Open and Distribute API

USPS Web Tools™ Application Programming Interface User's Guide

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USPS Web Tools User's Guide

Contents

Introduction to Web Tools	3
Before you get started:	
Open and Distribute API	
Overview	
Open / Distribute Priority Request	4
API Signature	4
Request Descriptions	
Sample Request	11
Response Descriptions	
Sample Response	13
Error Responses	14

Introduction to Web Tools

This document contains a Reference Guide to the USPS Open and Distribute Label **APIs**. See the Developer's Guide 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:

<TrackID> EJ123456780US </TrackID>

In this instance, you will replace "EJ123456780US" with the tracking ID for the package.

Before you get started:

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

For more information on Priority Mail Open and Distribute, see https://www.usps.com/ship/priority-mail.htm.

Open and Distribute API

Overview

Priority Mail Open and Distribute shipments expedite movement of any class of mail (except Express Mail) between the domestic origin and destination postal facility. The service is designed exclusively for all classes of mail commingled into an approved USPS container. Postage is paid based on the weight of the entire contents of the Priority Mail Open and Distribute contain, excluding the tare weight of the container, and is zoned rated from the acceptance Post Office to the destination facility of the shipment. The shipments receive Priority Mail service from the origin facility to the destination facility. Once received at the destination facility, the container address label barcode is scanned and the enclosed mail is processed appropriately to the mail class.

Mailers prepare Priority Mail Open and Distribute shipments according to standards for the enclosed class of mail and present their shipments to the business mail entry unit in enough time for acceptance, processing, and dispatch to the appropriate unit before the critical entry time. Mailers must use the electronic format.

Open / Distribute Priority Request

The Priority Mail Open and Distribute bar coded label will enable customers to easily and conveniently view the tracking of their shipments. The bar code label will increase package visibility. The bar coded label with the service type code "123" will assist in improving scan performance and provide mailers accurate and consistent information on each Open and Distribute container. USPS supplied container tags of green Tag 161 going to mail processing facilities, pink Tag 190 for destination delivery units or orange Label 23 used for both processing and DDU's, are provided for correct processing and handling of Priority Mail Open and Distribute shipments.

The five Priority Mail Open and Distribute address label barcodes are:

Drop Shipment Destination Facility	1. Destination Delivery Unit	2. Sectional Center Facility	3. Bulk Mail Center	4. Area Distribution Center	5. Auxiliary Service Facility
FacilityType	DDU	SCF	вмс	ADC	ASF
ToFacilityName	Required	Leave blank	Leave blank	Leave blank	Leave blank
ToFacilityAddress2	Required	Leave blank	Leave blank	Leave blank	Leave blank
ToFacilityCity and ToFacilityState	Required when ZIP not provided	Required when "AllowNonCle ansedFacility Addr" is true	Required when "AllowNonCle ansedFacility Addr" is true	Required when "AllowNonCle ansedFacility Addr" is true	Required when "AllowNonCle ansedFacility Addr" is true
ToFacilityZip5	Required when City / State not provided		Required	Required	Required

The facility address information can be obtained from Facility Access and Shipment Tracking (FAST) at https://fast.usps.com/fast/main.action. Using the Reports features, FAST will produce a "Drop Entry Point View" of available destinations for the Open and Distribute container based on the type and destination of the enclosed mailpieces.

For example, if the enclosed mail is being sent to ZIP codes starting with 441 via Standard mail, FAST will produce a listing similar to the one below. The Open and Distribute container would be addressed to the appropriate facility based on the shape of the contents and proximity to the destination.

API Signature

Scheme	Host	Path	API	XML
https://	secure.shippingapis.com	/ShippingAPI.dll	?API=OpenDistributePriorityV2	&XML=(see below)
https://	secure.shippingapis.com	/ShippingAPI.dll	?API=OpenDistributePriorityV2Certify	&XML=(see below)

Note: The "OpenDistributePriorityV2Certify" API signature is for testing purposes and will not generate usable labels and barcodes.

