

SELLONLINE™

SHIPPING SERVICE

ARCHITECTURE DOCUMENT

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For Technical Assistance
Call 1 866 511-0546
Email to sellonline@canadapost.ca

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1. Introduction

Objective This document explains the technical requirements needed to integrate the SellOnline™ Shipping Service with a client's electronic commerce application. This paper is not an implementation user guide but a preliminary guide to enable clients to make a better business decision to implement SellOnline™ to their eCommerce sites.

The implementation user guide is a requisite to this paper. Detailed implementation instructions are available on the developers website that will be made available at your request.

Basic Requirements As outlined in the implementation guide, the retailer must capture the following information before the technical team attempts to integrate with the SellOnline™ Shipping Service:

- Measurement and weight of each SKU or ready to ship item
- Measurement, weight and maximum weight capacity of all shipping boxes
- Warehouse postal code where goods are shipped from
- Canada Post pick-up time
- Warehouse turnaround time
- Canada Post Distribution contract

For the integration, your technical team requires:

- Delivery destination address (valid Canadian postal code, Country or State)
 - One of the following
 - HTTP post with XML
 - Direct TCP connection with XML
-

2. Overview of the SellOnline™ Shipping Service

Consumer Navigation

Most eCommerce products implement a "pipeline purchasing process" whereby the purchase process is represented by a series of clearly defined stages, each of which can be customized. In this case, when a consumer is ready to buy, your eCommerce platform sends to the SellOnline™ Shipping Service information of the items to be shipped. The SellOnline™ Shipping Service sends this information to its rate and service standards module and calculates the shipping cost and delivery date. The results are then returned to your eCommerce platform for display to your consumer. We recommend calling the shipping service during the checkout process before the payment is secured.

Basic Functionality

There are a number of supported communication methods with the SellOnline™ server:

HTTP Post with XML data.

- Your program is required to prepare the data into the XML for posting to the SellOnline™ server.
- The post returns data in XML format that you need to parse and then display to the consumers. The returned information contains detailed information on boxes to use for packing and on delivery services.
- The consumer selects the shipping speed.
- Your program captures the selection and provides the information to your warehouse staff and to the shipping system for shipping label printing.
- The post can return data in HTML format that you need to include in your page and then display to the consumers. The returned information contains the same detailed information on boxes to use for packing and on delivery services.

Direct TCP connection with XML data.

- Your program is required to prepare the data into the XML for sending to the SellOnline™ server.
- The server returns data in XML format that you need to parse and then display to the consumers. The returned information contains detailed information on boxes to use for packing and on delivery services.
- The consumer selects the shipping speed.
- Your program captures the selection and provides the

information to your warehouse staff and to the shipping system for shipping label printing.

3. Architecture

High Level Overview

The SellOnline™ Shipping Service interacts with your eCommerce platform by receiving the required purchasing and delivery information (detailed below) from your eCommerce platform. In turn, the shipping service provides the shipping costs and the expected delivery dates for the order.

4. External Application Program Interface

General

This section describes the inputs and outputs required to interact with the SellOnline™ Shipping Service.

SellOnline™ Shipping Service

To interface with the SellOnline™ Shipping Service, the following input is required:

As explained in section 2, the format of the request sent to the SellOnline™ Shipping Service is in XML. The DTD for the request can be obtained at:

http://sellonline.canadapost.ca/DevelopersResources/protocolV3/eP_ancel.dtd

An example request with description of each field can be obtained at:

http://sellonline.canadapost.ca/DevelopersResources/protocolV3/HT_TPIinterface.html

The information must be sent through one of the methods described in section 2. Additional details and examples can be obtained at

<http://sellonline.canadapost.ca/DevelopersResources/protocolV3/index.html>

5. Code Examples Using the API

Our server sellonline.canadapost.ca contains code examples for each implementation in the “Developer Resources” section.

6. Obtaining access to the developers site and a test shipping profile.

Please send an email to sellonline@canadapost.ca requesting a test account. When the SellOnline™ team receives your request, the account information will be sent to your email address.

