

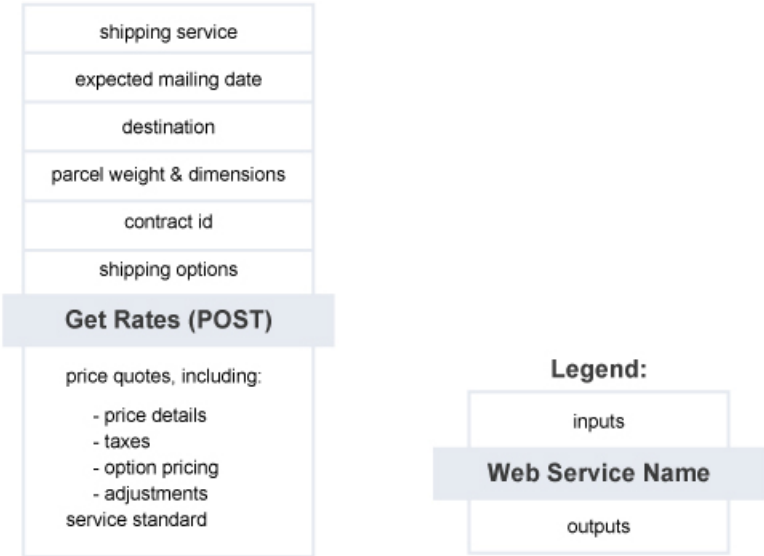


Code Samples for Rating: [Java \(.zip\)](#) | [PHP \(.zip\)](#) | [C# \(.zip\)](#)

## Get Rates – REST

### Summary

Name:	Get Rates
Reason to Call:	To get a list of services, prices and transit times for a shipment.
Input:	Basic address and parcel information
Output:	Service(s), price(s), transit time(s) and expected delivery date
Error Example:	No services are appropriate for the shipment of the defined parcel. Validate the parcel criteria against product specifications.
Typical prior call:	No directly related prior calls
Typical next call:	Create Shipment or Create Non-Contract Shipment
Version history:	Release notes



Get Rates – Summary of Service

### Request Details

#### Request – Structure for Get Rates

**Endpoint**

<b>POST https://XX/rs/ship/price</b>	
<b>Replace...</b>	<b>With...</b>
XX (Development)	ct.soa-gw.canadapost.ca*
XX (Production)	soa-gw.canadapost.ca

\*If you're not a commercial customer of Canada Post with a contract, but you are developing a third-party shipping solution intended for commercial customers, **please see important information about how to test contract shipping in our sandbox environment.**

**HTTP Headers**

<b>HTTP Header Variable</b>	<b>Value</b>
Accept	application/vnd.cpc.ship.rate-v3+xml ( <b>Note:</b> */* in place of the header value will return an error)
Content-Type	application/vnd.cpc.ship.rate-v3+xml ( <b>Note:</b> */* in place of the header value will return an error)
Authorization	Basic {Base64 encoding of userid:password}
Accept-language	en-CA or fr-CA

**Body**

```
<?xml version="1.0" encoding="utf-8"?>
<mailing-scenario xmlns="http://www.canadapost.ca/ws/ship/rate-v3">
xxx
</mailing-scenario>
```

**Request – Elements**

This section describes the XML elements of this service. The exact hierarchical structure of the XML inputs is shown in a diagram below this table.

<b>Element Name</b>	<b>Type</b>	<b>Required / Optional</b>	<b>Description</b>
mailing-scenario	complex	required	This is the overall XML structure for the request input information.
customer-number	simple	conditionally required	The customer number of the owner of the mail (mailed on behalf of customer). (numeric – up to 10 digits)  This element is required to obtain discounted rates for commercial customers and Solutions for Small Business members. It must be omitted to obtain counter (i.e., consumer) rates.
contract-id	simple	conditionally required	This element is required to obtain discounted rates for commercial customers when the customer-number element is provided. The contract-id element must be omitted for Solutions for Small Business members or general business users. (numeric – up to 10 digits)
promo-code	simple	optional	If you have a promotional discount code, enter it here. The discount amount will be returned in the response under the adjustment structure.
quote-type	simple	optional	Either commercial or counter. <ul style="list-style-type: none"><li>"commercial" will return the discounted price for the commercial customer or Solutions for Small Business member.</li><li>"counter" will return the regular price paid by consumers.</li></ul> Defaults to "commercial" if not specified.
expected-mailing-date	simple	optional	The expected mailing date for the parcel.  This date is used in calculations of the expected delivery date, however all rate quotes are based on the current system date.

