

FAQ for the Bing Search API: Windows Azure Marketplace

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The Bing Search API is now offered on a subscription basis through the [Windows Azure Marketplace](https://datamarket.azure.com/), a cloud-based data service. You can use the Marketplace to subscribe to various data sets and web services. You can then integrate the information you need into your applications using standardized data services.

This document first provides an introduction to the Bing Search API, and then provides answers to frequently asked questions that are organized into the following categories:

* [Subscriptions and billing](#_Subscriptions_and_billing)
* [Usage scenarios](#_Usage_scenarios)
* [Service Root URI](#_Service_Root_URIs)
* [Authentication](#_Authentication)
* [Schema](#_Schema)
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# Introduction

An application programming interface (API), such as the one provided by Microsoft Bing Search, is a published set of specifications for a host software library. Your application can communicate with the API to use the services that the library provides.

# Getting search results with the Bing Search API

With the Bing Search API, you can use data that is collected by the Bing search engine in your desktop application, webpage, or other software component. You can use the Bing Search API with any software component that can issue an HTTPS request.

You can use the Bing Search API to get search results in six categories, described in the following table.

| **Category** | **Description** |
| --- | --- |
| Web | General webpages that are relevant to your query. |
| Image | Images and icons that are relevant to your query. |
| Video | Videos that are relevant to your query. |
| News | News articles that are relevant to your query. |
| Related Search | Search expressions and their corresponding Bing Uniform Resource Identifiers (URIs) that are relevant to your query. For example: if your query is *San Francisco*, the Bing Search API returns URIs you can use to get search results about *San Francisco Weather*, *San Francisco Travel*, and *San Francisco Things to Do*. You can use the related search expressions to suggest more specific queries to your users. |
| Spelling Suggestions | Spelling suggestions for any misspelled words in your query. For example: if your query is *San Francsco Bseball*, the Bing Search API returns a single result with both misspelled words corrected. If your query doesn’t have misspellings, the API returns an empty *result set*. You can use spelling suggestions to suggest alternative queries to users. |

Each result in a result set contains information about the relevant resource, such as its title, description, and URI. The number and type of fields for each result varies by category. In the case of image and video results, each result also contains thumbnail information that you can use to display the thumbnails in your application.

# Using multiple categories

You can also use the Bing Search API to get results from multiple categories simultaneously. To do this, create a *composite query*. A composite query returns a result set with subsets for different categories, such as video and images.

# Filtering your results

In addition to using categories to customize the results, you can tell the Bing Search API to filter results in a result set. For example, you can limit your search results to a particular document type (for example, Microsoft Word or PDF), or a particular geographical region. You can specify that images must be of a certain size or of a certain aspect ratio or request only videos of a certain duration. In the News category, you can filter by a particular kind of news, for example, Business, Entertainment, Politics, or Sports.

# Results format

With Bing Search API you can receive the results in either of the following data formats:

| **Format** | **Description** |
| --- | --- |
| JavaScript Object Notation (JSON) | A lightweight data-interchange format. JSON is supported by many programming languages and environments, such as Microsoft Visual Basic, Java, Perl, PHP, Ruby, C++, and C#. |
| Extensible Markup Language (XML) | A widely supported markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable. |

Your choice of format might depend on any combination of the following factors:

* Your programming environment
* Requirements of the application
* Application’s ability to interact with other applications (for example, legacy applications)
* Company policy

With a typical query, expect the JSON response to be 25-30 percent smaller than the equivalent XML response.

**FAQs**

# Subscriptions and billing

## Which monthly subscription is right for me?

The Bing Search API has the following two subscription types.

|  |  |
| --- | --- |
| **Subscription type** | **Capabilities** |
| [Bing Search API](https://datamarket.azure.com/dataset/5BA839F1-12CE-4CCE-BF57-A49D98D29A44) | Gives you access to Bing web, image, video, news, related search results, and spelling suggestions. |
| [Bing Search API - Web Results Only](https://datamarket.azure.com/dataset/8818F55E-2FE5-4CE3-A617-0B8BA8419F65) | Gives you access only to Bing web results. |

With both subscription types, you can select a service level to meet the needs of your organization. Service levels are based on a monthly maximum of transactions. The lowest level (5000 transactions per month) is free.

## How does billing work?

When you select the service level that you want, you'll provide billing information, including a credit card number. For trial offers, your credit card will be used to convert the offer into a paid subscription after the trial period ends. If you don't want to convert to a paid offer, you can cancel your subscription before the trial period ends.

Windows Azure Marketplace will bill the subscription amount to your credit card each month, for as long as the subscription is active. You can view your active subscriptions on the [My Data](https://datamarket.azure.com/account/datasets) page in the Marketplace.

## I don't want to pay by credit card. Can I receive an invoice instead?

No. At this time, the Windows Azure Marketplace doesn’t offer invoicing.

## Where can I view the details of my subscription or change my subscription?

You can view the details of your active subscription on the [My Account](https://datamarket.azure.com/register?redirect=%2faccount%2finfo) tab in the Windows Azure Marketplace. You can also use this page to upgrade or downgrade your subscription.

## Do I get charged when I make a Bing Search API query and no results are returned?

Yes. The Windows Azure Marketplace records a transaction every time a request is sent. Even if your query doesn’t return any results, it counts toward your monthly quota.

## If I use less than my monthly quota, will my transactions roll over?

No, your transactions won't roll over. Consider subscribing to a lower service level in the next month.

## What if I exceed my monthly quota?

If you exceed your quota, the Bing Search API returns a 403 Forbidden error. You then have the option of upgrading to a higher level of service.

