

USPS Pricing Engine SDK

August 26, 2019

Summary

This is the Pricing Engine SDK (version 11.7.5.0) for the September 20, 2019 Release. The following is a list of enhancements included in this release.

UPUXIT

Summary

As the Price Engine I want to stop the acceptance of outbound international mail if the destination country / product / extra services combination is not supported so that USPS customer expectations are correctly set and to prevent mail in the mail stream that USPS cannot support

Changes

- Calls to GetCountries will no longer return the MaxWeight or Status.
- The Mail Services, Extra Services, Dimensions and Weight Limits will be for each country will be determined by the UPUXIT web service.
- The following attributes are returned for each Mail Service
- Web/App configuration files changes

UPUXITType	Indicator if the block information is for a Logistics Partner or Post. See the Web Service UPUXIT SDC Spec
UPUXITCode	The Logistics Partner code that will support international transportation.
UPUXITBarcodeTypes	The barcode(s) that a Logistics Partner will support for international transportation. A commas delimited list of Barcodes. i.e. S10,W12

- Add the following key/value pairs to the appSettings section
`<add key="UPUXIT.Available" value="true"/>`
`<add key="UPUXIT.URL" value="https://eagnmnmbd281.usps.gov:9443/sdc-rest-services/v1/upu/supportedCountries"/>`
`<add key="UPUXIT.Provider" value="SDC"/>`
`<add key="UPUXIT.DateTimeAvailable" value="9/6/2019 15:12" />`

UPUXIT.Available	Used to determine if the UPUXIT Web Service is used. Values: true or false
UPUXIT.URL	The URL of the UPUXIT Web Service
UPUXIT.Provider	Current should only be set to SDC
UPUXIT.DateTimeAvailable	This setting is Optional. Use to define when the UPUXIT web service will start to be used. The value is the Date Time or if

	only the Date is provide then the time of midnight will be used.
--	--

Rules:

- 1. If UPUXIT.Available is set to “false” the UPUXIT Web Service is not used.
- 2. If the UPUXIT.DateTimeAvailable is not present in the configuration file the value of the UPUXIT.Available is used.
- 3. If the value of the UPUXIT.DateTimeAvailable is not a date the UPUXIT.Available is used.
- 4. If the value of the UPUXIT.DateTimeAvailable is a date/time in the future the UPUXIT Web Service is not used.
- 5. If the value of the UPUXIT.DateTimeAvailable is a date/time in the past the UPUXIT Web Service is used.

Note: the URL is for the UPUXIT web service SIT environment. The URL for CAT and PROD have not yet been supplied.

UPUXIT Web service:

If a node returned by the UPUXIT Web Service has a SKU of “NO SKU” it is not used by the Price Engine.

New Package Required

The Newtonsoft.Json.12.0.2 package is required for all applications using the International Business Rate Engine library (RateEngine_IntlBusiness.dll). See <https://www.nuget.org/packages/Newtonsoft.Json> for details on installing.

SKU Based Pricing – Turned Off

Summary

The Domestic and International Price Engine now use internally SKU Based Pricing. In addition a new interface has been added that allows a client to supply a full or partial SKU as a request and get rates returned. **This behavior is being released turned off.**

Support for TLS1.2 Only

Summary

Changes have been made to only support TLS1.2 when calling to other services including: SDC, Kalaha, and WebTools.

Update API for Country List exceeding 32 characters

Summary

Calls to GetCountries will now include country name abbreviations in the AKA list. The name abbreviation will be prefixed with the characters “AB|”

DLL versions to remain 11.7.0.0

All the libraries will remain 11.7.0.0.

Impact on Existing Applications

You should not have to rebuild your applications.

Instructions

1. Copy the DLLs
2. Install Newtonsoft.Json.12.0.2 package
3. Update your application configuration file.

Contents

Description	File
Folder	DLL
Rate Engine Framework	RateEngine_Framework.dll
Business Framework Rate Engine	RateEngine_Business.dll
Domestic Business Rate Engine	RateEngine_DomBusiness.dll
International Business Rate Engine	RateEngine_IntlBusiness.dll
Service Delivery Extensions	ServiceDeliveryExtensions.dll
Customs Forms Engine	CustomsFormsEngine.dll
Folder	SQL
Folder	Domestic
SQL Script	BNS 1314 - SKU Pricing - Updates to 2019_06.sql
Folder	International
SQL Script	B-338815 - UPUXIT RCALC.sql
SQL Script	B-346739.sql
SQL Script	BNS 1314 - SKU Pricing - Updates to 2019_06.sql
Folder	Documentation
Release Notes	USPS Pricing Engine SDK 11_7_5_0.pdf

Reported Defects and Change Request

UPUXIT RCALC - GXG Envelopes Dimensions Text, Max Ins Value, Extra Services Overwritten by UPUXIT Data	Resolved
UPUXIT RCALC - FCMI Postcard isn't returned anymore	Resolved
UPUXIT RCALC - Return "...all mail services are not available..." exception if no valid mail services for a country	Resolved

UPUXIT RCALC - GXG Envelopes Dimensions Text, Max Ins Value, Extra Services Overwritten by UPUXIT Data

The Dimensions Text for GXG Envelopes is being updated by the UPU Exit data. I'm seeing weird text for Brazil in SIT2 compared to what is in PROD or SIT1. For GXG Envelopes, instead of

"USPS-Produced regular size cardboard envelope (12-1/2" x 9-1/2"), the legal-sized cardboard envelope (15" x 9-1/2") and the GXG Tyvek envelope (15-1/2" x 12-1/2") " SIT2 has "Max. length 15-1/2", width ", height 12-1/2" and max. length plus girth combined " " It also is losing the Max Insured Value and Extra Services for GXG Envelopes in SIT2.

UPUXIT RCALC - FCMI Postcard isn't returned anymore

FCMI Postcard isn't on the Product Map and isn't returned anymore.

For example, compare services returned for Barbados. In SIT1, First-Class Mail® International Postcard is returned, but in SIT2 it is not.

UPUXIT RCALC - Return "...all mail services are not available..." exception if no valid mail services for a country

We will make a change so it will return the "all mail services are not available" message when there are no valid mail services for a country. Then you'll get the expected exception message.

Then we're going to have another chat with the SDC Team about the data in their SIT environment, probably on Monday morning. For New Zealand, a product/service of FCPIS is returned for the online channel but it's mapped to PMI. However, PMI itself is not returned as a valid product/service, so Price Engine interprets that to mean that PMI isn't available either. The data doesn't make sense. We're not sure if it's just bad data or if this is a condition that the Management Console will allow and we need to change our logic.

For now, it may be best to only use Barbados (BB), Brazil (BR) and the United Kingdom (GB) for testing because that data came from the Price Engine. We understand that the data for the other countries is made up data.

From WebTools Dev Team:

Testing with Cook Islands (One that returned as AKA with "AB|" in GetCountries I get back this response:

If a country is not available (in the below example for Australia) then we should get the appropriate message: