



UPS Address Validation REST API Configuration

Megan De Freitas - 2024-11-22 - Miscellaneous

Overview

UPS has deprecated access key authentication in favor of an OAuth 2.0 security model and REST API. Beginning Aug 5, 2024, access keys will no longer be supported for authentication to any UPS APIs. After this date, all integrations must utilize OAuth 2.0 authentication and REST API to continue to transact with UPS services.

For more information, please see UPS's [Access Key to OAuth 2.0 Migration Guide](#).

Required Modules

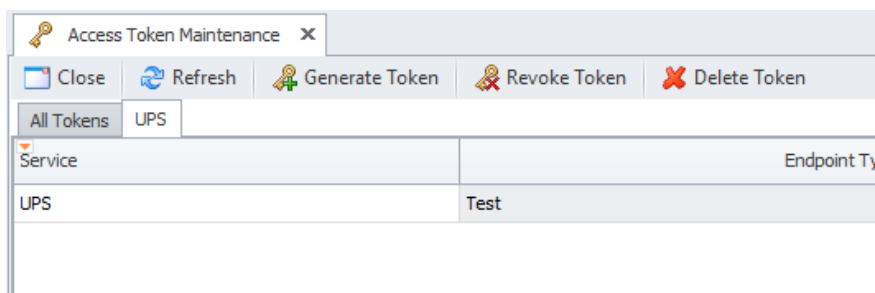
The following modules are required to use the new UPS REST API:

Module	Replaces	Requires
SalesPad.Module.UPS	SalesPad.Module.UPSValidation	N/A
SalesPad.Module.ShippingV2	SalesPad.Module.Shipping	SalesPad.Module.UPS

Access Token Maintenance

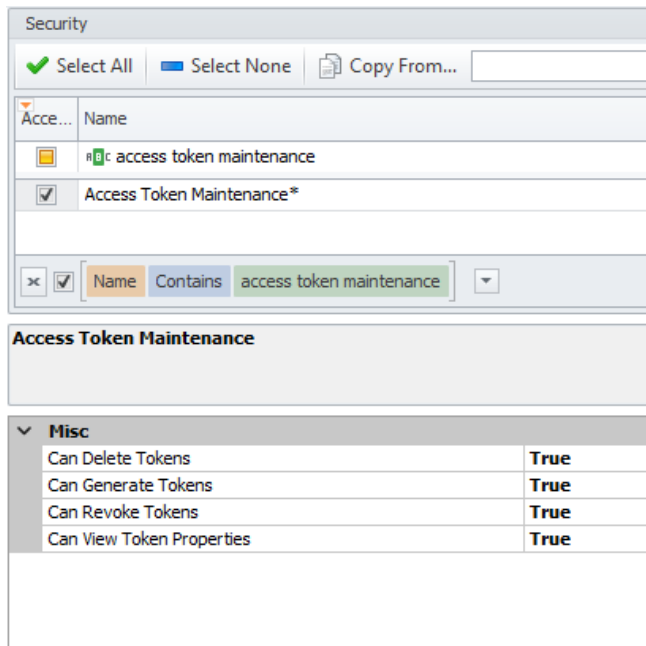
Overview

The Access Token Maintenance screen allows you to generate new access tokens for the UPS REST API.



Security

Enable the Access Token Maintenance screen by going to the Security Editor (Modules -> System -> Security Editor) and making sure the Access Token Maintenance checkmark is checked.



Can Generate Tokens - Can generate new access tokens.

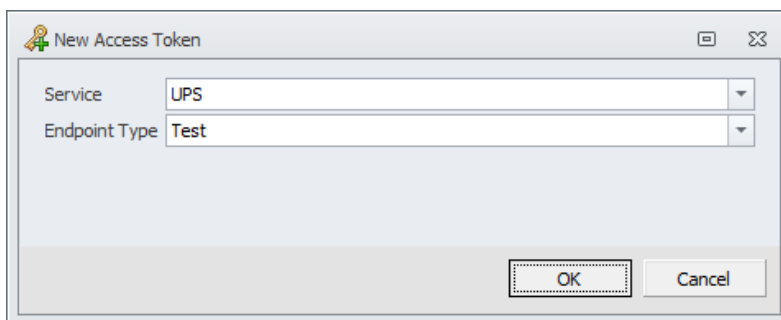
Can Revoke Tokens - Can revoke access tokens.

Can Delete Tokens - Can delete access tokens. This action will not revoke tokens from service.

