

## Identity Resolution & Data Quality Solutions

Matching, Address Validation, Profiling, Screening, Compliance

# CorrectAddress® Address Validation & Standardization

## Product Data Sheet

### I. INTRODUCTION

*CorrectAddress*® is a CASS™ and Canada Post SERP certified, address validation and standardization software product that enables users to cleanse, verify, and standardize their addresses in real-time or batch mode. As part of the address cleansing process *CorrectAddress* can:

- Overcome a significant degree of variation
- Fill in omitted data
- Fix misspellings and erroneous information
- Normalize incorrect formatting
- Manage vast quantities of data

Key features<sup>1</sup>:

- Address validation
- Address standardization
- ZIP™ correction
- ZIP + 4 Code appending
- Line of Travel (LOT) coding
- Delivery point bar coding
- Carrier route codes
- Advanced name and address parsing
- Major corporation address recognition
- DPV®
- LACS<sup>link</sup>®
- Geocoding (add-on)
- Merge purge and deduplication (add-on)
- RDI™ (add-on)

The product is a powerful and accurate, multi-platform, multi-user solution that fits a variety of development frameworks and production environments. It is available as either a stand-alone

application or as an online address validation solution. Intuitive APIs allow programmers to plug address validation and address standardization functionality into existing enterprise applications such as point-of-sale, screening and payroll services, customer management and order tracking to name a few. The product can be automated for daily or weekly batch jobs, or interactive address correction.

Powered by Intelligent Search Technology's advanced, multicultural fuzzy searching and matching engine *CorrectAddress* delivers unsurpassed address correction speed and accuracy, as compared to standard address handling methodologies. Accuracy is further enhanced as IST distributes regular updates when U.S. Postal Service® data and/or Canadian postal data have changed.

### II. ADDRESS VALIDATION AND STANDARDIZATION CAPABILITIES

*CorrectAddress*® is a powerful and accurate, multi-platform, multi-user solution that fits a variety of development frameworks and production environments. In addition to standardizing names or company information, addresses, cities, states, ZIP codes, enhanced postal address information can be generated:

**ZIP+4 Code Appending** - ZIP + 4 codes use the basic five-digit ZIP code plus an additional four digits to identify a geographic segment within the five-digit delivery area. *CorrectAddress* easily adds the plus-four code based on the specific address information processed.

<sup>1</sup> AD#3.09: Intelligent Search Technology, Ltd is a non-exclusive Limited Service Provider Licensee of the USPS. The following trademarks are owned by the USPS: CASS, RDI, ZIP, ZIP + 4, DPV, eLOT, LACS<sup>link</sup>, U.S. Postal Service, Post Office and USPS.

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**DPV** - With the help of seamless DPV integration, the physical location of the address can be verified and can be applied to check the validity of a known address.

**Major Corporations Address Recognition** - Many major corporation names are recognized by *CorrectAddress*. In many cases, the company name will be recognized if not entered by the user. It is not required but does allow *CorrectAddress* to match the address closely to firm records if they exist.

**LACS<sup>Link</sup>** - *CorrectAddress* supports the LACS<sup>Link</sup> service. The LACSLink Product contains addresses that have been converted from rural style to city style due to the implementation of 911 systems and addresses that have been renamed and renumbered.

**Delivery Point Bar Coding**-- A bar code is generated from the nine digit ZIP CODE combined with the Delivery Point Code (DPC) and the Checkdigit sum. This code can be used for scanning mail pieces.

**Line Of Travel (LOT) Coding** - *CorrectAddress* adds the code composed of a four-digit sequence number and an "A" or "D" for ascending and descending respectively. This denotes the direction that mail is delivered in for an address.

**Carrier Route Codes** - The four-digit code that identifies the carrier routes used for U.S. Postal Service® mail delivery is generated. A carrier route code is made up of a letter to designate the type of carrier route and 3 digits identifying a carrier route. Carrier route codes are part of the information matched against USPS databases.

### A. ENHANCED ADD-ON FEATURES:

Add-on features are available to further enhance the power and accuracy of the product:

**Canadian SERP Address Certification** - The Canadian address validation add-on for has been SERP-certified by Canada Post and is supported in Windows, UNIX, Linux, and Macintosh platforms.

**Geocoding** - Geocoding support allows *CorrectAddress* users to retrieve information from the Census Bureau and match it to the USPS data. Along with a validated address, the module returns

geographical coordinates (latitude and longitude), Census tract and block numbers. The geocoding functionality is accessible via options in the Windows Graphical User Interface.

**RDI™** - RDI™ enables users to determine whether a given address is classified as a residential or a business address. The RDI process may be run directly or as part of a standard address lookup. Separate licensing applies to RDI.

## III. SEARCHING AND MATCHING INTELLIGENCE

Powered by IST's advanced, fuzzy, multicultural searching and matching engine, *CorrectAddress* finds matches often overlooked using standard methodologies. Using built-in searching and matching intelligence, *CorrectAddress* achieves unparalleled accuracy and speed while overcoming variations due to misspellings, transcriptions, transpositions, acronyms, phonetics, sequence differences, nicknames, cultural differences, and many other common errors found in data. It relies on a set of sophisticated and highly efficient phonetic algorithms and comparison routines to provide the most accurate and powerful searching and matching technology while virtually eliminating false positives.