			(YYYY-MM-DD date format)		
options	complex	optional	Structure containing the list of options desired for the shipment.		
option	complex	required	May occur 1 ... 20 times. Holds the option code and qualifier for a selected option.		
option-code	simple	required	(10 alphanumeric) Holds the Canada Post-specific option code  Valid values: SO - Signature COV - Coverage (requires qualifier) COD - COD (requires qualifier) PA18 - Proof of Age Required - 18 PA19 - Proof of Age Required - 19 HFP - Card for pickup DNS - Do not safe drop LAD - Leave at door - do not card		
option-amount	simple	required depending on option-code	Required for COV – the amount of insurance to be purchased. 5.2 digits e.g. 99999.99		
parcel-characteristics	complex	required	Details of the parcel such as weight, dimensions and appearance.		
weight	simple	required	The weight of the parcel in kilograms. (99.999) Contained within parcel-characteristics.		
dimensions	complex	optional	Details of the parcel dimensions in centimeters.		
length	simple	required	Longest dimension. (3.1 digits e.g. 999.9 pattern)		
width	simple	required	Second longest dimension. (3.1 digits e.g. 999.9 pattern)		
height	simple	required	Shortest dimension. (3.1 digits e.g. 999.9 pattern)		
unpackaged	simple	optional	true   <b>false</b> <ul style="list-style-type: none"><li>• defaults to "false"</li><li>• true indicates that the parcel will be unpackaged (e.g. tires)</li></ul>		
mailing-tube	simple	optional	true   <b>false</b> <ul style="list-style-type: none"><li>• defaults to "false"</li><li>• true indicates that the object will be shipped in a mailing tube</li></ul>		
oversized	simple	optional	true   <b>false</b> <ul style="list-style-type: none"><li>• defaults to "false"</li><li>• true indicates that the object has oversized dimensions</li><li>• automatically set correctly if dimensions are provided</li></ul>		
services	complex	optional	Specifies the services to rate for this mailing scenario.		
service-code	simple	required	May occur 1 ... 20 times.  A specific service to be rated. If no instances of service-code are included in the request, all services applicable to the shipment and destination will be rated and returned. <table><thead><tr><th>Code</th><th>Description</th></tr></thead></table>	Code	Description
Code	Description				

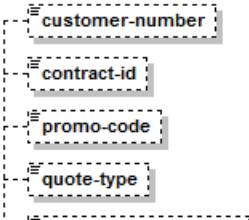
			DOM.RP	Regular Parcel
			DOM.EP	Expedited Parcel
			DOM.XP	Xpresspost
			DOM.XP.CERT	Xpresspost Certified
			DOM.PC	Priority
			DOM.DT	Delivered Tonight
			DOM.LIB	Library Materials
			USA.EP	Expedited Parcel USA
			USA.PW.ENV	Priority Worldwide Envelope USA
			USA.PW.PAK	Priority Worldwide pak USA
			USA.PW.PARCEL	Priority Worldwide Parcel USA
			USA.SP.AIR	Small Packet USA Air
			USA.TP	Tracked Packet – USA
			USA.TP.LVM	Tracked Packet – USA (LVM) (large volume mailers)
			USA.XP	Xpresspost USA
			INT.XP	Xpresspost International
			INT.IP.AIR	International Parcel Air
			INT.IP.SURF	International Parcel Surface
			INT.PW.ENV	Priority Worldwide Envelope Int'l
			INT.PW.PAK	Priority Worldwide pak Int'l
			INT.PW.PARCEL	Priority Worldwide parcel Int'l
			INT.SP.AIR	Small Packet International Air
			INT.SP.SURF	Small Packet International Surface
			INT.TP	Tracked Packet – International
origin-postal-code	simple	required	Postal Code from which the parcel will be sent. Format ANANAN (only accepted with uppercase)	
destination	complex	required	Defines the destination of the parcel.	
domestic	complex	choice	Defines the destination in Canada.	
postal-code	simple	required	The destination Postal Code. Format ANANAN (only accepted with uppercase)	
united-states	complex	choice	Defines destination in the United States.	
zip-code	simple	required	Used when country code = US. Format is 5 digits or 5-4 (for extended Zip Codes) E.g. 12345 or 12345-6789	
international	complex	choice	Defines an international destination (destination other than the United States or Canada). Only one of international, us-destination or domestic can be specified.	
country-code	simple	required	The destination country code. Standard 2-character country code (valid country code other than CA or US)	

