

Bing Search V7 API Gateway

Currently serving News Search

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Overview

What is the Bing News Search API?

Bing News Search API lets users find headline news, news by category, and trending articles. If you are looking to build an experience like bing.com/news, this is the API to use.

What is the Bing News Search API Gateway?

Is the API to Bing News Search API to reduce the overhead of setting up azure portal, resource creation, configuration, and ultimately less reading of the large documentation.

Get Started

You can easily call the API by sending a native HTTP GET request to hosted app or deploy with app your own subscription key. To get started using the API in your local system or cloud click on [QuickStart](#).

Features

While Bing News Search API primarily focuses on finding relevant news articles, it also provides several features for intelligent and focused news retrieval on the web.

Feature	Description
General News	The user's search query is used to retrieve general news articles. The API returns top news articles from various categories if the search question is null.
Today's trending news stories	Gets you the latest news items that are trending on social media.
News by category	Look for specific types of news, such as business, sports, or entertainment.

QuickStart

Deploy app in own server (or skip this to start firing GET requests).

- 1) Use this [link](#) to procure azure Bing search resource and generate subscription key.
- 2) Pull the code from [repository](#).
 - a. Update subscription key in Bing Search V7 API\App Constants\apiConstants.js
- 3) Download and install the latest version of [Node.js](#).
- 4) Command Prompt/bash change directory to Application's directory
 - a. npm install
 - b. pm2 start server.js
- 5) Refer HTTP GET Request to query the end points.

HTTP GET Request

Sample Query:

Simple search request for keyword covid-19 in India with language English and top two matching articles.

URL: <http://104.131.96.211:3000/api/v1/news/search?q=covid-19&mkt=en-IN&count=2>

Example JSON Response:

A successful response is returned in JSON, as shown in the following example:

```
{
  "_type": "News",
  readLink: "https://api.bing.microsoft.com/api/v7/news/search?q=covid-19",
  queryContext: {
    originalQuery: "covid-19",
    adultIntent: true
  },
  totalEstimatedMatches: 22,
  sort: [-],
  value: [
    {
      name: "COVID-19: Army To Create 2 Field Hospitals In Patna",
      url: "https://www.ndtv.com/india-news/covid-19-army-to-create-2-field-hospitals-in-patna-2436672",
      image: [-],
      description: "The Indian Army has mobilised two field hospitals from the northeast to Patna to assist the Bihar government in fighting the escalating cases of COVID-19 in the state, military officials said on Thursday.",
      provider: [-],
      datePublished: "2021-05-07T00:46:00.0000000Z"
    },
    {
      name: "Hearing in Allahabad High Court over Uttar Pradesh's COVID-19 management today",
      url: "https://www.msn.com/en-in/news/other/hearing-in-allahabad-high-court-over-uttar-pradeshs-covid-19-management-today/ar-BB1grMq",
      image: [-],
      description: "The Yogi Adityanath-led Uttar Pradesh government in a virtual hearing on Friday (May 7, 2021) will answer Allahabad High Court over its COVID-19 management in the state.",
      about: [-],
      mentions: [-],
      provider: [-],
      datePublished: "2021-05-07T01:22:10.0000000Z",
      video: [-],
      category: "World"
    }
  ]
}
```

How To

Search News:

Use News Search API to search the Web for news that is relevant to the user's search query. Use the below end point to make a request using cURL or Postman.

End Point: <http://104.131.96.211:3000/api/v1/news/search?q=<search-term>>

Query Parameters:

- count and offset — Used to page image results.
- mkt — Used to specify the market where the results come from, which is typically the market where the user is making the request from.
- safeSearch — Used to specify the user's safe search preference.
- textDecorations and textFormat — Used to turn on hit highlighting.

Refer [Query Parameters](#) for detailed specs.

Example:

curl <http://104.131.96.211:3000/api/v1/news/search?q=election+2021&mkt=en-us&safeSearch=moderate&textdecorations=true&textformat=raw&count=10&offset=0>

Get Trending News

Use this end point to get trending news on social media.

