



Location Intelligence

GeoStan™ z/OS Geocoding Suite

July 2019

Technical Notes

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Introduction

This document contains important technical information about the July 2019 release of the GeoStan z/OS Geocoding Suite. There are changes to the GeoStan z/OS Geocoding Suite from the June 2019 version to its current July 2019 version. The tables included below identify the new features, enhancements, fixed change requests, and known issues in each monthly release, beginning with the most recent general or major maintenance release.

Although we will continue to provide Level 1 technical support for the GeoStan z/OS Geocoding Suite in its June 2019 release version, any future product updates will only be provided for the GeoStan z/OS Geocoding Suite in its July 2019 release version.

Product Version Information

The current versions of products in the GeoStan z/OS Geocoding Suite are as follows:

- Geographic Determination Library™ (GDL) z/OS 39.04
- GeoStan™ z/OS 32.00
- GeoStan FileServer 2.1
- Spatial+™ z/OS 39.04

New Features, Enhancements, and Fixed Change Requests

The following table provides information on changes to the GeoStan z/OS Geocoding Suite. The table itemizes changes since the last major release and is reset with each major release.

Product	Date	Change Request/ Jira Item #	Description
GDL	July 2019		None for this release.
	June 2019		None for this release.
	May 2019		None for this release.

GeoStan	July 2019	None for this release.
	June 2019	None for this release.
	May 2019	<p>Added Master Location Data (MLD) Extended Attributes.</p> <p>This new feature provides access to extended attributes associated with an addressable location that has a pbKey. When matching addresses with MLD, you can now seamlessly return additional property information associated with the address, such as APN, Elevation, Address Type, Lot Size, etc. For more detail, see “MLD Extended Attributes” in the <i>Spring 2019 GeoStan Geocoding z/OS Suite Technical Notes</i>.</p> <hr/> <p>Added Residential Delivery Indicator (RDI™)</p> <p>This United States Postal Service (USPS®) data product identifies whether a delivery type is classified as residential or business. If you are shipping to residences, you may lower costs by shipping with the Postal Service™ and avoid residential delivery surcharges typically charged by other shipping companies. For more detail, see “Residential Delivery Indicator (RDI™)” in the <i>Spring 2019 GeoStan Geocoding z/OS Suite Technical Notes</i>.</p> <hr/> <p>Improvements have been made in handling of street names that could also be city names in singleline address processing.</p> <p>For example:</p> <p>Input address: BOX 58 ASHAWAY RI 02804 Previous match: 58 ASHAWAY RD, 02804 New match: BOX 58, ASHAWAY RI 02804</p> <p>Input address: BARCLAY PLZ APT 68G NEW WINDSOR NY 12553 Previous match: 68G NEW ST, NEW WINDSOR, NY 12553 New match: 68G BARCLAY PLZ, NEW WINDSOR, NY 12553</p>

Enhancements have been made in singleline POI matching to recognize one or more embedded POIs. For example:

Input address:

FIRST SHORE FEDERAL SAVINGS & LOAN W
GREEN ST & PEARL ST SNOW HILL

Result:

FIRST SHORE FEDERAL SAVINGS & LOAN, SNOW
HILL MD 21863

Improved standard singleline addr2 handling.
For example:

Input address:

MARVIN R BECK PT 1108 E PATTERSON/ POB 160
KIRKSVILLE MO 63501

Previous match: PO BOX 160

New match: 1108 E PATTERSON ST

Improved handling of singleline input addresses with missing or out of range house numbers. Matches and non-matches are now returned more accurately.

Improved handling and reporting of singleline matching of addresses containing multiple intersections when using Master Location Data. For example: 8th & laurel & 9th 21851.

