Merchant Returns
Web Service and API Guide

Document Version 1.7 (10/18/2023)

1.0	10/29/2019	New Format Application Enhancements: • Bulk Label Printing
1.1	03/31/2021	Application Enhancements: • Replace legacy <MerchantAccountID> tag based URL with new <MerchantAccountCode> based URL • Update Email Regex pattern to allow domain names with digits • Add/Correct Error Codes and messages • Added text as needed for clarification
1.2	10/29/21	Minor corrections • PostalMarkings corrected to PostalMarking • Page layout changed to horizontal to allow tag names to show in the table without word wrapping • Added TrackingNumber2 field to response structure • Updated error message 1071 • Added FAQ Question 25
1.3	11/19/21	Minor update • updated PostalMarking element description to explain it is only used for priorty mail. Removed PostalMarking from example
1.4	5/18/23	Hazmat Labels • Added <ContentType> tag • Added <ExtraServices> tag • Added <ExtraService>tag User Interface • Added user interface section describing how to use url parameters to pre-fill data values when using the Merchant Returns Website instead of the API
1.5	7/11/23	Removed: • First Class • Ground Added: • Priority Mail Express© Signature Requested Return Service • Priority Mail Express© Signature Waived Return Service • Ground Advantage© Return Service (Under One Pound) • Ground Advantage© Return Service (One Pound and over)

		User Interface • Added user interface section for “Under One Pound” and “Insurance” to the describe package page
1.6	7/20/23	Updated: • Zip codes starting 3 characters that indicate military or apo address. The net result has been to change 062,063,064,065,066 to 962,963,964,965,966
1.7	10/18/23	Updated: • Added Cubic tag o <ContainerType> o <LengthInches> o <WidthInches> o <HeightInches> • Added Cubic tier and size to the generated labels • Implemented Cubic validation • Implemented Cubic reporting in the Shipping Services File • Updated Error Codes

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USPS Merchant Returns API User Guide

1.0 Introduction

The United States Postal Service (USPS) Merchant Returns web service provides free and easy generation of USPS return labels for customers of merchants enrolled in the USPS Merchant Returns Program. After being enrolled and identifying a destination address for the return packages, merchants can provide return labels to their customers by using the free return label generation services provided by the USPS as described here.

These services can be utilized without ever leaving your website.

USPS Merchant Returns web services provides 2 ways to to generate labels.

- Merchants can utilize a customized url link that provides a web page interface so no API call is needed.
- Merchant applications can call the Application Programmer Interface (API) to directly generate one or more labels. Your server communicates through a USPS server over Hyper Text Transfer Protocol (HTTP)/s using eXtensible Markup Language (XML).

2.0 Acronyms & Abbreviations

The following Acronyms and Abbreviations are used within this user guide.

Table 2-1 Acronyms and Abbreviations

Acronym/Abbreviation	Definition
API	Application Programming Interface
CRID	Customer Registration ID
DMM	Domestic Mail Manual
HTTP	Hyper Text Transfer Protocol
HQ	Headquarters
ID	Identification

Acronym/Abbreviation	Definition
MID	Mailer Identifier
NOI	A label without instruction at the bottom
PRS	Parcel Return Service
PDF	Portable Document Format
PII	Personally Identifiable Information
TIF	Tagged Image Format
RMA	Return Merchandise Authorization (also known as “package information” or “packageInfo”
USPS	United States Postal Service
XML	eXtensible Markup Language

3.0 Label Generation Methods

This user guide provides instructions for the two ways to generate labels using the merchant returns application.

3.1.1 Website

The website is provided for those merchants that don’t want to or don’t have the resources to utilize the API. Each merchant receives a set of url links that lead to a label generation page. Merchants can add parameters to the url that pre-fill values

3.1.2 API

The API is for experienced programmers who are familiar with internet and website development tools and techniques. It is used to generate single or bulk returns shipping labels in either a TIF or PDF format.

An XML request must be built and sent to the USPS Merchant Returns web service. When the USPS Merchant Returns web service returns a response, it will either return a successful response document or an error document.

4.0 Label Specifications

For label specifications such as package dimensions, delivery information, etc., please refer to the Domestic Mail Manual (DMM).

5.0 Label Options

NOTE: It is up to the Merchant to work with a USPS Returns Administrator to select the Service Type and Label Size combinations available to the customer.

5.1.1 Display Type (CallCenter/Customer)

Both the Merchant Returns website and API utilize a display type. The only noticeable difference between the two is that a customer interface or API call is not allowed to specify an insurance service type or an insurance amount.

Table 5-1 Display Types

Allowed Display Types	Is Insurance Allowed?
CallCenter	Yes
Customer	No

5.1.2 Label Definitions

Merchant Returns can generate the following label sizes.

Table 5-2 Label Definitions

Label Definition	Single Website?	Bulk Website?	API?	Description
3X6	Yes	No	Yes	Label dimension in inches, full 8 ½ x 11 paper size
4X4	Yes	No	Yes	Label dimension in inches, full 8 ½ x 11 paper size
4X6	Yes	Yes	Yes	Label dimension in inches, full 8 ½ x 11 paper size
Zebra4X6	No	Yes	Yes	Label dimension in inches, image trimmed to contain label only. Allows for those utiilizing Zebra printers to print a 4X6 sized label without additional instructions or blank space included. The other label options are designed for printing in the standard 8 1/2 X 11 format. In order to print a label of the Zebra-4X6 size, the Label Format field must be set to “NOI” (No Instructions).

5.1.3 Label Formats

Merchant Returns can generate the following label formats.

Table 5-3 Label Formats

Label Format	Interface	Description
(blank or not present)	Website or API	Blank or not present is the default format. This is the only format allowed for the website. Leaving the <labelformat> tag off of an API request or setting the tag value to blank or spaces will generate a label with instructions. Refer to Figure 4 for an example.
NOI	API only	Generate one label per 8 ½” sheet with NO instructions at the bottom. Refer to Figure 5 for an example.
TWO	API only	Generates two labels on the same page, each with their own distinct RMA and Tracking Numbers. The double labels will share a Postal Routing number, as they are delivered to the same location. Refer to Figure 6 for an example.

5.1.4 Service Types

These service type codes can be used to generate specific mail class labels by the USPS Merchant Returns API. They can be further restricted by the merchant during account setup.

Table 5-4 Service Types

				NON-HAZMAT SERVICE TYPE CODES (Extra Service Codes)[Insurance Extra Service]			HAZMAT SERVICE TYPE CODES (Extra Service Codes)[Insurance Extra Service]			
Service Type & Extra Service Code	Ground only or air eligible?	Cubic allowed?	Mail Class	Non Insurance	Insurance <= $500	Insurance > $500	Hazmat Non Insurance	Hazmat Insurance <= $500	Hazmat Insurance > $500	Hazmat Division 6.2
Ground Advantage Lightweight	air / ground	NO	FC	020 (452)	597 (452)[930]	600 (452)[931]	187 (452, 857)	190 (452, 857)[930]	191 (452, 857)[931]	217 (452, 857)
Ground Advantage Heavyweight	Ground only	YES	FC	022 (452)	598 (452)[930]	601 (452)[931]	385 (452, 857)	388 (452, 857)[930]	399 (452, 857)[931]	218 (452, 857)
Priority Mail Return Service	air	YES	PM	019 (452)	596 (452)[930]	599 (452)[931]	037 (452, 857)	515 (452, 857)[930]	517 (452, 857)[931]	219 (452, 857)
Priority Mail Express Signature Return Service	air	NO	EX	796 (452, 981, 986)	797 (452, 981, 986)[925]		838 (452, 857, 981, 986)	839 (452, 857, 981, 986)[925]		x
Priority Mail Express Signature Waived Return Service	air	NO	EX	798 (452, 986)	x		837 (452, 857, 986)	x		x

5.1.5 Default Extra Service Codes

Table 5-5 Extra Service Codes

Code	Purpose
452	Tracking
857	Hazmat
925	Priority Mail Express® Insurance
930	Insurance <= $500
931	Insurance > $500
981	Priority Mail Express® Signature Requested
986	Priority Mail Express®

As shown in the chart in the “Service Types” section, these extra service codes are automatically assigned when the service code is selected. For instance, selecting “Priority Mail Express” service type with insurance > $500 will result in the following extra service codes being assigned: 452, 986, 981, 925

5.1.6 Hazmat Extra Service Codes

These extra service codes can be used to classify the type of hazmat included in the package for API requests. Only 1 hazmat extra service code is allowed per request. For more information about hazmat classification please visit https://www.usps.com/ship/shipping-restrictions.htm

Table 5-6 Hazmat Extra Service Codes

Code	Description	Class
810	Authorized perfumes with alcohol and limited quantities of hand sanitizer	Air Eligible Ethanol Package
811	Model rocket engines and igniters	Class 1 - Toy Propellant/Safety Fuse Package
812	Hand sanitizer, rubbing alcohol, ethanol base products, flammable liquids etc.	Hazardous Materials Class 3 Package
813	Radioactive materials like smoke detectors, night sights, minerals, etc.	Class 7 - Radioactive Materials Package
814	Certain cleaning or tree/weed killing compounds, etc.	Class 8 - Corrosive Materials Package

Code	Description	Class
815	Sealed lead acid batteries	Class 8 - Nonspillable Wet Battery Package
816	New Individual or spare lithium batteries (marked UN3480 or UN3090)	Class 9 - Lithium Battery Marked Ground Only Package
817	Used (opened) electronic devices that have lithium batteries	Class 9 - Lithium Battery – Returns Package
818	New (unopened) electronic devices with lithium batteries (marked UN3481 or UN3091)	Class 9 - Lithium batteries, marked package
819	Dry Ice (less than 5 lbs. if shipped via Air)	Class 9 - Dry Ice Package
820	New (unopened) electronic devices with lithium batteries (no marking)	Class 9 - Lithium batteries, unmarked package
821	Strong Magnets	Class 9 – Magnetized Materials Package
822	Safety/strike on box matches, book matches	Division 4.1 – Mailable flammable solids and Safety Matches Package
823	Hydrogen peroxide 8 to 20% concentration	Division 5.1 – Oxidizers Package
824	Organic Peroxides	Division 5.2 – Organic Peroxides Package
825	Pesticides, herbicides, etc. (with an LD50 of 50 mg/kg or less)	Division 6.1 – Toxic Materials Package
826	Lab test kits, COVID test kit returns	Division 6.2 - Hazardous Materials - Biological Materials
827	Small volumes of specifically excepted, air-eligible flammable liquids, corrosive, toxic or environmentally hazardous materials	Excepted Quantity Provision (marking required)
828	Items that are not listed, but are restricted to surface only	Ground Only Hazardous Materials

Code	Description	Class
829	Small amounts of air-eligible consumer products, including non-flammable aerosols, flammable combustible liquids, toxic substances, and miscellaneous hazardous materials.	ID8000 Consumer Commodity Package
831	Flammable liquids and aerosols in amounts that can’t go in planes, including fragrances, nail polish or remover, solvents, hand sanitizer, rubbing alcohol, ethanol base products, cosmetics, cleaning products, paints, disinfectants, hair spray, propane, butane, etc.	Limited Quantity Ground Package
830	Authorized Lighters	Lighters Package
832	Small amounts of hazardous materials that can be sent ground-only	Small Quantity Provision Package (markings required)

5.1.7 APO Address Hazmat Restrictions

MRA enforces an additional USPS restriction on hazmat types coming from APO Address. MRA considers an address APO if either:

- The state is "AA", "AE", "AP"
- The first 3 digits of the zip are in this list:

  "090", "091", "092", "093", "094", "095", "096", "097", "098", "099", "340", "962", "963", "964", "965", "966"

If the address is APO, then hazmat contents 820, 813, & 826 only are allowed.

