GeoStan Geocoding Suite Release Notes

Version 2023.01

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1 - About

In this section

Technical Support

Product documentation for this release is available on the **GeoStan Suite** support page. If you have any questions about the release or need further assistance, go to **support.precisely.com**.

Product Version Information

The Spring 2023 release includes the following products and versions:

- AddressBroker 2023.01
- Demographics Library 2023.01
- Geographic Determination Library 2023.01
- GeoStan 2023.01
- Spatial+ 2023.01
- Centrus Desktop 6.10.00 - no longer CASS-certified
- GeoStan FileServer 2.2
- GeoStan Geocoding Utilities 2023.01

Database Compatibility

No data format changes to the street and point datasets for this release.

Platform Specific Changes

For a complete list, please refer to the GeoStan Suite Supported Platforms document on the **GeoStan Suite** support site. For this release, the key changes are listed below.

New Platforms

No platforms were added.

Retired Platforms

No longer supporting 32-bit platforms.

Minimum Supported Levels

	Minimum
Java	1.7
z/OS	2.3
z/OS Transaction Server (CICS)	5.3

2 - Whats New

In this section

CASS™ Cycle O

CASS™ Cycle O is effective from August 1, 2023. Precisely has updated to comply with the CASS™ Cycle O certification. The USPS reserves the right to modify the "valid through" date in the future if conditions warrant it.

USPS-certified address standardization software generates the CASS form PS3553 report, commonly refered to as the CASS report, during mailing list processing. To generate a CASS report, the software compiles numerous statistics during processing, such as the number of 5-digit ZIP Codes and ZIP+4 Codes assigned to records in the address file. The application writes this information, along with other information required by the USPS, to an ASCII text file.

> **Note:** You must use the DPV, SuiteLink, and LACSLink options to produce a CASS form PS 3553.

You can use the *Use.gsd* and *Usw.gsd* files in the Centrus Data Product installation for 135 days, but after 105 days you cannot create a CASS report.

Important: For this release, USPS data (package KUS) will not be backward compatible with older GeoStan software versions. If you use USPS data (KUS), you must have GeoStan v2023 or newer..

For more information about CASS, visit the USPS National Customer Support Center (NCSC) Website at **https://www.usps.com/help/contact-us.htm**, or call the NCSC at 1-800-642- 2914.

Output ZIP Code Rule

CASS™ Cycle O has new rules about the output ZIP Code when the address does not match. A "single-ZIP city" is a city that has just one ZIP Code.

When a city and ZIP "correspond", it means they exist in the same USPS City State record. For example, BOULDER and 80301 correspond, but BOULDER and 80007 do not. 80007 is a ZIP for Arvada, CO, and Boulder is not a valid city name in 80007.

- If the input address does not match and there is not an input ZIP, if the output city has just one ZIP Code (also called "single-ZIP city"), output that ZIP.

- If the input address does not match, the input city is a single-ZIP city, and the input ZIP does not correspond to the input city, output the ZIP corresponding to the input city.

- If the input address does not match, the input city is a single-ZIP city, and the input ZIP does not exist, output the input ZIP.

Military Addresses

The USPS is adding new military addresses for CASS™ O Cycle.

Old military addresses were CMR (Consolidated Mail Room), PSC (Postal Service Center), and UNIT.

New military addresses are UMR (Unit Mail Room) and OMC (Official Mail Center).

Examples of new addresses:

OMC 8 BOX 1

FPO AE 09599-0002

UMR 6 BOX 2

FPO AE 09599-0001

USPS mandated changes to the CASS 3553 Form

The USPS has changed how the To/expiration dates are calculated in the 3553 Form and the CASS™ Technical Guide summarizes the new logic in Appendix 1, CASS Summary Report (PS Form 3553).

The GeoStan CASS report API implements the new logic.

References

For more information, refer to the following documents:

Description	Resource
Home page for all USPS CASS™ documentation	**https://postalpro.usps.com/certifications/cass**
CASS™ Cycle O - Executive Summary	**https://postalpro.usps.com/CASS_CycleO_Summary**
CASS™ Technical Guide for Cycle O	**https://postalpro.usps.com/mnt/glusterfs/2023-03/CASS_Tech_Guide_CycleO_0.pdf**
CASS™ Cycle O Partnership In Tomorrow Final Rules	**https://postalpro.usps.com/CASS_CycleO_FinalRules**
DPV® Return Codes and Footnotes	**https://postalpro.usps.com/CASS_DPV_DSF2_RCFTNote_Possble**

Custom Dataset Builder

For this release, UD Writer is replaced by Custom Dataset Builder in the GeoStan Suite.

The Custom Dataset Builder is a stand-alone command line utility that allows customers to create custom datasets and integrate address data with Spectrum Global Geocoding. Custom datasets can complement the Global Geocoding's standard datasets. In addition, the utility allows enhancing and optimizing geocoding behaviors to accommodate features unique to a particular dataset. It is available with Spectrum 2020.h1

For more information, refer to **Custom Dataset Builder**.

Windows Help

The Windows Help program is not supported in Windows 10, Windows Server 2012 or later versions of Windows Server. The Windows Help program is available for Windows Vista, 7, 8 and 8.1 only.

Context help files will no longer be included in GeoStan Suite software installation.

3 - Fixed Issues

In this section

ZIPs Crossing State Boundaries

Problem:

The USPS has been consolidating ZIP Codes resulting in more ZIP Codes that cross state boundaries. Because of this consolidation, there are now instances of duplicate addresses with the same ZIP Code where they previously had different ZIP Codes.

