SCAN API

USPS Web Tools™

Application Programming Interface

User's Guide

Document Version 2.3 (1/25/2015)

Contents

Introduction to Web Tools

This document contains a Reference Guide to the SCAN API. See the Developer's Guide to Web Tools APIs to learn the administrative process for gaining access to the Web Tools APIs as well as the basic mechanism for calling the APIs and processing the results. The Developer's Guide also contains information on testing and trouble-shooting.

Note: The Request Parameter sections present the XML input tags for generating live requests along with the restrictions on the values allowed. An error message will be returned if an incorrect value is entered. Also, be aware of the maximum character amounts allowed for some tags. If the user enters more than those amounts, an error will not be generated. **The Web Tool will simply pass in the characters up to the maximum amount allowed and disregard the rest.** This is important since the resulting value could prevent a correct response.

When building the XML request, pay particular attention to the **order and case** for tags. An error message will be returned if an incorrect value is entered. Remember that all data and attribute values in this document are for illustration purposes and are to be replaced by your actual values. For instance, a line of sample code may be:

<ZipDestination>12345</ZipDestination>

In this instance, you will replace "12345" with the destination ZIP Code for the domestic-bound package

Before you get started:

For information on registering and getting started with Web Tools, please refer to the Step-By-Step guide found on the Technical Documentation section of the Web Tools page on usps.com/webtools.

USPS SCAN API

Overview

The SCAN API allows integrators to consolidate multiple domestic and international labels and custom forms through one Electronic File Number (efile).

The API operates in two parts:

1. The SCAN API eligible Web Tools user creates valid, live labels using Web Tools domestic and international label APIs, setting the HoldForManifest request tag to "Y". More information on available label APIs can be found on the Web Tools documentation website.

2. A SCAN API request is submitted with the held PICs populated in the SCAN API request XML.

There are some rules to label grouping compatibility in the SCAN API:

1. The manifested labels must have been previously created and "held" when created.

2. The label mailing dates must be the same across label and SCAN API requests.

3. The manifest file formats for the labels must be identical. Legacy 2-digit STC labels will not be compatible with current 3-digit STC barcodes.

API Signature

Scheme	Host	Path	API	XML
https://	secure.shippingapis.com	ShippingAPI.dll	?API=SCAN	&XML=(see below)

Request Descriptions

Tag Name	Occurs	Description	Type	Validation
SCANRequest	required once	API=SCAN	(group)	
SCANRequest / @USERID	required	This attribute specifies your Web Tools ID. See the Developer's Guide for information on obtaining your USERID.	NMTOKEN	
SCANRequest / Option	optional	Groups form information	(group)	
SCANRequest / Option / Form	optional	Designates desired label option selected by customer. Enter one of the valid entries: '3152' generates PS Form 3152. '5630' generates PS Form 5630. For example: <Form>3152</Form>	string	enumeration=3152 enumeration=5630
SCANRequest / Revision	optional	This is for versioning of the API's and for triggering response tags for future versions. For future use.	string	minLength=0 pattern=\d{1}
SCANRequest / FromName	required once	Name of sender. For example: <FromName>Joe Smith</FromName>	string	
SCANRequest / FromFirm	required once	Company name. For example: <FromFirm>ABC Corp.</FromFirm>	string	

Tag Name	Occurs	Description	Type	Validation
SCANRequest / FromAddress1	required once	From address line 1. Denote apartment or suite number. For example: <FromAddress1>Apt. 3C</FromAddress1>	string	
SCANRequest / FromAddress2	required once	From address line 2. Denote street/structure number. For example: <FromAddress2>475 L'Enfant Plaza SW</FromAddress2>	string	
SCANRequest / FromCity	required once	From city. For example: <FromCity>Greenbelt</FromCity>	string	
SCANRequest / FromState	required once	From state. For example: <FromState>MD</FromState>	string	
SCANRequest / FromZip5	required once	From ZIP Code. Must be a valid ZIP5 Code. For example: <FromZip5>20770</FromZip5>	string	
SCANRequest / FromZip4	required once	From ZIP Code+4. For example: <FromZip4>1234</FromZip4>	string	
SCANRequest / Shipment	required once, repeating up to unbounded times	Groups shipment information	(group)	
SCANRequest / Shipment / PackageDetail	optional, repeating up to unbounded times	Groups package detail information	(group)	