**Request – XML Diagram**

The following is the hierarchical structure of the XML to be used for providing the shipping input information.

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Summary of Call for Get Rates



 [View full-size image](#)

Response Details

Response – Elements

The following table describes the XML fields in the response. For a detailed view of the hierarchy of the response, see the diagram below.

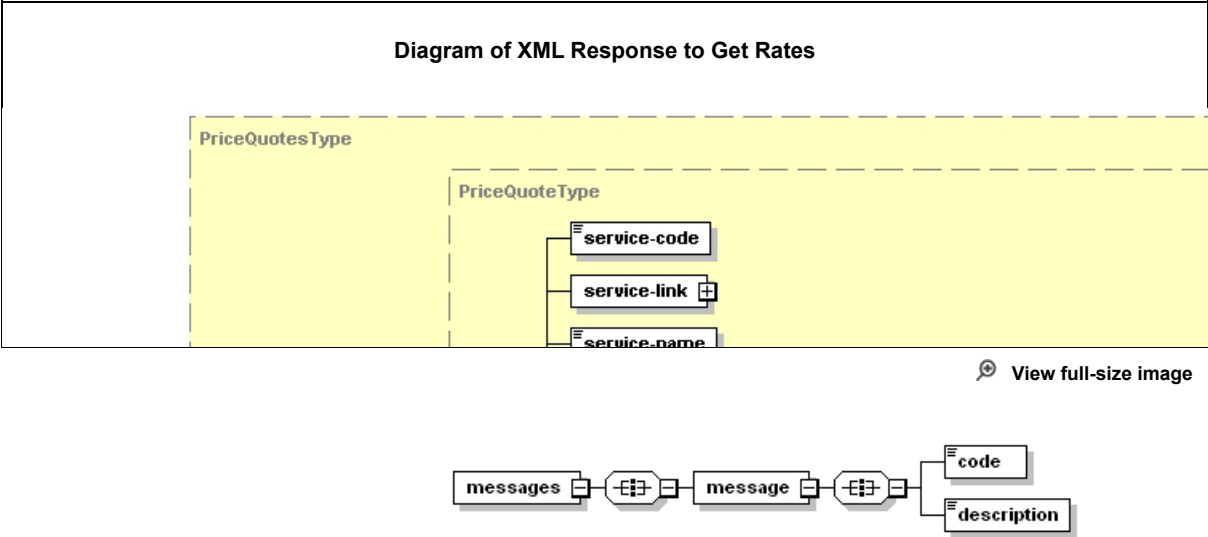
Response Elements		
Element Name	Type	Description
price-quotes	complex	One or more price quotes depending on the number of postal services available or selected for the shipment.
price-quote	complex	Costs and delivery standards for one particular postal-service.
service-code	simple	The code for the mail service being quoted.
service-link	simple	See <b>Provided endpoints</b>
service-name	simple	Service name in preferred language.
price-details	complex	Contains the detailed breakdown of the costs for this shipment if sent using this service.
base	simple	(numeric 99999.99) Base cost of the shipment before taxes
taxes	complex	Contains details on taxes charged for this shipment if sent using this service. (Will not contain all three tax type elements at once.)
gst	simple	(numeric 99999.99) Goods and services tax.
pst	simple	Provincial sales tax.
hst	simple	(numeric 99999.99) Harmonized sales tax.
percent	attribute of HST, PST or GST	numeric 999.99 value 1 to 100 Indicates the percentage of the tax applied to the base amount.
adjustments	complex	Structure containing details of the adjustments to a price.
adjustment	complex	Structure containing details of an adjustment to a price.
adjustment-code	simple	Code identifying the adjustment. AUTDISC – Automation discount FUELSC – Fuel surcharge NCNTGST – Non-contiguous state fee (applies to Priority Worldwide products sent to Alaska and Hawaii) V1DISC – Solutions for Small Business savings