Solution:

1. ZIPs crossing state boundaries is only available for USPS data (KUS).
2. This data is not backward compatible. You must be using the latest version of GeoStan (v2023+) in order to load KUS data.
3. ZIPs crossing state boundaries will be available in all datasets eventually. You must have GeoStan v2023 or newer to use this data and feature.

GSD Split / WinSplit

GSD Split and WinSplit are no longer shipped as part of the GeoStan Suite. They are are 32-bit programs, which are no longer supported.

Bug Fixes

Change requests and software defects addressed in this release are listed below. Review carefully to determine whether the following corrections apply to your situation.

Item Number	Description
CENTRUS-12010	As part of street-name matching improvements, EAST and WEST are not allowed to match in fuzzy string matching algorithm

Item Number	Description
CENTRUS-12085	Modified the GeoStan match code to recognize ordinal number and words as a non-change
CENTRUS-12130	If MLD has a unit number but no unit type, return "#" for the unit type

Improved street-name fuzzy matching

The word matching algorithm has been modified so that "EAST" and "WEST" no longer match and "NORTH" and "SOUTH" no longer match. This prevents bad matches in the street name and city name.

Input address	Input lastline	Old matching address
1413 SOUTHWEST ST	ARLINGTON, TX 76018	1413 SOUTHEAST PKWY
317 SE ST	BLACKWELL, OK 74631	317 SOUTHWEST BLVD
493 W 1ST NORTH ST	MESQUITE, NV 89027	493 W 1ST SOUTH ST
101 FAIRMONT SOUTH CT	MACON, GA 31210	101 FAIRMONT NORTH CT

Input address	Input lastline	Old matching lastline
31 WASHINGTON AVE	WEST ISLIP, NY	EAST ISLIP, NY 11730
1 E ACADEMY ST	EAST FISHKILL, NY	WEST FISHKILL, NY 12590
2001 POMFRET RD	NORTH POMFRET, VT	SOUTH POMFRET, VT 05067
1500 KEOKUK IOWA RD	SOUTH ENGLISH, IA	NORTH ENGLISH, IA 52316

GeoStan match code modified

GS_MATCH_CODE was modified to recognize ordinal number and words as a non-change. When a street name changes ordinal number format (FIRST to 1ST or vice versa), that change will no longer be flagged as a street name change.

Return # for MLD attributes

If MLD has a unit number but no unit type, return the correct unit type, unit low and unit high numbers for all use cases.

Use case 1: regular address

The input address matches to a unit type and unit number range in the data.

Input address	4750 WALNUT ST STE 200
Matching unit type	STE
Matching low unit number	100
Matching high unit number	205

All output for this address is unchanged.

GeoStan function	GeoStan enum	Output value
	GS_ADDRLINE	4750 WALNUT ST STE 200
	GS_UNIT_TYPE	STE
GsDataGet(GS_OUTPUT)	GS_LOUNIT	100
	GS_HIUNIT	205
	GS_UNIT_NUMBER	200

GeoStan function	GeoStan enum	Output value
GsMultipleGet()	GS_ADDRLINE	4750 WALNUT ST STE 200
	GS_UNIT_TYPE	STE
	GS_LOUNIT	100
	GS_HIUNIT	205
	GS_UNIT_NUMBER	200

Use case 2: Address with a # unit type

The input address matches to an MLD record with a unit type of "#". Unit type "#" is a default unit type for input and output addresses when the USPS does not know the specific unit type, like APT, STE, UNIT, etc. Sometimes in MLD we do not know the unit type, but we know there is a unit present, so MLD uses unit type "#".

Input address	755 E 85TH ST # 1
Matching unit type	#
Matching low unit number	1
Matching high unit number	1

Previously the unit type was always blank. Now the unit type is correctly returned as "#".

GeoStan function	GeoStan enum	Old output value	New output value
GsDataGet(GS_OUTPUT)	GS_ADDRLINE	755 E 85TH ST # 1	755 E 85TH ST # 1
	GS_UNIT_TYPE	*blank*	#
	GS_LOUNIT	1	1
	GS_HIUNIT	1	1
	GS_UNIT_NUMBER	1	1
GsMultipleGet()	GS_ADDRLINE	755 E 85TH ST # 1	755 E 85TH ST # 1
	GS_UNIT_TYPE	*blank*	#
	GS_LOUNIT	1	1
	GS_HIUNIT	1	1
	GS_UNIT_NUMBER	1	1

Use case 3: Address with a standalone unit type

Standalone unit types are a special type of unit type that do not necessarily have a unit number. USPS unit types are documented in USPS Publication 28, Appendix C. These unit types are BSMT, FRNT, LBBY, LOWR, OFC, PH, REAR, SIDE, and UPPR. Others like APT, BLDG, and STE must always have a unit number.

Input address	13190 BROMONT AVE OFC
Matching unit type	OFC
Matching low unit number	*blank*
Matching high unit number	*blank*

Previously the unit type, low and high unit numbers were incorrect. Now GeoStan correctly returns the standalone unit type in the unit type field and all of the unit number values are blank.

GeoStan function	GeoStan enum	Old output value	New output value
GsDataGet(GS_OUTPUT)	GS_ADDRLINE	13190 BROMONT AVE OFC	13190 BROMONT AVE OFC
	GS_UNIT_TYPE	OFC	OFC
	GS_LOUNIT	OFC	*blank*
	GS_HIUNIT	OFC	*blank*
	GS_UNIT_NUMBER	*blank*	*blank*
GsMultipleGet()	GS_ADDRLINE	13190 BROMONT AVE # OFC	13190 BROMONT AVE OFC
	GS_UNIT_TYPE	*blank*	OFC
	GS_LOUNIT	OFC	*blank*
	GS_HIUNIT	OFC	*blank*
	GS_UNIT_NUMBER	OFC	*blank*

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