

Spectrum™ Technology Platform

Version 2018.2 S26

Release Notes

This document contains information about Spectrum™ Technology Platform 2018.2 S26. You have access only to the modules you have licensed. To evaluate any other modules, contact your Pitney Bowes account executive for a trial license key.

Who should apply this update? This product update is for users of the Enterprise Geocoding Module for USA (EGM-USA).

Is this update required? This product update is strongly recommended.

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What's New

This update includes improvements to alias address details, singleline matching enhancements, new IsAlias return values, and a User Dictionary Writer.

Reverse PBKey Lookup: Alias Address Details

In the Reverse pbKey stage, additional address elements are now available for each address record that is considered an alias (an address variation). Select the **Address Alias** checkbox under **Output Data** on the **Options** tab. The standardized address elements remain identical, but the parsed, alias address information is returned as additional output fields.

Example: Multiple alias address returns for an input PBKey (P00008BCG8WM)

AP02. Standardized address: 1206 W 600 S, FOUNTAINTOWN, IN 46130-9409

AP02. Alias address: 1206 W 1200 N, FOUNTAINTOWN, IN 46130-9409

AP02. Alias address: 1206 W COUNTY ROAD 600 S, FOUNTAINTOWN, IN 46130-9409

Singleline Matching Enhancements

The following improvements were made to singleline matching:

Improved singleline matching for PO Boxes when entered as POST OFFICE BOX, or when the number is preceded by #.

Improvements have been made in handling of street names that could also be city names in singleline address processing.

For example:

Input address: BOX 58 ASHAWAY RI 02804

Previous match: 58 ASHAWAY RD, 02804

New match: BOX 58, ASHAWAY RI 02804

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

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
-

Matching Enhancements

The Qualifiers output field **IsAlias** has two new return values when a match occurs:

- **A13** a match is made to ZIPMove data.
- **A14** a match is made to the expanded centroid file us_cent.gsc or to bldgcent.gsc (files contained in the Master Location Structure Centroid data set).

Creation of User Dictionaries

This update includes the User Dictionary Writer which enables you to map fields from your source data to required and optional Spectrum fields, creating a custom dictionary. For example, a local government might create a custom dictionary based on parcel maps for an emergency response or tax assessment application.

Note: User Dictionaries are not for use with CASS geocoding.

To configure this functionality with Spectrum, update `DataManagerSettings` with the path to the appropriate US geocoder data files and run the UD Writer utility:

1. Locate the **USA_DataManagerSettings.properties** file in the `\config` folder. The default location is `C:\Program Files\Pitney Bowes\Spectrum\server\modules\geostan\bin\udwriter\config`.
2. Edit the **DICTIONARY_PATH1**=//<path to US geocoder data files>.
3. Run the UD Writer utility **run.bat** from the command (cmd) line. The `UDWriter run.bat` is located in the `C:\Program Files\Pitney Bowes\Spectrum\server\modules\geostan\bin\udwriter` folder.

Bug Fixes

This update includes the following fixes for the Enterprise Geocoding Module (EGM) in the Spectrum™ Technology Platform.

- (CENTRUS-11586) : Corrected an error where selecting Alias output, when there was no alias information, caused an exception in EGM.
- (CENTRUS-11528) Reverse PBKey Lookup was not returning information for addresses that have ZIP Centroid locations. This has been corrected.

Note: To enable returning Zip pbKeys from EGM (Forward or Reverse):

1. Edit the java.properties file. The default location is C:\Program Files\Pitney Bowes\Spectrum\server\modules\geostan.
 2. Set egm.us.return.pbkey.zip.centroids=true.
- (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.

Example: Incorrect ZIP

Before

Address	CITY	State	POSTCODE	outMatchCode	outLocCode	outCityPref	outState	outZip	outZIP4
107 PRESTON RD	Cheektowaga	NY	H2N1Y	S800	ASO	BUFFALO	NY	H2N1Y	3626

After

Address	CITY	State	POSTCODE	outMatchCode	outLocCode	outCityPref	outState	outZip	outZIP4
107 PRESTON RD	Cheektowaga	NY	14213	S900	AP05	BUFFALO	NY	14213	3626

Example: Missing ZIP

Before

Address	CITY	State	POSTCODE	outMatchCode	outLocCode	outCityPref	outState	outZip	outZIP4
8649 11TH AVE	SILVER SPRING	MD	0	S800	ASO	SILVER SPRING	MD	00000	3203

After

Address	CITY	State	POSTCODE	outMatchCode	outLocCode	outCityPref	outState	outZip	outZIP4
8649 11TH AVE	SILVER SPRING	MD	20903	S900	AP02	SILVER SPRING	MD	20903	3203

- (CENTRUS-11341) When doing last line geocoding and “Correct Lastline” is on, the Pref City now returns correctly. Example: Denver CO 80223 returns as Denver, not Aurora.
- (CENTRUS-10996) Fixed a stack overflow crash encountered using DPV and LACSLink data in CASS match mode.
- (CENTRUS-10630) Fixed an issue where an input address with a post-directional resulted in incorrect multimatch returns.

- (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.
- (CENTRUS-11030) Fixed an issue where an input address containing multiple, single alpha characters and spaces was returning an exception. 1 BOX T T #A now matches.
- (CENTRUS-11031) Fixed an issue where an input address containing an intersection in the address line resulted in a multi-match which caused an exception. W Elkhorn Ave & S Monterey Ave., Cantua Creek, CA 93608 now processes correctly and returns match information.
- (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.

Installation

To install this product update you must have Spectrum™ Technology Platform release 2018.2 installed.