		PROMODISC – Promotional discount (if the promo code is invalid or expired, the discount amount will show as zero under adjustment-cost) PLATFMDISC – Discount for using an e-commerce platform NEWREGDISC – Discount for joining the Developer Program DTNADJ – Delivered Tonight surcharge SAADJ – Service area adjustment (rate adjustment up or down for specific source and destination postal code combinations)
adjustment-name	simple	Adjustment name in preferred language.
adjustment-cost	simple	(9999.99 numeric) Amount of the adjustment in dollars and cents.
qualifier	complex	Contains the qualifier for the adjustment if applicable.
percent	simple	numeric 999.99 value 1 to 100 If the adjustment is based on a percentage value the percentage will be returned. E.g. fuel surcharge
due	simple	(numeric 99999.99) Total cost of the shipment if sent using this service including the cost of selected or required options, surcharges, discounts and taxes.
options	complex	This structure contains the options that were selected and will also show free options and the parcel characteristics of mailing tube, unpackaged or oversize if selected or warranted by dimensions.
option	complex	This structure contains details about a single option.
option-code	simple	(10 alphanumeric) The unique code for the option. Structure to show additional details about the option if available.
option-name	simple	Option name in preferred language.
option-price	simple	(5.2 digits e.g. 99999.99 pattern) Cost of this option for the current parcel.
qualifier	complex	(12 alphanumeric) Contains additional details about the option if available.
step-size	simple	Indicates the step size for additional step pricing. E.g. the amount of coverage purchased in one step such as \$100.
step-cost	simple	(5.2 digits e.g. 99999.99 pattern) Indicates the cost for a step size. E.g. 75 cents for each step size (\$100) of coverage.
included-amount	simple	(5.2 digits e.g. 99999.99 pattern) Indicates how much is covered by base service. E.g. the first \$100 of coverage is included.
max-value	simple	(5.2 digits e.g. 99999.99 pattern) Indicates the maximum option-amount. E.g. \$5000 maximum coverage.
included	simple	Indicates that the option is included at no charge.
percent	simple	numeric 999.99 value 1 to 100 If the option is based on a percentage value the percentage will be returned.
weight-details	complex	Will be empty if dimensions were not provided or actual parcel weight exceeds standard density weight for the dimensions.
cubed-weight	simple	The volumetric equivalent of the actual weight (VE) of the package. VE is not a unit of measure, a mass or a volume. It allows for more accurate pricing of an item given its weight and the space it occupies.
service-standard	complex	Contains details about package delivery if the quoted service is selected.
am-delivery	simple	true   false

		Indicates whether a.m. delivery is defined as part of the service standard for this service.
guaranteed-delivery	simple	true   false Indicates if the delivery date is guaranteed.
expected-transit-time	simple	(99 numeric) Indicates the number of days from drop-off or pickup to 1 <sup>st</sup> delivery attempt.
expected-delivery-date	simple	(YYYY-MM-DD date format) The estimated date of delivery, starting from the expected mailing-date.

Response – XML Diagram

The following diagrams show the response structure. Either price-quotes or messages (error response) will be returned.