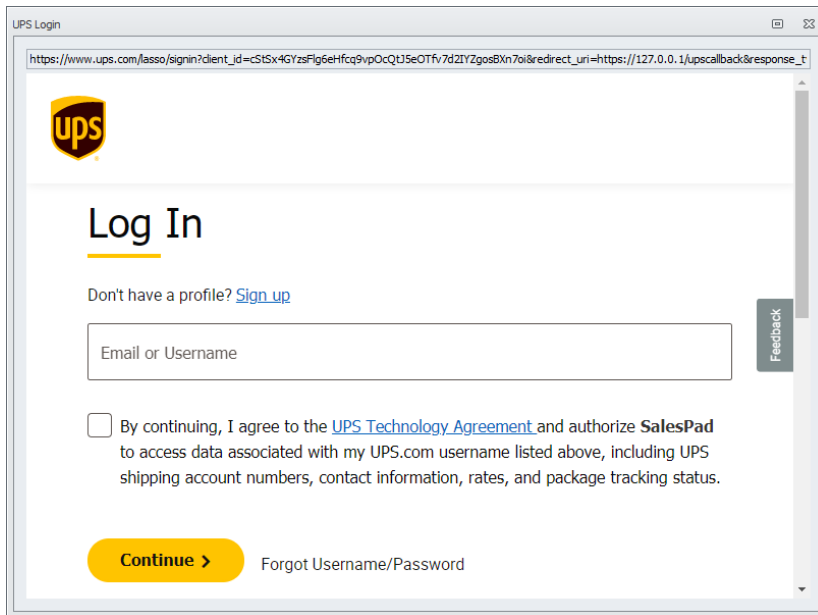
Can View Token Properties - Can view access token properties.

Generate Token

1. To generate a new access token, click the Generate Token button.
2. A New Access Token window will open. Select the endpoint type and click OK to start the token generation process. Note that production and test environments require separate access tokens.

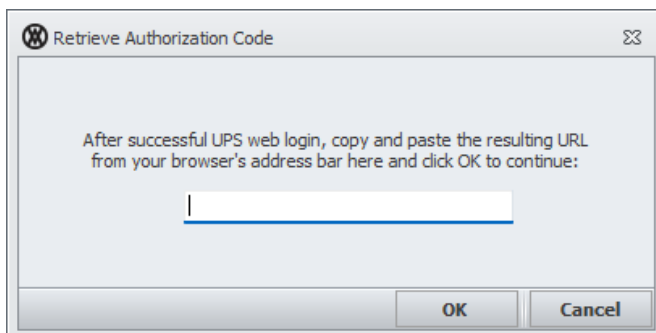


3. The UPS login screen will open and request that you log in using your UPS credentials. Enter your UPS username and password and click the Log In button to continue.



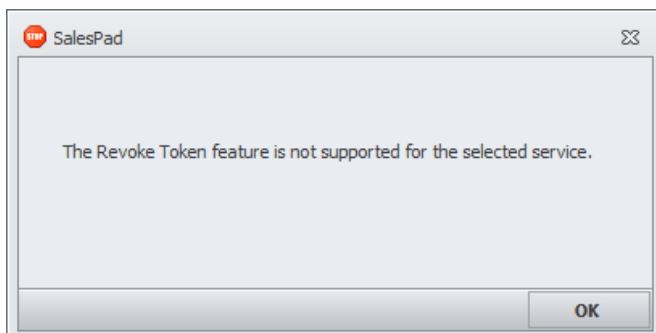
A prompt should display that the token was generated successfully.

NOTE: If there are any issues with the built-in UPS login, a manual login method is available. Hold the ALT key when clicking the Generate Token button and a separate browser window will open. After logging in, copy the resulting URL from the browser's address bar into the prompt in SalesPad and click OK. SalesPad will parse out the authorization code and generate an access token.



Revoke Token

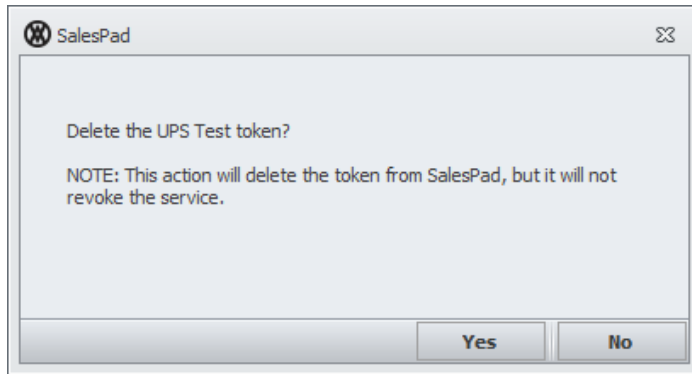
UPS access tokens cannot be revoked. The following message will appear if a user attempts to revoke an existing access token.