## What if I want more volume than Windows Azure Marketplace offers?

If you plan to use more than 2.5 million queries a month for the Bing Search API or more than 4 million queries a month for the Bing Search API - Web Results Only, you qualify as a high-volume developer. For more information about pricing and billing for high-volume developers, contact [Bing Customer Support](http://go.microsoft.com/fwlink/?LinkID=252157&clcid=0x409).

## What should I do if I have trouble subscribing or if I have a billing question?

Contact Windows [Azure Support](https://datamarket.azure.com/support).

# Usage scenarios

## Can I generate revenue through my application if it's using the Bing Search API?

Yes. We encourage you to generate revenue through your applications, in accordance with the Bing Web Service API Terms of Use. You can find the Terms of Use on the Publisher Offer Terms tab in [Windows Azure Marketplace](https://datamarket.azure.com/). You will find the [Terms of Use for the Bing Search API](http://datamarket.azure.com/dataset/bing/search#terms) and the [Terms of Use for the Bing Search API Web Results Only](http://datamarket.azure.com/dataset/bing/searchweb#terms) on their respective offer pages.

## Can I redistribute the data from the Bing Search API?

See the Bing Web Service API Terms of Use on the **Publish** tab in the [Windows Azure Marketplace](https://datamarket.azure.com/). You will find the [Terms of Use for the Bing Search API](http://datamarket.azure.com/dataset/bing/search#terms) and the [Terms of Use for the Bing Search API Web Results Only](http://datamarket.azure.com/dataset/bing/searchweb#terms) on their respective offer pages.

## Can I mash up these results with other data types?

See the Bing Web Service API Terms of Use on the **Publish** tab in the [Windows Azure Marketplace](https://datamarket.azure.com/). You will find the [Terms of Use for the Bing Search API](http://datamarket.azure.com/dataset/bing/search#terms) and the [Terms of Use for the Bing Search API Web Results Only](http://datamarket.azure.com/dataset/bing/searchweb#terms) on their respective offer pages.

# Service root URIs

## What are the service root URIs of the Bing Search API offerings?

The service root URIs have changed from the ones used in the Bing Search API 2.0. Use the URI in the following table that corresponds to the subscription type you’re using.

|  |  |
| --- | --- |
| **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/> |

## How can I experiment with generating queries?

You can experiment with the Bing Search API by using the Service Explorer tool in the Windows Azure Marketplace. Access Service Explorer by using one of the following links, depending on which subscription type you’re using.

|  |  |
| --- | --- |
| **Subscription type** | **Service Explorer link** |
| Bing Search API | <https://datamarket.azure.com/dataset/explore/5BA839F1-12CE-4CCE-BF57-A49D98D29A44> |
| Bing Search API - Web Results Only | <https://datamarket.azure.com/dataset/explore/8818F55E-2FE5-4CE3-A617-0B8BA8419F65> |

# Authentication

## Do I still need to specify an application ID?

No. Windows Azure Marketplace uses an account key for authentication.

## Where do I get an account key?

When you create an account in the Windows Azure Marketplace, you get a default account key, which you can’t change or remove. However, you can create other account keys.

We recommend that you use an account key that you have created instead of the default one. That way, if your key is compromised, you can remove it and create another one in its place. You can manage your account keys on the [Account Keys](https://datamarket.azure.com/account/keys) page.

# Schema

## Why were some of the schema properties removed?

The following properties were removed because they were no longer needed:

* SearchResponse element
* SearchResponse/Query element
* Immediate children of the source-type-specific containers like web:Web and mms:Image

For a detailed list that includes the reason for the removal of each property, see [Migrating Bing Search API Applications](http://go.microsoft.com/fwlink/?LinkID=248077&clcid=0x409).

## What is OData?

OData is the Open Data Protocol. The Bing Search API from the Windows Azure Marketplace uses OData standards in the parameters of the service query URI. For more information about OData, visit the [OData website](http://www.odata.org).

## What are reserved parameters?

A reserved parameter is a URI query string operator that is defined as part of the Open Data Protocol (OData) specification. A reserved parameter begins with a dollar sign ($). The Bing Search API uses the following reserved parameters in compliance with the OData standard.

| **Parameter** | **Description** |
| --- | --- |
| $top | Specifies the number of results to return. The default is 50 for web, image, and video searches, 15 for news. |
| $skip | Specifies the offset requested for the starting point of the returned results. The default is zero. |
| $format | Specifies the format of the OData response. Current options are Atom (for XML) or JSON. Default: Atom. |

## Do I need to use URL encoding to make a request?

Yes. You need to place your query text inside single quotation marks (‘’). You must encode single quotation marks for the URL by replacing them with **%27**. For example:

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

It is best to encode your whole query text as a URL, including single quotation marks. 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. For example:

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

## Which response formats does the Bing Search API support?

With the Bing Search API you can receive the results in either JSON or XML (Atom). To select the response format, use the *$format* reserved parameter.

Get a JSON response:

https://api.datamarket.azure.com/Bing/Search/Web?$format=json&Query=%27Xbox%27

Get an XML response:

https://api.datamarket.azure.com/Bing/Search/Web?$format=atom&Query=%27Xbox%27

## How do I parse OData results?

Adjust your response parsing logic to match the updated response format. You can use any of the growing list of client libraries across most key platforms. For more information, see the [OData libraries](http://www.odata.org/libraries).

## How do I compress my request over the wire?

The Bing Search API supports HTTP compression to save on transfer data volume and delivery. To enable HTTP compression, add header “Accept-Encoding: gzip” to your HTTP request.

# Documentation

## Where can I learn more about Windows Azure Marketplace?

For more information about the Windows Azure Marketplace, see the [Windows Azure Marketplace page on Microsoft MSDN](http://msdn.microsoft.com/en-us/library/windowsazure/gg315539.aspx) and the [Use the Data Market page on MSDN](http://msdn.microsoft.com/en-us/library/ff717656.aspx).

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