Important: Before you install this product update, be sure that you have installed all previously-released product updates for your modules and the platform. Unexpected issues may occur if you do not install product updates in the proper order. For a listing of product updates for each module and the platform, see the [Product Update Summary](https://support.pb.com/spectrum) on support.pb.com/spectrum.

Applying this product update to a cluster

To apply this product update to a cluster, install the product update to each node by following the instructions in these release notes. You can apply the product update to one node at a time without stopping all the nodes in the cluster.

Updated Files

This product update includes an update to all the Geostan files located in `SpectrumFolder\server\modules\geostan\lib`.

Installing on Windows

Note: In this procedure, *SpectrumLocation* refers to the folder where you have installed the Spectrum™ Technology Platform server.

1. Stop the Spectrum™ Technology Platform server. To stop the server, right-click the Spectrum™ Technology Platform icon in the Windows system tray and select **Stop >Spectrum**. Alternatively, you can use the Windows Services Control Panel and stop the Pitney Bowes Spectrum™ Technology Platform service.
2. Ensure that Enterprise Designer is closed.
3. Back up the following files and folders to a different location.
 - Within **Deploy** (`SpectrumLocation\server\app\deploy\`), back up the four geostan files:
 - `geostan.war`
 - `geostan-18.2.car`
 - `geostan-18.2.console`
 - `geostanwebconsole.war`
 - Within **Modules**, back up the entire geostan library folder:

- `modules\geostan\lib`
4. Delete the `geostan-xx.xx.xx-api.jar` file (where `xx.xx.xx` is the .jar file version number) in:
`SpectrumLocation\server\modules\geostan\lib`
 5. Check for a `geostan-xx.xx.xx-api.jar` file in:
`SpectrumLocation\server\modules\geostan\bin\udwriter\support`.
If one exists, delete it.
 6. Download the .zip file containing the patch for your version of the Windows operating system and extract the contents to a temporary location.
The product update announcement includes a link to download the software and Release Notes.
 7. Extract the contents of the `cdq2018020S26.zip` file to the folder where you installed Spectrum.
For example, `C:\Program Files\Pitney Bowes\Spectrum`. Choose to overwrite the existing files.
 8. Start the Spectrum™ Technology Platform server.
 - To start the server, right-click the Spectrum™ Technology Platform icon in the Windows system tray and select **Start Spectrum™**.
 - Alternatively, you can use the Windows Services Control Panel to start the Pitney Bowes Spectrum™ Technology Platform service.

Installing on Unix or Linux

Note: In this procedure, *SpectrumLocation* refers to the folder where you have installed the Spectrum™ Technology Platform server.

1. Ensure that Enterprise Designer is closed.
2. Source the *SpectrumLocation/server/bin/setup* script.
3. Run the *SpectrumDirectory/server/bin/server.stop* script to stop the Spectrum™ Technology Platform server.
4. Back up these files and folders to a different location:
 - Within **Deploy** (*SpectrumLocation/server/app/deploy/*), back up the four geostan files:
 - *geostan.war*
 - *geostan-18.2.car*
 - *geostan-18.2.console*
 - *geostanwebconsole.war*
 - Within **Modules**, back up the entire geostan library folder:
 - *modules/geostan/lib*
5. Delete the *geostan-xx.xx.xx-api.jar* file (where *xx.xx.xx* is the .jar file version number) in:
SpectrumDirectory/server/modules/geostan/lib
6. Check for a *geostan-xx.xx.xx-api.jar* file in:
SpectrumDirectory/server/modules/geostan/bin/udwriter/support
If one exists, delete it.
7. Download the file containing the patch and extract the contents to a temporary location.
The product update announcement includes a link to download the software and Release Notes.
8. Locate the *cdq201802S26.tar* file for your operating system.

For HP-UX 11.31 (Itanium), there is a single extracted *cdq201802S26.tar* file contained in the destination folder.

For Red Hat and CentOS, SUSE, Solaris and AIX, there are folders for the OS release or glibc versions as listed below. Choose the appropriate folder, then select the *cdq201802S26.tar* file.
 - The **REDHAT** folder contains version-specific folders for the *glibc* support library:
 - 2.5 - Red Hat Enterprise Linux 5, CentOS 5

- 2.12 - Red Hat Enterprise Linux 6, CentOS 6
 - 2.17 - Red Hat Enterprise Linux 7, CentOS 7
 - The `SUSE` folder contains a version-specific folder for the `glibc` support library:
 - 2.9 - SUSE Enterprise Linux Server 11
 - The `SOLARIS` folder contains OS version folders:
 - 5.10 - Solaris 10
 - 5.11 - Solaris 11
 - The `AIX` folder contains OS version folders:
 - 6.1 - AIX 6.1
 - 7.1 - AIX 7.1
9. FTP the `cdq201802S26.tar` file in binary mode to a temporary directory on the Spectrum™ Technology Platform machine.
 10. Untar the file using this command:

```
tar -xvf TemporaryDirectory/cdq201802S26.tar
```
 11. Be sure you have execute permission on the updated files by typing the following command:

```
chmod -R a+x SpectrumDirectory/server
```
 12. On any machines that have Management Console, Enterprise Designer, or Interactive Driver installed, delete `WindowsTemporaryDirectory\glAssemblies`, where `WindowsTemporaryDirectory` is one of the following: `%TMP%`, `%TEMP%`, `%USERPROFILE%`, or the Windows directory. Typically the path is:

```
C:\Users\UserName\AppData\Local\Temp\glAssemblies
```
 13. Run the `SpectrumDirectory/server/bin/server.start` script to start the Spectrum™ Technology Platform server.



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