

Service Availability Web Service- 1.1.2





Purolator E-Ship $^{\rm TM}$ Web Services

Revision Notes

Revision	Date	Change Description
1.0	04/23/2009	Version 1.0 Created.
1.1	05/25/2009	
		updated.
1.1.1	11/27/2009	URL for endpoints has been modified.
		Version allowed value has been updated.
1.1.2	02/24/2010	Update to the Introduction.
		Update to Implementation Considerations.
		Addition of error # 1001171



Table of Contents

1	GET	TING STARTED	5
	1.1	Introduction	5
	1.2	DOCUMENT OVERVIEW	6
	1.3	SPECIFICATION COMPLIANCE	6
	1.4	DEVELOPMENT PLATFORMS	6
	1.5	RELATED RESOURCES	7
	1.6	PUROLATOR E-SHIP TM WEB SERVICES DEVELOPMENT PROCESS	7
2	WEB	SERVICES	8
	2.1	CHARACTERISTICS OF CALLS	8
	2.2	DATA TYPES	
	2.3	SECURITY	9
	2.4	SERVICE METHODS AND OBJECTS	9
	2.4.1	Validate City/Postal Code/Zip Code	9
	2.4.2		10
	2.4.3	•	
	2.5	Error Handling	
	2.6	IMPLEMENTATION CONSIDERATIONS	.15
	2.7	Error Messages / codes	
ΑF	PPENDI	X A – COMPLETE FIELD LIST	
		X B- ALLOWED CODE LIST	



Legal and Copyright Notices

This document and the information contain herein is confidential and proprietary to Purolator Courier Ltd., and its use is governed by the Purolator E-Ship™ Resource Centre Agreement or the Purolator E-Ship™ Web Services Soft Launch Agreement (as applicable). In the event of a conflict between this document and the Purolator E-Ship Resource Centre Agreement or the Purolator E-Ship Web Services Soft Launch Agreement (as applicable), the Purolator E-Ship Resource Centre Agreement or the Purolator E-Ship Web Services Soft Launch Agreement (as applicable) will govern to the extent of the inconsistency.

The information in this documentation may be changed at any time without notice. If you have gained access to this document without first agreeing to the Purolator E-Ship Resource Centre Agreement or the Purolator E-Ship Web Services Soft Launch Agreement (as applicable) you must cease using this document immediately and destroy any copies obtained.

© 2009 Purolator Courier Ltd., Purolator and the Purolator logo are trademarks of Purolator Courier Ltd. All rights reserved.



1 Getting Started

1.1 Introduction

To help you integrate Purolator E-Ship Web Services into your website or application, Purolator provides technical documentation and sample code for each Web Service. The documents describe how to consume each Web Service and detail Purolator's service offerings. In addition to this document, additional information and support is available on the Developers Forum http://www.purolatorwebservices.com and also on the E-Ship Web Services Wiki http://www.purolatorwebservices.com/wiki2.

The following documents can be downloaded by registered Purolator E-Ship Resource Centre users in the Documentation and Sample Code section.

Introduction

Introduction to Purolator E-Ship Web Services

Service Availability Web Service

Validate the origin and destination addresses and receive all available Purolator services, products, options and associated rules.

Estimates Web Service

Receive estimates based on origin and destination addresses as well as package and service inputs. Estimates are available as quick estimates using list prices or detailed estimates for customers with negotiated pricing.

Shipping Web Service

Create domestic, U.S. and international shipments. Please note that shipping labels and documents are created using the Get Documents Web Service.

Pickup Web Service

Schedule/Modify/Delete/View history for pickups.

Returns Management Web Service

Create domestic Returns Management shipments. Please note that shipping labels and documents are created using the Get Documents Web Service.

Get Documents Web Service

Retrieve shipment labels and documentation for Purolator shipments and Returns Management shipments.

Tracking Web Service

Get detailed tracking information for all Purolator shipments.

Test Cases

Test cases and expected results for all Purolator E-Ship Web Services.

The following documents will be provided when you are ready to take your website or application into Purolator's production environment.

Production Readiness

Guidelines to help ensure your Purolator E-Ship Web Services integration is ready to promote into Purolator's production environment.

Security Options

Security options available for your Purolator E-Ship Web Services implementation.



1.2 Document Overview

This document is a technical specification that describes the Purolator Service Availability Web Service. It is geared towards developers whose application requires a list of valid Purolator Service Offerings. For a given origin and destination the Purolator Service Availability Web Service returns a list of all services, special services and options that are available. This includes premium Express and Ground services, U.S. and International Services, ExpressCheque and Dangerous Goods Options. This web services also performs postal code and zip code validation and can also return the rules associated with each service- for example, the minimum and maximum allowed shipment weights.

This document uses the following structure to explain Purolator's E-Ship Tracking Web Service:

Introduction (this chapter)

- Web Services overview
- Specification compliance and development platform compatibility
- Related resources

Web Services

- Explanations of the characteristics of calls, as well as data types used
- Security information
- Service details for the Service Availability service
- Error details and error codes and descriptions

Appendix

- Complete field listing
- Enumeration and expected values

1.3 Specification Compliance

The Web Services are designed to comply with the following specifications:

Specification Name	Website
Simple Object Access Protocol (SOAP) 1.1	http://www.w3.org/TR/2000/NOTE-SOAP-20000508/
Web Service Description Language (WSDL) 1.1	http://www.w3.org/TR/2001/NOTE-wsdl-20010315

Please visit the websites listed above for detailed information regarding SOAP and WSDL technologies.

1.4 Development Platforms

The Web Services work with any current SOAP/XML development environments, including, but not limited to, Visual Studio .NET 2005, JAVA, and PHP.

Note: Development platforms vary in their SOAP/XML implementations. Please refer to your platform's documentation for more information.