Delete Token

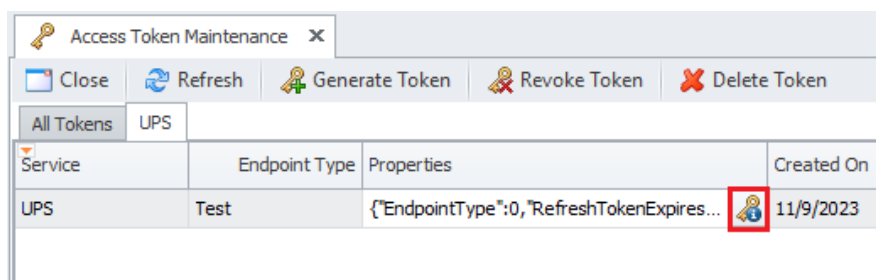
To delete an access token, click the Delete Token button. Click Yes on the following prompt

to confirm deletion.

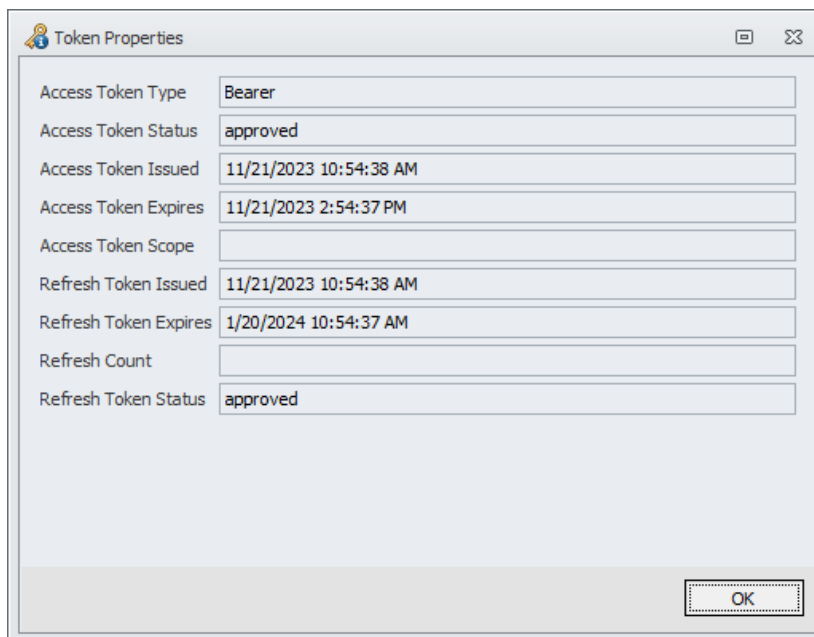


View Token Properties

To view token properties, click the Key Information button.



This will open the Token Properties window which displays various token properties, such as issue date, expiration date, and status.

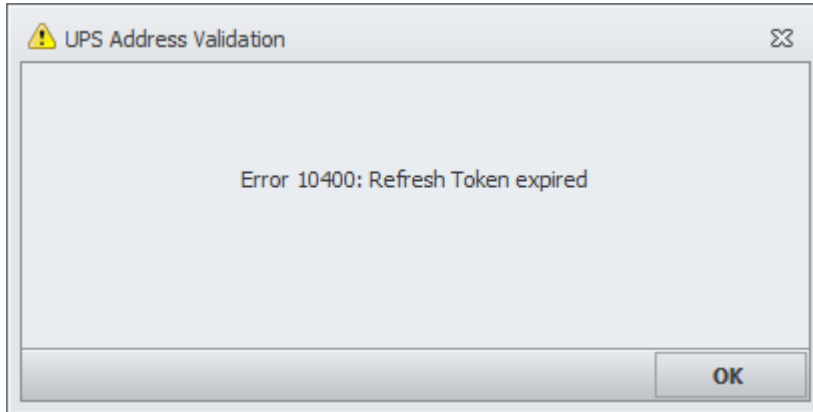


Access Token

The access token must be refreshed every four hours for SalesPad to continue interacting with the UPS REST API. SalesPad will refresh this token automatically when making an API call. Further action from the user is not required.