End Point: <http://104.131.96.211:3000/api/v1/news/trendingtopics>

Query Parameters:

- mkt — Used to specify the market where the results come from, which is typically the market where the user is making the request from.
- since — Used to select trending topics that Bing discovered on or after the specified date and time.
- sortBy — Use to specify the order (by date or by relevance) to return news topics in.

Example:

curl <http://104.131.96.211:3000/api/v1/news/trendingtopics?mkt=en-us&since=1620358190sortby=date>

Get Trending News by Category

Call the News Category API to get headline news or category-specific news, such as sports, politics, or world news.

End Point: <http://104.131.96.211:3000/api/v1/news?mkt=en-us&category=sports>

Query Parameters:

- **category** — This is an optional region. This is where you specify which news category you want to get your news from. See News categories by market for a list of potential news categories that you can specify. If no parameters are given, the API will return up to ten headline news posts.
- **mkt** — This specifies the market from which the results are derived, which is usually the market from which the consumer is making the request. See News Category API markets for a list of markets that this API serves.

Example:

curl <http://104.131.96.211:3000/api/v1/news?mkt=en-us&category=sports>

Pagination

The count parameter specifies the number of results to return in the response. The maximum number of results that you may request in the response is default 10 and the maximum is 100.

End Point: All three end points behave same when added in query parameters.

Query Parameters:

Set count to 10 and offset to 0 to get the first page of results if your user interface displays 10 news articles per page. Increase the offset by 10 for each subsequent page (for example, 10, 20).

Example:

<http://104.131.96.211:3000/api/v1/news/search?q=biden&count=10&offset=0&mkt=en-us>

Request Throttling

The number of queries per second (QPS) that you may make is determined by the service and the subscription form. The request fails if the QPS cap is reached or exceeded, and an HTTP 429 status code is returned. The Retry-After header in the answer shows how long you must wait before submitting another message.

To Make sure the app has the logic to remain within the quota. I have written a client to restrict number of calls within quota. (QPS-client-sample.html).

REST

End Points

Endpoint	Description
http://104.131.96.211:3000/api/v1/news	The top news articles by category are returned. You may, for example, request the most popular sports or entertainment posts. See the category parameter for more detail on defining categories.
http://104.131.96.211:3000/api/v1/news/search	Returns news articles based on the search question entered by the user. The call returns the top news articles if the search query is null.
http://104.131.96.211:3000/api/v1/news/trendingtopics	Returns trending news on social media.

Query Parameters

Common Parameters:

Parameter	Required	Type	Description
mkt	No	String	<i>The market must be formatted as a <language>-<country/region> pair. Take, for instance, en-US. See Market codes for a list of potential market values.</i>
safeSearch	No	String	Off - Return news articles with adult text, photographs, or videos if they are turned. Moderate - Return news articles with adult text but no adult photos or videos Strict - Returning news articles containing adult text, photographs, or videos is prohibited. Moderate is the default setting.
since	No	Integer	Bing selects trending topics using the Unix epoch time. Bing returns trending topics discovered on or after the date and time mentioned, not the date the subject was written.
sortBy	No	String	Date — Returns a list of news topics ordered by date, from newest to oldest. Relevance — Sorts news topics by relevance, which takes into account subject freshness, genre, global user interaction, and customized features.
textDecorations	No	Boolean	If true , the strings may include markers. The default is false .
textFormat	No	String	Raw — Use Unicode characters to mark content that needs special formatting. HTML — Use HTML tags to mark content that needs special formatting.

End Point Specific Parameters:

- <http://104.131.96.211:3000/api/v1/news>

Parameter	Required	Type	Description
category	No	String	The category of news articles to return. For example, Sports or Entertainment articles. For a list of possible categories, see Market and News Categories .