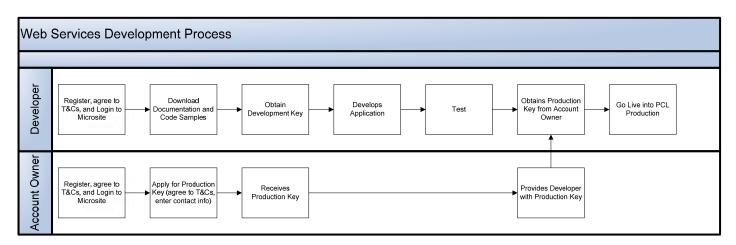


1.5 Related Resources

The Purolator E-Ship Developer Centre provides a full suite of documentation, sample code, sample SOAP messages, community-based support, and other resources to help you with your development projects. Be sure to visit http://eship.purolator.com to signup for a developer account.

1.6 Purolator E-Ship[™] Web Services Development Process

To integrate Purolator E-Ship Web Services within your application, follow the steps outlined below. After registering for the Purolator E-Ship™ Resource Centre, both the Purolator account holder and software developer will have access to all resources on the Resource Centre website.



Web Services Developer Process

Step 1: Register

Sign up for the Purolator E-Ship Resource Centre to access all Web Services' resources.

Step 2: Download Documentation and Code Samples

View code samples and documentation for the Purolator E-Ship Web Service(s) you will be using.

Sample code such as; C#, Java, PHP, SOAP/XML as well as WSDL is available and can be found at the Purolator E-Ship Developer Resource Centre at: http://www.purolator.com/eship/samplecode

Documentation, including testing documentation is available at http://www.purolator.com/eship/documentation.

Step 3: Obtain Development Key

Apply for a Development Key. This will allow you to test your code in the Purolator E-Ship Test Environment.

Apply for a development key (including a development password, and test account number) at http://www.purolator.com/eship/development.

Note: The key, account number and password will be used to access the development environment at <a href="https://devwebservices.purolator.com/EWS/V1/ServiceAvailability/ServiceAvailab

Step 4: Develop

Develop your application using the code samples and documentation.



Step 5: Test

Test your application in the Purolator E-Ship Test Environment. Data in the Test Environment is sample data and should be used for testing purposes only. Recommended test cases with expected results are provided in the documentation.

Step 6: Obtain Production Key from Purolator Account Holder

When your development and testing are complete, replace the Development Key with the Production Key. You can obtain the Production Key from the Purolator account holder. Once activated, the Production Key will allow you to access account-specific shipping, tracking, estimates and returns information. Optional security features are available through consultation with Purolator.

Note: The key, account number and password will be used to access the production environment at <a href="https://webservices.purolator.com/EWS/V1/ServiceAvailability/ServiceAvailabilit

Step 7: Go Live

Launch your application with Purolator E-Ship Web Services.

Purolator Account Holder Process

Step 1: Register

Sign up for the Purolator E-Ship™ Resource Centre to access all Web Services' resources.

Step 2: Apply for a Production Key

To use Purolator E-Ship™ Web Services, you must apply for a Production Key. The Production Key will allow you to access shipping, tracking, estimates and returns information specific to your Purolator account. A Purolator representative may contact you for security purposes before your Production Key is activated. Optional security features are available through consultation with Purolator.

Apply for a production key (including a production password) at http://www.purolator.com/eship/production.

Step 3: Provide your developer with the Production Key

Ask your developer to replace their Development Key with your Production Key. You will then be ready to use Purolator E-Ship Web Services.

Step 4: Go Live

Launch your application with Purolator E-Ship Web Services.

2 Web Services

Web Services is a collection of programming technologies, including XML, Web Services Description Language (WSDL) and SOAP, which allow you to build programming solutions for specific messaging and application integration.

Web Services are, by definition, platform independent. Purolator Web Services allow developers to build custom applications that are independent of changes to the Purolator interface. This is achieved through backwards compatibility support for all versions of the web services.

2.1 Characteristics of Calls

All Web Service calls are:

• **Service Requests and Responses**—your client application prepares and submits a service request to Purolator E-Ship Web Services, which is processed and a response is returned, and the client application handles the response.



• **Synchronous**—once the API call is invoked, your client application waits until it receives a response from the service. Asynchronous calls are not supported.

2.2 Data Types

Value	Description
String	Character strings. Fields that are of data type string contain text and some have length restrictions. Please see the field reference list for format and restrictions.
Decimal	Decimal represents a subset of the real numbers, which can be represented by decimal numerals. The \cdot -value space of decimal is the set of numbers that can be obtained by dividing an integer by a non-negative power of ten, i.e., expressible as $i/10^n$ where i and n are integers and $n \ge 0$. Precision is not reflected in this value space; the number 2.0 is not distinct from the number 2.00. (The datatype precisionDecimal may be used for values in which precision is significant.) The order relation on decimal is the order relation on real numbers, restricted to this subset.
Int	The precisionDecimal datatype represents the numeric value and (arithmetic) precision of decimal numbers which retain precision; it also includes values for positive and negative infinity and for "not a number", and it differentiates between "positive zero" and "negative zero". This datatype is introduced to provide a variant of decimal that closely corresponds to the floating-point decimal datatypes described by the expected forthcoming revision of IEEE/ANSI 754. Precision of values is retained and values are included for two zeroes, two infinities, and not-a-number.
Enumeration	Enumeration constrains the <u>-value space</u> to a specified set of values. Enumeration does not impose an order relation on the <u>-value space</u> it creates; the value of the <u>-ordered</u> property of the derived datatype remains that of the datatype from which it is derived.

2.3 Security

Purolator E-Ship Web Services authentication uses the standard HTTP Basic Authentication method allowing client programs to provide credentials in the form of a user name and password when making an HTTP request. Purolator E-Ship Web Services uses the standard HTTP protocol and in our case the username corresponds to the Development and Production Key that is issued to you by Purolator when you signed up for Purolator E-Ship Web Services. These credentials are sent from your client programs to our Purolator E-Ship Web Services servers securely using SSL.

2.4 Service Methods and Objects

The following section will highlight the various methods associated with the shipment service. As well, visual representations will depict the XML schema of both the requests, and the responses of the service calls.

