset for the results. The default is zero.
Example: https://api.datamarket.azure.com/Bing/Search/Web?Query=%27Xbox%27&skip=20	

Parameter	Description
$format	Specifies the format of the OData response. Current options are Atom (for XML) or JSON. Default: Atom
Example: https://api.datamarket.azure.com/Bing/Search/Web?Query='Xbox'&$format=json	

For more information about OData, visit the OData website.

Notes: You don't need to enclose the values of the OData parameters in single quotation marks ('), nor URL encode them. However, you do need to do this for all other string parameter values, such as *Market*, *Sources*, *ImageFilters*, *Options*, and other parameters.

The Bing Search API supports HTTP compression to reduce transfer size. To enable HTTP compression, add header "*Accept-Encoding: gzip*" to your HTTP request.

Service operations

A service operation is the data source that is targeted for the Bing Search API results.

To target a particular service operation, append it to your service root URI. For instance, if you want image results, append the service operation *Image* to your service URI as follows:

    https://api.datamarket.azure.com/Bing/Search/Image

The service operations available on the Bing Search API Marketplace are listed in the following table. Service operation names are case-sensitive.

Service Operation / Example
Web   https://api.datamarket.azure.com/Bing/Search/Web?Query=%27Xbox%27
Image   https://api.datamarket.azure.com/Bing/Search/Image?Query=%27Xbox%27
Video   https://api.datamarket.azure.com/Bing/Search/Video?Query=%27Xbox%27
News   https://api.datamarket.azure.com/Bing/Search/News?Query=%27Xbox%27

Service Operation / Example
SpellingSuggestion   https://api.datamarket.azure.com/Bing/Search/SpellingSuggestion?Query=%27Xbox%27
RelatedSearch   https://api.datamarket.azure.com/Bing/Search/RelatedSearch?Query=%27Xbox%27
Composite   https://api.datamarket.azure.com/Bing/Search/Composite?Sources=%27Web%2BNews%27&Query=%27Xbox%27

Multiple service operations

To target multiple service operations in a single query, use the *Composite* service operation followed by its required parameter *Sources*. Make the value of *Sources* the names of the service operations concatenated with a plus (+) character. For example, to get results about Xbox from both web and news sources simultaneously:

   https://api.datamarket.azure.com/Bing/Search/Composite?Sources=%27Web%2BNews%27&Query=%27Xbox%27

Exception: When you request a spelling suggestion as part of a composite query, you need to use the service operation *Spell* instead of *SpellingSuggestion*. Example:

   https://api.datamarket.azure.com/Bing/Search/Composite?Sources=%27Web%2BSpell%27&Query=%27San+Fernado%27

Notice that the value of the *Sources* parameter is surrounded by single quotation marks, which have been URL-encoded along with the rest of the string. This requirement applies to all string parameter values.

Also note that the number of results returned with the OData reserved parameter $top refers to all data sources specified in the query except News. News will always return a fixed number of 15 news results when you use it in a composite query.

Bing Search API Data: input parameters and results

The following section describes input parameters you can use with the Bing Search API. It also describes the results of each service operation.

Input parameters applicable to all service operations

The following table shows the input parameters you can use with any service operation.

Note: Parameter *Query* is the only required parameter. All other parameters, including those specific to a particular service operation, are optional.

Name	Type	Sample values	Description
Query	String	xbox	Bing search query. The query can contain any valid query text that the Bing Engine supports.
Adult	String	Moderate	Setting used for filtering sexually explicit content. Not specifying the level of filtering means that the API will use the default level for a particular market, which may vary per market. In addition, for certain markets, the level should not be lower than the predefined value for that market. For example, in the de-DE market, the level is always set to **Strict**. For more information about the levels for this parameter, see You can specify multiple options by concatenating the options with a plus(+) sign. Example: WebSearchOptions='DisableQueryAlterations+DisableHostCollapsing' Remember to URL-encode before appending to your query string. Adult.
Latitude	Double	47.603450	Latitude (north/south coordinate). Valid input values range from –90 to 90.
Longitude	Double	-122.329696	Longitude (east/west coordinate). Valid input values range from –180 to 180.