Annex 1 – Result Codes

Up to date result codes are available on our test server at sellonline.canadapost.ca under “Developer Resources”. The error codes are returned when the service could not recover from the error and therefore these codes are the only information returned.

In the case of warnings, they are returned for information purposes. They indicate there were some problems with the Canada Post service but that the service was able to recover from it and therefore the information (rates, etc.) are also returned.

Annex 2 – List of countries

The following are the English and French list of countries as they are to be sent to the Canada Post interface service. The service also allows the use of ISO country codes to replace this list. The ISO link is available from the developers site. The following list is available in csv format on our test server at sellonline.canadapost.ca under “Developer Resources” and “SellOnline™ Service Integration Documentation”.

English List

United States				
Abu Dhabi	Admiralty Islands	Afghanistan	Aland Islands	Albania
Algeria	Alofi Islands	American Samoa	Andaman Islands	Andorra
Angola	Anguilla	Antigua & Barbuda	Argentina	Armenia
Aruba	Ascension	Australia	Austria	Azerbaijan
Azores	Bahamas	Bahrain	Balearic Islands	Bali
Bangladesh	Banka	Banks Islands	Barbados	Belarus
Belgium	Belize	Benin	Bermuda	Bhutan
Billiton Island	Bismark Archipelago		Bolivia	Bonaire
Bophuthatswana	Bosnia & Herzegovina	Botswana	Brazil	Brunei Darussalam
Bulgaria	Burkina Faso	Burma	Burundi	Cambodia
Cameroon	Canary Islands	Cape Verde	Cayman Islands	Celebes
Central African Rep.		Ceuta	Chad	Chafarinas
Channel Islands	Chile	China	Christmas Islands	Ciskei
Coloane	Colombia	Comoros (Fed. Islamic Rep.)	Corfu	Congo (Dem. Rep.)
Congo (People's Rep.)		Cook Islands	Croacia	Corsica
Costa Rica	Cote d'Ivoire	Crete	Daito Island	Cuba
Curacao	Cyprus	Czech Republic	Dominican Republic	Denmark
Djibouti	Dodecanese Island	Dominica	El Salvador	Dubai
East Timor	Ecuador	Egypt	Ethiopia	England
Equatorial Guinea	Eritrea	Estonia	Finland	Falkland Islands
Fanning Island	Faroe Islands	Fiji	Futuna Islands	France
French Guiana	French Polynesia	Fujairah	Ghana	Gabon
Gambia	Georgia	Germany	Greenland	Gibraltar
Gilbert Islands	Great Britain	Greece	Guernsey	Grenada
Guadeloupe	Guam	Guatemala	Hervey Islands	Guinea
Guinea-Bissau	Guyana	Haiti	Hunan Islands	Hokkaido Island
Honduras	Hong Kong	Honshu Island	Iran	Hungary
Iceland	India	Indonesia	Isle of Pines	Iraq
Ireland (Northern)	Ireland (Republic)	Isle of Man	Japan	Israel
Italy	Jadu	Jamaica	Kenya	Java
Jersey	Jordan	Kazakhstan	Kyrgystan	Kiribati
Korea North	Korea South	Kuwait	Lebanon	Kyushu Island
Lagosta	Lao	Latvia	Liberia	Leeward Islands (British)
Leeward Islands (French)	Lesotho	Loyalty Islands	Luxembourg	Libyan Jamahiriya
Liechtenstein	Lithuania	Madeira	Madura Island	Macao
Macedonia	Madagascar	Mali	Malta	Malawi
Malaysia	Maldives	Martinique	Mauritania	Manus Island
Marshall Islands	Marquesas Island	Moldova	Moluccas Islands	Mauritius
Mayotte	Mexico	Morocco	Mozambique	Monaco
Mongolia	Montserrat	Nepal	Netherlands	Myanmar
Namibia	Nauru	New Ireland	New Zealand	Netherlands Antilles
New Britain	Niger	Nigeria	Niue Islands	Nicaragua
Nicobar Islands	Northern Ireland	Norway	Ocean Island	Norfolk Islands
North Korea	Palau	Panama	Papua New Guinea	Oman
Pakistan	Philippines	Pitcairn Islands	Poland	Paraguay
Peru	Qatar	Rarotonga Islands	Réunion	Portugal
Puerto Rico	Romania	Russian Federation	Rwanda	Rhio Island
Rodriguez Island	Saint Christopher & Nevis		Saint Vincent & the Grenadines	Ryukyu Island
Saba	Saipan	Samoa	San Marino (Rep.)	
Saint Lucia	Saudi Arabia	Scotland	Senegal	Sao Tome & Principe
Sardinia	Sierra Leone	Singapore	Slovakia	Seychelles
Shikoku Island	Solomon Islands	Somalia	South Africa	Slovenia
Society Islands				South Korea