5.1.8 CUBIC Tags, Markings and Pricing

MRA allows labels to be marked with the Cubic Postal Marking, tier, and Size. Label requests can specify Cubic. Marking a package cubic enables it for better shipping rates. Cubic packages:

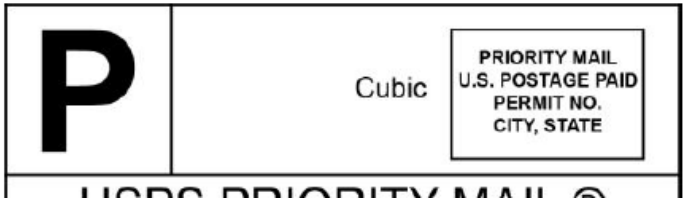
- Must be 20 lbs or under, weight in pounds and ounces is required.
- No dimension can be over 18”
- Dimensions are rounded down to the quarter inch
- Is only valid for USPS Ground Advantage™ 1 lb or over or USPS Priority Mail©.

If CUBIC is requested, the Container Type is required. It can be either “BOX” or “SOFTPACK”.

- For CUBIC SOFTPACK the total of the length and width dimensions can’t be more than 36”

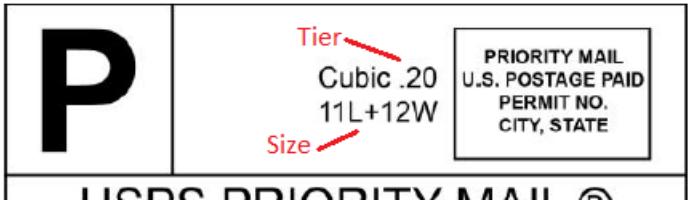
5.1.8.1 CUBIC Box

If ContainerType is “BOX”, then Length, Width and Height must be specified. BOX CUBIC markings on the label look like this:



5.1.8.2 CUBIC SOFTPACK

“SOFTPACK” is used for padded envelopes. If ContainerType is “SOFTPACK”, then Length and Width need to be specified. SOFTPACK CUBIC markings on the label look like this:



To determine Length, Width, and Height measure the length, width, and height at each dimension's maximum point, in inches. Round down each measurement to the nearest 1/4 inch. The only valid values will end in no decimal point, a decimal point, .0, .00, .25, .5, .50, .75. (e.g. 3, 3., 3.0, 3.00, 3.25, 3.5, 3.50, 3.75) Using the measurements given, the Cubic Tier is calculated and printed on the label.

More information about Cubic pricing can be found for

- Priority Mail at https://pe.usps.com/text/dmm300/223.htm
- Ground Advantage (using rates from the old Parcel Select) at https://pe.usps.com/text/dmm300/253.htm

6.0 Merchant Returns Website

The Merchant Returns website is a free service provided to merchants that totally removes the need for any API development. Simply providing your customers with a url as described in this section will allow them to generate a return label. This url can be emailed to your customer, or can be included in your company website for a seamless experience.

It is a recommended procedure that you generate a label with your company information to understand the process before sending any urls to your customers.

6.1.1 URLs

Each enrolled merchant will be provided with 4 urls. This is the minimum information that must be provided to get to the label website for a merchant. They will look similar to these. The "CallCenter" interfaces allow insurance, the"Customer" interfaces don't.

Single Label Call Center URL

http://returns.usps.com/Label/CreateSingle?Code=___YOUR_ACCOUNT_CODE_HERE____&DisplayType=CallCenter

Single Label Customer URL

http://returns.usps.com/Label/CreateSingle?Code=___YOUR_ACCOUNT_CODE_HERE____&DisplayType=Customer

Multiple Label Call Center Bulk URL

http://returns.usps.com/Label/CreateBulk?Code=___YOUR_ACCOUNT_CODE_HERE____&displayType=CallCenter

Multiple Label Customer Bulk URL

http://returns.usps.com/Label/CreateBulk?Code=___YOUR_ACCOUNT_CODE_HERE____&displayType=Customer

6.1.2 URL parameters

Merchants can add additional parameters to the url to pre-fill most values needed for creating the label. The hazmat information can't be bypassed, the customer must declare whether or not hazmat is included in the package. URL Parameters will pre-fill information on the label form for the customer.

Available URL parameters for ***single or bulk*** labels are:

Table 6-1 URL Parameters – Single or Bulk

Parameter	Allowed values	Description
address1	Alpha & Numeric	House/Building Number and Street
address2	Alpha & Numeric	Apartment/Suite number
city	City Name	City Name
customerEmail	name@domainName	Valid email address. See the email regex string below for detailed information
insuranceAmount	Decimal	Amount of insurance desired for package. Ignored without a valid insurance service type.
insuranceAnswer	YES,NO	Preselects the “Does the Package have insurance” button
labelDefinition	See label definition table	The size of the label. Limited to the allowed label definitions defined for this merchant account.
packageDescription	Alpha & Numeric	Describes content of package
name	Alpha	Customer Name
serviceType	See service type table	The mail service type desired. Limited to the allowed service types defined for this merchant account. Requires shippingInfoIncluded parameter
shippingInfoIncluded	YES, NO	Required to include service type and label definition. YES indicates serviceType and LabelDefinition url parameters are present. When desired value is NO parameter can be omitted.
state	2 Character State Abbreviation	State Abbreviation
UnderOnePoundAnswer	YES,NO	Preselects the “Does the Package have insurance” button
urbanization	Puerto Rico Urbanization	Urbanization associated with a Puerto Rico Address
zipCode	5 digits	USPS ZIP Code™

Available URL parameters for ***single*** labels are:

Table 6-2 URL Parameters – Single Only

Parameter	Allowed values	Description
packageInfo	Specified by merchant account setup	An identifying number or character sequence. Used by merchants to identify package. Also known as "RMA", "Return Merchant Authorization", "Invoice Number", "Order Number".

Available URL parameters for ***bulk*** labels are:

Table 6-3 URL Parameters – Bulk Only

Parameter	Allowed values	Description
BatchNumber	Specified by merchant account setup	An identifying number or character sequence. Used by merchants to identify the set of labels generated from this bulk request
ConfirmCRID	Your account CRID	Actual Customer Registration ID (CRID).
Quantity	Number between 2 and 100	Determines the number of label generated. Label requests with an odd quantity and the TWO format will produce one more label than requested.

6.1.3 Url Examples

When building the url, remember that all data and attribute values in this document are for illustration purposes; replace them with your actual values. For instance, a line of sample code may read:

Single label with Service and label type prefilled

http://returns.usps.com/Label/CreateSingle?Code=___YOUR_ACCOUNT_CODE_HERE____&DisplayType=CallCenter&ShippingInfoIncluded=yes&serviceType=019&labelDefinition=4X4

In this instance, replace "___YOUR_ACCOUNT_CODE_HERE____" with your merchants account code assigned when you enrolled in USPS Merchant Returns.

Single label with all possible values prefilled

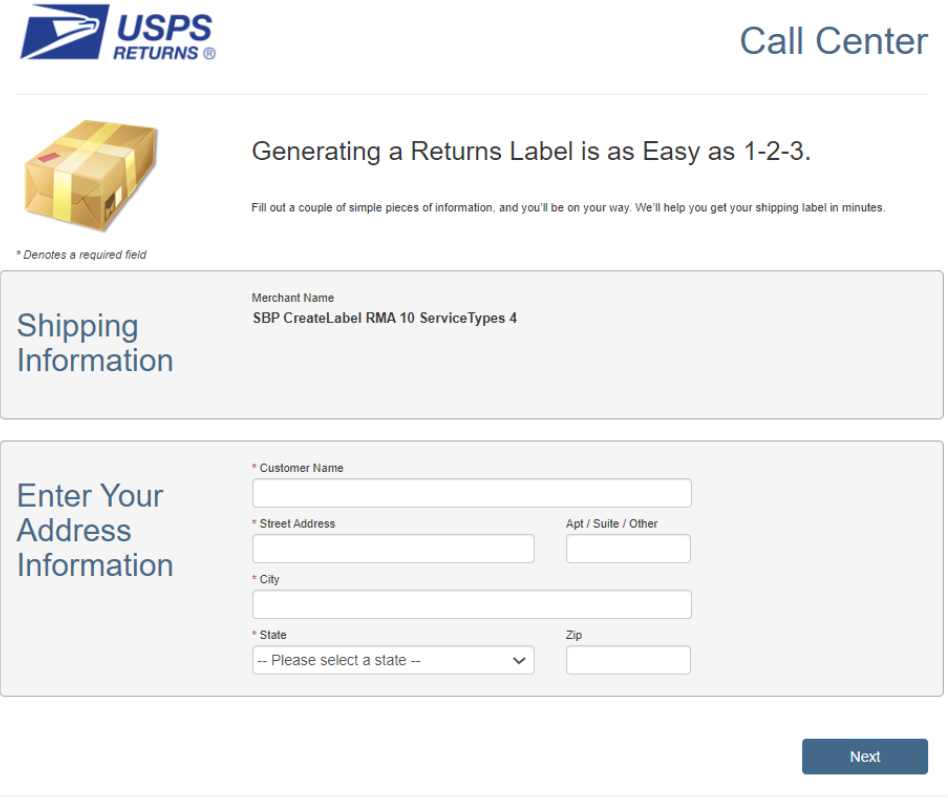
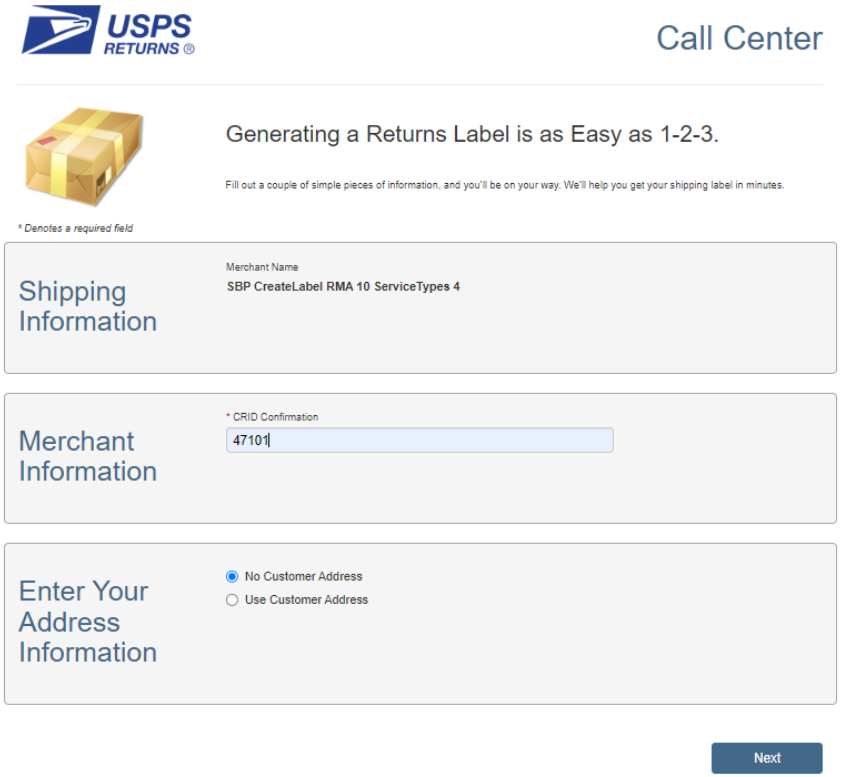
http://returns.usps.com/Label/CreateSingle?Code=___YOUR_ACCOUNT_CODE_HERE____&DisplayType=CallCenter&ShippingInfoIncluded=yes&serviceType=597&labelDefinition=4X4&packageInfo=123&packageDescription=shoes&insuranceAnswer=YES&insuranceAmount=200& UnderOnePoundAnswer=YES&name=John Smith&address1=123 Main ST&address2=101&city=WASHINGTON&state=DC&zipCode=20024&customerEmail=yourCustomer@yourcustomersemail.com

In this instance, also replace “John Smith” with the name, address and email of the person returning the package when making your request.

