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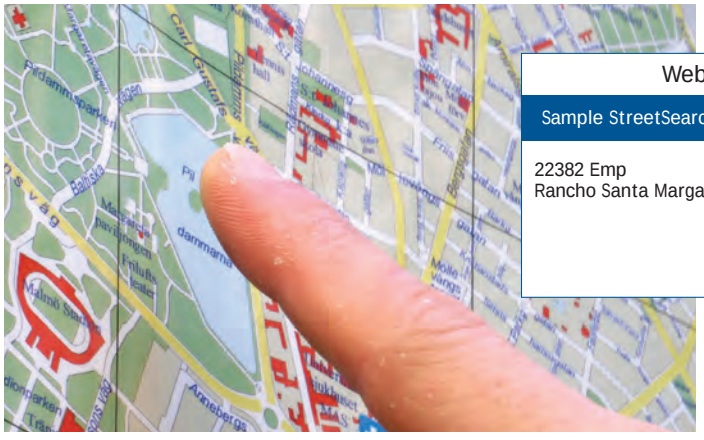
< IN THE SPOTLIGHT >

The WebSmart Street Search Approach

Make the most out of your Web service subscription by taking advantage of our latest WebSmart product – Street Search. Used in conjunction with our WebSmart Address Check Service, Street Search (available through SOAP, XML or REST) enhances point of entry address verification by allowing you to provide possible street suggestions to users when a submitted address did not verify.



WebSmart StreetSearch

Sample StreetSearch Input	Sample StreetSearch Output
22382 Emp Rancho Santa Margarita, CA	Range Low: 22300 Range High: 22398 Range Odd/Even: E Street Name: Empresa Street Suffix: AVDA Zip: 92688

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DATA QUALITY TOOLS

- Address Object
- Canadian Address Object
- Data Quality for SSIS
- DQ*Plus
- Email Object
- GeoCoder Object
- IP Locator Object
- MatchUp Object
- Name Object
- Phone Object
- Presort Object
- Right Fielder Object
- SmartMover Web Service
- StyleList Object
- Telco SmartSearch Web Service

< WebSmart Services >

The Insider Pro

Did you know that our past articles in the INSIDER are still relevant and beneficial today? That's why I'd like to highlight some of our most popular articles and insightful tips below. We'll feature a new section each issue offering links to past articles we're sure will help you better optimize the functionality of our data quality tools and solutions.

In the Nov 2008 and March 2009 issues, we wrote hands-on tips on the most effective ways to utilize our Address Object. Check them out here:
MelissaData.com/dqi-nov
MelissaData.com/dqi-mar

To access our library of past INSIDER issues, go to:
MelissaData.com/dqi

Sincerely,
Bud Walker

Bud Walker
Product Manager

Tips +Tricks

By Admound Chou, DQT Assistant Manager

+ Increasing the Speed of Melissa Data Libraries

There are several architectural/language/optimization changes that can speed up processing. They are listed here in order with suggestions most likely to increase speed at the top. Of course, these are not the only measures one can take to increase speed, but from our experience, these are the most effective.

1. Make sure you are using 1 object per batch process

You only need to initialize one instance of an object to process a batch list. Make sure that you are not creating a new instance and re-initializing for every record unless you absolutely have to.

2. Move to a more optimized programming language

The fastest language to use is C++ because our components are written in C++. However, any modern Object Oriented language will provide fairly similar speeds. The main exception is T-SQL. SQL Server was not designed to use third party components as fast, and will process contact data anywhere from three to 10 times slower. If your data is stored in SQL, we recommend you invoke and use our components in another programming language (like C#, VB.NET, C++, Java) and create a connection to the SQL Server to retrieve and store the data. Additionally, sometimes the time taken for selects, inserts, and/or updates gets confused for processing time of our components when they alone account for a significant portion of the overall time.

3. Order the data by ZIP Code™

The source data we use to verify and look up address information is stored in ZIP Code order. So, if your data is also in ZIP Code order, there will be less data being moved in and out of cache, speeding up processing time.

4. Increase memory (RAM) or improve other hardware

If you have 1 GB of memory or less, increasing to 2 or 4 GB can significantly increase processing speed. This is the easiest and most effective way to increase speed from hardware. Another hardware upgrade option is to use a faster hard drive (SCSI or solid state).

5. Multi-threading

Our components are thread safe and can have multiple instances running in multiple threads. Having additional threads will allow you to take full advantage of CPU time as well as multiple cores. Adding threads will increase processing (up to a certain point) but each additional thread will provide diminishing value. We recommend 2-3 threads per core.

Disclaimer: Do not use multi-threading until you are comfortable and experienced with it. Data access of our components are thread safe but you must maintain thread safety for accessing our libraries. Rule of thumb: one thread per instance.

6. Cut out COM Interop

Our Windows components are available in two flavors, COM and Standard DLL. They both have the same core verification engine but the COM version has a COM Interop layer to facilitate communication with many popular programming languages. If you are experienced with COM vs non-COM, you may look into using the Standard DLL to remove the COM Interop layer and reduce the amount of data marshalling. For .NET users, both the COM (samples directory) and the Standard DLL (interfaces/NET directory) sample codes are available.