Request Descriptions

Tag Name	Occurs	Description	Туре	Validation	
OpenDistributePriorityV 2.0Request	required once	API=OpenDistributePriorityV2 API=OpenDistributePriorityV2Certify The "Certify" form of the request is used for integrator testing. It produces a label that is not suitable for mailing and must not be entered into the US Postal System. Certify requests do not require additional permissions to invoke.	(group)	substitutionGroup= "OpenDistributePriorityV2.0Certify Request"	
OpenDistributePriorityV 2.0Request / Option	optional	For future use.	empty		
OpenDistributePriorityV 2.0Request / Revision	optional	This is for versioning of the API's and for triggering response tags for future versions.	string	minLength=0 pattern=\d{1}	
OpenDistributePriorityV 2.0Request / ImageParameters	optional	For future use.	(group)	minOccurs="0"	
OpenDistributePriorityV 2.0Request / ImageParameters / ImageParameter	required	For future use. Required on request, leave blank.	string	minOccurs="0"	
OpenDistributePriorityV 2.0Request / PermitNumber	optional	Input Permit number provided by your local post office.	string	pattern=\d{1,15}	
OpenDistributePriorityV 2.0Request / PermitIssuingPOZip5	optional	ZIP Code of post office that issued your permit. REQUIRED when PermitNumber is specified. Must be valid within Address Matching System. City and State for Permit imprint are obtained from this ZIP code.	string	pattern=\d{5}	
OpenDistributePriorityV 2.0Request / FromName	required once	Name of sender.	string	minLength=1 maxLength=100	
OpenDistributePriorityV 2.0Request / FromFirm	required once	Company name.	string	minLength=0 maxLength=50	
OpenDistributePriorityV 2.0Request / FromAddress1	optional	Secondary address unit designator and number (such as an apartment or suite number (APT 202, STE 100)).	string	minLength=0 maxLength=50	
OpenDistributePriorityV 2.0Request / FromAddress2	required once	Street number and name. Includes predirectional, suffix, and postdirectional for the address or rural route and box number (RR 5 BOX 10), highway contract route and box number (HC 4 BOX 45), or post office box number (PO BOX 458).	string	minLength=1 maxLength=50	

Tag Name	Occurs	Description	Туре	Validation
OpenDistributePriorityV 2.0Request / FromCity	required once	The city is any acceptable mailing name for the 5-digit ZIP code serving the intended recipient.	string	minLength=1 maxLength=28
OpenDistributePriorityV 2.0Request / FromState	required once	Use only official USPS state name abbreviations.	string	pattern=\w{2} valid state
OpenDistributePriorityV 2.0Request / FromZip5	required once	Correct 5-digit ZIP Code.	string	pattern=\d{5}
OpenDistributePriorityV 2.0Request / FromZip4	required once	Last four digits of a complete ZIP+4 code.	string	minLength=1 pattern=\d{4}
OpenDistributePriorityV 2.0Request / POZipCode	optional	When the ZIP Code of a collection point for a given package is different from the Zip Code of the person mailing the package (their return address), this tag must be used to convey this difference to the USPS. Enter the ZIP Code of the post office or collection box where the item is mailed. May be different than "FromZip5."	string	minLength=0 pattern=\d{5}
OpenDistributePriorityV 2.0Request / ToFacilityName	required once	Drop Shipment destination facility name. Required for OpenDistributePriorityV2.0Request [FacilityType='DDU']. Truncated to 26 characters on label.	string	minLength=0 maxLength=100
OpenDistributePriorityV 2.0Request / ToFacilityAddress1	required once	Drop Shipment destination facility secondary address unit designator and number. Truncated to 32 characters after address standardization for label.	string	minLength=0 maxLength=50
OpenDistributePriorityV 2.0Request / ToFacilityAddress2	required once	Drop Shipment destination facility street number and name. OpenDistributePriorityV2.0Request[Facility Type='DDU']. Truncated to 32 characters after address standardization for label.	string	minLength=0 maxLength=50
OpenDistributePriorityV 2.0Request / ToFacilityCity	required once	Drop Shipment destination facility city. When OpenDistributePriorityV2.0Request[Facility Type ='DDU'], either City and State, or ZIP code is REQUIRED. Truncated to 15 characters after address standardization for label.	string	minLength=0 maxLength=28
OpenDistributePriorityV 2.0Request / ToFacilityState	required once	Drop Shipment destination facility state abbreviation. When OpenDistributePriorityV2.0Request[Facility Type='DDU'], either City and State, or ZIP code is REQUIRED.	string	minLength=0 pattern=\w{2}