Response – Possible Error Responses

A correctly structured request may receive a business rule validation error related to the validity of the parcel specifications and origin/destination or customer and contract selected. In this case, the HTTP error code will be 400 and there will be diagnostic message text in the preferred language (English or French).

Code	Message
1622	The expected-mailing-date must not be in the past.
7050	The {0} option requires the {1} option. Please add the prerequisite or remove the option.
9111	No services are appropriate for the shipment of the defined parcel. Validate the parcel criteria against product specifications.
9112	The service {0} is not available for the specified country or customer/contract.

For details, see **Structure of the HTTP response**.

Examples

Sample REST XML Request – Get Rates

```
<mailing-scenario xmlns="http://www.canadapost.ca/ws/ship/rate-v3">
  <customer-number>1234567</customer-number>
  <parcel-characteristics>
    <weight>1</weight>
```

```

</parcel-characteristics>
<origin-postal-code>K2B8J6</origin-postal-code>
<destination>
  <domestic>
    <postal-code>J0E1X0</postal-code>
  </domestic>
</destination>
</mailing-scenario>

```

### Sample REST XML Response – Get Rates

```

<price-quotes>
  <price-quote>
    <service-code>DOM.EP</service-code>
    <service-link rel="service" href="https://ct.soa-gw.canadapost.ca/rs/ship/service/DOM.EP?country=CA" media-
    type="application/vnd.cpc.ship.rate-v3+xml"></service-link>
    <service-name>Expedited Parcel</service-name>
    <price-details>
      <base>9.59</base>
      <taxes>
        <gst>0.00</gst>
        <pst>0</pst>
        <hst>0</hst>
      </taxes>
      <due>10.21</due>
      <options>
        <option>
          <option-code>DC</option-code>
          <option-name>Delivery confirmation</option-name>
          <option-price>0</option-price>
        </option>
      </options>
      <adjustments>
        <adjustment>
          <adjustment-code>AUTDISC</adjustment-code>
          <adjustment-name>Automation discount</adjustment-name>
          <adjustment-cost>-0.29</adjustment-cost>
          <qualifier>
            <percent>3.000</percent>
          </qualifier>
        </adjustment>
        <adjustment>
          <adjustment-code>FUELSC</adjustment-code>
          <adjustment-name>Fuel surcharge</adjustment-name>
          <adjustment-cost>0.91</adjustment-cost>
          <qualifier>
            <percent>9.75</percent>
          </qualifier>
        </adjustment>
      </adjustments>
    </price-details>
    <weight-details></weight-details>
    <service-standard>
      <am-delivery>false</am-delivery>
      <guaranteed-delivery>true</guaranteed-delivery>
      <expected-transit-time>2</expected-transit-time>
      <expected-delivery-date>2011-10-24</expected-delivery-date>
    </service-standard>
  </price-quote>
  <price-quote>
    <service-code>DOM.PC</service-code>
    <service-link rel="service" href="https://ct.soa-gw.canadapost.ca/rs/ship/service/DOM.PC?country=CA" media-
    type="application/vnd.cpc.ship.rate-v3+xml"></service-link>