2.4.1 Validate City/Postal Code/Zip Code

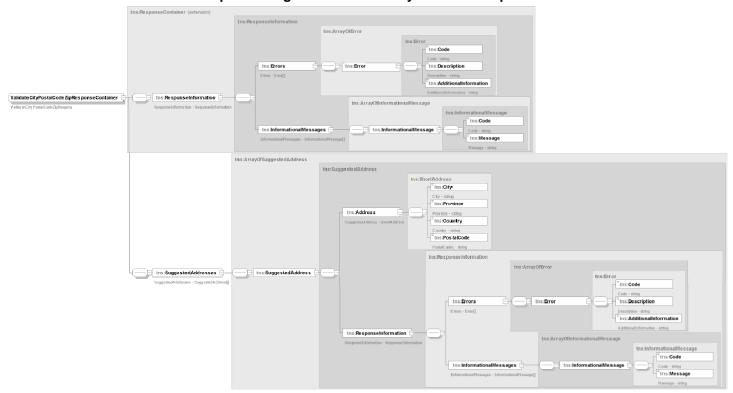
The ValidateCityPostalCodeZip method validates that the city/province (state)/postal (zip) code entered is correct. Should the combination be incorrect, the response message will return suggested values, based on the information entered.



2.4.1.1 Request Diagrams – ValidateCityPostalCodeZip



2.4.1.2 Response Diagrams – ValidateCityPostalCodeZip

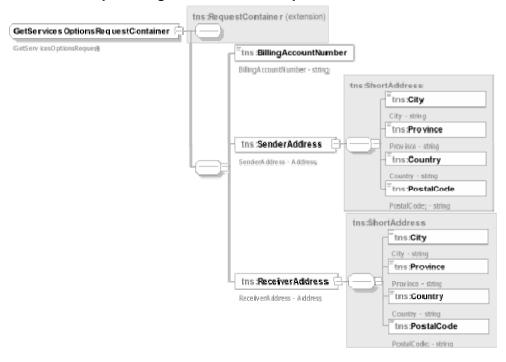


2.4.2 Get Services Options

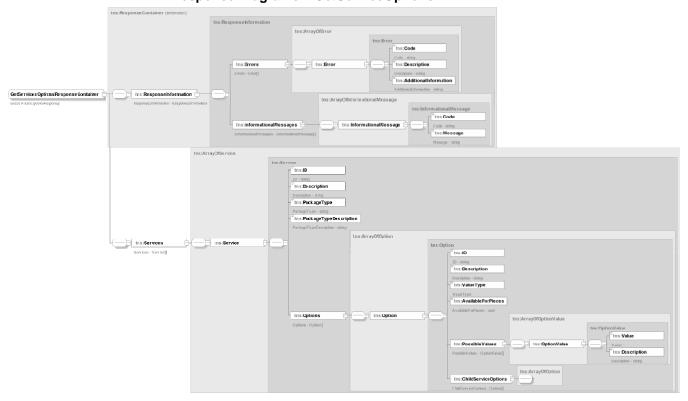
The GetServiceOptions method returns all available Purolator services for the specified origin and destination addresses.



2.4.2.1 Request Diagrams – GetServiceOptions



2.4.2.2 Response Diagrams – GetServiceOptions

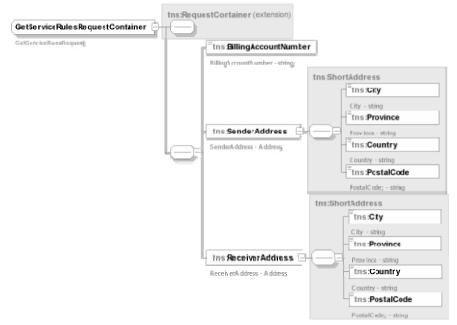




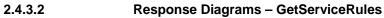
2.4.3 Get Service Rules

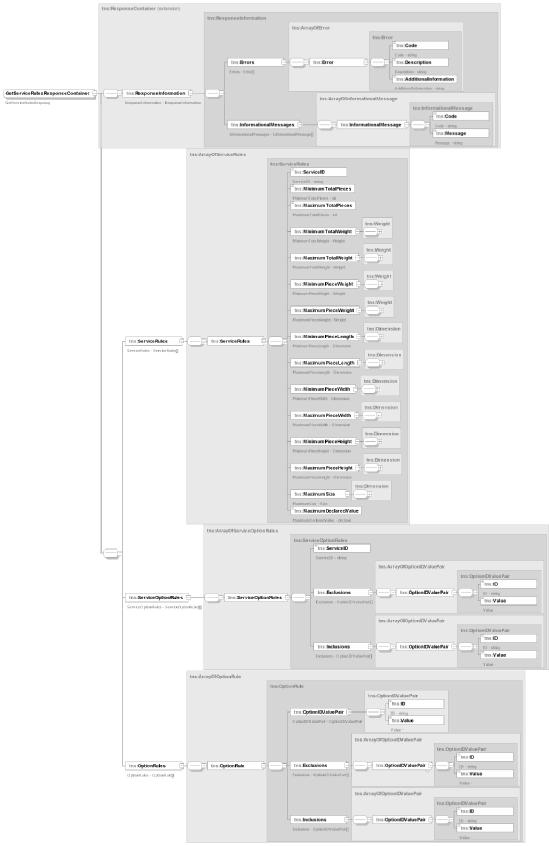
The GetServiceRules method returns all available Purolator products and options, as well as all the rules associated with the products and options. This includes all product min/max weights and dimensions, min/max pieces, product inclusions and exclusions, as well as option inclusions and exclusions.

2.4.3.1 Request Diagrams – GetServiceRules







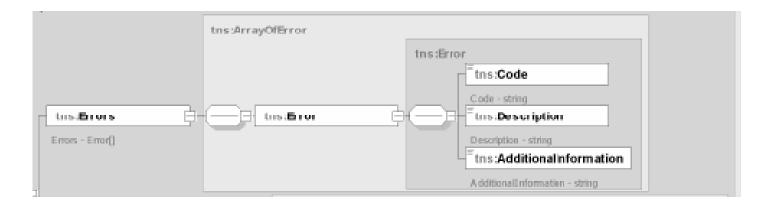




2.5 Error Handling

The Web Service calls return error data that your client application can use to identify and resolve runtime errors. If an error occurs during the invocation of most Web Services calls, then the API provides the following types of error handling:

- For errors resulting from badly formed messages, failed authentication, or similar problems, the Web Services returns a SOAP fault message.
- For errors resulting from a problem with the information sent to Purolator's systems, error codes and error descriptions are returned to the client application.