Name	Type	Sample values	Description
Market	String	en-US	Market. If the parameter is not specified, the API attempts to determine an applicable market through the use of logic such as the IP address of the request, cookies, and other elements. For a list of the markets, see Market. **Note:** Not all service operations support all markets.
Options	String	EnableHighlighting	Specifies general options for the query. Fore more information, see Options.

Web service operation

The following section describes input parameters and results for the *Web* service operation.

Input parameters

The following table shows the optional input parameters you can use for the *Web* service operation. You can use these in addition to the parameters shown in Input parameters applicable to all service operations.

Name	Type	Sample values	Description
WebFileType	String	XLS	A file name extension for the type of files to return. This parameter accepts only one file name extension. For a list of values for supported file name extensions, see WebFileType.
WebSearchOptions	String	DisableQueryAlterations	Specifies options for a web request. For more information, see WebSearchOptions.

Results

The following table lists results for the *Web* service operation.

Name	Type	Description
ID	Guid	Identifier
Title	String	Text specified in the HTML <title> tag of the page
Description	String	Description text of the web result
DisplayUrl	String	Web URL to display to the user
Url	String	Full URL of the web result

Image service operation

The following section describes input parameters and results for the *Image* service operation.

Input parameters

The following table shows the optional input parameters you can use for the *Image* service operation. You can use these in addition to the parameters shown in Input parameters applicable to all service operations.

Name	Type	Sample values	Description
ImageFilters	String	Size:Small	Array of strings that filter the response that the API sends based on size, aspect, color, style, face, or any combination thereof. For a list of values for this parameter, see ImageFilters.

Results

The following table lists results for the *Image* service operation.

Name	Type	Description
ID	Guid	Identifier
Title	String	Title of the image
MediaUrl	String	URL of the full-size image
SourceUrl	String	URL of the website that contains a returned image
DisplayUrl	String	URL that is displayed on the search results page
Width	Int32	Width of the full-size image, in pixels, if available
Height	Int32	Height of the full-size image, in pixels, if available
FileSize	Int64	Size of the full-size image file, in bytes, if available
ContentType	String	MIME type of an image, if available
Thumbnail	Thumbnail	Thumbnail properties of the multimedia element

Video service operation

The following section describes input parameters and results for the *Video* service operation.

Input parameters

The following table shows the optional input parameters you can use for the *Video* service operation. You can use these in addition to the parameters shown in Input parameters applicable to all service operations.

Name	Type	Sample values	Description

Name	Type	Sample values	Description
VideoFilters	String	Duration:Short	Array of strings that filter the response that the API sends based on duration, aspect, resolution, or any combination thereof. In the query URL, you use a plus sign (+) to indicate multiple filters. For example: **videofilters=Aspect:Standard+Duration:Short** For a list of the values for this parameter, see VideoFilters. **Note:** You cannot include more than one value for duration in the same request.
VideoSortBy	String	Date	Sort order of results. For more information, see VideoSortBy.

Results

The following table lists results for the *Video* service operation.

Name	Type	Description
ID	Guid	Identifier
Title	String	Source of the video
MediaUrl	String	URL of the original video
DisplayUrl	String	URL of this video from the Bing Video page
RunTime	Int32	Playback length of the video, in milliseconds, if available
Thumbnail	Thumbnail	Thumbnail properties of the multimedia element

News service operation

The following section describes input parameters and results for the *News* service operation.

Input parameters

The following table shows the optional input parameters you can use for the *News* service operation. You can use these in addition to the parameters shown in Input parameters applicable to all service operations.

Name	Sample values	Type	Description

Name	Sample values	Type	Description
NewsCategory	rt_Business	String	Category of news for which to provide results. If no results match the input provided for this parameter, Bing returns the default set of results, which is news from a mix of categories. Applicable only in the en-US market. For a list of the valid values, see NewsCategory.
NewsLocation Override	US.WA	String	Overrides Bing location detection. Applicable only in the en-US market.
NewsSortBy	Date	String	Sort order of results. For more information, see NewsCategory Valid values for the *NewsCategory* parameter include: • rt_Business • rt_Entertainment • rt_Health • rt_Politics • rt_Sports • rt_US • rt_World • rt_ScienceAndTechnology NewsSortBy.

Results

The following table lists results for the *News* service operation.

