Roadrunner

Rate Quote with Guaranteed Service Web Service Developer's Guide Documentation Date: 10/17/2023

Rate Quote Web Service Interface Rate Quote Web Service Overview

The rate quote web service assists customers in receiving a detailed quote of charges for shipping freight through Roadrunner Transportation Systems. Customers can rate up to 10 different classes at one time and also add various additional service options.

Authentication information is populated in the SOAP header. The header along with the quote request are sent over an SSL connection. The user receives a quote response element back. Errors are received back as SOAP faults

The web services can be accessed at <u>https://webservices.rrts.com/rating/ratequote.asmx</u>

Login information should be the same username/password used to login to the RRTS website. If you do not currently have this information, you can register at https://freight.rrts.com/Pages/Register/aspx

There are four service operations available. RateQuote and RateQuoteByAccount have the same response schema and RateQuoteWithGuarV1 and RateQuoteByAccountWithGuarV1 have the same response schema. The differences in the schema are with the Guaranteed element. Description is in the Special Consideration section and in the Response Schema section.

- **RateQuote** Determines rating based on main account assigned to the authenticated user.
- **RateQuoteByAccount** Allows authenticated user to specify a sub-account number to use for rating. If the account number is not related to the user, rating will fail.
- **RateQuoteWithGuarV1** Always provides both guaranteed and standard service rates.
- **RateQuoteByAccountWithGuarV1** Always provides both guaranteed and standard service rates. Allows authenticated user to specify a sub-account number to use for rating. If the account number is not related to the user, rating will fail.

Special Considerations

RateQuote and RateQuoteByAccount Methods

** Roadrunner only offers Guaranteed Service in certain origin/destination pairs (lane). If a user requests a Guaranteed Service quote in a lane Roadrunner does not offer guaranteed service in, a QuoteDetail element will be returned where Code = PP and Charge = -1. The returned quote is valid for standard service shipments only. **

RateQuoteWithGuarV1 and RateQuoteByAccountWithGuarV1 Methods

** Roadrunner only offers Guaranteed Service in certain origin/destination pairs (lane). The Guaranteed element will always be returned. If the value = 0 guaranteed service is not available in the lane. A ServiceOption element with code PP is not required for the guaranteed rate to be returned.

For cases where guaranteed service is offered the NetCharge value is inclusive of the guaranteed service charge. To calculate standard service charges subtract the Guaranteed value from the NetCharge. **

Request Schema

The following tables contain the complex types found in the quote Request schema. Each table consists of the following:

- 1. Element The element name
- 2. Description Information describing the element
- 3. Rules Element requirements and limitations

Element	Reques	Request				
Description	The ro	The root element for a request				
Rules	This el	ement is	required	to request a quote		
Element Name	Type (Length)	Require d	Cardinalit y	Description and Rules		
OriginZip	String (6)	Yes	1	Contains 5 digit US Zip code or 6 character Canadian postal code		
DestinationZip	String (6)	Yes	1	Contains 5 digit US Zip code or 6 character Canadian postal code		
ShipmentDetails		Yes	110	Container of shipment details. Can have up to 10 different shipment details in one transaction		
OriginType	String (1)	Yes	1	Contains "O" for shipper, "I" for consignee, and "B" for third party		

PaymentType	String (1)			Contains "P" for Prepaid or "C" for Collect.
PalletCount	String	No	01	If customer has pallet rating, must supply 0 or greater pallets. Can leave blank if no pallet rating.
LinearFeet	String	No	01	If customer has linear ft rating, must supply 0 or greater linear ft. Can leave blank if no linear ft. rating.
CubicFeet	String	No	01	If customer has customer has cubic ft. rating, must supply 0 or lgreater cubic ft. Can leave blank if no cubic ft. rating. Note: This field is required if rating to Hawaii or Puerto Rico.
Pieces	Integer	No	01	Must be filled out if using Sort/Segregate accessorial code.
ServiceDeliveryOptio ns		No	115	Container for additional service accessorials to be added. See appendix B for list of services
COD		No		COD is no longer offered
Discount	Double	No	01	Allows a discount percentage to be endered (internal use only)
ListedConsigneeCity	String (1)	No	01	Obsolete
Pallet Position	String	No	01	Only used by customers that have rating by pallet position, othwise blank.
ShipDate	Date	Yes	01	Date format should be YYYY- MM-DD
Account	String	Yes	01	Used only for RateQuoteByAccount and RateQuoteByAccountWithGuar V1 service operations – Four to Seven digit rating account number.