Enhancements have been made in POI matching for the following cases:

- Singleline input address containing a POI that ends with a city name that matches a given ZIP Code.
For example: CHARTER HOSP OF DENVER 80228
- Singleline input address containing a POI that ends with a state name that matches a given ZIP Code.
For example: BANK OF COLORADO 80720
- Two-line or singleline input address containing a POI that ends with a number.
For example: KBIQ 102 7 80920

	Improved handling and matching of PO Box addresses that contain a “#” sign in front of the box number; for example, PO BOX #14.
	<p>New GS_IS_ALIAS return values:</p> <ul style="list-style-type: none"> • “A13” is returned when a match is made to ZIPMove data. • “A14” is returned when a match is made to the expanded centroid file us_cent.gsc (file contained in the Master Location Structure Centroid data set).
CENTRUS-10630	Fixed an issue where an input address with a post-directional resulted in incorrect multi-match returns.
Case 14964838 / CENTRUS-10758	Corrected inconsistent results for an address by modifying the way USPS Preferred aliases are returned outside of the CASS match mode.
CENTRUS-11004	Improved handling of input addresses containing underscores; for example, __4750 Walnut St. 80301
CENTRUS-11005	Improved handling and matching of PO Box addresses that contain a “#” sign in front of the box number; for example, PO BOX #14.
Case 17993814 / CENTRUS-11030	Fixed an issue where an input address containing multiple, single alpha characters and spaces was returning a segmentation fault error. 1 BOX T T #A now matches.
Case 17999041 / CENTRUS-11031	Fixed an issue where an input address containing an intersection in the address line resulted in a multi-match which caused a crash. W Elkhorn Ave & S Monterey Ave., Cantua Creek, CA 93608 now processes correctly and returns match information.
CENTRUS-11032	Corrected an issue where multiple “NADCON files not found” error messages were returned when the files were not installed.
CENTRUS-11130	Fixed an issue where a system error was returned when only the “Return ZIP Code centroids” Centroid preference was selected, and no input ZIP was included when using 2-line address input. Now a non-match is returned instead.

GeoStan (cont)	May 2019	Case 18929830 / CENTRUS-11100	Corrected an issue where the output ZIP was not being corrected on a matched address, if the input ZIP was invalid or missing and the Prefer Zip Over City option was being used.																								
			<p>Example: Incorrect ZIP</p> <p>Before</p> <table border="1"> <thead> <tr> <th>Address</th> <th>CITY</th> <th>State</th> <th>POSTCODE</th> <th>outMatchCode</th> <th>outLocCode</th> </tr> </thead> <tbody> <tr> <td>107 PRESTON RD</td> <td>Cheektowaga</td> <td>NY</td> <td>H2N1Y</td> <td>S800</td> <td>AS0</td> </tr> </tbody> </table> <p>After</p> <table border="1"> <thead> <tr> <th>Address</th> <th>CITY</th> <th>State</th> <th>POSTCODE</th> <th>outMatchCode</th> <th>outLocCode</th> </tr> </thead> <tbody> <tr> <td>107 PRESTON RD</td> <td>Cheektowaga</td> <td>NY</td> <td>14211</td> <td>S800</td> <td>AP02</td> </tr> </tbody> </table>	Address	CITY	State	POSTCODE	outMatchCode	outLocCode	107 PRESTON RD	Cheektowaga	NY	H2N1Y	S800	AS0	Address	CITY	State	POSTCODE	outMatchCode	outLocCode	107 PRESTON RD	Cheektowaga	NY	14211	S800	AP02
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			<p>Example: Missing Zip</p> <p>Before</p> <table border="1"> <thead> <tr> <th>Address</th> <th>CITY</th> <th>State</th> <th>POSTCODE</th> <th>outMatchCode</th> <th>outLocCode</th> </tr> </thead> <tbody> <tr> <td>8649 11TH AVE</td> <td>SILVER SPRING</td> <td>MD</td> <td>0</td> <td>S800</td> <td>AS0</td> </tr> </tbody> </table> <p>After</p> <table border="1"> <thead> <tr> <th>Address</th> <th>CITY</th> <th>State</th> <th>POSTCODE</th> <th>outMatchCode</th> <th>outLocCode</th> </tr> </thead> <tbody> <tr> <td>8649 11TH AVE</td> <td>SILVER SPRING</td> <td>MD</td> <td>20903</td> <td>S900</td> <td>AP02</td> </tr> </tbody> </table>	Address	CITY	State	POSTCODE	outMatchCode	outLocCode	8649 11TH AVE	SILVER SPRING	MD	0	S800	AS0	Address	CITY	State	POSTCODE	outMatchCode	outLocCode	8649 11TH AVE	SILVER SPRING	MD	20903	S900	AP02
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			<p>Case 20071807 / CENTRUS-11341</p> <p>When doing last line geocoding and “Correct Lastline” is on, the Pref City now returns correctly.</p> <p>Example: Denver CO 80223 returns as Denver, not Aurora.</p>																								
			<p>Case 17733972 / CENTRUS-10996</p> <p>Fixed a stack overflow crash encountered using DPV and LACSLink data in CASS match mode.</p>																								
GeoStan FileServer	July 2019	Updated to correctly display the FileServer version number “2.1”.																									
			None for this release.																								
			None for this release.																								
			File Server can now handle up to 220 files such as MLD, Extended Attribute, and Reverse PBK files.																								
Spatial+	July 2019	None for this release.																									
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Known Issues