Tag Name	Occurs	Description	Туре	Validation
OpenDistributePriorityV 2.0Request / ToFacilityZip5	required once	Drop Shipment destination facility 5-digit ZIP code. When OpenDistributePriorityV2.0Request[Facility Type='DDU'], either City and State, or ZIP code is REQUIRED. For all other FacilityType values, always REQUIRED and must be valid ZIP code.	string	minLength=0 pattern=\d{5}
OpenDistributePriorityV 2.0Request / ToFacilityZip4	required once	Drop Shipment destination facility last four digits of ZIP+4. May be REQUIRED to obtain exact address match when OpenDistributePriorityV2.0Request[Facility Type='DDU'].	string	minLength=0 pattern=\d{4}
OpenDistributePriorityV 2.0Request / ToFacilityPOBoxFlag	optional	Indicates that the ToFacility address is a PO Box.	boolean	default=false
OpenDistributePriorityV 2.0Request / ToContactPreference	required once	This indicates how the recipient will be notified that the package is available for pickup. Specify WAIVED if notification is not desired. For example: <tocontactpreference>EMAIL</tocontactpreference>	string	Enumerations: EMAIL SMS EMAILSMS WAIVED default=EMAIL
OpenDistributePriorityV 2.0Request / ToContactMessaging	required once	This contains the text messaging address or is blank depending on the ToContactPreference tag. This value must be a syntactically-valid SMS number. If WAIVED is used, this value must be blank. For example: <tocontactmessaging>5701234567</tocontactmessaging>	string	maxLength=64
OpenDistributePriorityV 2.0Request / ToContactEMail	optional	This contains the email address or is blank depending on the ToContactPreference tag. This value must be a syntactically-valid email address. If WAIVED is used, this value must be blank. For example: <tocontactmessaging>user@anydomain.gov</tocontactmessaging>	string	maxLength=64 valid email address

Tag Name	Occurs	Description	Туре	Validation
		Drop Shipment destination facility type.		
OpenDistributePriorityV 2.0Request / FacilityType	required once	Type Code Destination Delivery Unit DDU Sectional Center Facility SCF Bulk Mail Center BMC Area Distribution Center ADC Auxiliary Service Facility ASF	string	Enumerations: DDU SCF BMC ADC ASF
OpenDistributePriorityV 2.0Request / MailClassEnclosed	required once	Mail Class and Processing Category	string	Enumerations: LETTERS FLATS PARCELS MIXED OTHER
OpenDistributePriorityV 2.0Request / MailClassOther	optional	Explanation, REQUIRED when OpenDistributePriorityV2.0Request MailClassEnclosed = Other	string	minLength=0 maxLength=21
OpenDistributePriorityV 2.0Request / WeightInPounds	optional	(Estimated) weight of package in pounds. Number must be represented using at moseight characters.	decimal	minInclusive=0 maxInclusive=70
OpenDistributePriorityV 2.0Request / WeightInOunces	optional	(Estimated) weight of package in ounces. Number must be represented using at moseight characters.	integer	maxInclusive=1120 minInclusive=0
OpenDistributePriorityV 2.0Request / ImageType	required once	The type of label image desired.	string	Enumerations: TIF PDF NONE
OpenDistributePriorityV 2.0Request / SeparateReceiptPage	optional	Enter "true" for the shipping label and the online customer record to be printed on two separate pages or "false" for both printed on the same page.	boolean	default=false
OpenDistributePriorityV 2.0Request / LabelDate	optional	Date package will be mailed. Ship date may be today plus 0 to 3 days in advance. For example: <labeldate>2015-05-05 </labeldate>	string	minLength=0 Enter the date in either format: pattern=yyyy-mm-dd pattern=mm\dd\yyyy pattern= dd-mmm-yyyy
OpenDistributePriorityV 2.0Request / CustomerRefNo	optional	For future use	empty	
OpenDistributePriorityV 2.0Request / RecipientEmail	optional	This contains the email address or is blank	string	valid email address
OpenDistributePriorityV 2.0Request / AllowNonCleansedFacilit yAddr	optional	Allows option to not cleanse Facility Address. If selected, may result in an undeliverable package.	boolean	default=false