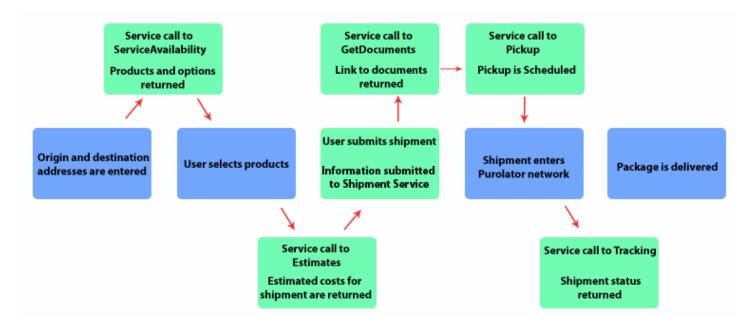
2.6 Implementation Considerations

As Purolator's business changes to meet the on-going needs of its customer, the business rules for certain products may change from time to time. As our business changes, your application doesn't have to. Purolator E-Ship Web Services offers customers an advanced Service Availability service that, when called, will return available products and services for a given origin and destination address. In addition to the available products and services, all business rules as well as product rules, product inclusions and exclusions, and products min/max dimensions and weights.

This can be used to offer your customers a greater experience, and offer all of Purolator's products and services, without needing to submit a request, only to discover that a particular product is not available for a particular address.

As well, additional Purolator E-Ship Web Services can be consumed to offer a richer customer experience. From estimates to tracking to retrieving necessary documentation, Purolator's E-Ship Web Services are designed to offer you the flexibility to consume the services required for your business.

Below is an example of how the all Purolator E-Ship Web Services may be utilized. (Green boxes denote service calls)



2.7 Error Messages / codes

Below is a list of all the error codes and descriptions.

Web Service Error

Code	Message	
1000100	System exception occurs.	
1001171	Service Id is a Mandatory Field.	
1100000	One or more errors have occurred.	
1100100	Field is missing.	



Code	Message
1100101	The Account Number is a mandatory field.
1100102	The Account Name is a mandatory field.
1100103	The Account Number is a mandatory field.
1100104	The City Name is a mandatory field.
1100107	The Country is a mandatory field.
1100110	The Package Type is a mandatory field.
1100115	The Postal Code is a mandatory field.
1100116	The Province is a mandatory field.
1100119	The Service Mode is a mandatory field.
1100123	The State is a mandatory field.
1100128	The User Type is a mandatory field.
1100131	The Receiver Address is a mandatory field.
1100132	The Receiver City is a mandatory field.
1100133	The Receiver Country is a mandatory field.
1100147	The Zip Code is a mandatory field.
1100200	Field is invalid.
1100202	City is invalid.
1100204	Country is invalid.
1100207	Package is invalid.
1100208	Phone Country Code is invalid.
1100213	Postal Code is invalid.



Code	Message
1100214	Province is invalid.
1100216	Service Mode is invalid.
1100217	State is invalid.
1100226	Country Code is invalid.
1100227	Premium Service Code is invalid.
1100241	Zip Code is invalid.
1100242	Receiver City is invalid.
1100243	Receiver Country is invalid.
1100266	Piece Weight is invalid.
1100275	Product Number is invalid.
1100285	Number of Shipments is Invalid.
1100400	Account object not initialized.
1100401	Account number is invalid.
1100407	Either both service point hierarchies are provided or none.
1100411	Account Status is invalid.
1100419	Postal Code is invalid.
1100426	Country Code is invalid.
1100427	City is invalid.
1100438	City not found.
1100454	Premium Services are only valid for Domestic shipments.
1100455	The specified Postal Code is valid for the City, Province: %city%, %province%.



Code	Message
1100465	Unable to retrieve Account information for Account %accountNo%.
1100468	Failed to find City Name.
1100491	Product is invalid.
1100497	An error occurred with your request. Please try again later.
1100500	Your request failed. Please call 1-888-SHIP-123 or 1-888-744-7123 for assistance.
1100505	Undefined Account Type for Account %account%.
1100506	%characteristicName% must be numeric.
1100507	%characteristicName% must be one of %validTypes%
1100508	%characteristicName%%characteristicValue% is not valid with %characteristicName2%%characteristicValue2%
1100535	Regrettably we are experiencing technical difficulties and unable to provide all the available statuses on your U.S. shipment. We hope to have the problem rectified ASAP.
1100552	All Shipments must originate in Canada.
1100604	Receiver State is invalid.
1100605	Receiver State is a mandatory field.
1100606	Receiver Zip Code is invalid.
1100607	Receiver Zip Code is a mandatory field.
1100633	Membership Creation Failure.
1100674	Postal Code %postalCode% is only valid for %city%, %province%.
1100675	Zip Code %zipCode% is only valid for %city%, %state%.
100693	Residential Signature or Originator Signature Not Required must be selected
1100676	Invalid Printer Type.
3001099	Invalid PackageType Code: {0}. Valid values are: {1}.



Code	Message
3001100	Invalid TaxType Code: {0}. Valid values are: {1}.
3001101	Invalid DataType Code: {0}. Valid values are: {1}.
3001102	Invalid ScanType Code: {0}. Valid values are: {1}.
3001103	Invalid SignatureImageFormat Code: {0}. Valid values are: {1}.
3001104	Invalid ILLanguage Code: {0}. Valid values are: {1}.
3001105	Invalid ESOLanguage Code: {0}. Valid values are: {1}.
3001106	Invalid ESOYesNo Code: {0}. Valid values are: {1}.
3001107	Invalid Option Code: {0}. Valid values are: {1}.
3001108	Invalid Product Code: {0}. Valid values are: {1}.
3001109	Invalid StreetType Code: {0}. Valid values are: {1}.
3001110	Invalid StreetDir Code: {0}. Valid values are: {1}.
3001111	Invalid StreetSuffix Code: {0}. Valid values are: {1}.
3001112	Invalid Country Code: {0}. Valid values are: {1}.
3001113	Invalid Province/State Code: {0}. Valid values are: {1}.
3001114	Translation Failed.
3001115	Service Call Failed.
3001116	Service Failed
3001117	A Web Service Error has occurred.
3001122	Invalid ChainOfSignature Code: {0}. Valid values are: {1}.
3001123	Invalid DangerousGoods Code: {0}. Valid values are: {1}.
3001124	Invalid DangerousGoodsClassification Code: {0}. Valid values are: {1}.