Tag Name	Occurs	Description	Type	Validation
SCANRequest / Shipment / PackageDetail / PkgBarcode	required once	Individual package PICs. For example: <PkgBarcode>420202609101805213907 02413570 </PkgBarcode>	string	
SCANRequest / Shipment / PackageDetail / SpecialService	optional, repeating up to unbounded times	FOR FUTURE USE. Groups extra service information.	(group)	
SCANRequest / Shipment / PackageDetail / SpecialService / SpcServCode	required once	FOR FUTURE USE. If present, must be <SpcServFee>. From Extra Service Code table. For example: <SpcServCode>01</SpcServCode>	string	
SCANRequest / Shipment / PackageDetail / SpecialService / SpcServFee	required once	FOR FUTURE USE. Fee for Extra Service. For example: <SpcServFee>00275</SpcServFee>	string	
SCANRequest / Shipment / PackageDetail / EMail	optional	FOR FUTURE USE. Email address of acceptance scan event recipient. For example: <EMail>john.smith@abc.com</EMail>	string	
SCANRequest / MailDate	required once	Date of mailing/Carrier Pickup. This denotes date mail to be tendered to Postal Service. YYYYMMDD format. For example: <MailDate>20060103</MailDate>	string	
SCANRequest / MailTime	required once	Time of mailing/Carrier Pickup. This is an approximation. This denotes time of mail to be tendered to Postal Service. HHMMSS (24 hour) format. For example: <MailTime>143000</MailTime>	string	

Tag Name	Occurs	Description	Type	Validation
SCANRequest / EntryFacility	required once	ZIP Code of Postal Service facility. Populate/required only if different from <FromZip5>. For example: <EntryFacility>07067</EntryFacility>	string	
SCANRequest / ImageType	required once	The form image format desired. Enter one of the valid entries: "TIF" "PDF" "NONE" For example: <ImageType>TIF</ImageType>	string	enumeration=TIF enumeration=PDF enumeration=NONE
SCANRequest / CustomerRefNo	optional	Arbitrary number for customers own tracking or inventory systems, does not print to form or manifest with Product Tracking. May be any combination of alpha and numeric characters, up to a maximum of 30. For example:<CustomerRefNo>123456</CustomerRefNo>	string	
SCANRequest / CarrierPickup	optional	FOR FUTURE USE.	boolean	Default=false
	Note: whiteSpace=collapse processing is currently limited to trimming leading and trailing spaces.			

Sample Request

```
Test XML Request:
thttp://production.shippingapis.com/ShippingAPITest.dll?API=SCAN&XML=<SCANRequest USERID="xxx">
    <Option>
        <Form>5630</Form>
    </Option>
    <FromName>John Doe</FromName>
    <FromFirm>United States Postal Service</FromFirm>
    <FromAddress1></FromAddress1>
    <FromAddress2>475 L'Enfant Plaza SW, Room 1546</FromAddress2>
    <FromCity>Washington</FromCity>
    <FromState>DC</FromState>
    <FromZip5>20260</FromZip5>
    <FromZip4>1234</FromZip4>
    <Shipment>
```

```
    <PackageDetail>
        <PkgBarcode>LJ019027504US</PkgBarcode>
    </PackageDetail>
</Shipment>
<MailDate>20120719</MailDate>
<MailTime>080501</MailTime>
<EntryFacility>20260</EntryFacility>
<ImageType>TIF</ImageType>
<CustomerRefNo>123XYZ</CustomerRefNo>
</SCANRequest>
```

Response Descriptions

Tag Name	Occurs	Description	Type
SCANResponse	required once		(group)
SCANResponse / SCANFormNumber	required once	Electronic File Number	integer
SCANResponse / SCANFormImage	required once	Encoded image of PS Form 3152 or PS Form 5630.	base64Binary

Sample Response

Test XML Response:
<SCANResponse>
    <SCANFormNumber>CS20100914140609467066O949S</SCANFormNumber>
    <SCANFormImage>SUkqAAgAAAASAP4ABAABAAAAAAAAAABBAABAAAArgYAAAEBBA<!--65255 skipped--
>=</SCANFormImage>
</SCANResponse>EDGEWATER NJ 07020.