Refresh Token

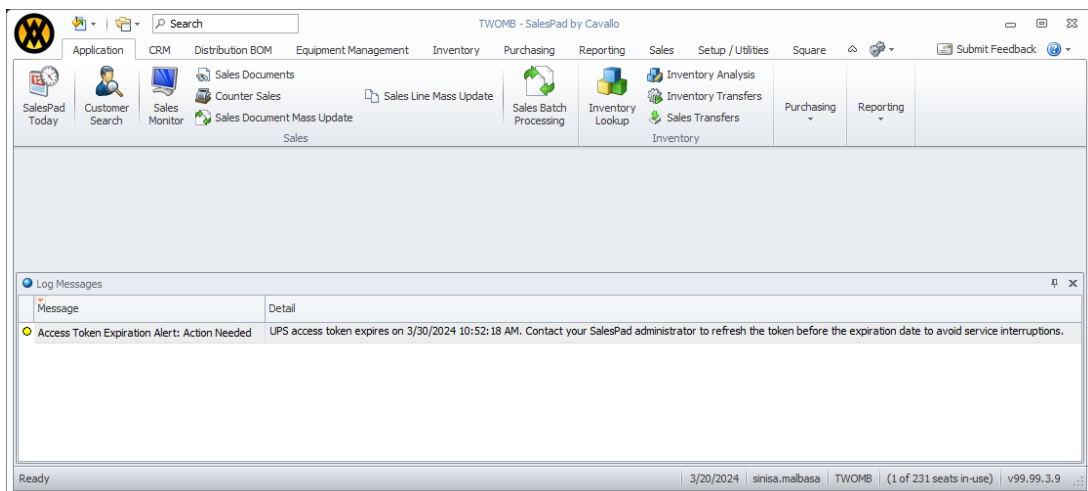
The refresh token is returned when a new access token is generated. It is used to refresh the access token. Unlike the access token, **the refresh token lasts three months and must be refreshed manually**. A refresh token expired error will appear if a transaction is attempted to be processed with an expired refresh token.



A new refresh token can be obtained by generating a new access token after the refresh token expires.

Token Expiration Reminder

When a user logs into SalesPad, and a UPS access token will expire in the next 7 days or is already expired, then an alert will appear in the Log Messages. This will display information on whether the token is already expired, or when it expires, in order to notify that the manual token refresh step must be handled soon.



Note that token expiration reminders are available as of SalesPad 5.4.6.

Address Validation

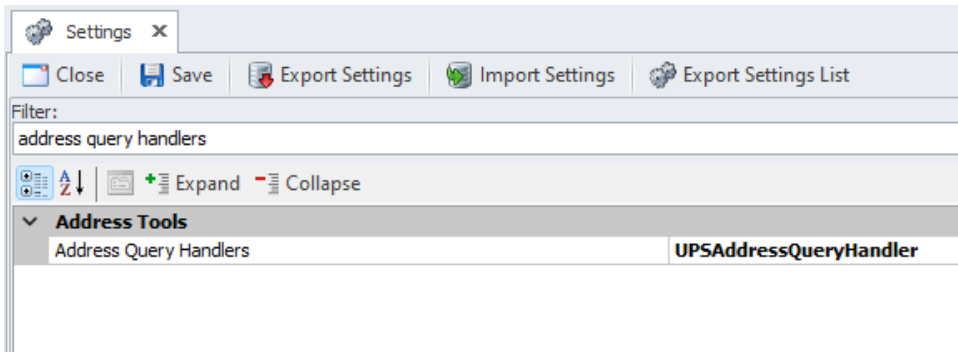
Overview

Address validation is part of the SalesPad.Module.UPS module. This module replaces the legacy SalesPad.Module.UPSValidation module.

Settings

Go to Settings (Modules -> System -> Settings). Set the Address Query Handlers setting to

“UPSAddressQueryHandler”.



Filter to “UPS” and configure the following settings.

UPS	
Automatically Apply Address Recommendations In Workflow	True
Endpoint Type	Production
UPS Shipper Number	

Automatically Apply Address Recommendations In Workflow - Specify whether to automatically apply changes in workflow when UPS address validation responds with a valid recommendation.

Endpoint Type - Set the endpoint type to 'Test' or 'Production.'

UPS Shipper Number - A UPS account number is a six-digit number that is unique to each individual/corporation that holds an account with UPS.

Customer Address Card

1. Navigate to the Customer Address Card.

The screenshot shows a 'Customer Address Card' form for 'Contact: PRIMARY/Bob Fitz'. The form is divided into 'Customer' and 'Address' sections.