Code	Message
3001125	Invalid DangerousGoodsMode Code: {0}. Valid values are: {1}.
3001126	Invalid ExpressCheque Code: {0}. Valid values are: {1}.
3001127	Invalid ExpressChequeMethodOfPayment Code: {0}. Valid values are: {1}.
3001128	Invalid HoldForPickup Code: {0}. Valid values are: {1}.
3001129	Invalid SaturdayDelivery Code: {0}. Valid values are: {1}.
3001130	Invalid SaturdayPickup Code: {0}. Valid values are: {1}.
3001131	Invalid SpecialHanding Code: {0}. Valid values are: {1}.
3001132	Invalid TypesOfSpecialHandling Code: {0}. Valid values are: {1}.
3001133	Invalid DocumentType Code: {0}. Valid values are: {1}.
3001134	Invalid ExpressChequeAmount Code: {0}. Valid values are: {1}.
3001136	Service version is invalid
3001137	Invalid Declared Value Code: {0}. Valid values are: {1}.
3001138	Invalid OSNR Value Code: {0}. Valid values are: {1}.
3001139	Invalid registered shipping account specified in shipment
3001140	Invalid registered shipping account specified in return shipment
3001141	Postal / Zip code {0} code is not valid for Canada or U.S.
3001142	Country is not found
3001143	Suggested address is supplied
3001144	One or more addresses are invalid or suggestions are supplied
3001145	Invalid Piece Option Code: {0}. Valid values are: {1}.
3001146	Invalid Printer Type Option Code: {0}. Valid values are: {1}.



Purolator E-Ship $^{\rm TM}$ Web Services

Code	Message
3001147	Invalid Address.
3001148	Postal / Zip Code is required to validate a Canadian / U.S. Address.
3001153	Service Error



APPENDIX A - Complete Field List

Elements

ArrayOfError | ArrayOfInformationalMessage | ArrayOfOption | ArrayOfOptionIDValuePair | ArrayOfOptionRule |
ArrayOfOptionValue | ArrayOfService | ArrayOfServiceOptionRules | ArrayOfServiceRules | ArrayOfShortAddress |
ArrayOfSuggestedAddress | Dimension | Error | GetServiceRulesRequestContainer | GetServiceRulesResponseContainer |
GetServicesOptionsRequestContainer | GetServicesOptionsResponseContainer | InformationalMessage | Language | Option |
OptionIDValuePair | OptionRule | OptionValue | PackageType | RequestContext | ResponseContext | ResponseInformation |
Service | ServiceOptionRules | ServiceRules | ShortAddress | SuggestedAddress |
ValidateCityPostalCodeZipRequestContainer | ValueType | Weight

Input		
Field Name	Description	Allowed Value
ComplexType RequestContext	Used by: RequestContext	
Version	Version Number of the Web Service Request.	1.0 or 1.1(Currently)
Language	Used to define the Language of the Response text.	Enumeration. en fr
GroupID RequestReference	For Future Use Reference Identifier for the Service Request. Used to aid in Customer Support.	String
ComplexType GetServiceRulesRequestContain er	Used by: GetServiceRulesRequest	
BillingAccountNumber	Required. Registered billing account number	String
SenderAddress ReceiverAddress		Complex Type ShortAddress Complex Type ShortAddress
ComplexType GetServiceRulesOptionsContain er	Used by: GetServiceRulesRequest	
BillingAccountNumber	Required. Registered billing account number	String
SenderAddress ReceiverAddress		Complex Type ShortAddress Complex Type ShortAddress
ComplexType ValidateCityPostalCodeZipReque stContainer	Used by: ValidateCityPostalCodeZipRequest	
ArrayOfShortAddress		Complex Type ArrayOfShortAddress
ComplexType ArrayOfShortAddress	Used by: ValidateCityPostalCodeZipRequest	
Addresses		Complex Type Addresses
ComplexType Addresses	Used by: ValidateCityPostalCodeZipRequest	
ShortAddress		Complex Type ShortAddress
ComplexType ShortAddress	Used by: GetServiceRulesRequestContainer/R GetServicesOptionsRequestContainer	



Input		
Field Name	Description	Allowed Value
		String
City	Required. City	Alpha Numeric
		Maximum character length 30
		String
Province	Required. Province/State	Enumeration
	·	See Province/State list
		String
Country	Required. Country name	Enumeration
	·	See <u>Country</u> List
PostalCode		

Output		
Field Name	Description	Output Values
Element ResponseInformation	Used by: ResponseInformation	
ResponseReference Errors InformationalMessages	Array of errors	Complex Type <u>ArrayOfError</u> Complex Type <u>ArrayOfInformationalMessages</u>
ComplexType ArrayOfError	Used by: ArrayOfError, ResponseInformation	/Errors
Error	Error information returned by the service call.	Complex Type <u>Error</u>
ComplexType Error	Used by: Error, ArrayOfError/Error	
Code Description AdditionalInformation	Error Code Error Description Additional error information	
ComplexType ArrayOfInformationalMessage	Used by: ArrayOfInformationalMessage, Resp	oonseInformation/InformationalMessages
InformationalMessage	An array of Informational Messages as part of a response to a service request.	Array of Strings
ComplexType ArrayOfOption	Used by: Option/ChildServiceOptions, Service	e/Options
<u>Option</u>	The ArrayOfOptionIDValuePair field is used by both the shipment element, and the piece element. This array is used to input a single or multiple characteristics to the piece and/or shipment level.	Complex Type Option