Error Responses

Error conditions are handled at the main XML document level. When parsing, it is best to check for an error document first before checking for good data. Error documents have the following format:

<Error>
  <Number></Number>
  <Source></Source>
  <Description></Description>
  <HelpFile></HelpFile>
  <HelpContext></HelpContext>
</Error>

Where:

- Number = the error number generated by the Web Tools server.
- Source = the component and interface that generated the error on the Web Tools server.

- Description = the error description.
- HelpFile = [reserved for future use].
- HelpContext = [reserved for future use].

Errors that are further down in the hierarchy also follow the above format.
An <Error> element may be returned at the top (response) level if there is a problem with the syntax of the request, or if a system error occurs.

If you need assistance with an error response, contact the Internet Customer Care Center uspstechnicalsupport@mailps.custhelp.com.

Tagged PS Form 3152 Diagram

UNITED STATES POSTAL SERVICE ®

**Confirmation Services
Certification**

Company Information

Company Name	Address *(Number, street, suite no.)*		
<FromFirm>	<FromAddress2><FromAddress1>		
Mailer ID	City	State	ZIP +4®
	<FromCity>	<FromState>	<FromZip5><FromZip4>

Electronic File

The electronic file submitted by the company shown above has been certified by the National Customer Support Center (NCSC) to be complete and accurate in both content and transmission and meet the requirements as defined in Publication 91, *Confirmation Services Technical Guide.*

Authorized Signature	Date Signed
<FromName>	<MailDate>

Barcoded Labels

The barcoded labels printed and submitted by the company shown above have been certified by the NCSC to meet the standards and specifications as prescribed in Publication 91 and the appropriate standards published by ANSI or AIM.

Authorized Signature	Date Signed
<FromName>	<MailDate>

Instructions for Mailer

Keep the original of this form in a safe place and provide a copy to your local USPS® facility if requested . If participating in the Product Performance Reports submit a PS Form 3152 with each mailing. In the space below place a GS1-128 barcode representing the electronic File Number from the Header Record. If you cannot print the barcode, fill in the sequence numbers and check digit (the last nine characters) from your electronic File Number. This information is in the Header Record of the electronic file.

Place the bar code here. OR write the sequence number and check digit of the electronic file in the spaces provided.

<SCANFormNumber>

Instructions for Acceptance Employee

If mailings are presented under an authorized manifest mailing system, verify payment of postage and fees, where applicable, using standard sampling procedures for pieces with extra services. In addition, check the barcode formatting for the following:

(1) Horizontal bars above and below the barcode.
(2) Human-readable numbers below the barcode.
(3) Depending on the Confirmation Service used, the words "USPS DELIVERY CONFIRMATION, "USPS DELIVERY CONFIRM," "USPS SIGNATURE CONFIRMATION," "USPS SIGNATURE CONFIRM," or "INSURED."

USPS®, Delivery Confirmation™, and Signature Confirmation™ are registered trademarks of the United States Postal Service®.

Date and Time of Verification	Date and Time of Mailing *(If different from date of verification)*

PS Form **3152,** April 2008   For information regarding our Privacy Policy visit *usps.com*

Tagged PS Form 5630 Diagram

UNITED STATES POSTAL SERVICE™

Shipment Confirmation Acceptance Notice

A. Mailer Action

Note To Mailer: The labels and volume associated to this form online, **must** match the labeled packages being presented to the USPS® employee with this form.

Shipment Date: ___<MailDate>___

Shipped From:

Name ___<FromName>___

Address ___<FromAddress2><FromAddress1>___

City ___<FromCity>___

State ___<FromState>___ ZIP+4® ___<FromZip5><FromZip4>___

Type of Mail	Volume
Express Mail Service®*	0
Priority Mail Service®	0
Global Express Guaranteed® (GXG)*	0
Express Mail International®*	0
Priority Mail International®	1
Other	0
Total Volume	1

*Start time for products with service guarantees will begin when mail arrives at the local Post Office'
and items receive individual processing and acceptance scans.

B. USPS Action

USPS EMPLOYEE: Please scan upon pickup or receipt of mail. Leave form with customer or in customer's mail receptacle.

USPS SCAN AT ACCEPTANCE

<SCANFormNumber>

PS Form **5630**, PSN 7530-08-000-4335, July 5, 2006

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