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The WebSmart Street Search Approach

When does Street Search become useful?

It's not uncommon for customers to enter incorrect or incomplete address information every so often. Whether they've missed a suffix, forgotten a directional, or accidentally misspelled the street, certain levels of inconsistencies to an input address will sometimes cause it to be unverifiable. This is where WebSmart Street Search becomes valuable. Through Street Search, you can generate street suggestions to show users some alternative street matches that are closely related to the entered address.

Let's take a look at some specific cases of where you can use Street Search:

I. Missing Directional or Suffix

Invalid addresses due to a missing Street Suffix or Directional is a common mistake for users. Take for example this address:

1014 Laurel, Beverly Hills CA 90210

The Address Check Service detects more than one possible suffix for this street, thus resulting in an error. Passing this same address through Street Search allows you to list the possible street names for the invalidated address:

1014 Laurel **Way**, Beverly Hills CA 90210
1014 Laurel **Ln**, Beverly Hills CA 90210

II. Misspellings

One unique aspect of Street Search is its innate ability to automatically perform wildcard searches. In cases where a user might have misspelled a street name, Street Search will look for the closest possible matching streets by truncating the last letter one by one and performing a wildcard search each time until a street match is found. Thus in the case of:

201 S Burlingom Ave, Los Angeles CA

Street Search is able to match this to:

201 S **Burlington Ave**, Los Angeles CA
201 S **Burlingame Ave**, Los Angeles CA

III. Missing Suites

Street Search can also be used to provide information on missing suites. For example:

1911 S Palm Grove Ave, Los Angeles CA

Address Check flags this address as having missing suite information. Entering this same address through Street Search lets you provide suggestions for the missing suites:

1911 S Palm Grove Ave,
Apt 1 – 8 (Odd/Even)
Los Angeles CA

By taking advantage of our WebSmart Street Search Service, you take address correction and validation to a much higher level, giving users a more flexible way of determining the discrepancy of an address before it reaches your database. For more info, go to: **MelissaData.com/dqi-web**

News Bytes

>> New WebSmart Offerings

Melissa Data introduced several new Web services – including Phone Verifier, ZIP Search and Street Search – to our line of WebSmart services. The Phone Verifier validates phone numbers to the entire 10 digits, appends geographic information, and identifies landline vs. cell and business vs. residence and toll free numbers. The ZIP Search service allows you to search by city names and ZIP™ codes. The Street Search service lets you query all possible streets in the U.S., allowing you to generate suggestions on bad address inputs. We encourage you to try these services and see the value they can bring to your data quality initiatives. Also, look for new Web services to come in the near future, including business coding and international address verification.

Case Study >> SMARTech Integrates Enterprise Platform to Consolidate Data Sets

Company

SMARTech Corp. – whose parent firm is AirNet – is a leading provider of complex hosting, network services and advanced Internet applications for enterprises that outsource their IT infrastructure.

Challenge

For years, SMARTech/AirNet relied on applications developed by external vendors for their data hygiene, enhancement and matching of data.

"Integration within our proprietary applications – and even use of their product – was only done by select consultants… there were limited resources and a shallow knowledge-base for the tools" said Jeff Averbeck, president and CEO of SMARTech/AirNet.

The company's reliance on external vendors proved to be a challenge when implementing its smartCommunicator® product – a communication portal that allows individuals and businesses to share information from diverse sources – using a single, unified media platform.

Solution

Melissa Data's Total Data Quality Integration Toolkit (TDQ-IT), is a complete enterprise platform that works within the SSIS data flow to deliver a wide range of data integration, transformation and cleansing functionality including: profiling, parsing, cleansing, matching and monitoring.

Results

SMARTech/AirNet's smartCommunicator portal features several modules to provide its customers with a more customized, interactive way to micro-target their audience.

Melissa Data's TDQ-IT resides as the hub of the import tool for the smartData module within the smartCommunicator application.

"Name, Address, GeoCoder, Phone and Email verification components, or transforms, are all put into action as each individual data upload is scrubbed and merged into a single, uniform data set – creating a single anchor record per individual from which our customers operate multi-million- record mass communications strategies," Averbeck said. "The toolkit's ease of integration has also expanded our ability to provide customer-specific data-based applications – ensuring that all data entering the applications is uniform, standardized and cleansed."

To read the complete story, please go to: **MelissaData.com/dqi-smart**

Helpful Links

Melissa DATA Resources
Link to our white papers, case studies, and insightful articles to help you get the most out of your direct mail, marketing and data management initiatives.
www.MelissaData.com/resources

Discussion Forums
Ask questions, talk product, and get fast answers in our discussion forums.
http://forum.melissadata.com/default.aspx

Free Trials

Automate postal presorting routines for discounts. Get a free trial of Presort Object.
www.MelissaData.com/dqi-po

Correct address data for more than 240 countries with Address Doctor.
www.MelissaData.com/dqi-global

Append lat/long to an address for geotargeting. Download a free trial of GeoCoder Object.
www.MelissaData.com/dqi-geo

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