Output		
Field Name	Description	Output Values
ComplexType Option	Used by: ArrayOfPiece/Piece, Piece	
ID Description		Enumeration:
ValueType		String Decimal DateTime Enumeration
AvailableForPieces PossibleValues ChildServiceOptions		Boolean Complex Type ArrayOfOptionValue Complex Type ArrayOfOption
ComplexType ArrayOfOptionValue	Used by: Option/PossibleValues	
OptionValue		Cmplex Type OptionValue
ComplexType OptionValue	Used by: Option/PossibleValues	
Value Description		
ComplexType ArrayOfOptionIDValuePair	Used by: Piece/Options, OptionsInformation	n/Options
<u>OptionIDValuePair</u>		Complex Type OptionIDValuePair
ComplexType OptionIDValuePair ID Value	Used by: ArrayOfOptionIDValuePair/OptionII	DValuePair, OptionRule/OptionIDValuePair
ComplexType ArrayOfOptionRule	Used by: GetServiceRulesResponseContain	er/OptionRules
OptionRule	Array or option rules for a specified product/service.	Complex Type OptionRule
ComplexType OptionRule	Used by: GetServiceRulesResponseContain	er/OptionRules
OptionIDValuePair Exclusions Inclusions		Complex Type OptionIDValuePair Complex Type OptionIDValuePair Complex Type OptionIDValuePair
ComplexType ArrayOfService	Used by: GetServicesOptionsResponseConf	tainer/Services
Service	Array used to return all Purolator services available for the specified origin and destination addresses	Complex Type Service
ComplexType Service	Used by: GetServicesOptionsResponseConf	tainer/Services
ID Description	Nillable Nillable	String String



Output		
Field Name	Description	Output Values
		Enumeration:
		ExpressEnvelope
PackageType		ExpressPack
		CustomerPackaging
	Nillable	ExpressBox
PackageTypeDescription	Nillable	String
Options		Complex Type ArrayOfOption
ComplexType ArrayOfServiceOptionRules	Used by:	seContainer/ServiceOptionRules
ServiceOptionRules	Nillable	Complex Type ServiceOptionRules
ComplexType		Complex Type ServiceOptionRules
ServiceOptionRules	Used by: GetServiceRulesRespons	seContainer/ServiceOptionRules
ServiceID	Nillable	String
Exclusions		Complex Type OptionIDValuePair
Inclusions		Complex Type OptionIDValuePair
ComplexType	Used by:	
ArrayOfServiceRules		seContainer/ServiceRules
ServiceRules	Nillable	Complex Type ServiceRules
ComplexType	Used by:	
ServiceRules	GetServiceRulesRespons	seContainer/ServiceRules
ServiceID		String
MinimumTotalPieces		Int
MaximumTotalPieces		Int
MinimumTotalWeight		Complex Type Weight
MaximumTotalWeight		Complex Type Weight
MinimumPieceWeight		Complex Type Weight
MaximumPieceWeight		Complex Type Weight
MinimumPieceLength		Complex Type <u>Dimension</u>
MaximumPieceLength		Complex Type <u>Dimension</u>
MinimumPieceWidth		Complex Type <u>Dimension</u>
MaximumPieceWidth		Complex Type <u>Dimension</u>
MinimumPieceHeight		Complex Type <u>Dimension</u>
MaximumPieceHeight		Complex Type Dimension
MaximumSize		Complex Type <u>Dimension</u>
MaximumDeclaredValue		Decimal
ComplexType	Used by:	
ArrayOfSuggestedAddress	ValidateCityPostalCodeZ	ipResponseContainer/SuggestedAddresses
SuggestedAddress		Complex Type SuggestedAddress
ComplexType SuggestedAddress	Used by: ValidateCityPostalCodeZ	ipResponseContainer/SuggestedAddresses
Address		Complex Type ShortAddress
ResponseInformation		Complex Type ResponseInformation
ComplexType	Used by:	
ShortAddress		Container/ReceiverAddress
2167	-	uestContainer/SenderAddress
City Province	City Province/State	String String
TOVITICE	riovince/State	String



Output		
Field Name	Description	Output Values
Country	Country name	String
PostalCode	Postal/Zip Code	String
ComplexType ResponseContext	Used by: GetServiceRulesRequestContainer/ GetServicesOptionsRequestContail	/ReceiverAddress
ResponseReference	•	
ComplexType Weight		t ServiceRules/MaximumTotalWeight t ServiceRules/MinimumTotalWeight Weight
Value		Decimal
WeightUnit		Enumeration: Lb kg
ComplexType Dimension	ServiceRules/MaximumSize Service	PieceHeight h ServiceRules/MaximumPieceWidth
Value		Decimal Enumeration:
DimensionUnit		in cm
ComplexType ValidateCityPostalCodeZipRespo nseContainer		
ResponseInformation SuggestedAddresses		Complex Type ResponseInformation Complex Type SuggestedAddresses
ComplexType GetServiceRulesResponseContai ner		
ResponseInformation		Complex Type ResponseInformation
ServiceRules		Complex Type ServiceRules
ServiceOptionRules		Complex Type ServiceOptionRules
OptionRules		Complex Type OptionRules
ComplexType GetServicesOptionsResponseCo ntainer		·
ResponseInformation		Complex Type ResponseInformation
Services		Complex Type Services



APPENDIX B- Allowed Code List

Province/State

Province/State			
Province/ State Code	Description	Province/ State Code	Description
AB	Alberta	NL	Newfoundland
AK	Alaska	NM	New Mexico
AL	Alabama	NS	Nova Scotia
AR	Arkansas	NT	Northwest Territories
AZ	Arizona	NU	Nunavut
BC	British Columbia	NV	Nevada
CA	California	NY	New York
CO	Colorado	ОН	Ohio
СТ	Connecticut	OK	Oklahoma
DC	District of Columbia	ON	Ontario
DE	Delaware	OR	Oregon
FL	Florida	PA	Pennsylvania
GA	Georgia	PE	Prince Edward Island
HI	Hawaii	QC	Quebec
IA	Iowa	RI	Rhode Island
ID	Idaho	SC	South Carolina
IL	Illinois	SD	South Dakota
IN	Indiana	SK	Saskatchewan
KS	Kansas	TN	Tennessee
KY	Kentucky	TX	Texas
LA	Louisiana	UT	Utah
MA	Massachusetts	VA	Virginia
MB	Manitoba	VT	Vermont
MD	Maryland	WA	Washington
ME	Maine	WI	Wisconsin
MI	Michigan	WV	West Virginia
MN	Minnesota	WY	Wyoming
MO	Missouri	YT	Yukon
MS	Mississippi		
MT	Montana		
NB	New Brunswick		
NC	North Carolina		
ND	North Dakota		
NE	Nebraska		
NH	New Hampshire		
NJ			