Element Description Rules	Holds (ShipmentDetails Holds Classes and Weights for Rating One instance is negatined, can supply up to 10			
Kules		One instance is required, can supply up to 10			
Element Name	Type (Length)				
ActualClass	Double	Yes	1	Class of Freight – See Appendix A for list of allowed values	
Weight	Integer	Yes	1	Weight of freight for listed class	

Element Description	ServiceOptions Holds optional services that can be added					
Rules	Not required, but can hold 15 different accessorials					
		1	1			
Element Name	Type (Length)					
ServiceCode	String (3)	Yes	1	Code for additional service requested. See Appendix B for allowed values		

Response Schema

The following tables contain the complex types found in the quote Response schema. Each table consists of the following:

- 1. Element The element name
- 2. Description Information describing the element
- 3. Rules Element requirements and limitation

Element	Guarar	Guaranteed			
Description	Guarar	nteed ser	vice charge	e	
Rules	Only ro RateQu	Only returned with RateQuoteWithGuarV1 and RateQuoteByAccountWithGuarV1 Methods			
Element Name	Type (Length)	Required	Cardinality	Description and Rules	
Guaranteed	Double	Yes	1	If value is 0 guaranteed service is not available in the lane.	

Element	Quote Response					
Description	The root element for a quote response					
Rules	This element is required in a response					
Element Name	Type (Length)	Required	Cardinality	Description and Rules		
QuoteNumber	Integer	Yes	1	Quote Number returned from RRTS system		
Net Charge	Double	Yes	1	Contains the net rate. In the event a quote cannot be rated, will return -1		
Customer	Customer Container	Yes	1	Container for Customer Information as stored by RRTS		
RoutingInfo	Routing Container	Yes	1	Container for Routing Information as stored by RRTS		
RateDetails	QuoteDetail	Yes	199	Individual line charges calculated by RRTS system		
CustomerCubicFoot	Integer	No	1	Returns the same cubic foot submitted		
HawaiianCubicFoot	Integer	No	1	Returns cubic foot used for rating Hawaiian shipments		

Element	Custon	CustomerInformation				
Description	Contai	ner for C	ustomer I	nformation		
Rules	This ele	This element is required in a response				
	·					
Element Name	Type (Length)					
AccountNumber	String	Yes	1	Users main RRTS account number		

Element	Routing Information				
Description	Container for Routing Information Details				
Rules	This ele	ement is	required in	n a response	
	1	Γ	ſ		
Element Name	Type (Length)	Required	Cardinality	Description and Rules	
DestinationState	String	Yes	1	Destination State	
Name	String	Yes	1	Customer Name	
Address1	String	Yes	1	Customer Address	
Address2	String	No	01	Additional Address	
				Information	
City	String	Yes	1	Customer City	
State	String	Yes	1	Customer State	
ZipCode	String	Yes	1	Customer Zip Code	
DestinationZip	String	Yes	1	Destination Zip Code	
OriginState	String	Yes	1	Origin State	
OriginZip	String	Yes	1	Origin Zip Code	
EstimatedTransitDays	String	Yes	1	Transit time in days	
OriginTerminal	String	Yes	1	Origin Terminal Code	

Element	Quote Detail					
Description	on Holds optional services that can be added Not required, but can hold 15 different accessorials					
Rules						
Element Name	Type (Length)	Required	Cardinality	Description and Rules		
Actual Class	String	No	01	Actual Class of Item		
Rated Class	String	No	01	Rated Class of the Item		
Code	String	No	01	Provided for most items. Will be blank for base rate. See Appendix C for a list of values		
Description	String	No	01	Description for the code field		
Rate	Double	No	01	Rate for item		
Weight	Integer	No	01	Weight for the item		
ExtraMessages	String	No	1	Message generated by the system. Explains why rates came back with a -1 or where to find more information		
Charge	Double	Yes	1	Contains positive or negative charges. Will be -1 if line item cannot be provided online		

Rate Quote Error Messages

If there are errors that stop a rating request, messages are returned via a SOAP fault. Errors that are because of data issues will have a fault code of **Client** while issues with the system at Roadrunner will have a fault code of **Server**. Examples of Client SOAP faults include the following scenarios:

- Invalid zip code is sent
- Roadrunner does not ship from the origin to the destination
- Invalid user name or password
- User is not setup for online rating
- Account number is not active
- User is inactive
- Invalid class, origin type or payment type

