XAV Web Service Schema

The Address Validation Web Service Schema

Overview

Access the Service at: https://onlinetools.ups.com/webservices/XAV

Service Operation: ValidateAddress

ValidateAddress Operation

Type: Request-Response (client sends a request to UPS, and the UPS server replies with a response)

SOAPAction Header: http://onlinetools.ups.com/webservices/XAVBinding

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Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
XAVRequest	/XAVRequest	Yes	One	container			
Request	/XAVRequest/Request	Yes	One	container	N/A	XAV Request Container.	Please see country validation and classification matrix for valid request combinations
RequestOption	/XAVRequest/Request/RequestOption	Yes	One	string	1	Identifies the optional processing to be performed.	If not present or invalid value then an error will be sent back. Valid Values are: 1 - Address Validation 2 - Address Classification 3 - Address Validation and Address Classification. Note: Please see Country Validation and Classification Matrix for valid request combinations
TransactionReference	/XAVRequest/Request/TransactionReference	No	One	container	N/A	TransactionReference identifies transactions between client and server.	
CustomerContext	/XAVRequest/Request/TransactionReference/CustomerContext	No	One	string	1...512	The client uses CustomerContext to synchronize request/response pairs. The client establishes CustomerContext, which can contain any information you want, as along as it is valid XML; it is echoed back by the server.	
TransactionIdentifier	/XAVRequest/Request/TransactionReference/TransactionIdentifier	No	One	string	0	The Unique TransactionIdentifier for a given transaction.	Empty Tag.

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Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
RegionalRequestIndicator	/XAVRequest/RegionalRequestIndicator	No	One	string	0	If this indicator is present then either the region element or any combination of Political Division 1, Political Division 2, PostcodePrimaryLow and the PostcodeExtendedLow fields will be recognized for validation in addition to the urbanization element. If this tag is present, US and PR street level address validation will not occur. The default is to provide street level address validation. Not valid with the address classification request option.	
MaximumCandidateListSize	/XAVRequest/MaximumCandidateListSize	No	One	string	1..2	The maximum number of Candidates to return for this request.	Valid Values : 0 - 50 Default Value : 15
AddressKeyFormat	/XAVRequest/AddressKeyFormat	Yes	One	container	N/A	AddressKeyFormat container.	The Key format is based on addressing standards jointly developed by the Postal Service and mailing industry. The information provided in the Address Key container will be returned in the same format.
ConsigneeName	/XAVRequest/AddressKeyFormat/ConsigneeName	No	One	string	1..40	Name of business, company or person. Ignored if user selects the RegionalRequestIndicator.	
AttentionName	/XAVRequest/AddressKeyFormat/AttentionName	No	One	string	1..40	Name of the building. Ignored if user selects the RegionalRequestIndicator.	
AddressLine	/XAVRequest/AddressKeyFormat/AddressLine	No	One	string	1..100	Address line (street number, street name and street type) used for street level information. Applicable to US and PR only. Ignored if user selects the RegionalRequestIndicator.	
Region	/XAVRequest/AddressKeyFormat/Region	Cond	One	string	1..100	Single entry, containing in this order, PoliticalDivision2, PoliticalDivision1, PostcodePrimaryLow and PostcodeExtendedLow.	If this node is present the following tags will be ignored: Political Division 2, Political Division 1, PostcodePrimaryLow, and PostcodeExtendedLow. Valid only for US or PR origins only. Using this tag for non US/PR origins may cause address format errors.
PoliticalDivision2	/XAVRequest/AddressKeyFormat/PoliticalDivision2	Cond	One	string	1..30	City or Town name.	

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Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
PoliticalDivision1	/XAVRequest/AddressKeyFormat/PoliticalDivision1	Cond	One	sting	1..30	State or Province/Territory name.	
PostcodePrimaryLow	/XAVRequest/AddressKeyFormat/PostcodePrimaryLow	Cond	One	string	1..10	Postal Code.	
PostcodeExtendedLow	/XAVRequest/AddressKeyFormat/PostcodeExtendedLow	Cond	One	string	1..10	4 digit Postal Code extension. For US use only.	
Urbanization	/XAVRequest/AddressKeyFormat/Urbanization	No	One	string	1...30	Puerto Rico Political Division 3. Only valid for Puerto Rico.	
CountryCode	/XAVRequest/AddressKeyFormat/CountryCode	Yes	One	string	2	Country Code.	Please see Country Validationand Classification Matrix for valid request combinations.
XAVResponse	/XAVResponse	Yes	One	container	N/A	XAV Response Container.	
Response	/XAVResponse/Response	Yes	One	container	N/A	Response Container.	
ResponseStatus	/XAVResponse/Response/ResponseStatus	Yes	One	container	N/A	Response Status Container.	
Code	/XAVResponse/Response/ResponseStatus/Code	Yes	One	string	1	Identifies the success or failure of the transaction. 1 = Success 0 = Failure	
Description	/XAVResponse/Response/ResponseStatus/Description	Yes	One	string	1...35	Describes Response Status Code. Returns text of 'Success' or 'Failure'.	
Alert	/XAVResponse/Response/Alert	No	One	container	N/A	Alert Container. There can be zero to many alert containers with code and description.	
Code	/XAVResponse/Response/Alert/Code	Yes*	One	string	1...10	Warning code returned by the system.	

