

ZIP Search Web Service: Programmer's Quick Start

Overview

For Both the U.S. and Canada, the ZIP™ Search Web service can perform three distinct searches: (1) find cities tied to a given ZIP or Postal code, (2) retrieve ZIP or Postal codes associated with a given city and state/province, and (3) find city names that match a specific pattern within a given state or province. ZIP Search also can match geographic data to a ZIP code and city information that match a specific pattern within a state to correct misspelled city names in your list.



- Improves geographic targeting, profiling and segmentation
- Enriches existing data for business intelligence
- No software to update or maintain

Returns data on carrier route, county name, Federal Information Processing Standards (FIPS) code, postal facility type, and lat/long

SearchTypes

1. Find Cities in ZIP Code (Default)
2. Find ZIP Codes in City
3. Find City Names in State

OptOfficialCityNameOnly

This Boolean value instructs the web service to return all cities associated with a ZIP/Postal Code during a Find Cities in ZIP Code Search or to return just the official city

FIELDS INPUT AND OUTPUT FROM THE SERVICE

INPUTs	OUTPUTs
Transmission Reference	Transmission Reference
Customer ID	Results
SearchType	Total Records
OptOfficialCityNameOnly (SearchType 1 Only)	ZipRecord
Zip (SearchType 1 Only)	Record ID
City (SearchType 2 & 3 Only)	Zip
State (SearchType 2 & 3 Only)	ZipType
Country(SearchType 1 Only)	City
	Name
	Abbreviation
	County
	Name
	FIPS
	State
	AreaCode
	TimeZone
	Name
	Code
	Latitude
	Longitude
	LastLineIndicator
	LastLineNumber
	PreferredLastLineNumber
	FacilityCode

License String

You should have been provided an encrypted and unique license string or Customer ID from Melissa Data. This is necessary for including with each request to the ZIP Search web service. This value should be put into the CustomerID element in each web service request.

If you do not have a license string, please contact your Melissa Data sales representative at 1-800-MELISSA (1-800-635-4772).

SINGLE REQUEST

SAMPLE REST REQUESTS (INSERT UNIQUE CUSTOMER ID)

1. Find Cities in ZIP Code

https://zipsearch.melissadata.net/v2/REST/Service.svc/doZipSearch?id=12345678&opt=true&stype=1&zip=92688

2. Find ZIP Codes in City

https://zipsearch.melissadata.net/v2/REST/Service.svc/doZipSearch?id=12345678&stype=2&city=Rancho%20Santa%20Margarita&state=CA

3. Find Cities in State

https://zipsearch.melissadata.net/v2/REST/Service.svc/doZipSearch?id=12345678&stype=3&city=Rancho%20S%2A&state=CA

SAMPLE XML RESPONSE

```
<?xml version="1.0" ?>
```

```
<Request>
```

```
<TransmissionReference xmlns="urn:mdWebServiceZipSearch">Testing: DQWS SOAP Sample Code implementation using single record input.</TransmissionReference>
```

```
<CustomerID xmlns="urn:mdWebServiceZipSearch">12345678</CustomerID>
```

```
<SearchType xmlns="urn:mdWebServiceZipSearch">1</SearchType>
```

```
<OptOfficialCityNameOnly xmlns="urn:mdWebServiceZipSearch">true</OptOfficialCityNameOnly>
```

```
<City xmlns="urn:mdWebServiceZipSearch"> </City>
```

```
<State xmlns="urn:mdWebServiceZipSearch">CA</State>
```

```
<Zip xmlns="urn:mdWebServiceZipSearch" /> 92602 </Zip>
```

```
<Country xmlns="urn:mdWebServiceZipSearch">us</Country>
```

```
</Request>
```

ZIP Search Service URLs

[Zip Search Endpoints](#)

Choosing a Web Service Protocol

The Melissa Data ZIP Search Service supports REST, JSON, XML, and SOAP. For the undecided here are some Pros and Cons of one over the other.

REST

Pros: REST is lightweight, and relies upon HTTP to do its work. If you don't need a strict API definition, this is the way to go. REST is also format-agnostic so you can use XML or JSON as responses.

Cons: REST can only be used for the sending of single records and doesn't support strict contracts or more involved security. The Response is an XML or JSON document.

XML

Pros: XML allows record set structures of more than one record at a time and has very good support with most languages and browsers. Supports namespaces

Cons:

Developers need to use tools to serialize/de-serialize the XML structure.

JSON

Pros: JSON relies on simple object serialization based on JavaScript's object initialization. It is very simple to use with JavaScript and easily parsed and understood by developers.

Cons: No support for formal definitions. No namespace support. Not much support in Web Service clients with some platforms.

SOAP

Pros: SOAP (using a WSDL) is a heavy-weight XML standard that is centered around document passing. The advantage with this is that your requests and responses can be very well structured.

Cons: The downside SOAP documents are very verbose, and hard to consume without a SOAP toolkit and generally carry more overhead.

Basic Order of Operations (Pseudo Code)

1. Choose SOAP, XML, or the REST service
2. Create an instance of the request object.
3. Populate the request element CustomerID with your Product License
4. Set the options for the web service
5. Call the method and pass in the request to the service using the SOAP endpoint for SOAP request and the WEB endpoint for XML or JSON requests.
6. Examine and parse the response from the reply object back from the service.
7. Interpret the results.

Interpreting Results

Melissa Data's Zip Search Service uses Result Codes to determine if a ZIP is found. The Melissa Data Cloud Services use the following Results conventions:

1. CLOUD SERVICE ERRORS: SExx
2. CLOUD TRANSMISSION ERRORS: GExx
3. Zip SEARCH STATUS CODES: ZSxx
4. NO ZIP SEARCH ERROR CODES: DExx

For Example: An ZS01 Result Code means the zip search returned one or more results within the designated range

The DE01-DE02 Result Codes will explain the no records found. Please check the documentation for any additional information on Results.

Sample Code

Fully working examples are available on the wiki pages:
[Click here to go to Zip Search Web Service Wiki Page.](#)

Wiki Page

A product support Wiki is available for your convenience. In the wiki you will find documentation about the service in more detail.

[Click here to go to Zip Search Web Service Wiki Page.](#)

Misc. Considerations

Firewall

If you are behind a firewall, you may need to allow specific IP addresses access in order to communicate with the service. For a full list of IP Addresses, see [IP Address Information](#).

Result Codes

The service returns a series of results codes to tell you of the status of the Phone and any changes or errors found during the verification process.

For a full list of the result codes returned by the ZIP Search Web Service, see [Returned Result Codes](#).