```



```

<service-name>Priority Courier</service-name>
<price-details>
  <base>22.64</base>
  <taxes>
    <gst>0.00</gst>
    <pst>0</pst>
    <hst>0</hst>
  </taxes>
  <due>25.20</due>
  <options>
    <option>
      <option-code>DC</option-code>
      <option-name>Delivery confirmation</option-name>
      <option-price>0</option-price>
    </option>
  </options>
  <adjustments>
    <adjustment>
      <adjustment-code>AUTDISC</adjustment-code>
      <adjustment-name>Automation discount</adjustment-name>
      <adjustment-cost>-0.68</adjustment-cost>
      <qualifier>
        <percent>3.000</percent>
      </qualifier>
    </adjustment>
    <adjustment>
      <adjustment-code>FUELSC</adjustment-code>
      <adjustment-name>Fuel surcharge</adjustment-name>
      <adjustment-cost>3.24</adjustment-cost>
      <qualifier>
        <percent>14.75</percent>
      </qualifier>
    </adjustment>
  </adjustments>
</price-details>
<weight-details></weight-details>
<service-standard>
  <am-delivery>false</am-delivery>
  <guaranteed-delivery>true</guaranteed-delivery>
  <expected-transit-time>1</expected-transit-time>
  <expected-delivery-date>2011-10-21</expected-delivery-date>
</service-standard>
</price-quote>
<price-quote>
  <service-code>DOM.RP</service-code>
  <service-link rel="service" href="https://ct.soa-gw.canadapost.ca/rs/ship/service/DOM.RP?country=CA" media-
  type="application/vnd.cpc.ship.rate-v3+xml"></service-link>
  <service-name>Regular Parcel</service-name>
  <price-details>
    <base>9.59</base>
    <taxes>
      <gst>0.00</gst>
      <pst>0</pst>
      <hst>0</hst>
    </taxes>
    <due>10.21</due>
    <options>
      <option>
        <option-code>DC</option-code>
        <option-name>Delivery confirmation</option-name>
        <option-price>0</option-price>
        <qualifier>
          <included>true</included>
        </qualifier>
      </option>
    </options>
  </price-details>
</price-quote>

```

```

    </qualifier>
  </option>
</options>
<adjustments>
  <adjustment>
    <adjustment-code>AUTDISC</adjustment-code>
    <adjustment-name>Automation discount</adjustment-name>
    <adjustment-cost>-0.29</adjustment-cost>
    <qualifier>
      <percent>3.000</percent>
    </qualifier>
  </adjustment>
  <adjustment>
    <adjustment-code>FUELSC</adjustment-code>
    <adjustment-name>Fuel surcharge</adjustment-name>
    <adjustment-cost>0.91</adjustment-cost>
    <qualifier>
      <percent>9.75</percent>
    </qualifier>
  </adjustment>
</adjustments>
</price-details>
<weight-details></weight-details>
<service-standard>
  <am-delivery>false</am-delivery>
  <guaranteed-delivery>false</guaranteed-delivery>
  <expected-transit-time>4</expected-transit-time>
  <expected-delivery-date>2011-10-26</expected-delivery-date>
</service-standard>
</price-quote>
<price-quote>
  <service-code>DOM.XP</service-code>
  <service-link rel="service" href="https://ct.soa-gw.canadapost.ca/rs/ship/service/DOM.XP?country=CA" media-
type="application/vnd.cpc.ship.rate-v3+xml"></service-link>
  <service-name>Xpresspost</service-name>
  <price-details>
    <base>12.26</base>
    <taxes>
      <gst>0.00</gst>
      <pst>0</pst>
      <hst>0</hst>
    </taxes>
    <due>13.64</due>
    <options>
      <option>
        <option-code>DC</option-code>
        <option-name>Delivery confirmation</option-name>
        <option-price>0</option-price>
      </option>
    </options>
    <adjustments>
      <adjustment>
        <adjustment-code>AUTDISC</adjustment-code>
        <adjustment-name>Automation discount</adjustment-name>
        <adjustment-cost>-0.37</adjustment-cost>
        <qualifier>
          <percent>3.000</percent>
        </qualifier>
      </adjustment>
      <adjustment>
        <adjustment-code>FUELSC</adjustment-code>
        <adjustment-name>Fuel surcharge</adjustment-name>
        <adjustment-cost>1.75</adjustment-cost>

```

```
<qualifier>
  <percent>14.75</percent>
</qualifier>
</adjustment>
</adjustments>
</price-details>
<weight-details></weight-details>
<service-standard>
  <am-delivery>false</am-delivery>
  <guaranteed-delivery>true</guaranteed-delivery>
  <expected-transit-time>2</expected-transit-time>
  <expected-delivery-date>2011-10-24</expected-delivery-date>
</service-standard>
</price-quote>
</price-quotes>
```

## Questions? Find answers in Support.

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