The following table provides information on known issues with the GeoStan z/OS Geocoding Suite. Items are listed in the month in which the issue was discovered. Known issues discovered prior to the current yearly release are not itemized by month but are listed under the month of the latest major release.

Product	Date	Change Request /Jira Item #	Description
GDL	July 2019		None for this release.
	June 2019		None for this release.
	May 2019		None for this release.
GeoStan	July 2019		None for this release.
	June 2019		None for this release.
	May 2019		To support DPV processing with point data, in addition to enabling the GS-FIND-DPV property, the Find property must be set. The GS-FIND-ENABLE-CLASSIC-SORT property sets the sort order to prioritize parcel centroids over other centroids. Setting this property restores the previous behavior to produce the expected DPV confirmation results for records that should DPV confirm. Default = False. If you wish to create and use multi-volume data sets with a version of IBM Language Environment prior to 1.8, you must install IBM APAR PK05959. When using auxiliary files, if House Number Parity, Side of Street, and Segment Direction contain erroneous input values, the following behavior occurs: <ul style="list-style-type: none"> • House Number Parity - GeoStan rejects the record as invalid. • Side of Street - GeoStan accepts the record and uses the centerline of the street as the address location. • Segment Direction - GeoStan accepts the record but changes the value to F (forward). NOTE: If the value is left blank, GeoStan uses the default value.
GeoStan FileServer	July 2019		None for this release.
	June 2019		None for this release.
	May 2019		None for this release.
Spatial+	July 2019		None for this release.
	June 2019		None for this release.
	May 2019		None for this release.

Regulatory Information

The implementation date for CASS Cycle O has been deferred by the United States Postal Service® (USPS®) until August 1, 2021. The USPS Coding Accuracy Support System (CASS™) Cycle N will be valid through July 31, 2021. The USPS reserves the right to modify the “valid through” date in the future if conditions warrant it. The geocoder application shipped with GeoStan is CASS Certified for Cycle N.

Data Compatibility

There are no data format changes to the street and point data sets for this release.

Additional Information

See the *GeoStan z/OS Geocoding Suite Spring 2019 Installation Guide* for the latest installation instructions. Technical notes and installation instructions are available for review and download from the Pitney Bowes Software Support Web site at <https://www.pitneybowes.com/us/support/products/software/geostan-support.html>.

For Further Assistance

If you have any questions, please refer to the contact information on our website: <https://www.pitneybowes.com/us/contact-dcs.html>.

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The Master Location Dataset (MLD) product is a produced work that referenced the Microsoft US Building Footprints dataset. This dataset is available at <https://github.com/Microsoft/USBuildingFootprints> and is licensed under the Open Database License (ODbL). The license is available at <https://opendatacommons.org/licenses/odbl/>.