6.1.4 Web pages

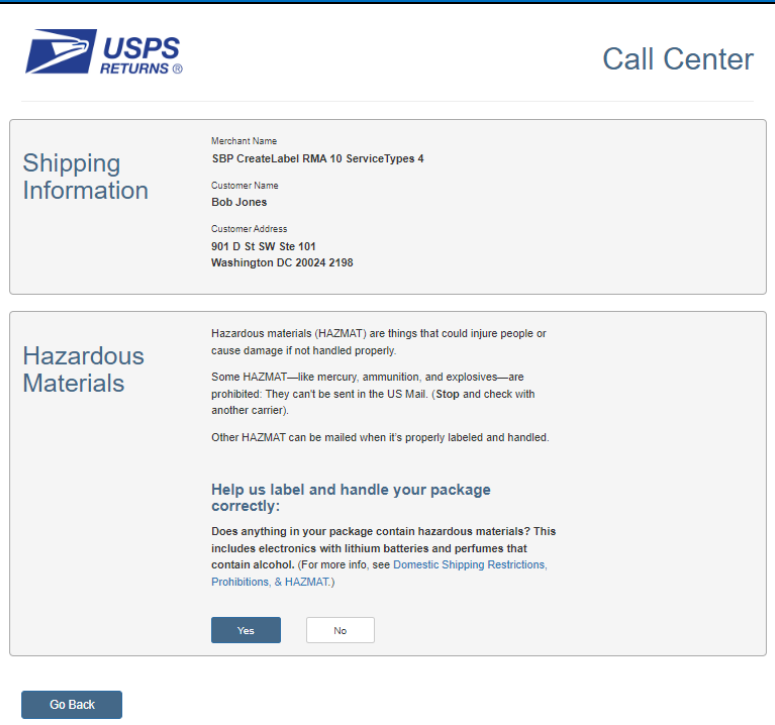
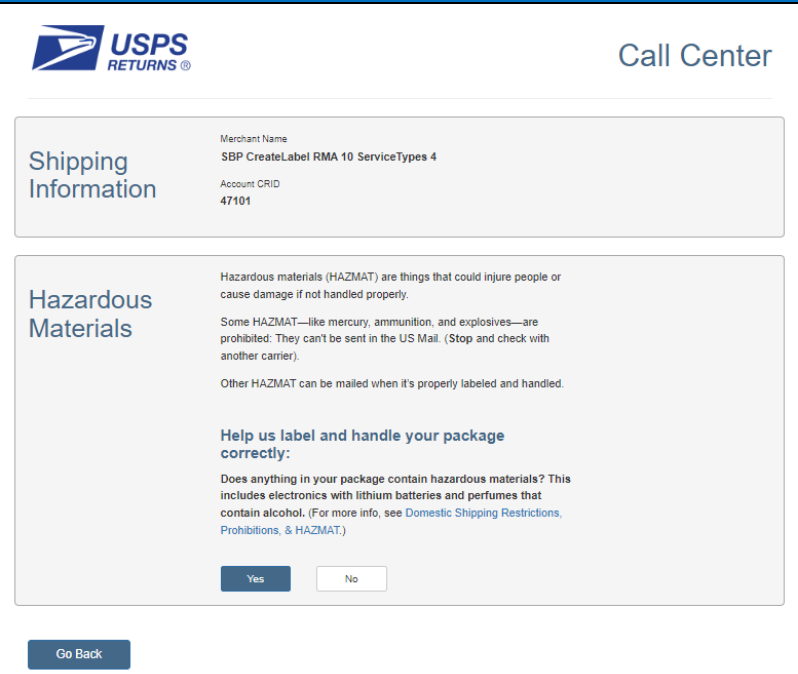
6.1.4.1 Start Page - Address

Entering a military/diplomatic address restricts the Hazmat types shown on the next page. Bulk requires a CRID and does not require a customer address.

SINGLE	BULK
	

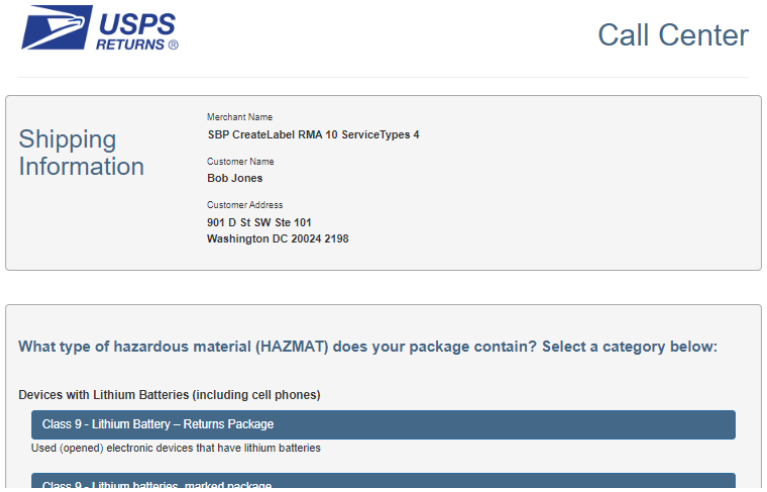
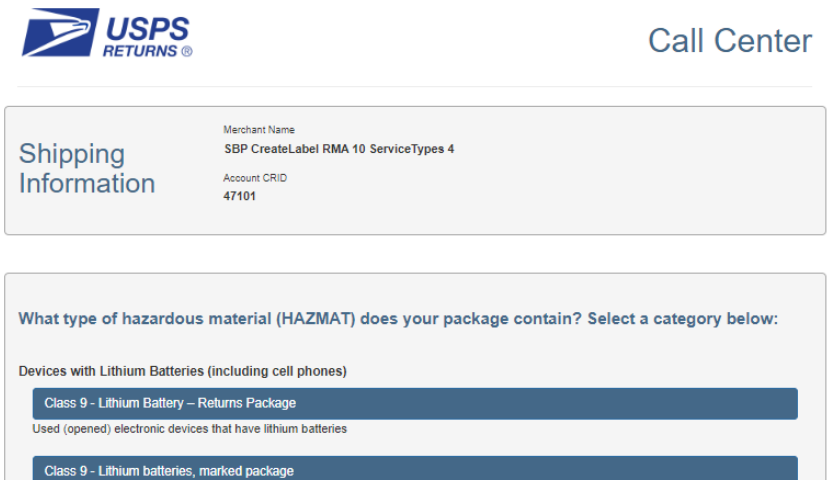
6.1.4.2 Hazmat Page - Yes/No

Is the same for single or bulk

SINGLE	BULK
	

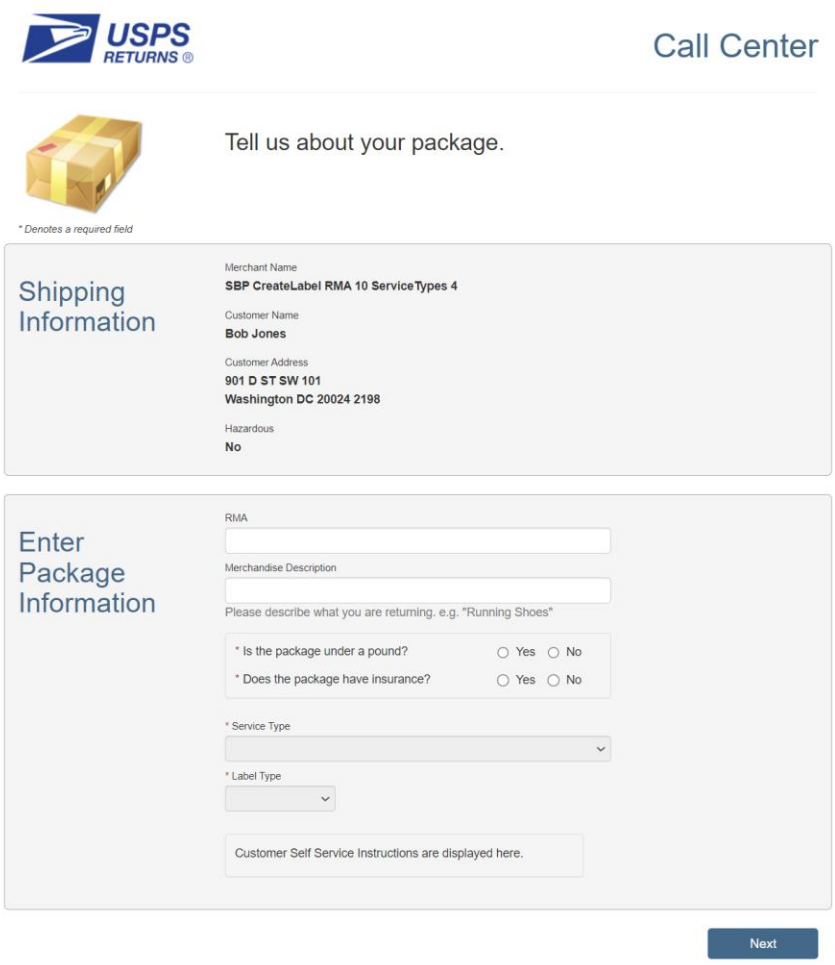
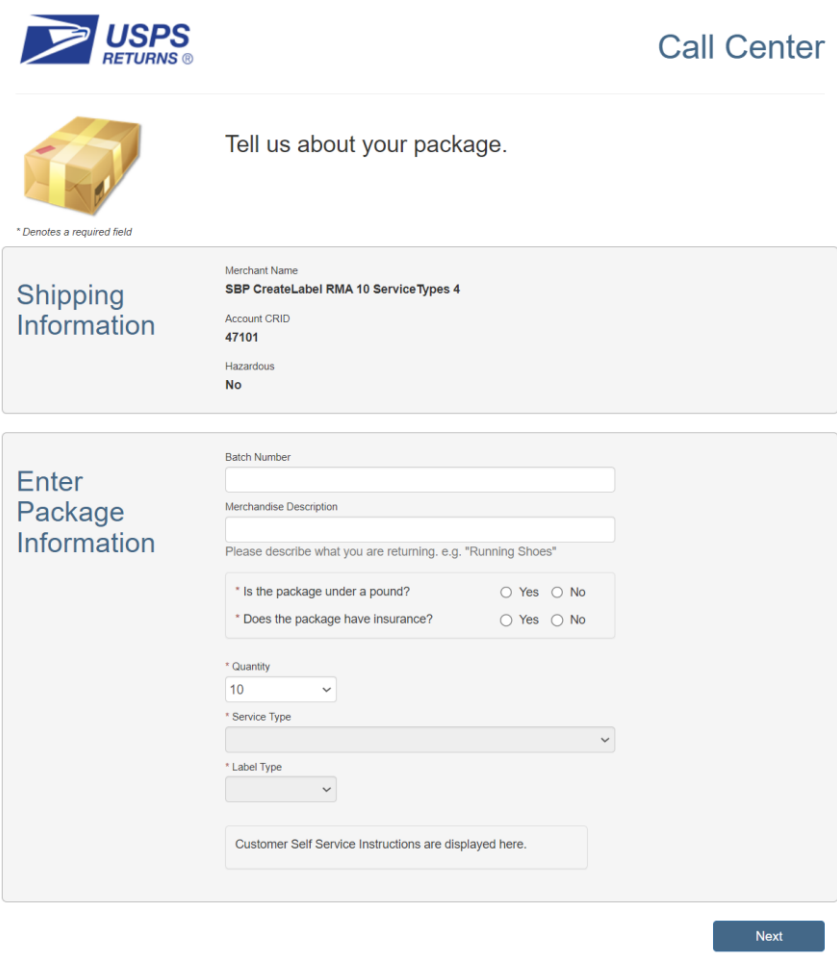
6.1.4.3 Hazmat Page - Selection

Is the same for single or bulk. Will be skipped if the previous answer is “No”. These images show a small portion of the actual list shown.