Other exceptions require more information before a quote can be sent. A subset of error numbers and descriptions are:

- Error Number 99999 Internal System Error
- Error Number 99998 Invalid User
- Error Number 99997 Invalid Request description will be provided
- Error Number 99996 This account has linear ft rating, send back 0 (if unknown) or linear ft value
- Error Number 99995 This account has pallet rating, send back 0 (if unknown) or pallet value
- Error Number 99994 Pallet count required for accessorial
- Error Number 99993 Piece count required for accessorial
- Error Number 99992 This account has cubic ft rating, send back 0 (if unknown) or cubic ft value
- Error Number 99991 Manual rating required, call Roadrunner for a quote
- Error Number 99990 Other unknown error description will be provided
- Error Number 999987 Cubit foot value is required for Hawaii & Puerto Rico shipments

Appendix A – Valid Freight Classes

- 50 55 •
- •
- 60 •
- 65 •
- 70 •
- 77.5 •
- 85 •
- 92.5 •
- 100 •
- 110 •
- 125 •
- 150 •
- 175 •
- 200 •
- 250 •
- 300 •
- 400 •
- 500

Code	Description
AHD	Apartment Delivery
AHP	Apartment Pickup
AID	Airport Site Delivery
AIP	Airport Site Pickup
AMD	Amusement Park Delivery
AMP	Amusement Park Pickup
APT	Appointment Charge
BSC	Blind Shipment Charge
CCD	Country Club Delivery
ССР	Country Club Pickup
CFD	Container Station Delivery
CFS	Container Station Pickup
CHD	Place of Worship Delivery
CHP	Place of Worship Pickup
CPD	Camp/Park/Resort Delivery
CPP	Camp/Park/Resort Pickup
CSD	Construction Delivery
CSP	Construction Pickup
DCC	Distribution Center Delivery
ESD	Exhibition Site Delivery
EXH	Exhibition Site Pickup
EXM	Excessive Length 8-12 ft
EXN	Excessive Length 12-16 ft
EXL	Excessive Length 16-20 ft
EXO	Excessive Length 20-27 ft
EXX	Excessive Length >27 ft
FAD	Farm/Ranch Delivery
FAP	Farm/Ranch Pickup
FAB	Floors Above Delivery
FSD	Forest Delivery
GSD	Government Site Delivery
GWD	Grocery Distribution Delivery
GWP	Grocery Distribution Pickup
WCL	Hawaiian Will Call
HAZ	Hazardous Materials

Appendix	B –	Valid	Request	Service	Codes
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Code	Description
HHD	Hotel Delivery
HHP	Hotel Pickup
IRD	Reservation Delivery
IRP	Reservation Pickup
ID	Inside Delivery
IP	Inside Pickup
LGD	Liftgate Delivery
LGP	Liftgate Pickup
LTD	Limited Access Delivery
LTP	Limited Access Pickup
MSD	Mine Site Delivery
NBD	Non-Business Hours Delivery
NC	Notification Charge
NHD	Nursing Home Delivery
NHP	Nursing Home Pickup
PP	Guaranteed Service
PWD	Pier/Port/Wharf Delivery
PWP	Pier/Port/Wharf Pickup
PSD	Prison Delivery
PSC	Protect from Cold
RSD	Residential Delivery
RSP	Residential Pickup
SHD	School Site Delivery
SHP	School Site Pickup
SRT	Sort and Segregate
STD	Storage Unit Delivery
STP	Storage Unit Pickup
USD	Utility Site Delivery
USP	Utility Site Pickup

Code	Description
AAP	Non-Direct Point Pricing
AS	Rated AS Values
BYD	Beyond Charge
BYI	Beyond Island Charge
BYP	Beyond Documentation Charge
CA	California Compliance Destination Charge
СО	California Compliance Origin Charge
CWC	Canadian Warehouse Charge
CWS	Canadian Border Clearance Charge
DEF	Deficit Weight
DIS	Discount
FSB	Beyond Fuel Surcharge
FSC	Fuel Surcharge
GLS	Geographic Linehaul Surcharge
LHS/HND	Linehaul Surcharge
NYD	New York Delivery Charge
NYP	New York Pickup Charge
PLT	Pallet Based Charges
RLS	Regional Linehaul Surcharge
SED	Shipper Export Delaration Charge

Appendix C – Response Codes

Notes:

Only a single California Compliance charge will appear for any shipment. A shipment will not have both CA & CO charge.