Tag Name	Occurs	Description	Туре	Validation
OpenDistributePriorityV 2.0Request / HoldForManifest	optional	Restricted use. Holds manifest record for possible inclusion in SCAN request.	string	Enumerations: Y N
OpenDistributePriorityV 2.0Request / CommercialPrice	optional	For future use.	boolean	Default=false
OpenDistributePriorityV 2.0Request / Container	optional	Use to specify special containers or container attributes that may affect postage; otherwise, leave blank. Specifically this is used to indicate various flat and regional rate options for Priority Mail, otherwise the API will assume "simple". Needed to assign an appropriate RDC and to ensure the proper 3 digit service type code is included in the barcode. For example: <container>VARIABLE</container>	string	Enumerations=
OpenDistributePriorityV 2.0Request / Size	optional	Defined as follows: REGULAR: all package dimensions are under 12"; LARGE: any package dimension is greater than 12" For example: <size>REGULAR</size>	string	Enumerations= REGULAR LARGE
OpenDistributePriorityV 2.0Request / Width	optional	Value must be numeric. Units are inches. Required when Size is LARGE. For example: <width>5.5</width>	decimal	minExclusive=0.0 totalDigits=10
OpenDistributePriorityV 2.0Request / Length	optional	Value must be numeric. Units are inches. Required when Size is LARGE. For example: <length>11</length>	decimal	minExclusive=0.0 totalDigits=10
OpenDistributePriorityV 2.0Request / Height	optional	Value must be numeric. Units are inches. Required when Size is LARGE. For example: <height>11</height>	decimal	minExclusive=0.0 totalDigits=10