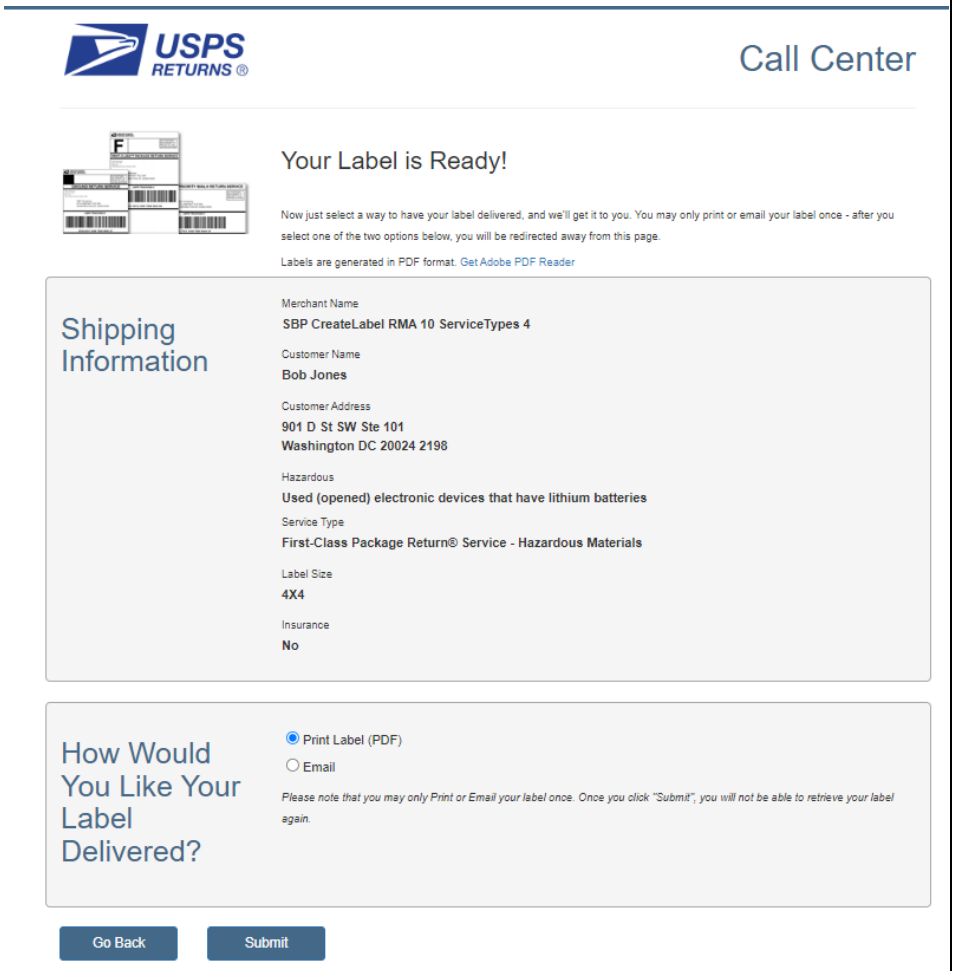
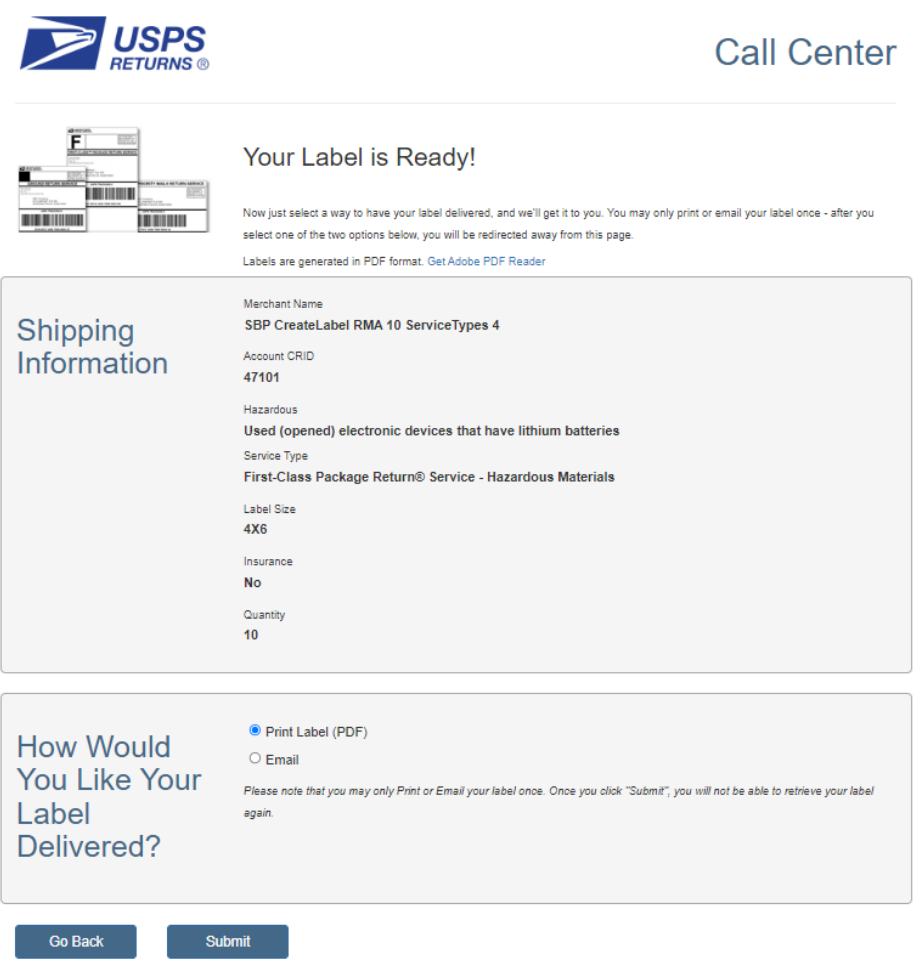
SINGLE	BULK
	

6.1.4.4 Describe Package Page

On this page, once the questions are answered, the service and label types dropdowns are limited by your merchant account preferences, hazmat type (or none) selected, and the answers to the Hazmat Yes/No and specific hazmat type on the previous. You can refer to the STC and ESC charts above to determine the expected drop down values.

SINGLE	BULK
	

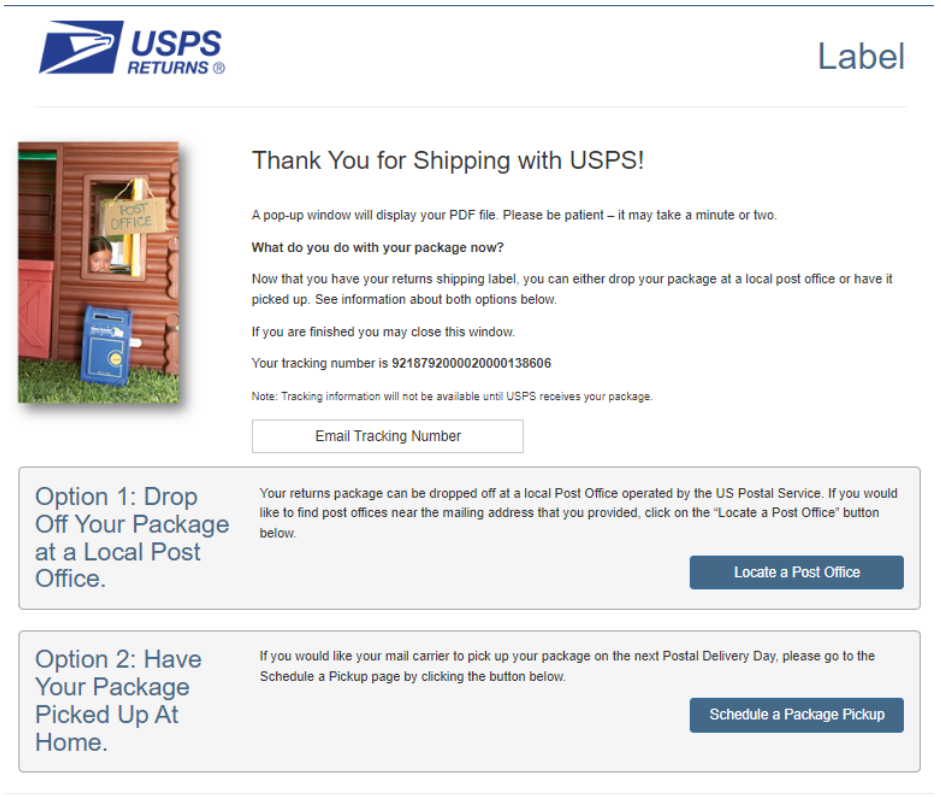
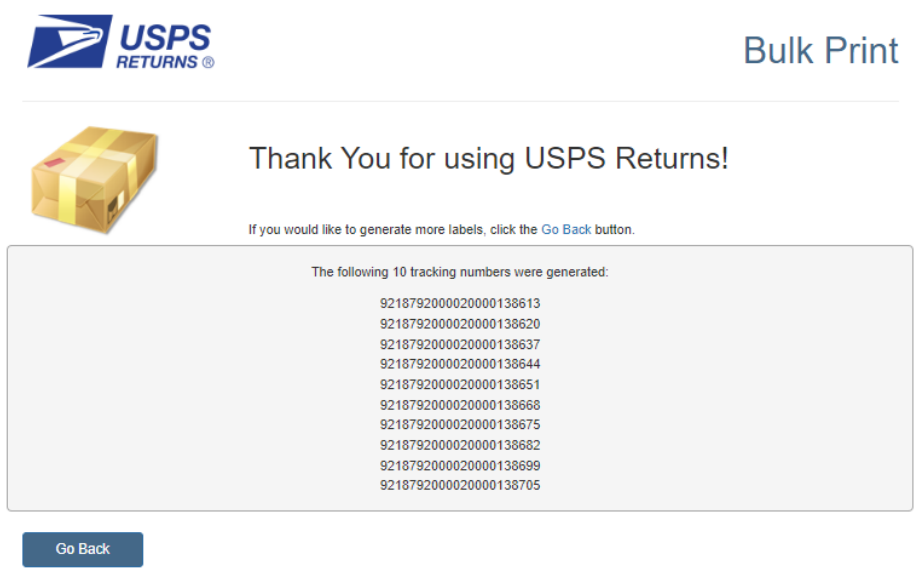
6.1.5 Review Page

SINGLE	BULK
	

6.1.6 Show Label Page

If previous delivery option was “Print Label”, then a popup window will appear with the label in PDF form. Bulk and any customer addresses that only provide a valid zip code (such as military/diplomatic) will not see the “Have your package picked up at home” option.

Choosing “Locate a Post Office” or “Schedule a Package Pickup” will take the customer to the standard usps.com website to complete those tasks.

SINGLE	BULK
	

7.0 Merchant Returns Services API

7.1.1 General guidelines

It is important to note that if an incorrect value is entered, an error message is returned. Also, be aware of the maximum character amounts allowed for some tags. If the user enters more than those amounts, an error is not generated. ***The web service 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 delivery.

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

<CustomerName>John Smith</CustomerName>

In this instance, replace "John Smith" with the name of the person returning the package when making your request.

7.1.2 XML Overview

XML uses a hierarchical (tree) element structure. Each element consists of a start tag (i.e. <Name>) and an end tag (i.e. </Name>), between which can be data and other elements.

TIP: <Name/> is shorthand for <Name></Name>, an element with no data.

All data and attribute values in this document are for illustration purposes and are to be replaced by the actual values. Developers must use the order and case for tag names of the sample code contained in this document. The tabs and carriage returns in the XML structures are for readability only; there is no need for white space in the actual code.

TIP: Case of the starting and end tags must match. <NAME></Name> will cause an error.