Name	Type	Description
ID	Guid	Identifier
Title	String	Headline for this result
Url	String	URL of this article
Source	String	Organization responsible for this article
Description	String	Representative sample of this result
Date	DateTime	Date on which this article was indexed

RelatedSearch service operation

The following section describes input parameters and results for the *RelatedSearch* service operation.

Input parameters

There are no parameters that are specific to the *RelatedSearch* service operation. Use the parameters shown in Input parameters applicable to all service operations.

Results

The following table lists results for the *RelatedSearch* service operation.

Name	Type	Description
ID	Guid	Identifier
Title	String	Title of the related resource
BingUrl	String	URL of the related resource

SpellingSuggestions service operation

The following section describes input parameters and results for the *SpellingSuggestions* service operation.

Input parameters

There are no parameters that are specific to the *SpellingSuggestions* service operation. Use the parameters shown in Input parameters applicable to all service operations.

Results

The following table lists results for the *SpellingSuggestions* service operation.

Name	Type	Description
ID	Guid	Identifier
Value	String	The corrected spelling

Bing Search API Data - Web Results Only: input parameters and results

The following section describes input parameters you can use with the Bing Search API – Web Results Only and describes the results of the *Web* service operation.

Web service operation

The following section describes input parameters and results for the *Web* service operation.

Input parameters

The following table shows the optional input parameters you can use for the *Web* service operation. You can use these in addition to the parameters shown in Input parameters applicable to all service operations.

Name	Type	Sample values	Description

Name	Type	Sample values	Description
WebFileType	String	XLS	A file name extension for the type of files to return. This parameter accepts only one file name extension. For a list of values for supported file name extensions, see [WebFileType](#).

Results

The following table lists results for the *Web* service operation.

Name	Type	Description
ID	Guid	Identifier
Title	String	Text specified in the HTML <title> tag of the page
Description	String	Description text of the web result
DisplayUrl	String	Web URL to display to the user
Url	String	Full URL of the web result

Options for input parameters

The following sections describe members and values that you can use to customize input parameters.

Options

Values of the *Options* parameter specify general options for the query.

Value	Description
DisableLocationDetection	Prevents Bing from inferring location from the terms of a query.
EnableHighlighting	Bing will use a special character to identify the beginning and the end of a query term that appears in results. For more information, see Hit Highlighting on the MSDN website.

You can specify multiple options by concatenating the options with a plus(+) sign. Example:

Options='EnableHighlighting+DisableLocationDetection'

Remember to URL-encode before appending to your query string.

WebSearchOptions

Values of the *WebSearchOptions* parameter specify options for a web request.

Value	Description
DisableHostCollapsing	Prevents Bing from suppressing results from the same top-level URL for a request.
DisableQueryAlterations	Prevents Bing from altering the query string. Such alteration may have been done to correct apparent spelling error in the original query string.

You can specify multiple options by concatenating the options with a plus(+) sign. Example:

WebSearchOptions='DisableQueryAlterations+DisableHostCollapsing'

Remember to URL-encode before appending to your query string.

Adult

Values of the *Adult* parameter specify the level of adult content filtering used in the query.

Value	Description
Off	Filtering is not used in a query.

Value	Description
Moderate	Results of a query should not include sexually explicit images or videos, but can include sexually explicit text.
Strict	Results of a query should not include sexually explicit text, images, or videos.

ImageFilters

Values of the *ImageFilters* parameter restrict results.

Value	Restricts image results by
Size:Small	Small size.
Size:Medium	Medium size.
Size:Large	Large size.
Size:Height:*<Height>*	Height in pixels, where *<Height>* is an unsigned int value.
Size:Width:*<Width>*	Width in pixels, where *<Width>* is an unsigned int value.
Aspect:Square	Standard aspect ratio.
Aspect:Wide	Widescreen aspect ratio.
Aspect:Tall	Tall aspect ratio.
Color:Color	Color images.
Color:Monochrome	Black and white images.
Style:Photo	Photos.
Style:Graphics	Graphics or illustrations.
Face:Face	Faces.
Face:Portrait	Portraits (head and shoulders).

Value	Restricts image results by
Face:Other	Other **Face** categories.