Spain	Spanish Territories of North Africa	Spitzbergen	Sri Lanka
St. Helena	St. Croix	St. John	St. Maarten
St. Pierre & Miquelon	St. Thomas	Sudan	Sumatra Island
Suriname	Svalbard	Swaziland	Switzerland
Syrian Arab Rep.	Tahiti	Taiwan	Tajikistan
Tanzania	Tarawa Islands	Thailand	Tokelau Islands
Tonga Islands	Torres Islands	Tortola Island	Transkei
Trinidad & Tobago	Tristan da Cunha	Tubuai Islands	Turkey
Turkmenistan	Turks & Caicos Islands	Tuvalu	Uganda
Ukraine	United Arab Emirates	Upolu Island	Uruguay
Uzbekistan	Vanuatu	Vatican	Venezuela
Viet Nam	Virgin Gorda	Virgin Islands (British)	Virgin Islands (U.S.)
Wales	Wallis Island	Washington Island	Yugoslavia
Zaire	Zambia	Zimbabwe	

French List

États-Unis				
Abu Dhabi	Açores	Afghanistan	Afrique du Sud	Albanie
Algérie	Allemagne	Andorre	Angeeterre	Angola
Anguilla	Antigua et Barbuda	Antilles néerlandaises		Arabie saoudite
Archipel Bismark	Argentine	Arménie	Aruba	Ascension
Australie	Austriche	Azerbaïdjan	Bahamas	Bahrain
Bali	Bangladesh	Banka	Barbade	Bélarus
Belgique	Belize	Bénin	Bermudes	Bhoutan
Bolivie	Bonaire	Bophuthatswana	Bosnie-Herzégovine	
Botswana	Brésil	Brunei Darussalam	Bulgarie	Burkina Faso
Burma	Burundi	Cambodge	Cameroun	Cap-Vert
Centrafrique	Ceuta	Chafarinas	Chili	Chine
Chypre	Cisnei	Coloane	Colombie	Comoros
Congo	Congo (Rép. Dém.)	Corée du Nord	Corée du Sud	Corfu
Corse	Costa-Rica	Côte d'Ivoire	Crète	Croatie
Cuba	Curaçao	Danemark	Djibouti	Dominique
Dubai	Écosse	Égypte	El Salvador	Émirats arabes unis
Équateur	Érythrée	Espagne	Estonie	Éthiopie
Fédération de Russie		Fidji	Finlande	France
Fujairah	Gabon	Galles	Gambie	Géorgie
Ghana	Gibraltar	Grande-Bretagne	Grèce	Grenade
Groenland	Guadeloupe	Guam	Guatemala	Guernesey
Guinée	Guinée équatoriale	Guinée-Bissau	Guyane	Guyane française
Haïti	Honduras	Hongkong	Hongrie	Île Billiton
Île Christmas	Île Daito	Île de Man	Île Dodécane	Île Fanning
Île Kyushu	Île Madura	Île Manus	Île Marquesas	Île Océan
Île Rhio	Île Rodriguez	Île Ryukyu	Île Shikoku	Île Sumatra
Île Tortola	Île Upolu	Île Wallis	Île Washington	Îles Aland
Îles Alofi	Îles Andaman	Îles Baléares	Îles Banks	Îles Canaries
Îles Cayman	Îles Célèbes	Îles Cooke	Îles de l'Amirauté	Îles de la Manches
Îles des Pins	Îles Falkland	Îles Féroé	Îles Futuna	Îles Gilbert
Îles Hervey	Îles Hokkaido	Îles Honshu	Îles Hunan	Îles Leeward britannique
Îles Leeward française		Îles Loyauté	Îles Marshall	Îles Molusques
Îles Nicobar	Îles Niue	Îles Norfolk	Îles Pitcairn	Îles Rarotonga
Îles Salomon	Îles Société	Îles Tarawa	Îles Tokelau	Îles Tonga
Îles Torres	Îles Tuamotu	Îles Tubuai	Îles Turques & Caïques	
Îles Vierges (É.-U.)	Îles Vierges britanniques		Inde	Indonésie
Iran	Iraq	Irlande	Irlande du Nord	Islande
Israël	Italie	Jadu	Jamahiriya libyenne	
Jamaïque	Japon	Java	Jersey	Jordanie
Kazakhstan	Kenya	Kiribati	Kuwait	Kyrgyzistan
Lagosta	Lao	Lesotho	Lettonie	Liban
Libéria	Liechtenstein	Lituanie	Luxembourg	Macao
Macédoine	Madagascar	Madère	Malaisie	Malawi
Maldives	Mali	Malte	Maroc	Martinique
Maurice	Mauritanie	Mayotte	Mexique	Moldova
Monaco	Mongolie	Montserrat	Mozambique	Myanmar
Namibie	Nauru	Népal	New Ireland	Nicaragua
Niger	Nigeria	Norvège	Nouvelle-Calédonie	Nouvelle-Zélande
Nouvelle-Bretagne	Oman	Ouganda	Ouzbékistan	Pakistan
Palau	Panama	Papousie-Nouvelle Guinée		Paraguay