For more information about XML, browse the following websites:

- W3C
- XML.com

7.1.3 Single API Signature

Table 7-1 Single API Signature

Scheme	Host	Path	Method	XML
https://	returns.usps.com	/services	/GetLabel?	externalReturnLabelRequest=(see Request Parameters below)

7.1.4 Bulk API Signature

Table 7-2 Bulk API Signature

Scheme	Host	Path	Method	XML
https://	returns.usps.com	/services	/GetBulkLabels?	externalReturnLabelRequest=(see Request Parameters below)

7.1.5 Request Parameters used in either single or bulk requests

Table 7-3 Request Parameters

Tag Name	Occurs	Description	Type	Validation
ExternalReturnLabelRequest	required	Wrapping tag around data portion of the request	group	
CustomerName	required	Name of customer returning package.	string	minLength=1 maxLength=32
CustomerAddress1	required	Address of customer returning the package.	string	minLength=1 maxLenght=32
CustomerAddress2	optional	Secondary address unit designator/number of customer returning the package. (i.e. an apartment or suite number APT 202, STE 100).	string	minLength=0 maxLength=32

Tag Name	Occurs	Description	Type	Validation
CustomerCity	required	City of customer returning the package.	string	minLength=1 maxLength=20
CustomerState	required	State of customer returning the package.	string	length-2
CustomerZipCode	required when addressoverride notification tag is true required when AddressValidation tag is false	ZIP Code of customer returning the package.	string	Pattern=\d{5}
CustomerUrbanization	optional	Urbanization of customer returning the package (only applicable to Puerto Rico addresses).	string	minLenth=0 maxLength=32
MerchantAccountCode	required	Identification code of Merchant Account in the Merchant Returns system (to be assigned when a merchant is onboarded by a USPS administrator). Determines system response for Return Address, Package Information type (e.g. Invoice #), etc.	string	Length=32
MID	required	The MID of the merchant. The MID used must be the MID associated with the Merchant Account Code passed with the request.	integer	length=6 or 9

Tag Name	Occurs	Description	Type	Validation
CompanyName	optional	The name of the company to which the package is being returned.	string	minLength=0 maxLength=38
Attention	optional	The intended recipient of the returned package (i.e. Returns Department).	string	minLength=0 maxLength=38
PostalMarking	optional	Format in which the labels have the Postal Marking to left of the indicia. Labels with PostalMarking must be Priority Mail.	string	enumerations: • CUBIC
ContainerType	optional	Indicates the type of package being mailed. Required when PostalMarking = “CUBIC”	string	enumerations: • BOX • SOFTPACK
LengthInches	optional	Length of package in inches rounded down to the nearest quarter inch. Required when PostalMarking = “CUBIC”	string	Decimal number. 5 digits max.
WidthInches	optional	Width of package in inches rounded down to the nearest quarter inch. Required when PostalMarking = “CUBIC”	string	Decimal number. 5 digits max.

Tag Name	Occurs	Description	Type	Validation
HeightInches	optional	Height of package in inches rounded down to the nearest quarter inch. Required when ContainerType = “Box”	string	Decimal number. 5 digits max.
WeightLb	optional	Pounds portion of package weight. Required when PostalMarking = “CUBIC”	string	Integer from 0 to 70. • When combined with weightoz must be between 1 oz and 70lbs.
WeightOz	optional	Ounce portion of package weight. Required when PostalMarking = “CUBIC”	string	Integer from 0 to 15. • When combined with weightLb must be between 1 oz and 70lbs.
BlankCustomerAddress	optional	Format in which the labels have the “From” address being just three horizontal lines.	boolean	Lowercase “true” or “false”
LabelFormat	required	Format in which the label(s) is printed.	string	enumerations: • Null, blank, or not present (“Instructions”) • NOI (“No Instructions”) • TWO (“Double Label”)
LabelDefinition	required	Size of the label. (e.g. 4X6).	string	**Uppercase:** enumeration=4X6 enumeration=Zebra-4X6 enumeration=4X4 enumeration=3X6
ServiceTypeCode	required	Service type of the label as specified in the merchant profile setup.	integer	Pattern=\d{3} enumerations: • See ServiceTypes section

Tag Name	Occurs	Description	Type	Validation
MerchandiseDescription	optional	Description of the merchandise.	string	minLength=0 maxLength=255
InsuranceAmount	required depending on servicetypecode provided	Insured amount of package.	decimal string	pattern=^(1-5000)
AddressOverrideNotification	required	Override address if more address information is needed or system cannot find address. If the AddressOverrideNotification tag value is true then any address error from WebTools is bypassed and a successful response is returned.	boolean	Lowercase “true” or “false”
PackageInformation	optional	Value of package information (e.g. “484880”). Package information can be one of three types: RMA, Invoice or Order Number. This appears on the generated label.	string	maxlength depends on merchant profile setup (maxLength <=17)
PackageInformation2	optional	Value of package information (e.g. “484880”). Package information can be one of three types: RMA, Invoice or Order Number. This appears on the second label generated when the LabelFormat “TWO” is selected.	string	maxlength depends on merchant profile setup (maxLength <=17)

Tag Name	Occurs	Description	Type	Validation
CallCenterOrSelfService	required	Used to determine if the returns label request is coming from a merchant call center agent or an end customer.	string	Enumeration • CallCenter • Customer
ImageType	optional	Used to select the format of the return label. If the ImageType tag is blank or unrecognized, the default format is a PDF.	string	Enumeration: • PDF • TIF
AddressValidation	optional	Used to override the validation of the customer address. If the AddressValidation tag is true or left blank, the address is validated against WebTools; if it is false, the system bypasses the validation.	boolean	Lowercase • true • false
SenderName	optional	“From:” name in an email sent by the system containing the returns label attachment. Defaults to “Merchant Returns” if a recipient name is entered and a sender name is not.	string	
SenderEmail	optional	“From:” email address in an email sent by the system containing the returns label attachment and message, Defaults to DONOTREPLY@USPSReturns.com if a recipient email is entered and a sender email is not.	string	See “Email Validation Pattern” section below

Tag Name	Occurs	Description	Type	Validation
RecipientName	optional	“To:” name in an email sent by the system containing the returns label attachment.	string	
RecipientEmail	optional	“To:” email address in an email sent by the system containing the returns label attachement and message.	string	See “Email Validation Pattern” section below
RecipientBCC	optional	“BCC:” email address in an email sent by the system containing the returns label attachment and message.		See “Email Validation Pattern” section below

7.1.6 Email Validation Pattern

Table 7-4 Email Validation Pattern

Email must match both of the following Regex patterns
\A[a-z0-9]+([-._][a-z0-9]+)*@([a-z0-9]+(-[a-z0-9]+)*\.)+[a-z]{2,20}\z
^(?=.{1,64}@.{4,64}$)(?=.{6,100}$).*

7.1.7 Additional Request Parameters Required for GetBulkLabels Requests

Bulk Label requests use all of the common parameters along with the following:

Table 7-5 Bulk Request Required Parameters

Tag Name	Occurs	Description	Type	Validation
ConfirmCRID	required	Actual Customer Registration ID (CRID).	integer	length=5
Quantity	required	Total number of bulk labels.	integer	value=between 2 and 100

7.1.8 Hazmat Tags

If the package is hazardous materials, a <ContentType> tag with the value of HAZMAT must be provided. When a package is marked hazardous materials, it is required to provide one and only one hazmat code in an <ExtraService> tag. Other service tags can be included, but if not present the default tags for the selected service type will be automatically added.

```
<ContentType>HAZMAT</ContentType>
 <ExtraServices>
    <ExtraService>812</ExtraService>
 </ExtraServices>
```

7.1.9 Cubic Tags

If cubic pricing is desired, either (but not both) of these sets of tags can be added to the request. The only valid values for measurements will be rounded to the nearest quarter inch and will end in no decimal point, a decimal point, .0, .00, .25, .5, .50, .75. (e.g. 3, 3., 3.0, 3.00, 3.25, 3.5, 3.50, 3.75)

If <PostalMarking> is used, it must be set to "CUBIC" and <ContainerType> is required.

7.1.9.1 CUBIC "BOX" Container

If ContainerType is "BOX", then 3 dimensions of the box (Length, Width, Height) are required so they can be used in the cubic dimension calculation.

<PostalMarking>CUBIC>/PostalMarking>

<ContainerType>BOX</ContainterType>

<LengthInches>8.25</LengthInches>

<WidthInches>5.75</WidthInches>

<HeightInches>2</HeightInches>

7.1.9.2 CUBIC "SOFTPACK" Container

If ContainerType is "SOFTPACK", then only 2 dimensions of the box (Length, Width) are required – height is not used in the cubic dimension calculation.

<PostalMarking>CUBIC>/PostalMarking>

<ContainerType>SOFTPACK</ContainterType>

<LengthInches>8.25</LengthInches>

<WidthInches>5.75</WidthInches>

8.0 Merchant Returns Request API Examples

NOTE

The request examples provided below allow users to test the USPS Returns web service and generate sample single labels for a test merchant "USPS HQ Returns" and for the following desination:

475 L'Enfant Plaza SW, Room 5411
Washington, DC 20260-0004

Your Returns tool onboarding must be completed by **a USPS administrator** in order to test the web service with your own information. Once a USPS administrator has set up an account for you, they are able to input your information (destination address, services offered to customers, etc.) and you are provided a new Merchant Account Code. You do not have the ability to self-register or make changes to your account.

You can test the examples by copying the full request, replacing the accountCode, MID and CRID and pasting it into an internet browser.

8.1.1 API Single Request Example

```
https://returns.usps.com/services/GetLabel?externalReturnLabelRequest=
<ExternalReturnLabelRequest>
 <CustomerName>Nash Rambler</CustomerName>
 <CustomerAddress1>475 L'Enfant Plaza SW</CustomerAddress1>
 <CustomerAddress2>Rm 5411 </CustomerAddress2>
 <CustomerCity>Washington</CustomerCity>
 <CustomerState>DC</CustomerState>
 <CustomerZipCode>20260</CustomerZipCode>
 <MerchantAccountCode>YourMerchantAccountCodeHere</MerchantAccountCode>
 <MID>YourMIDHere</MID>
 <LabelDefinition>4X6</LabelDefinition>
 <ServiceTypeCode>019</ServiceTypeCode>
 <MerchandiseDescription></MerchandiseDescription>
 <InsuranceAmount></InsuranceAmount>
 <AddressOverrideNotification>true</AddressOverrideNotification>
 <PackageInformation></PackageInformation>
 <PackageInformation2></PackageInformation2>
 <CallCenterOrSelfService>Customer</CallCenterOrSelfService>
 <CompanyName></CompanyName>
 <Attention></Attention>
 <SenderName></SenderName>
 <SenderEmail></SenderEmail>
 <RecipientName></RecipientName>
 <RecipientEmail></RecipientEmail>
 <RecipientBCC></RecipientBCC>
</ExternalReturnLabelRequest>
```

8.1.2 API Single Hazmat Request Example

```
https://returns.usps.com/services/GetLabel?externalReturnLabelRequest=
<ExternalReturnLabelRequest>
 <CustomerName>Nash Rambler</CustomerName>
 <CustomerAddress1>475 L'Enfant Plaza SW</CustomerAddress1>
 <CustomerAddress2>Rm 5411 </CustomerAddress2>
 <CustomerCity>Washington</CustomerCity>
 <CustomerState>DC</CustomerState>
 <CustomerZipCode>20260</CustomerZipCode>
 <MerchantAccountCode>YourMerchantAccountCodeHere</MerchantAccountCode>
 <MID>YourMIDHere</MID>
 <LabelDefinition>4X6</LabelDefinition>
 <ServiceTypeCode>0385</ServiceTypeCode>
 <ContentType>HAZMAT</ContentType>
 <ExtraServices>
    <ExtraService>812</ExtraService>
 </ExtraServices>
 <MerchandiseDescription></MerchandiseDescription>
 <InsuranceAmount></InsuranceAmount>
 <AddressOverrideNotification>true</AddressOverrideNotification>
 <PackageInformation></PackageInformation>
 <PackageInformation2></PackageInformation2>
 <CallCenterOrSelfService>Customer</CallCenterOrSelfService>
 <CompanyName></CompanyName>
 <Attention></Attention>
 <SenderName></SenderName>
 <SenderEmail></SenderEmail>
 <RecipientName></RecipientName>
 <RecipientEmail></RecipientEmail>
 <RecipientBCC></RecipientBCC>
</ExternalReturnLabelRequest>
```

8.1.3 API Single Cubic Request Example

```
https://returns.usps.com/services/GetLabel?externalReturnLabelRequest=
<ExternalReturnLabelRequest>
 <CustomerName>Nash Rambler</CustomerName>
 <CustomerAddress1>475 L'Enfant Plaza SW</CustomerAddress1>
 <CustomerAddress2>Rm 5411 </CustomerAddress2>
 <CustomerCity>Washington</CustomerCity>
 <CustomerState>DC</CustomerState>
 <CustomerZipCode>20260</CustomerZipCode>
 <MerchantAccountCode>YourMerchantAccountCodeHere</MerchantAccountCode>
 <MID>YourMIDHere</MID>
 <LabelDefinition>4X6</LabelDefinition>
 <ServiceTypeCode>019</ServiceTypeCode>
 <PostalMarking>CUBIC</PostalMarking>
 <ContainerType>BOX</ContainerType>
 <LengthInches>10.25</LengthInches>
 <WidthInches>9</WidthInches>
 <HeightInches>2.75</HeightInches>
 <WeightLb>1</WeightLb>
 <WeightOz>5</WeightOz>
 <MerchandiseDescription></MerchandiseDescription>
 <InsuranceAmount></InsuranceAmount>
 <AddressOverrideNotification>true</AddressOverrideNotification>
 <PackageInformation></PackageInformation>
 <PackageInformation2></PackageInformation2>
 <CallCenterOrSelfService>Customer</CallCenterOrSelfService>
 <CompanyName></CompanyName>
 <Attention></Attention>
 <SenderName></SenderName>
 <SenderEmail></SenderEmail>
 <RecipientName></RecipientName>
 <RecipientEmail></RecipientEmail>
 <RecipientBCC></RecipientBCC>
</ExternalReturnLabelRequest>
```