- <http://104.131.96.211:3000/api/v1/news/search>

Parameter	Required	Type	Description
q	Yes	String	<i>The word used in the user's search query. The top news reports are included in the response if the term is empty.</i>
count	No	Integer	<i>The number of news articles to return in the response.</i>
offset	No	Integer	<i>Use this parameter along with the count parameter to page results. Example: count=10&offset=20, to get second set of 10 count results.</i>
freshness	No	String	Day – Returns articles within 24 hours. Week – Returns articles within 7 days. Month – Returns articles within 30 days.
originalimg	No	Boolean	<i>If true, includes actual image URL else thumbnail</i>

Market and Language

Please refer below link for all the possible values for Market and Language pair-

<https://docs.microsoft.com/en-us/bing/search-apis/bing-news-search/reference/market-codes>

Market and News Categories

Please refer below link for all the possible values for Market and News Categories pair-

<https://docs.microsoft.com/en-us/bing/search-apis/bing-news-search/reference/query-parameters#news-categories-by-market>

Response Objects

Error

Name	Type	Value
_status	Integer	HTTP status code returned by the Bing Search News API or set by the app.
_message	String	Error status message returned by Bing Search News API or set by the app.
_errorList	String	Array of errors returned by the Bing Search News API

NewsAnswer

Reference – Bing News Search Documentation

Name	Type	Value
_type	String	Type hint.
Id	String	An ID that uniquely identifies the news answer. Only Web Search API responses include this field.
sort	SortValue[]	A list of options for sorting the news articles. For example, sort by relevance (default) or date. To determine which sort, order the request used, see the <i>isSelected</i> field.
totalEstimatedMatches	Long	The estimated number of news articles that are relevant to the query. Use this number along with the count and offset query parameters to page the results. Only the News Search API includes this field.
value	NewsArticle[]	A list of news articles that are relevant to the query term. If there are no results to return for the request, the array is empty.
webSearchUrl	String	A URL to the top news stories on Bing. Included only for /news requests.

NewsArticles

Reference – Bing News Search Documentation

Name	Type	Value
category	String	<i>The news category that the article belongs to. For example, Sports. If the news category cannot be determined, the article does not include this field. For a list of possible categories, see News Categories by Market. If your request specifies the Sports-Tennis category, the category property may contain Sports-Tennis or Sports.</i>
clusteredArticles	NewsArticle[]	<i>A list of related news articles.</i>
datePublished	String	<i>The date and time that Bing discovered the article. The date is in the format, YYYY-MM-DDTHH:MM:SS.</i>
description	String	<i>A short description of the news article.</i>
headline	Boolean	<i>A Boolean value that indicates whether the news article is a headline. If true, the article is a headline.</i>
Id	String	<i>An ID that uniquely identifies this article in the list of articles.</i>
image	Object	<i>An image related to the new article. The Image object in this context contains only the thumbnail field.</i>
mentions	Object[]	<i>A list of entities (places or persons) mentioned in the article.</i>
name	String	<i>The name of the article.</i>
provider	Object[]	<i>A list of providers that ran the article.</i>
url	String	<i>A URL to the news article.</i>
video	String	<i>A video link that's related to the news article.</i>

Error codes

The following are the possible HTTP status codes that a request may return.

Status code	Description
200	Success.
400	One of the query parameters is missing or not valid.
410	The request used HTTP instead of the HTTPS protocol. HTTPS is the only supported protocol.
429	The caller exceeded their queries per second quota.
500	Unexpected server error.

The Application may return these below errors when using [Deploy app in own server](#), incase of mis configuration.

401	The subscription key is missing or is not valid.
403	The user is authenticated (for example, they used a valid subscription key) but they don't have permission to the requested resource.

Security

Authentication

//TODO:

Helmet (Node Js Middleware)

Reference - GeeksForGeeks

By properly setting HTTP headers, Helmet will help protect the app from certain well-known web vulnerabilities. Helmet is a series of smaller middleware functions that set HTTP response headers related to security.

- **Content-Security-Policy** sets the Content-Security-Policy header to help prevent cross-site scripting attacks and other cross-site injections.
- **hidePoweredBy** removes the X-Powered-By header.
- **hsts** sets Strict-Transport-Security header that enforces secure (HTTP over SSL/TLS) connections to the server.
- **X-Download-Options:** It restricts to various Download-Options.
- **noCache** sets Cache-Control and Pragma headers to disable client-side caching.
- **noSniff** sets X-Content-Type-Options to prevent browsers from MIME-sniffing a response away from the declared content-type.
- **frameguard** sets the X-Frame-Options header to provide clickjacking protection.
- **xssFilter** sets X-XSS-Protection to disable the buggy Cross-site scripting (XSS) filter in web browsers.