Pays-Bas	Pérou	Philippines	Pologne	Polynésie française
Porto-Rico	Portugal	Qatar	Rép. arabe Syrienne	
Rép. San Marino	République Dominicaine		République Tchèque	
Réunion	Romanie	Rwanda	Saba	Saint-Christophe-et-Nevis
Saint-Eustatius	Saint-Lucie	Saint-Maarten	Saint-Pierre et Miquelon	
Saint-Thomas	Saint-Vincent-et-Grenadines		Sainte-Croix	Sainte-Hélène
Saipan	Samoa	Samoa américaine	Sao Tomé-et-Principe	
Sardaigne	Sénégal	Seychelles	Sierra Leone	Singapour
Slovaquie	Slovénie	Somalie	Soudan	Spitzberg
Sri Lanka	St. John	Suède	Suisse	Suriname
Svalbard	Swaziland	Tahiti	Taïpa	Taïwan
Tajikistan	Tanzanie	Tchad	Territoires espagnols de l'Afrique Sud	
Thaïlande	Timor Oriental	Togo	Transkei	Trinité-et-Tobago
Tristan da Cunha	Tunisie	Turkménistan	Turquie	Tuvalu
Ukraine	Uruguay	Vanuatu	Vatican	Venda
Vénézuéla	Viet Nam	Virgin Gorda	Yémen	Yugoslavie
Zaire	Zambie	Zimbabwe		

Annex 3 – List of State Names

The following are the US State Names that can be handles by the SellOnline™ Shipping Service:

Alabama	Nebraska
Alaska	Nevada
Arizona	New Hampshire
Arkansas	New Jersey
California	New Mexico
Colorado	New York
Connecticut	North Carolina
Delaware	Ohio
District of Columbia	Oklahoma
Florida	Oregon
Georgia	Pennsylvania
Hawaii	Rhode Island
Idaho	South Carolina
Illinois	South Dakota
Indiana	Tennessee
Iowa	Texas
Kansas	Utah
Kentucky	Vermont
Louisiana	Virginia
Maine	Washington
Maryland	West Virginia
Massachusetts	Wisconsin
Michigan	Wyoming
Minnesota	
Mississippi	
Missouri	
Montana	