8.1.4 API Bulk Request Example

```
https://returns.usps.com/Services/GetBulkLabels?externalReturnLabelRequest=
 <ExternalReturnLabelRequest>
 <CustomerName>Nash Rambler</CustomerName>
 <CustomerAddress1>475 L'Enfant Plaza SW</CustomerAddress1>
 <CustomerAddress2>Rm 5411 </CustomerAddress2>
 <CustomerCity>Washington</CustomerCity>
 <CustomerState>DC</CustomerState>
 <CustomerZipCode>20260</CustomerZipCode>
 <MerchantAccountCode>YourMerchantAccountCodeHere</MerchantAccountCode>
 <MID>YourMIDHere</MID>
 <ConfirmCRID>YourCRIDHere</ConfirmCRID>
 <LabelDefinition>4X6</LabelDefinition>
 <LabelFormat></LabelFormat>
 <ServiceTypeCode>019</ServiceTypeCode>
 <WeightLB></WeightLB>
 <WeightOZ></WeightOZ>
 <MerchandiseDescription></MerchandiseDescription>
 <InsuranceAmount></InsuranceAmount>
 <AddressOverrideNotification>true</AddressOverrideNotification>
 <PackageInformation></PackageInformation>
 <Quantity>4</Quantity>
 <CallCenterOrSelfService>Customer</CallCenterOrSelfService>
 <CompanyName></CompanyName>
 <Attention></Attention>
 <SenderName>Merchant Returns</SenderName>
 <SenderEmail></SenderEmail>
 <RecipientName>Recipient</RecipientName>
 <RecipientEmail></RecipientEmail>
</ExternalReturnLabelRequest>
```

8.1.5 API Bulk Hazmat Request Example

```
https://returns.usps.com/Services/GetBulkLabels?externalReturnLabelRequest=
<ExternalReturnLabelRequest>
 <CustomerName>Nash Rambler</CustomerName>
 <CustomerAddress1>475 L'Enfant Plaza SW</CustomerAddress1>
 <CustomerAddress2>Rm 5411 </CustomerAddress2>
 <CustomerCity>Washington</CustomerCity>
 <CustomerState>DC</CustomerState>
 <CustomerZipCode>20260</CustomerZipCode>
 <MerchantAccountCode>YourMerchantAccountCodeHere</MerchantAccountCode>
 <MID>YourMIDHere</MID>
 <ConfirmCRID>YourCRIDHere</ConfirmCRID>
 <LabelDefinition>4X6</LabelDefinition>
 <LabelFormat></LabelFormat>
 <ServiceTypeCode>385</ServiceTypeCode>
 <ContentType>HAZMAT</ContentType>
 <ExtraServices>
    <ExtraService>812</ExtraService>
 </ExtraServices>
 <WeightLB></WeightLB>
 <WeightOZ></WeightOZ>
 <MerchandiseDescription></MerchandiseDescription>
 <InsuranceAmount></InsuranceAmount>
 <AddressOverrideNotification>true</AddressOverrideNotification>
 <PackageInformation></PackageInformation>
 <Quantity>4</Quantity>
 <CallCenterOrSelfService>Customer</CallCenterOrSelfService>
 <CompanyName></CompanyName>
 <Attention></Attention>
 <SenderName>Merchant Returns</SenderName>
 <SenderEmail></SenderEmail>
 <RecipientName>Recipient</RecipientName>
 <RecipientEmail></RecipientEmail>
</ExternalReturnLabelRequest>
```

8.1.6 API Bulk Cubic Request Example

```
https://returns.usps.com/Services/GetBulkLabels?externalReturnLabelRequest=
<ExternalReturnLabelRequest>
 <CustomerName>Nash Rambler</CustomerName>
 <CustomerAddress1>475 L'Enfant Plaza SW</CustomerAddress1>
 <CustomerAddress2>Rm 5411 </CustomerAddress2>
 <CustomerCity>Washington</CustomerCity>
 <CustomerState>DC</CustomerState>
 <CustomerZipCode>20260</CustomerZipCode>
 <MerchantAccountCode>YourMerchantAccountCodeHere</MerchantAccountCode>
 <MID>YourMIDHere</MID>
 <ConfirmCRID>YourCRIDHere</ConfirmCRID>
 <LabelDefinition>4X6</LabelDefinition>
 <LabelFormat></LabelFormat>
 <ServiceTypeCode>022</ServiceTypeCode>
 <PostalMarking>CUBIC</PostalMarking>
 <ContainerType>BOX</ContainerType>
 <LengthInches>10.25</LengthInches>
 <WidthInches>9</WidthInches>
 <HeightInches>2.75</HeightInches>
 <WeightLb>1</WeightLb>
 <WeightOz>5</WeightOz>
 <MerchandiseDescription></MerchandiseDescription>
 <InsuranceAmount></InsuranceAmount>
 <AddressOverrideNotification>true</AddressOverrideNotification>
 <PackageInformation></PackageInformation>
 <Quantity>4</Quantity>
 <CallCenterOrSelfService>Customer</CallCenterOrSelfService>
 <CompanyName></CompanyName>
 <Attention></Attention>
 <SenderName>Merchant Returns</SenderName>
 <SenderEmail></SenderEmail>
 <RecipientName>Recipient</RecipientName>
 <RecipientEmail></RecipientEmail>
</ExternalReturnLabelRequest>
```

9.0 Merchant Returns Service Response

9.1.1 Response Parameters

Table 9-1 Response Parameters

Tag Name	Occurs	Description	Type	Validation
ExternalReturnLabelResponse	required		group	
ReturnLabel	required	Base64 Encoded return label image (See “Decoding Base64” section below).		
PostalRouting	required	Postal Routing number package when return label is created.	string	Pattern=(^\d{8}$)\|(^\d{12}$)
TrackingNumber	required	Tracking Number of package when return label is created.	string	Pattern=(^\d{22}$)\|(^\d{26}$)
TrackingNumber2	Optional	Tracking Number of second label when a request with <LabelFormat>TWO</LabelFormat> is sent. Not included otherwise	string	Pattern=(^\d{22}$)\|(^\d{26}$)

9.1.2 Success Response Example

```
<ExternalReturnLabelResponse xmlns:xsd= “http://www.w3.org/2001/XMLSchema” xmlns:xsi=
“http://www.w3.org/2001/XMLSchema-instance>”
<ReturnLabel>JVBERixLjcKJdP0zOEKMSAwIG9iago8PAovQ3J1YXRpb25EYXR1KEQ6MjAxMTA5Mj
 …..[long label base64 text has been removed]
SCi9Sb29IDIgMCBSCi9TaXplIDcKPj4Kc3RhcnR4cmVmCjM3NDg2ngo1JUVPRgo=</ReturnLabel>
<PostalRouting>42021117119</PostalRouting>
<TrackingNumber>92044937883800030687</TrackingNumber>
</ExternalReturnLabelResponse>
```

The reponse contains a Base-64 encoded label. It also contains the postal routing number and the label tracking number. The tracking number is displayed on the label, below the barcode.

10.0 Merchant Return Error Message Response

In the event that the API does not successfully return a response with the return label and tracking number, an error message response is sent back to the requestor. This message is formatted as follows.

10.1.1 Error Message Response Parameters

Table 10-1 Error Message Response Parameters

Tag Name	Occurs	Description	Type	Validation
ExternalReturnLabelResponse	required		group	
Errors	required		group	
ExternalReturnLabelError	required		group	
InternalErrorNumber	required	Error number of an error coming from the Merchant Returns application (Refer to Section 6.0 for a full list of error codes).	integer	Pattern=^ [1000-5000]
InternalErrorDescription	required	Description of error number coming from the Merchant Returns Application.	string	
ExternalErrorNumber	optional	Error number of an error coming from an external system.	integer	
ExternalError Description	optional	Description of error number coming from an external system.	string	

10.1.2 Error Message Response Example

```
<ExternalReturnLabelErrorResponse xmlns:xsd= “http://www.w3.org/2001/XMLSchema” xmlns:xsi=
“http://www.w3.org/2001/XMLSchema-instance”>
<errors>
<ExternalReturnLabelError>
<InternalErrorNumber>1063</InternalErrorNumber>
<InternalErrorDescription>LabelDefinitionType isn’t found for this merchant profile</InternalErrorDescription>
      </ExternalReturnLabelError>
</errors>
</ExternalReturnLabelErrorResponse>
```

11.0 Merchant Returns Error Message Codes

NOTE

Error code 1071 is a response to the use of the following characters as part of the XML request: #,&, and <. Using any of these three characters affects the XML syntax and results in a malformed XML input.

Table 11-1 Error Message Codes

Code	Title	Description
1000	Quantity Invalid Error	Please enter a valid quantity between 1 and {0}. {0} is a required field and must not be empty.
1002	Required Field Error	{X} is a required field and must not be empty.
1006	Field Length Error	{X} must be (less than or) equal to {X} characters.
1037	WeightRequiredWhenContentTypeIsCubic	Weight is required when ContentType is "Cubic".
1040	CubicBoxTotalDimensionInvalid	[{0}] exceeds the total dimension of [{1}] inches for cubic boxes.

Code	Title	Description
1041	CubicBoxUnableToDetermineTier	Unable to determine tier for Cubic box with calculated dimension of [{0}].
1042	CubicSoftpackUnableToDetermineTier	Unable to determine tier for Cubic softpack with calculated dimension of [{0}].
1044	AccountDoesNotAllowCubic	This account does not allow Cubic packaging.
1045	ServiceTypeDoesNotAllowCubic	The selected Service Type does not allow Cubic packaging.
1046	CubicContainerTypeRequired	Container type is required when contentType is Cubic.
1047	CubicContainerTypeInvalid	[{0}] is not a valid container type.
1048	CubicMaxWeightExceeded	Package weight of [{0}] ounces exceeds cubic maximum weight of [{1}].
1052	DisplayTypeOptionNotAllowed	Display type option is not allowed
1053	CallCenterOrSelfServiceNotFound	CallCenterORSelfService must be only the values “CallCenter” and “Customer”.
1055	ZipCode	CustomerZipCode must be an integer.
1061	InsuranceNotAllowedForCustomerInterface	Insurance is not allowed for the Customer Interface.
1062	ServiceTypeNotFound	Service Type Code isn’t found for this merchant profile.
1063	LabelDefinitionType	LabelDefinition provided is incorrect. (This must be one of the label sizes specified for the Merchant Account)
1064	Invalid Postal Marking	This is an invalid Postal Marking value
1065	UnexpectedError	An unexpected error has occurred.
1066	PostalMarking	PostalMarking must be Priority Mail.
1067	PackageInformationLength	Use an alpha-numeric string (no spaces or special characters) of no more than {0} characters.
1067	InsuranceAmount	Insurance Amount must be less than {0}. or Insurance Amount must be greater than {0}.
1068	WeightLB	WeightLB must be less than 70 pounds.
1069	WeightOZ	WeightOZ must be less than 16 ounces.
1070	MerchantAccountIDNotFound	MerchantAccountID wasn’t found in the applications databse.