Market

Values of the *Market* parameter indicate languages and countries/regions.

Note: Not all Service Operations support all markets.

Market ID	Language	Country/region
ar-XA	Arabic	Saudi Arabia
bg-BG	Bulgarian	Bulgaria
cs-CZ	Czech	Czech Republic
da-DK	Danish	Denmark
de-AT	German	Austria
de-CH	German	Switzerland
de-DE	German	Germany
el-GR	Greek	Greece
en-AU	English	Australia
en-CA	English	Canada
en-GB	English	United Kingdom
en-ID	English	Indonesia
en-IE	English	Ireland
en-IN	English	India

Market ID	Language	Country/region
en-MY	English	Malaysia
en-NZ	English	New Zealand
en-PH	English	Philippines
en-SG	English	Singapore
en-US	English	United States
en-XA	English	Saudi Arabia
en-ZA	English	South Africa
es-AR	Spanish	Argentina
es-CL	Spanish	Chile
es-ES	Spanish	Spain
es-MX	Spanish	Mexico
es-US	Spanish	United States
es-XL	Spanish	Latin America
et-EE	Estonian	Estonia
fi-FI	Finnish	Finland
fr-BE	French	Belgium
fr-CA	French	Canada
fr-CH	French	Switzerland
fr-FR	French	France

Market ID	Language	Country/region
he-IL	Hebrew	Israel
hr-HR	Croatian	Croatia
hu-HU	Hungarian	Hungary
it-IT	Italian	Italy
ja-JP	Japanese	Japan
ko-KR	Korean	Korea
lt-LT	Lithuanian	Lithuania
lv-LV	Latvian	Latvia
nb-NO	Norwegian	Norway
nl-BE	Dutch	Belgium
nl-NL	Dutch	Netherlands
pl-PL	Polish	Poland
pt-BR	Portuguese	Brazil
pt-PT	Portuguese	Portugal
ro-RO	Romanian	Romania
ru-RU	Russian	Russia
sk-SK	Slovak	Slovakia
sl-SI	Slovenian	Slovenia
sv-SE	Swedish	Sweden

Market ID	Language	Country/region
th-TH	Thai	Thailand
tr-TR	Turkish	Turkey
uk-UA	Ukrainian	Ukraine
zh-CN	Simplified Chinese	China
zh-HK	Traditional Chinese	Hong Kong SAR
zh-TW	Traditional Chinese	Taiwan

NewsCategory

Valid values for the *NewsCategory* parameter include:

- rt_Business
- rt_Entertainment
- rt_Health
- rt_Politics
- rt_Sports
- rt_US
- rt_World
- rt_ScienceAndTechnology

NewsSortBy

Values of the *NewsSortBy* parameter affect the sort order of news results.

Value	Description
Date	News results are sorted in chronological order.
Relevance	News results are sorted by relevance of to the query.

VideoFilters

Values of the *VideoFilters* parameter restrict results.

Value	Restricts video results by
Duration:Short	Runtime of less than 300 seconds.

Value	Restricts video results by
Duration:Medium	Runtime of between 300 seconds and 12,000 seconds.
Duration:Long	Runtime of greater than 12,000 seconds.
Aspect:Standard	Standard aspect ratio.
Aspect:Widescreen	Widescreen aspect ratio.
Resolution:Low	Low resolution.
Resolution:Medium	Medium resolution.
Resolution:High	High resolution.

VideoSortBy

Values of the *VideoSortBy* parameter affect the sort order of video results.

Value	Description
Date	Video results are sorted in chronological order.
Relevance	Video results are sorted by relevance to the query.

WebFileType

Values of the *WebFileType* parameter filter results by supported file name extensions.

Value	File type
DOC	Microsoft Word document
DWF	Autodesk Design Web Format file
FEED	Really Simple Syndication (RSS) feed
HTM	Hypertext Markup Language (.htm) file
HTML	Hypertext Markup Language (.html) file

Value	File type
PDF	Adobe Portable Document Format
PPT	Microsoft PowerPoint presentation
RTF	Microsoft Rich Text Format document
TEXT	Generic text (.text) file
TXT	Generic text (.txt) file
XLS	Microsoft Excel workbook

Parameters, options and operators not documented here are not officially supported.

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