Customer	
Customer ID:	<input type="text" value="AARONFIT0001"/>
Customer Name:	<input type="text" value="Aaron Fitz Electrical"/>

Address	
Code:	<input type="text" value="PRIMARY"/>
Alt Comp. Name:	<input type="text" value="Aaron Fitz Electrical"/>
Contact Name:	<input type="text" value="Bob Fitz"/>
Address:	<input type="text" value="One Microsoft Way"/>
Zip:	<input type="text" value="98052-6399"/>
State:	<input type="text" value="WA"/>
City:	<input type="text" value="Redmond"/>
Country Code:	<input type="text" value="US"/>
Country:	<input type="text" value="United States"/>

2. Click the Save button when the customer address is ready to be saved and validated. If an address is ambiguous, SalesPad will allow the user to choose which one they would like to use.

The screenshot shows a 'Validate Address' dialog box with the following fields and values:

Field	Original Address	Suggested Address
Address	1600 Amphitheatre Parkway	1600 AMPHITHEATRE PKWY
City	Mountain View	MOUNTAIN VIEW
State	CA	CA
Zip	94043	94043-1351
Country Code	US	US
Classification		Commercial

Sales Document Entry Addresses

1. Navigate to the Addresses formlet on the Sales Document Entry screen.
2. Click the Save button when the sales document is ready to be saved and have its Ship To address validated. If an address is ambiguous, SalesPad will allow the user to choose which one they would like to use.

Freight Calculator

Overview

The freight calculator is part of the SalesPad.Module.ShippingV2 module. This module replaces the legacy SalesPad.Module.Shipping module.

Security

Go to the Security Editor (Modules -> System -> Security Editor) and make sure that Sales Document Freight Rates and Sales Document Simple Freight Rates are enabled.

Security

Select All
 Select None

Acce...	Name
<input type="checkbox"/>	freight rates
<input checked="" type="checkbox"/>	Sales Document Freight Rates* (Beta)
<input checked="" type="checkbox"/>	Sales Document Simple Freight Rates*

Name Contains freight rates

Sales Document Freight Rates

Misc	
Custom Shipper Country	US
Custom Shipper State/Province	
Custom Shipper Zip Code	
Default Shipping Rate Restriction	
Import Single Package Script	
Prompt For Large Queries	True
Ship From Custom Location	True
Shipping Warehouses	
Use Label To Update Shipping Method	False

Security

Select All
 Select None

Acce...	Name
<input type="checkbox"/>	freight rates
<input checked="" type="checkbox"/>	Sales Document Freight Rates* (Beta)
<input checked="" type="checkbox"/>	Sales Document Simple Freight Rates*

Name Contains freight rates

Sales Document Simple Freight Rates

An automated Freight Calculator. Automatically pulls package dimensions and weight from UDFs, and

Misc	
Cheapest Rate Line Color	
Custom Shipper Country	US
Custom Shipper State/Province	
Custom Shipper Zip Code	
Default Shipping Rate Restriction	
Import Single Package Script	
Package Dimension Units	IN
Package Weight Units	LB
Prompt For Large Queries	True
Run On Load	False
Ship From Custom Location	True
Shipping Warehouses	
Use Label To Update Shipping Method	False

NOTE: Sales Document Freight Rates has the same functionality as the Sales Document Freight Calculator, and the Sales Document Simple Freight Rates has the same functionality

as the Sales Document Simple Freight Calculator from the legacy Shipping module.

Settings

Go to Settings (Modules -> System -> Settings) and filter to "Shipping Tools V2", then configure the following settings.

Shipping Tools V2 - Misc	
Customer Address Residential UDF	
Display Shipping Request Input Values	False
Item Number Exclusion	
Item Package Height Smart Field	
Item Package Insured Amount Smart Field	Extended_Price
Item Package Length Smart Field	
Item Package Weight Smart Field	Item_Shipping_Weight
Item Package Width Smart Field	
Location Upcharge Amount	0
Shipping Carrier Query Handlers	UPSQueryHandler
Shipping Restriction Smart Field	
Single Document Package	False
Single Document Package Height	0
Single Document Package Length	0
Single Document Package Width	0
Upcharge Locations	
Upcharge Percent	0
Shipping Tools V2 - UPS	
Calculate UPS Time In Transit	True
UPS Max Weight	150
UPS Pickup Type	Daily Pickup
Use Negotiated Rates	False

UPS Max Weight - Max weight allowed for calculating UPS rates. Defaults to 150.

UPS Pickup Type - Specify a pickup type for UPS. Defaults to 'Daily Pickup'.

Use Negotiated Rates - Use 'Negotiated Rates' as opposed to 'Published Rates' from the UPS API. Defaults to false.

Shipping Carrier Query Handlers - Specify the carriers that can be used. Set this setting to 'UPSQueryHandler' to obtain UPS rates.