Code	Title	Description
1071	Malformed Xml Input	Malformed Xml Input:[specificMessageHere] Possible errors might be a misspelled tag, extra or missing '<' or '>' characters around tags, missing '/' starting an end tag, start and end tags that don't match, a data value that doesn't match the data type of the tag. Use all lowercase for true/false values.
1072	Invalid Email	The email address {X} is invalid.
1073	Recipient Email Missing	A recipient email address is required when a sender email is present.
1074	Email Not Sent	The system was not able to email the label.
1075	WeightTotal	Total weight max for this service type is {0} ounces.
1076	WeightTotalMin	Total weight minimum for this service type is {0} ounces.
1078	Label Format and Definition MisMatch	The LabelFormat provided does not match the LabelDefinition.
1079	Package Information2 for “TWO” label format error	PackageInformation2 is not valid when quantity is greater than 1.
1080	Package Information2 not allowed	PackageInformation2 is not allowed when LabelFormat is not "TWO".
1081	Package Information2 not allowed	PackageInformation2 is not allowed when PackageInformation is not present.
1082	DeprecatedCommandError	{0} has been deprecated.
1083	HazmatTypeNotAllowedFromMilitary	The hazmat type provided [{0}] is not allowed to/from military or diplomatic addresses.
1084	InvalidExtraServiceTypeCode	The extra service code(s) provided [{0}] is/are not valid.
1085	HazmatRequiresExtraServiceCode	Packages marked hazardous require a service code to identify the type of hazardous material being mailed.
1086	HazmatAllowedOneExtraServiceCode	Packages marked hazmat are allowed only 1 extra service code to identify the type of hazardous material being mailed. Received [{0}] as service codes.
1087	HazmatExtraServiceCodeNotAllowedWithoutHazmatContentType	The hazardous extra service code provided [{0}] is not allowed without the 'HAZMAT' content type.

Code	Title	Description
1088	HazmatContentRequiresHazmatServiceType	[{0}] is not a hazmat service type. If ContentType is 'HAZMAT' then the service type provided must be a hazmat service type.
1089	HazmatServiceTypeNotAllowedWithoutHazmatContentType	[{0}] is a hazmat service type. If ContentType is not 'HAZMAT' then the service type provided must NOT be a hazmat service type.
1090	HazmatAirServiceTypeNotAllowedWithGroundExtraServiceCode	[{0}] is an air only hazmat service type. [{1}] is a ground only hazmat extra service code.
1091	TooManyInsuranceExtraServiceCodes	Only one insurance extra service code is allowed, request contained [{0}].
1092	InsuranceExtraServiceCodeDoesNotMatchServiceType	For insurance service type {0} provided, expected extra service code of {1} but recieved {2}.
1093	DuplicateExtraServiceCodes	Duplicate extra service codes [{0}] were found in the request extra service codes provided [{1}]
1094	BiologicalExtraServiceCodeAndServiceTypeMustMatch	Provided Service Type [{0}] or Hazmat Extra Service Code [{1}] are not both Division6.2.
1100	CubicDimensionRequired	Length is required when contentType is Cubic.
1101	CubicDimensionRequired	Width is required when contentType is Cubic.
1102	CubicDimensionRequired	Height is required when contentType is Cubic.
1103	CubicDimensionMustBeQuarterInchOrDigitsOnly	Cubic dimensions must be integers or must end in quarter inch increments (.0, .00, .25, .50, .75) or be digits only.
1104	_CubicDimensionMaxLength	Length exceeds the maximum dimension of [{0}] inches for cubic packages.
1105	_CubicDimensionMaxWidth	Width exceeds the maximum dimension of [{0}] inches for cubic packages.
1106	_CubicDimensionMaxHeight	Width exceeds the maximum dimension of [{0}] inches for cubic packages.
2000	WebTools Address Standardization API Error	Multiple messages are possible: One examples is : Address entered was found but more information is needed (such as apartment, suite, or box number) to match to a specific address.
4001	MID Authorization Error	Authorization error. MID must correspond to MerchantAccountCode.
4002	CRID Authorization Error	Authorization error. CRID must correspond to MerchantAccountCode.
4003	LabelAttemptForDeactivatedMerchantAccount	A create label attempt was made for deactived account {0}

12.0 Proximity Routing Feature

Proximity Routing is a feature on the Returns tool intended for merchants who have multiple accounts that serve as different return locations. Proximity Routing allows the merchant to determine what destination address to print on the label, based on the distance of the customer to the merchants return location.

12.1.1 Web Service Request for Merchants with Proximity Enabled

One of the required web service request parameters is the Merchant Account Code (<MerchantAccountCode>). This Code is assigned to a merchant after they have onboarded an account on the Returns tool. With this Code, the system is able to identify the merchant's address information and selected label preferences (service type and label size) when the web service request is sent.

When proximity is enabled for a merchant with multiple return locations, one of the accounts is chosen as a default account. This account is designated by the merchant as the account with the label preferences that are available for web service requests. Since each onboarded account is provided with a unique Merchant Account Code , the default account provides the universal Code that should be used when making web service requests for proximity-enabled merchants.

NOTE

Proximity-enabled merchants who utilize the web service are provided with the Merchant Account Code of the default account. Merchants will also be notified of the label preferences (<Label Definition> and <Service Type Code>) availabel for that account. Failure to use the Merchant account Code of the default account could result in Label Definition and Service Type Code errors.

12.1.2 Proximity routing Example

Use the following diagram as a reference. Merchant "ABC Returns" has three different return locations (North Carolina, Texas, and California. Each of the return locations has different service types and label sizes selected in their admin console. Each account is also assigned a unique account Code. This Code is created once a merchant account is onboarded on the Returns tool.

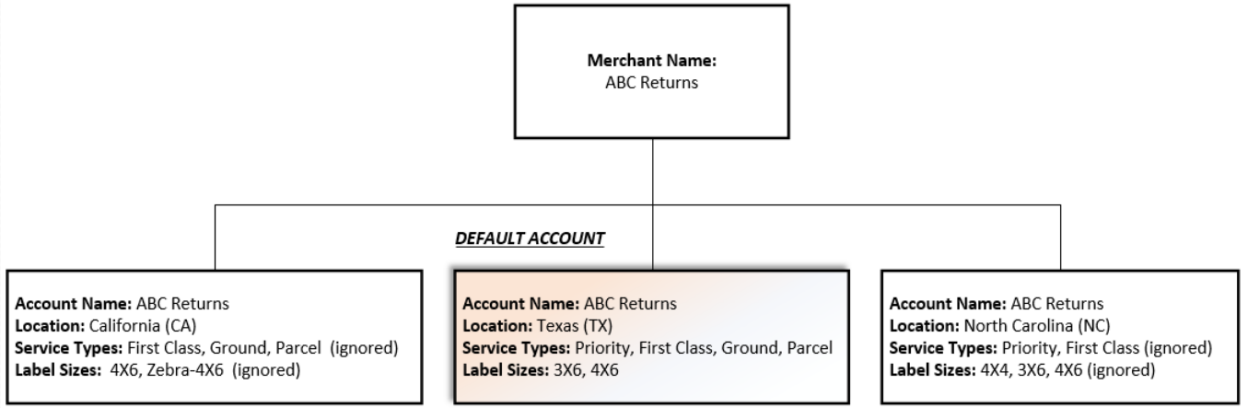


Figure 12-1 Proximity Routing Example

If ABC Returns decides to activate proximity routing with their default account (Texas) and is provided a Merchant Account Code, the merchant is expected to use this Code when making web service requests. It is also important that the request is sent with a service type (<Service Type Code>) and label size (<Label Definition>) available for the default account.

If the request is sent with a Merchant Account Code for the Texas account, but a 4X4 label size, the request results in an error. This is because the ABC Returns, Texas account only has 3X6 and 4X6 label sizes available.

The final destination of a package would be dynamically determined by shortest distance. A customer mailing a package from New York would have their package routed to North Carolina, whereas a customer mailing from Oregon would have their package routed to the California return address. Any error in distance calculation would result in the package being sent to the default account, in this case Texas.

In the event a returns address site is unavailable (such as natural disaster) the merchant can work with a USPS Administrator to temporarily deactivate the affected account, thus removing it from the proximity calculations.

NOTE

A request for a merchant utilizing proximity routing is exactly identical to the request example for non-proximity merchants. The method of sending a web service request does not change if the merchant has Proximity Routing enabled.The only difference in the request is that a user will use the Merchant Account Code, Label Definition, and Service Type Code available for the default account.

NOTE

The Proximity Routing feature cannot be utilized on labels printed in the “Double Label” format. <LabelFormat>TWO</LabelFormat> The API places blank lines in the sender or “To” address section of the field and therefore does not capture the customer’s origin ZIP code. Without such origin ZIP information, the system cannot determine which return location is closest to the customer and therefore the proximity routing feature is ineffective.

13.0 Decoding Base64

The web service response is returned as an XML structure. The label generated is in PDF or TIF format, depending on the image type (<ImageType>) used in the request. The <ReturnLabel> tag contains the label and is Base-64 encoded for transport over the internet. The Base-64 encoded label must be decoded using a Base-64 decoder to obtain the return label.

Base64 encoding takes 6 bits at a time and converts them to a hexadecimal number. Many programming libriaries exist that can decode this for you.

As part of debugging your application, you can paste the full API request into a browser. The response will be in XML as described above. You can then search the web for a base64 decoder and give it the response data in the <ReturnLabel> tag.

When you decode the label, be sure to only decode the data between the <ReturnLabel> and </ReturnLabel> tags.

14.0 Sample Labels

Displayed in the following pages are examples of each label size layout as well as examples of each format type:

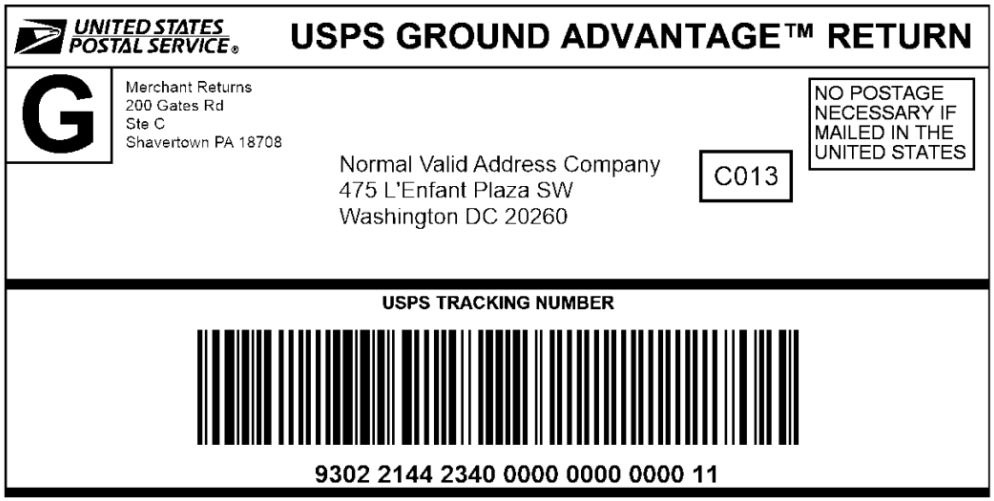


Figure 14-1 - 3X6 Label Layout

Figure 14-2 - 4X4 Label Layout

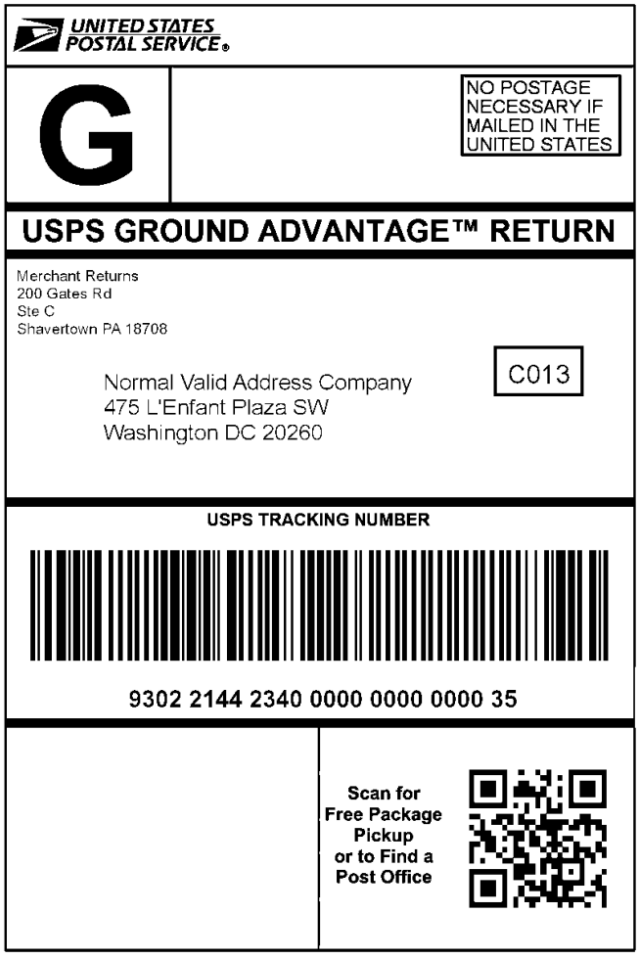


Figure 14-3 – 4X6 and Zebra 4X6 Layout

Figure 14-4 – Label with Instructions

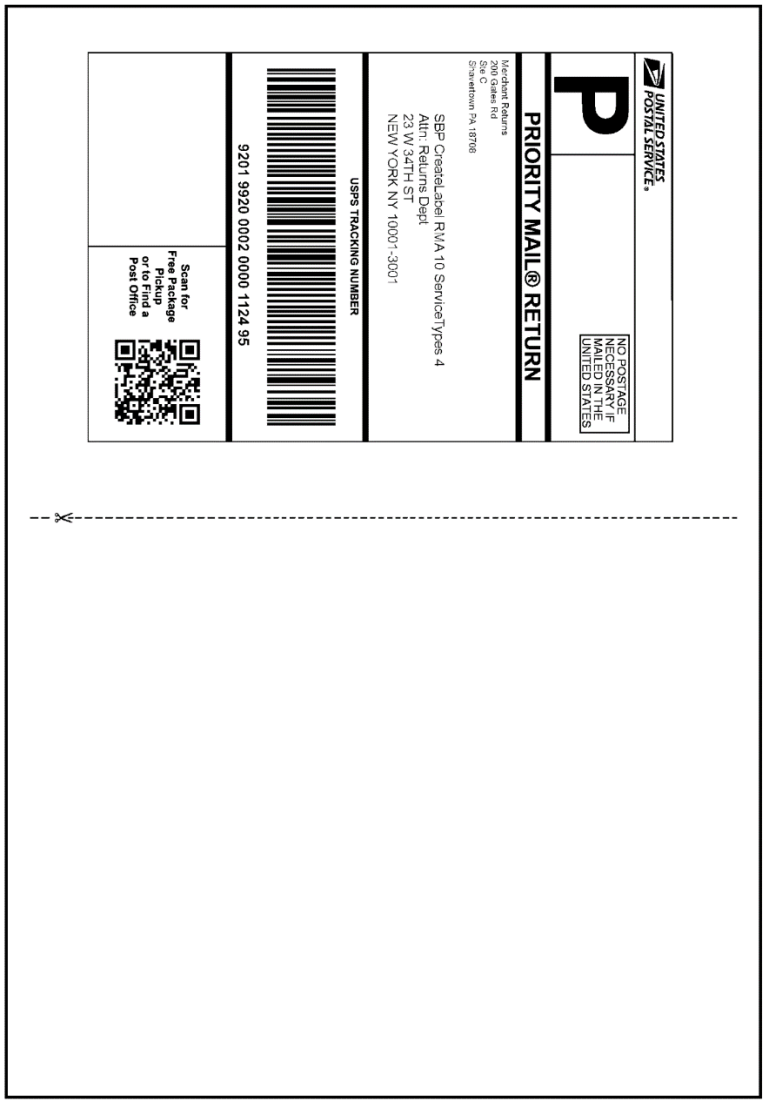


Figure 14-5 – Label with No Instructions

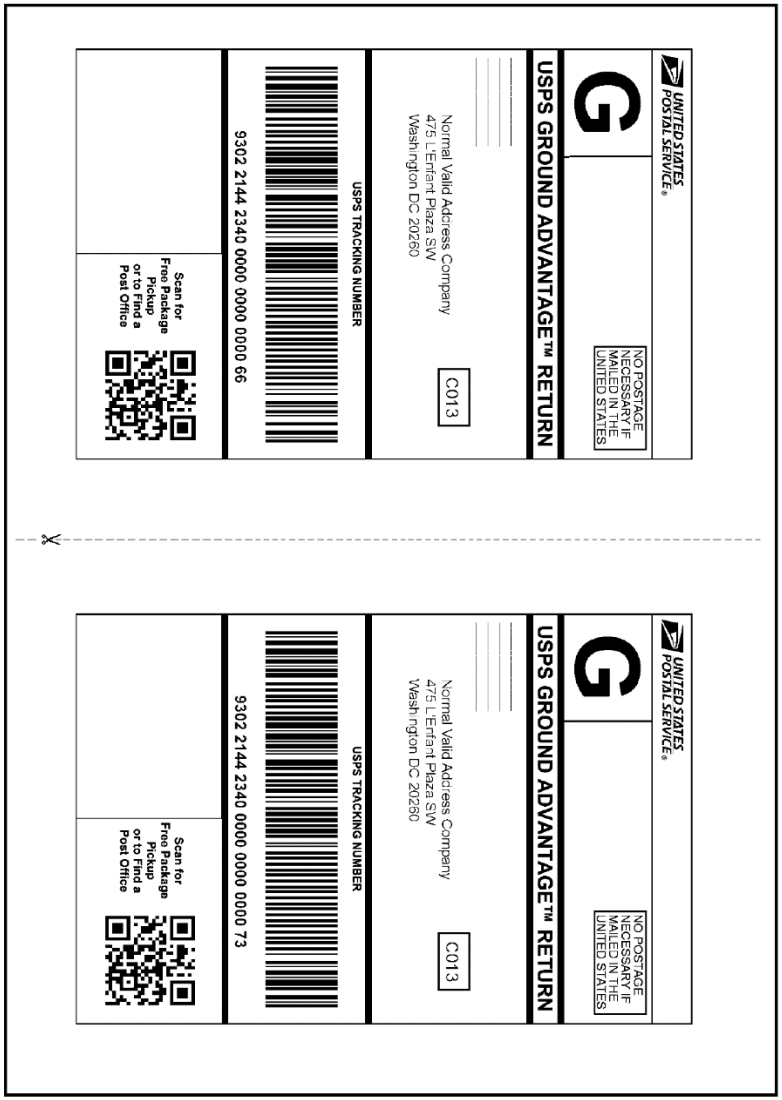


Figure 14-6 - Double Label

15.0 Frequenty Asked Questions

- **Who should I contact with questions regarding the Merchant Returns Service?**
  For help with any issues regarding the implementation of the Merchant Returns Service, you can contact your sales representative directly or the Merchant Returns Support Team via email at Merchant.Returns.Support@usps.gov.

- **Should a POST or GET method be used when sending the request?**
  All requests should be made via HTTP GET. Attempts to access the web service using other protocols will result in errors.

- **How should the XML be properly URL encoded?**
  XML should be encoded using standard HTTP/URL encoding. Failure to encode XML inputs may result in errors.

- **Do I need to supply a WebTools ID with the request?**
  No, the WebTools ID is not a request parameter for the Merchant Returns API. When a merchant has an account onboarded onto the Merchant Returns application, they will be provided with a unique Merchant Account Code. This Code should be passed with the parameter when making a request.

- **Why do I not see the Merchandise Description on the label?**
  The Merchandise Description is intended to provide merchants with information on the type of packages returned by their customers. It is not displayed on the label, but rather stored internally on the Merchant Returns application. It is contained in the transaction reports that can be sent to merchants that request a summary of their label activity.

- **Is a password required with my request?**
  No, there is no password needed with the Merchant Returns API. The only credentials that need to be sent with the request are the Merchant Account ID and the MID.

- **What MID should I use with my request if I have multiple accounts?**
  If a merchant has multiple accounts, they will be provided with a MID and Merchant Account ID for each account. Each MID will be associated to a specific Merchant Account. When sending a request, the MID has to be passed with the specific Merchant Account Code it is associated with. Failure to do so will result in an error.

- **Why is the address case different from what was in my XML request?**
  When a request is sent, the letter case of the address is modified to display on the label as title case.

- **What is the purpose of the “AddressValidation” parameter?**
  The Merchant Returns application uses the USPS WebTools Address Validation API to validate the customers address passed with the request. If a request is sent with an address that cannot be validated, the user will be notified with an error. This parameter can be used to bypass the validation of the customer address. If this parameter is true, the system will permit any address entered by the user, provided that the user

provides a ZIP code with the request. This parameter can also be used for merchants who already validate their customers address and do not wish to utilize the USPS Address Validation API.

- **What is the purpose of the AddressOverrideNotification parameter?**
  If an address that requires additional information (apt, suite, etc.) is passed without the additional information, the user will be provided with an error message indicating that more information is required. The parameter can be used to bypass this error and continue without providing the additional address information, provided that a valid ZIP is sent with the request. The parameter can also be used to bypass addresses that the system cannot find.

- **Is the XML request case sensitive?**
  The request parameters enclosed in the XML tags should be passed as title case. The case of the data passed within the tags is dependent on the particular request parameter. In order to ensure that you do not get an error as a result of an inaccurate case, it is important to that the starting and ending values for any tag used have the identical case.
  (i.e. <TagName></TagName>

- **What is the purpose of the "CustomerUrbanization" parameter?**
  Is only applicable to Puerto Rico addresses. This request parameter is an additional address field that is contained in some Puerto Rico addresses.

- **How can I change my service types and/or label size?**
  The service types and label sizes can only be changed by a USPS administrator. USPS administrators can make any required updates to your label preferences from your merchant profile.

- **How can I print a label for a Zebra printer?**

  Labels can be printed for Zebra printers by setting the "LabelFormat" field to "NOI" (No Instructions) and the "Label Definition" field to "Zebra-4X6". This will generate a 4 inch by 6 inch label that can be printed using a Zebra Printer and is available for all service types.

- **Can I email the returns label?**

  Yes. Provide the customer's name and email address in the "Recipient Name" and "Recipient Email" request parameters. The merchant can also provide their name and email address in the "Sender Name" and "Sender Email" request parameters.

- **Can I print a label without the attached instructions section?**
  Yes. Select the "NOI" option on the "Label Format" request parameter drop down to activate the "No Instructions" label format.

- **Can I print two labels on one page?**

  Yes. Select the "TWO" option on the "Label Format" request parameter drop down to activate the "Double Label" format and generate two labels on the same page.

- **Do labels printed using the "TWO" format have different tracking numbers?**

  Yes. Each of the labels printed using the "TWO" label format will have its own unique tracking number. They will, however, share a Postal Routing number as the packages with these labels will be delivered to the same address.

- **Can labels printed using the "TWO" format have different RMA/Order/Invoice numbers?**

  Yes. Information entered in the "Package Information" field will appear on the label printed on the top half of the label using the "Double Label" format. Information entered in the "<PackageInformation2> tag will appear on the label printed on the bottom half of the label using the "Double Label" format.

- **Can I print labels of different service types and sizes on one page by using the "Double Label" format?**

  No. The two labels generated on a single page using the "Double Label" format will have the same service type and label size. The Double Label option is only availale for Single Label services. Bulk Labels do not allow for this option.

- **Can I print single labels for two different customer addresses on one page by using the "Double Label" format?**

  No, there is only one set of customer address fields allowed in the label request.

- **Can I utilize the Proximity Routing feature on labels printed in the "Double Label" (TWO) format?**

  For single labels, the answer is No. Proximity routing is based on the customer's origin address information which is not captured by the API during the printing of labels in the "Double Label" format as the sender address section is populated by blank lines.

  For bulk labels, the answer is yes. Customer labels are allowed, even when using the "Double Label" format.

- **Can I provide insurance for both of the labels printed on a single page?**
  Yes, but the insurance amount must be the same for both labels.

- **When using the Single API call with a label format of TWO, even when the customer information is populated, it prints blank lines for the customer return address. What is happening here?**

  Single API labels with label format of TWO automatically use a blank return address. This is historical API behavior and will not be changed so we maintain consistency for customers that expect this behavior.