Tag Name	Occurs	Description	Туре	Validation
OpenDistributePriorityV 2.0Request / Girth	optional	Value must be numeric. Units are inches. Girth is only required when Container = 'NONRECTANGULAR' or 'VARIABLE' and Size='LARGE' For example: <girth>11</girth>	decimal	minExclusive=0.0 totalDigits=10
OpenDistributePriorityV 2.0Request / ReturnCommitments	optional	Indicates if commitment information should be returned.	boolean	default=false
OpenDistributePriorityV 2.0Request / Content	optional	Special Contents of package	(group)	
OpenDistributePriorityV 2.0Request / Content / ContentType	required once – if content included	Use to specify ContentType. Required if LIVES. Note: USPS-produced packaging, including Flat Rate and Regional Rate, cannot be used to ship live animals. Error response will be returned.	string	Enumerations= HAZMAT LIVES PERISHABLE FRAGILE
OpenDistributePriorityV 2.0Request / Content / ContentDescription	optional	Description. Required if LIVES.	string	Enumerations: BEES DAYOLDPOULTRY ADULTBIRDS OTHER
OpenDistributePriorityV 2.0Request /MeterData	optional	Meter Data grouping.	(group)	
OpenDistributePriorityV 2.0Request /MeterData/ MeterVendorID	optional	Meter Vendor ID, which is the 2 digit number USPS assigned vendor ID.	string	minLength value="0" maxLength value="2"
OpenDistributePriorityV 2.0Request /MeterData/ MeterSerialNumber	optional	Serial number of meter used for postage.	string	minLength value="0" maxLength value="20"
OpenDistributePriorityV 2.0Request /MeterData/ MeterModelID	optional	Two digit model number of the Meter For example: PC-Postage models are 1 numeric followed by 1 alpha. <metermodelid>7a</metermodelid>	string	minLength value="0" maxLength value="15"
OpenDistributePriorityV 2.0Request /MeterData/ RateCategory	optional	Four digit value denotes Product / Rate Category (As defined by the IBI data dictionary)	string	minLength value="0" maxLength value="4"
OpenDistributePriorityV 2.0Request /MeterData/ IndiciumCreationRecord Date	optional	Date IBI was created Example: 12/19/2016 This tag is mostly used by PC Postage, metered and IMI PC Compliant customers	string	pattern value="\d{1,2}/\d{1,2}/\d{4} "

Tag Name	Occurs	Description	Туре	Validation
OpenDistributePriorityV 2.0Request/MeterData/I BI	optional	Information-Based Indicia (IBI)- Refers to a secure postage evidencing standard used by the United States Postal Service (USPS) to indicate electronic postage payment.	string	minLength value="0" maxLength value="150"
OpenDistributePriorityV 2.0Request	required once		(alias)	

Sample Request

```
Test XML Request:
https://secure.shippingapis.com/ShippingAPI.dll?API=OpenDistributePriorityV2Certify&XML=<?xml
version="1.0" encoding="UTF-8" ?>
<OpenDistributePriorityCertifyV2.0Request USERID="xxx">
   <Revision/>
   <ImageParameters>
       <ImageParameter/>
   </ImageParameters>
   <PermitNumber>1</PermitNumber>
   <PermitIssuingPOZip5>18701</PermitIssuingPOZip5>
   <FromName>John Doe
   <FromFirm>XYZ Corporation
   <FromAddress1>Ste 501/FromAddress1>
   <FromAddress2>7 North Wilkes Barre Blvd/FromAddress2>
   <FromCity>Wilkes Barre/FromCity>
   <FromState>PA
   <FromZip5>18702
   <FromZip4/>
   <POZipCode>18701</POZipCode>
   <ToFacilityName>Fairfax Post Office</ToFacilityName>
   <ToFacilityAddress1/>
   <ToFacilityAddress2>10660 Page Ave</ToFacilityAddress2>
   <ToFacilityCity>Fairfax</ToFacilityCity>
   <ToFacilityState>VA</ToFacilityState>
   <ToFacilityZip5>22030</ToFacilityZip5>
   <ToFacilityZip4/>
   <ToFacilityPOBoxFlag>false</ToFacilityPOBoxFlag>
   <FacilityType>DDU</FacilityType>
   <MailClassEnclosed>OTHER</MailClassEnclosed>
   <MailClassOther>Free Samples</MailClassOther>
   <WeightInPounds>22</WeightInPounds>
   <WeightInOunces>10</WeightInOunces>
   <ImageType>TIF</ImageType>
   <SeparateReceiptPage>false</SeparateReceiptPage>
   <AllowNonCleansedFacilityAddr>false</AllowNonCleansedFacilityAddr>
   <HoldForManifest>N</HoldForManifest>
   <CommercialPrice>N</CommercialPrice>
   <ReturnCommitments>true</ReturnCommitments>
 /OpenDistributePriorityCertifyV2.0Request>
```