Piece level Characteristics

Characteristic Value (ID field)	Allowed Value (Value field)
	Enumeration:
SpecialHandling	true
	false



Shipment level Characteristic

Characteristic Value (ID field)	Allowed Value (Value field)
SpecialHandling	Enumeration: TRUE FALSE
DangerousGoods	Enumeration: TRUE FALSE Enumeration:
DangerousGoodsClass (required if sending Dangerous Goods)	FullyRegulated UN3373 UN1845 LessThan500kgExempt LimitedQuantities
DangerousGoodsMode (required if sending Dangerous Goods)	Enumeration: Air Ground
DeclaredValue	String Numeric xxxxx.xx
ChainOfSignature	Enumeration: TRUE FALSE
SaturdayPickup	Enumeration: TRUE FALSE
SaturdayDelivery	Enumeration: TRUE FALSE
ExpressCheque	Enumeration: TRUE FALSE
HoldForPickup	Enumeration: TRUE FALSE
ExpressChequeMethodOfPayment	Enumeration: Cheque PostDatedCheque CertifiedCheque MoneyOrder BankDraft
ExpressChequeAmount	String Numeric xxxxx.xx
OriginSignatureNotRequired	Enumeration: TRUE FALSE
ResidentialSignatureDomestic	Enumeration: TRUE FALSE
ResidentialSignatureIntl	Enumeration: TRUE FALSE



Product List (ServiceID)

PurolatorExpress9AM PurolatorExpress10:30AM

PurolatorExpress

PurolatorExpressEvening

PurolatorExpressEnvelope9AM

PurolatorExpressEnvelope10:30AM

PurolatorExpressEnvelope

PurolatorExpressEnvelopeEvening

PurolatorExpressPack9AM

PurolatorExpressPack10:30AM

PurolatorExpressPack

 ${\bf Purolator Express Pack Evening}$

PurolatorExpressBox9AM

PurolatorExpressBox10:30AM

PurolatorExpressBox

PurolatorExpressBoxEvening

PurolatorGround

PurolatorGround9AM

PurolatorGround10:30AM

PurolatorGroundEvening

PurolatorExpressU.S.

PurolatorExpressU.S.9AM

PurolatorExpressU.S.10:30AM

PurolatorExpressU.S.12:00

Discolate of Commence Formal and I C

 ${\bf Purolator Express Envelope U.S.}$

PurolatorExpressU.S.Envelope9AM

PurolatorExpressU.S.Envelope10:30AM

PurolatorExpressU.S.Envelope12:00

PurolatorExpressPackU.S.

PurolatorExpressU.S.Pack9AM

PurolatorExpressU.S.Pack10:30AM

PurolatorExpressU.S.Pack12:00

PurolatorExpressBoxU.S.

PurolatorExpressU.S.Box9AM

PurolatorExpressU.S.Box10:30AM

PurolatorExpressU.S.Box12:00

PurolatorGroundU.S.

PurolatorExpressInternational

PurolatorExpressInternational9AM

PurolatorExpressInternational10:30AM

PurolatorExpressInternational12:00

PurolatorExpressEnvelopeInternational

- arolator Expresse Environmental

Purolator ExpressInternational Envelope 9AM

PurolatorExpressInternationalEnvelope10:30AM

PurolatorExpressInternationalEnvelope12:00

PurolatorExpressPackInternational

PurolatorExpressInternationalPack9AM

PurolatorExpressInternationalPack10:30AM

PurolatorExpressInternationalPack12:00

PurolatorExpressBoxInternational

PurolatorExpressInternationalBox9AM

PurolatorExpressInternationalBox10:30AM

PurolatorExpressInternationalBox12:00

PurolatorGroundDistribution

Street Suffix

Λ	Г
В	Q
С	R
D	S
E	Т
F	U
G	V
Н	W
1	X
J	Υ
K	Z
L	1/4
M	1/2
N	3/4



0

Street Type

Field Port Abbey Acres Forest Promenade Alley Front Point Allé Pathway Freeway Autoroute Gate Private Quay avenue (F) Gardens Avenue (E) Glade Rang Bay Glen Road Beach Green Rond-point Bend Grounds Range Boulevard (E) Grove Ridge Boulevard (F) Harbour Rise By-pass Highlands Ruelle Hill Row Byway Centre (F) Hollow Route Campus Heights Rue Cape Highway Run Carré Île Sentier Carrefour Impasse Square Cul-de-sac Island Street Cercle Key Subdivision Chemin Knoll Terrace Chase Landing Thicket Circle Lane **Townline** Circuit Line **Towers** Close Link Trail Common Lookout Turnabout Concession Limits Terrasse Vale Côte Loop Via Cour Mall Cove Manor View Crescent Maze Village Corners Meadow Vista Croissant Mews Voie Walk Crossing Montéé Court Moor Way Wharf Centre (E) Mount Dale Mountain Wood Wynd Dell Orchard Diversion Parade Port Promenade **Downs** Parc Drive Passage Point Échangeur Path Pathway End **Pines** Private Esplanade Park Quay **Estates** Parkway Rang