## IV. ADVANTAGES

**Significantly increased address correction ratio** - Millions of mail pieces are returned as undeliverable each year. In performing address validation and correction, *CorrectAddress* cleans up misspelled addresses and assigns appropriate city names and ZIP + 4 codes to ensure proper delivery.

**Enhanced Postal Address Information** - In addition to address validation and address correction, *CorrectAddress* provides additional postal information about processed addresses. This includes carrier route numbers, enhanced eLOT® numbers, county information, firm names, urbanization names, delivery point codes. A geocoder option provides latitude and longitude coordinates.

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**Postal Discount Rates** - *CorrectAddress* eliminates the need for manual correction by Post Office™ personnel, allowing mail to be delivered quicker and more efficiently. Users are eligible for considerable **bulk mailing discounts** from the USPS. The software generates a copy of Postal Form PS3553 that is required as part of any request for bulk rates. More information on postal discount rates is available at <http://www.usps.gov>.

**DPV** - With the help of DPV functionality, a physical location of the address can be verified. After the standard CASS cleansing and matching, the DPV service can be applied to check the validity of a known address.

## V. VERSIONS

*CorrectAddress* is available in three formats offering solutions for diverse requirements:

### A. CORRECTADDRESS -STAND-ALONE EDITION

The *CorrectAddress* stand-alone edition is installed on a computer or server in your own environment. It features a set of callable modules that can be interfaced from a wide array of languages, environments, and development frameworks. These modules can be easily integrated into pre-existing applications or used as stand-alone services. A powerful Graphical User Interface (GUI) allows users to access both the interactive and batch functionalities through easy-to-navigate menus and customization wizards.

### B. CORRECTADDRESS PLUS

*CorrectAddress Plus* combines the power of *CorrectAddress* with the sophistication of IST's *MerlinMerge SpeedPro*® duplicate detection engine. It includes all of the *CorrectAddress* features working in concert with the deduplication and merge/purge components of *MerlinMerge*® *SpeedPro*. *MerlinMerge SpeedPro* is capable of interfacing with database systems such as SQL Server, Oracle, DB2, MS Access, MySQL and Teradata. A customized built-in engine retrieves and reloads database records quickly and efficiently.

### C. CORRECTADDRESS-ONLINE ADDRESS VALIDATION SERVICE

As an alternative to the standalone edition, the easy-to-use online solution allows users to input addresses for single-search requirements or upload data to our batch processing server and receive validated, corrected, and enhanced addresses in return. The online service has the same features as the standalone product with some enhancements. Fees are charged per record processed.

In addition to the interactive and batch processing Address Validation and Standardization features discussed for the stand-alone edition of the product, the online validation service features the following enhancements:

**XML Web Services** - Web services allow client-side scripts to invoke a server's remote methods and receive processed data back in XML format. XML allows for more efficient data parsing in Web-enabled applications. Functions can be called via XML Web Services provided by IST.

**Microsoft® Office® Validation Add-in** - Integration of the Microsoft Office Address Validation Add-In to your Microsoft Office XP, 2003, or 2007 installation allows users of Word, Excel, and Publisher to validate addresses individually or through batch processing through an internet connection.

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### VI. COMPATIBILITY

At the core of *CorrectAddress* is a set of callable modules that can be interfaced from a wide array of languages, environments, and development frameworks. These modules can be easily integrated into pre-existing applications or used as stand-alone services.

*CorrectAddress* code libraries can be utilized to process database tables as well as flat files of any format or delimitation. The software is readily invoked from major database engines, such as Oracle, SQL Server, MySQL, DB2, Access, Sybase, and Teradata. A selection of Software Development Kits (SDKs) and demos are available to assist developers with the integration of *CorrectAddress* into existing applications or in creating new applications.

**Operating Systems-** Windows (NT, 2000, XP, 2003, Vista, 7), Solaris, Linux, AIX, HP-UX, and Mac OS X All major distributions.

**Database Systems** - SQL Server 2000/2005/2008  
Oracle ,DB2.

**Programming Environments** - C/C++, Java, Visual Basic, VBA, VB.NET, C#, PERL, PL/SQL, T-SQL, Visual FoxPro, PHP, Python, ColdFusion, Power Builder and COBOL.

### VII. ABOUT IST

Founded in 1993, Intelligent Search Technology, Ltd. (IST), a privately held company, has devoted its resources to the development of high performance, multicultural identity search, and matching software. Its highly acclaimed identity search and matching engine, *NameSearch*®, adds intelligence to applications requiring efficient and accurate retrieval of identity data regardless of variations. With the development of *MerlinMerge*® *SpeedPro* (duplicate detection, merge-purge software), *CorrectAddress*® (address verification and standardization software), and *IST Watch*© (OFAC compliance and watch list searching software), IST continues to bolster its position as a true and independent leader in overall data quality.