Response Descriptions

Tag Name	Occurs	Description	Туре
Open Distribute Priority V 2.0 Response	required once	The OpenDistributePriorityV2.0Response XML document is sent in response to an OpenDistributePriorityV2.0Request. Certify response: The OpenDistributePriorityV2CertifyResponse XML document is sent in response to an OpenDistributePriorityV2CertifyRequest.	(group)
OpenDistributePriorityV2.0Response / OpenDistributePriorityNumber	required once	Open and Distribute ID Number (PIC #)	string
Open Distribute Priority V2.0 Response / Open Distribute Priority Label	optional	Open and Distribute Shipping Label (not returned when Image Type is None in the request).	base64Binary
OpenDistributePriorityV2.0Response / OpenDistributePriorityReceipt	optional	Open and Distribute Customer Online Record (returned only when SeparateReceiptPage is true in the request). This tag is returned only if the <separatereceiptpage> tag was set to "true" in the request. Otherwise the Customer Online Record is contained within the label image and the <opendistributepriorityv2receipt> tag is NOT present in the response.</opendistributepriorityv2receipt></separatereceiptpage>	base64Binary
OpenDistributePriorityV2.0Response / ToFacilityName	required once	Drop shipment facility name from the request	string
OpenDistributePriorityV2.0Response / ToFacilityAddress1	required once	Standardized facility address line 1	string
OpenDistributePriorityV2.0Response / ToFacilityAddress2	required once	Standardized facility address line 2	string
OpenDistributePriorityV2.0Response / ToFacilityCity	required once	Standardized facility city	string
OpenDistributePriorityV2.0Response / ToFacilityState	required once	Standardized facility state	string
OpenDistributePriorityV2.0Response / ToFacilityZip5	required once	Standardized facility ZIP code	string
OpenDistributePriorityV2.0Response / ToFacilityZip4	required once	Standardized facility ZIP+4 extension	string
OpenDistributePriorityV2.0Response / ToFacilityPOBOXFlag	Optional	Indicates that the ToFacility address is a PO Box.	boolean
OpenDistributePriorityV2.0Response / Postage	required once	Postage amount	string
OpenDistributePriorityV2.0Response / Zone	required once	Postal Zone. Indicates the number of postal rate zones between the origin and destination ZIP codes.	string

Tag Name	Occurs	Description	Туре
OpenDistributePriorityV2.0Response / Commitment	optional	Returned if ReturnCommitments is true in the request.	(group)
OpenDistributePriorityV2.0Response / Commitment / CommitmentName	optional	Commitment name such as 1-day, 2-day, 3-day, Military, DPO	String
OpenDistributePriorityV2.0Response / Commitment / ScheduledDeliveryDate	optional	Date in the YYYY-MM-DD format.	Date
OpenDistributePriorityV2.0Response	required once		(alias)

Sample Response

Test XML Response:

- <?xml version="1.0" encoding="UTF-8" ?>
- <OpenDistributePriorityCertifyV2.0Response>
- <OpenDistributePriorityNumber>420220309155805213907020971523
- <OpenDistributePriorityLabel>JVBERi0xLjlCBvYmoN<!--truncated-->
- <ToFacilityName>Fairfax Post Office</ToFacilityName>
- <ToFacilityAddress1/>
- <ToFacilityAddress2>10660 PAGE AVE</ToFacilityAddress2>
- <ToFacilityCity>FAIRFAX</ToFacilityCity>
- <ToFacilityState>VA</ToFacilityState>
- <ToFacilityZip5>22030</ToFacilityZip5>
- <ToFacilityZip4>4098</ToFacilityZip4>
- <Postage>26.25</Postage>
- <Zone>3</Zone>
 - <Commitment>
 - <CommitmentName>3-Day</CommitmentName>
 - <ScheduledDeliveryDate>2013-07-29</ScheduledDeliveryDate>
- </Commitment>
- </OpenDistributePriorityCertifyV2.0Response >

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 our Internet Customer Care Center uspstechnicalsupport@mailps.custhelp.com.