Purolator E-Ship $^{\mathsf{TM}}$ Web Services

ExpresswayPlace (E)RoadExtensionPlace (F)Rond-pointFarmPlateauRange

Country

Country Code	Country Description	Country Code	Country Description	Country Code	Country Description
AD	Andorra	GN	Guinea	OM	Oman
AE	Utd.Arab Emir.	GP	Guadeloupe	OR	Orange
AF	Afghanistan	GQ	Equatorial Guin	PA	Panama
AG	Antigua/Barbuda	GR	Greece	PE	Peru
Al	Anguilla	GS	S. Sandwich Ins	PF	Frenc.Polynesia
AL	Albania	GT	Guatemala	PG	Pap. New Guinea
AM	Armenia	GU	Guam	PH	Philippines
AN	Dutch Antilles	GW	Guinea-Bissau	PK	Pakistan
AO	Angola	GY	Guyana	PL	Poland
AQ	Antarctica	HK	Hong Kong	PM	St.Pier,Miquel.
AR	Argentina	HM	Heard/McDon.Isl	PN	Pitcairn Islnds
AS	Samoa, America	HN	Honduras	PR	Puerto Rico
AT	Austria	HR	Croatia	PS	Palestine
AU	Australia	HU	Hungary	PT	Portugal
AW	Aruba	IC	Canary Islands	PW	Palau
AX	Aland Islands	ID	Indonesia	PY	Paraguay
AZ	Azerbaijan	IE	Ireland	QA	Qatar
BA	Bosnia-Herz.	IL	Israel	RE	Reunion
BB	Barbados	IM	Isle of Man	RO	Romania
BD	Bangladesh	IN	India	RS	Serbia
BE	Belgium	Ю	Brit.Ind.Oc.Ter	RU	Russian Fed.
BF	Burkina Faso	IQ	Iraq	RW	Rwanda
BG	Bulgaria	IR	Iran	SA	Saudi Arabia
ВН	Bahrain	IS	Iceland	SB	Solomon Islands
BI	Burundi	ΙΤ	Italy	SC	Seychelles
BJ	Benin	JE	Jersey	SD	Sudan
BL	Blue	JM	Jamaica	SG	Singapore
BM	Bermuda	JO	Jordan	SH	Saint Helena
BN	Brunei Daruss.	JP	Japan	SI	Slovenia
ВО	Bolivia	KE	Kenya	SJ	Svalbard
BR	Brazil	KG	Kyrgyzstan	SK	Slovakia
BS	Bahamas	KH	Cambodia	SL	Sierra Leone
BT	Bhutan	KI	Kiribati	SM	San Marino
BV	Bouvet Islands	KM	Comoros	SN	Senegal
BW	Botswana	KN	St Kitts&Nevis	SO	Somalia
BY	Belarus	KP	North Korea	SR	Suriname
BZ	Belize	KR	South Korea	ST	S.Tome,Principe
CA	Canada	KW	Kuwait	SV	El Salvador
CC	Coconut Islands	KY	Cayman Islands	SY	Syria
CD	Dem. Rep. Congo	KZ	Kazakhstan	SZ	Swaziland
CF	Central African	LA	Laos	TC	Turksh Caicosin



Country Code	Country Description	Country Code	Country Description	Country Code	Country Description
	Republic				
CG	Rep.of Congo	LB	Lebanon	TD	Chad
CH	Switzerland	LC	St. Lucia	TF	French S.Territ
CI	Cote d'Ivoire	LI	Liechtenstein	TG	Togo
CK	Cook Islands	LK	Sri Lanka	TH	Thailand
CL	Chile	LR	Liberia	TJ	Tajikistan
CM	Cameroon	LS	Lesotho	TK	Tokelau Islands
CN	China	LT	Lithuania	TL	Timor Leste
СО	Colombia	LU	Luxembourg	TM	Turkmenistan
CR	Costa Rica	LV	Latvia	TN	Tunisia
CU	Cuba	LY	Libya	TO	Tonga
CV	Cape Verde	MA	Morocco	TP	East Timor
CX	Christmas Islnd	MC	Monaco	TR	Turkey
CY	Cyprus	MD	Moldova	TT	Trinidad,Tobago
CZ	Czech Republic	ME	Montenegro	TV	Tuvalu
DE	Germany	MG	Madagascar	TW	Taiwan
DJ	Djibouti	MH	Marshall Islnds	TZ	Tanzania
DK	Denmark	MK	Macedonia	UA	Ukraine
DM	Dominica	ML	Mali	UG	Uganda
DO	Dominican Rep.	MM	Burma	UM	Minor Outl.Isl.
DZ	Algeria	MN	Mongolia	UN	United Nations
EC	Ecuador	MO	Macau	US	USA
EE	Estonia	MQ	Martinique	UY	Uruguay
EG	Egypt	MR	Mauretania	UZ	Uzbekistan
EH	West Sahara	MS	Montserrat	VA	Vatican City
ER	Eritrea	MT	Malta	VC	St. Vincent
ES	Spain	MU	Mauritius	VE	Venezuela
ET	Ethiopia	MV	Maldives	VG	Brit.Virgin Is.
EU	European Union	MW	Malawi	VI	Amer.Virgin Is.
FI	Finland	MX	Mexico	VN	Vietnam
FJ	Fiji	MY	Malaysia	VU	Vanuatu
FK	Falkland Islnds	MZ	Mozambique	WF	Wallis,Futuna
FM	Micronesia	NA	Namibia	WS	Samoa
FO	Faroe Islands	NC	New Caledonia	XB	Bonaire
FR	France	NE	Niger	XC	Curacao
GA	Gabon	NF	Norfolk Islands	XM	St. Maarten
GB	United Kingdom	NG	Nigeria	XN	Nevis
	Ĭ				Somaliland
GD	Grenada	NI	Nicaragua	XS	Republic
GE	Georgia	NL	Netherlands	XY	St. Barthelemy
GF	French Guayana	NO	Norway	YE	Yemen
GG	Guernsey	NP	Nepal	YT	Mayotte
GH	Ghana	NR	Nauru	ZA	South Africa
GI	Gibraltar	NT	Nato	ZM	Zambia
GL	Greenland	NU	Niue	ZW	Zimbabwe
GM	Gambia	NZ	New Zealand	ZZ	Dummy Country



Street Direction

E	S
N	SE
NE	SO SW
NO NW	SW
NW	W
0	

