# Data Quality Web Service Quick Start Guide



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#### **MELISSA DATA CORPORATION**

22382 Avenida Empresa Rancho Santa Margarita, CA 92688

Phone: 1-800-MELISSA (1-800-635-4772)

Fax: 949-589-5211

E-mail: info@MelissaData.com Web site: www.MelissaData.com

#### Dear Programmer,

I would like to take this opportunity to introduce you to Melissa Data Corp. Founded in 1985, Melissa Data provides data quality solutions, with emphasis on address and phone verification, postal encoding, and data enhancements.

We are a leading provider of cost-effective solutions for achieving the highest level of data quality for lifetime value. A powerful line of software, databases, components, and services afford our customers the flexibility to cleanse and update contact information using almost any language, platform, and media for point-of-entry or batch processing.

This online manual will guide you through the properties and methods of our easy-touse programming tools. Your feedback is important to me, so please don't hesitate to email your comments or suggestions to ray@MelissaData.com.

I look forward to hearing from you.

Best Wishes,

Raymond F. Melissa

President

#### INTRODUCTION

Data Quality Web Service uses the power of the internet to instantly verify, correct, update, and enhance data you submit online.

You can use it to:

- Verify and correct each address and phone number your customers submit with online purchases, information requests, and survey responses.
- Create applications that automatically update each record in your database.
- Personalize customer records by separating first and last names and identifying gender.
- Target markets more effectively by appending geographic data to each record.

Our Data Quality Web Service provides these services and more — saving you time and money while providing trouble-free, real-time data verification and other database services. You no longer need to worry about installing and maintaining software applications or keeping your data updated to meet USPS® requirements. Data Quality Web Service does all the work for you —freeing you to concentrate on your business and your customers!

# HOW DO I USE DATA QUALITY WEB SERVICES?

To begin, you must create an account through one of Melissa Data's sales representatives. You will then receive an e-mail containing your unique CustomerID, which is required for each record you submit to Data Quality Web Service.

Next, simply provide the records you want us to process, and we'll take care of the rest! Next, the Quick Start Guide will step you through the process of submitting an address to the Address Mailing package using Visual Studio .NET.

# Step 1 - Include a Reference to the Web Services in your Project

To include the web service objects in your project, click the Project menu and select Web References. Visual Studio .NET will display the Add Web Reference dialog. Enter the following in the URL box:

**Secure:** https://ws.melissadata.com/dqws/address.asmx **Non-secure:** http://ws.melissadata.com/dqws/address.asmx

## Step 2 - Intialize the Web Service Objects in your code

Before submitting addresses for processing, you must start the webservices by creating instances of the mdWebService, Request and Response objects, like this Visual Basic sample code:

```
Dim Action As New mdWebService.mdWebServices
Dim Request As New mdWebService.RequestRecord
Dim Response As New mdWebService.ResponseRecord
```

With each request, you also need to provide the CustomerID that was given to you when Melissa Data created your account.

```
Request.CustomerID = "1234567890"
```

# Step 3 - Select the Package that You Want to Retrieve

Now select the package(s) that includes the information you wish to retrieve about the address that you are submitting. For each package, there is a Boolean property of the Request obejct.

Select the Address Mailing packages by setting its property to True.

```
Request.pkgAddressMailing = True
```

# Step 4 - Enter the Address Data that You Want to Process

Now enter the address to be coded into the appropriate properties of the Request object.

```
_Name
Request.FullName
                      _Company
Request.Company
                      _Address
Request.Address =
                      Address2
Request.Address2
                  =
                      _Suite
Request.Suite
Request.City
                       CityName
                      _State
Request.State =
Request.Zip5
                       Zip5
Request.Plus4 = Request.Telephone =
                      Plus4
                       Phone
Request.Country
                      Country
```

Address, City, State and Zip5 are required for the Address Mailing Package to successfully code an address. Zip5 is optional if City and State are included. City and State are

optional if Zip5 is included. The full ZIP + 4 can be included in the Zip5 property or split between the Zip5 and Plus4 properties.

For the purposes of this guide, we will assume this address is being submitted to the web service:

```
Request.Address = "22382 Ave Impresa"
Request.City = "Rancho Santa Margarita"
Request.State = "CA"
Request.Zip5 = "92688"
```

# Step 5 - Submit the Request

Next, you submit the Request object to the mdWebService object, using the doSingleRecord method of the mdWebService object you created above.

```
Response = Action.doSingleRecord(Request)
```

Once you submit a record, Data Quality Web Service will instantly verify, update, correct, and enhance the data it contains

## Step 6 - Retrieve the Coded Address Data

Now you can process the various properties of the Response object to retrieve your coded address data. The specific properties depend up the exact package selected, but the syntax will be similar to this.

```
_Street = Response.Address.Street
_City = Response.Address.City.Name
_CityAbbr = Response.Address.City.Abbreviation
_State = Response.Address.State.Abbreviation
_County = Response.Address.County.Name
_Zip5 = Response.Address.Zip.Zip5
_Plus4 = Response.Address.Zip.Plus4
```

The Address Mailing Package returns more fields than shown here. For full details, see the Data Quality Web Service Reference Manual. After submitting the address shown above, these variables would contain the following values:

```
_Street = "22382 Avenida Empresa"
_City = "Rancho Santa Margarita"
_CityAbbr = "Rcho Sta Marg"
_State = "CA"
_County = "Orange"
_Zip5 = "92688"
Plus4 = "2112"
```

Notice how the abbreviation "Ave" in the street address was standardized to the full word "Avenida", the spelling of the street name was corrected and the full ZIP +  $4^{\$}$  code was returned.

#### STATUS CODES

Status codes are returned with each response to indicate how fully the web service was able to code the submitted address.

The status codes are return as part of the response object using the following properties:

```
StatusCode = Response.Address.Result.StatusCode
StatusDesc = Response.Address.Result.StatusDesc
```

See the Reference Guide for details on all of the possible Status Codes. If the Status Code indicates that the address was not fully coded, see the Error Codes for more information about why this happened.

#### **ERROR CODES**

The status codes for this object are returned as part of the response object using the following properties:

```
ErrorCode = Response.Address.Result.ErrorCode
ErrorDesc = Response.Address.Result.ErrorDesc
```

See the Reference Guide for details on all of the possible Error Codes.