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Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
Description	/XAVResponse/Response/Alert/Description	Yes*	One	string	1...150	Warning messages returned by the system.	
TransactionReference	/XAVResponse/Response/TransactionReference	No	One	container	N/A	Transaction Reference Container.	
CustomerContext	/XAVResponse/Response/TransactionReference/CustomerContext	No	One	string	1...512	The CustomerContext Information which will be echoed during response.	
TransactionIdentifier	/XAVResponse/Response/TransactionReference/TransactionIdentifier	No	One	string	35	The Unique TransactionIdentifier Information for that transaction. This will be present only if requested in the request.	
ValidAddressIndicator	/XAVResponse/ValidAddressIndicator	Cond	One	string	0	Indicates query found an exact match.	
AmbiguousAddressIndicator	/XAVResponse/AmbiguousAddressIndicator	Cond	One	string	0	Indicates query could not find exact match. Candidate list follows.	
NoCandidatesIndicator	/XAVResponse/NoCandidatesIndicator	Cond	One	string	0	No Candidate found.	
AddressClassification	/XAVResponse/AddressClassification	No	One	container	N/a	AddressClassification Container.	
Code	/XAVResponse/AddressClassification/Code	Yes*	One	string	1	Contains the classification code of the input address. 0 - UnClassified 1 - Commercial 2 - Residential	
Description	/XAVResponse/AddressClassification/Description	Yes*	One	string	1..15	Contains the text description of the address classification code: UnClassified Commercial Residential	
Candidate	/XAVResponse/Candidate	No	One	container	N/A	Candidate Container.	

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Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
AddressClassification	/XAVResponse/Candidate/AddressClassification	No	One	container	N/A	AddressClassification Container.	
Code	/XAVResponse/Candidate/AddressClassification/Code	Yes*	One	string	1	Contains the classification code of the address: 0 - UnClassified 1 - Commercial 2 - Residential	
Description	/XAVResponse/Candidate/AddressClassification/Description	Yes*	One	string	1..15	Contains the text description of the address classification code: UnClassified Commercial Residential	
AddressKeyFormat	/XAVResponse/Candidate/AddressKeyFormat	Yes	One	container	N/A	AddressKeyFormat Container.	
ConsigneeName	/XAVResponse/Candidate/AddressKeyFormat/ConsigneeName	No	One	string	1..40	Name of business, company or person. Not returned if user selects the RegionalRequestIndicator.	
AttentionName	/XAVResponse/Candidate/AddressKeyFormat/AttentionName	No	One	string	1..40	Name of building. Not returned if user selects the RegionalRequestIndicator.	
AddressLine	/XAVResponse/Candidate/AddressKeyFormat/AddressLine	No	One	string	1..100	Address line (street number, street name and street type, and political division 1, political division 2 and postal code) used for street level information. Applicable to US and PR only. Not returned if user selects the RegionalRequestIndicator.	
Region	/XAVResponse/Candidate/AddressKeyFormat/Region	Cond	One	string	1..100	Single entry containing in this order Political Division 2, Political Division 1 and Post Code Primary Low and/or PostcodeExtendedLow.	
PoliticalDivision2	/XAVResponse/Candidate/AddressKeyFormat/PoliticalDivision2	Cond	One	string	1..30	City or Town name.	

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Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
PoliticalDivision1	/XAVResponse/Candidate/AddressKeyFormat/PoliticalDivision1	Cond	One	string	1..30	State/Province. Returned if the location is within a State/Province/Territory. For International: returned if user enters valid Country Code, and City/postal code and it has a match. For Domestic addresses, the value must be a valid 2-character value (per US Mail standards). For International the full State or Province name will be returned.	
PostcodePrimaryLow	/XAVResponse/Candidate/AddressKeyFormat/PostcodePrimaryLow	Cond	One	string	1..10	Low-end Postal Code. Returned for countries with Postal Codes. May be alphanumeric	
PostcodeExtendedLow	/XAVResponse/Candidate/AddressKeyFormat/PostcodeExtendedLow	Cond	One	string	1..10	Low-end extended postal code in a range. Example in quotes: Postal Code 30076-'1234'. Only returned in candidate list. May be alphanumeric	
Urbanization	/XAVResponse/Candidate/AddressKeyFormat/Urbanization	No	One	string	1...30	Puerto Rico Political Division 3. Only Valid for Puerto Rico.	
CountryCode	/XAVResponse/Candidate/AddressKeyFormat/CountryCode	Yes	One	string	2	A country code. Required to be returned.	

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