Middlewest Motor Freight Bureau

MWB Web Service

http://www.middlewest.com/mwbratingvirtualdirectory/service.asmx

Request Quote Schema

Element	Description
RequestQuote	Required. The root element for the request.
Username	Required. The username assigned to you by Middlewest Motor Freight Bureau.
Password	Required. The password assigned to you by Middlewest Motor Freight Bureau.
OriginZip	Required. A five-digit US ZIP Code or a six-digit Canadian Postal Code.
DestinationZip	Required. A five-digit US ZIP Code or a six-digit Canadian Postal Code.
TariffName	Required. The name of the tariff used to rate the shipment.
EffectiveDate	Required. The effective date of the level of rates for the tariff used to rate the shipment. Format YYYYMMDD.
Commodities	Required. Indicates the beginning of where the commodities in the shipment are listed.
Commodity	One instance required. Up to thirty instances are allowed, with the following two child elements present for each instance.
Class	Optional for each Commodity element. The freight class of this commodity. Valid freight classes are: 50, 55, 60, 65, 70, 77.5, 85, 92.5, 100, 110, 125, 150, 175, 200, 250, 300, 400, 500.
Weight	Required for each Commodity element. The weight of this commodity, in pounds. Must be from 1 to 999999.
MCDiscount	Optional. The discount to be applied to the minimum charge. A four-digit number with two implied decimal places. Ex. 70% discount = 7000, 75.25% discount = 7525.
L5CDiscount	Optional. The discount to be applied to the L5C weight group. A four-digit number with two implied decimal places. Ex. 70% discount = 7000, 75.25% discount = 7525.
M5CDiscount	Optional. The discount to be applied to the M5C weight group. A four-digit number with two implied decimal places. Ex. 70% discount = 7000, 75.25% discount = 7525.

M1MDiscount	Optional. The discount to be applied to the M1M weight group. A four-digit number with two implied decimal places. Ex. 70% discount = 7000, 75.25% discount = 7525.
M2MDiscount	Optional. The discount to be applied to the M2M weight group. A four-digit number with two implied decimal places. Ex. 70% discount = 7000, 75.25% discount = 7525.
M5MDiscount	Optional. The discount to be applied to the M5M weight group. A four-digit number with two implied decimal places. Ex. 70% discount = 7000, 75.25% discount = 7525.
M10MDiscount	Optional. The discount to be applied to the M10M weight group. A four-digit number with two implied decimal places. Ex. 70% discount = 7000, 75.25% discount = 7525.
M20MDiscount	Optional. The discount to be applied to the M20M weight group. A four-digit number with two implied decimal places. Ex. 70% discount = 7000, 75.25% discount = 7525.
M30MDiscount	Optional. The discount to be applied to the M30M weight group. A four-digit number with two implied decimal places. Ex. 70% discount = 7000, 75.25% discount = 7525.
M40MDiscount	Optional. The discount to be applied to the M40M weight group. A four-digit number with two implied decimal places. Ex. 70% discount = 7000, 75.25% discount = 7525.
AbsoluteMC	Optional. The minimum charge floor. A five-digit number in cents. Freight charges cannot be discounted below this amount.
FuelSurcharge	Optional. A percentage stored as a four-digit number with two implied decimal places. Ex. 25.5% = 2550.

Example of Request Quote XML Document

```xml
<?xml version="1.0" encoding="utf-8"?>
<RequestQuote xmlns="http://www.middlewest.com/">
        <Username>CUST01</Username>
        <Password>C01Passwd</Password>
        <TariffName>MARS 500</TariffName>
        <EffectiveDate>20180401</EffectiveDate>
        <OriginZip>50322</OriginZip>
        <DestinationZip>59055</DestinationZip>
        <Commodities>
                <Commodity>
                        <Class>100</Class>
                        <Weight>4060</Weight>
                </Commodity>
                <Commodity>
                        <Class>50</Class>
                        <Weight>3720</Weight>
                </Commodity>
        </Commodities>
        <MCDiscount>7250</MCDiscount>
        <L5CDiscount>7500</L5CDiscount>
        <M5CDiscount>7500</M5CDiscount>
        <M1MDiscount>7500</M1MDiscount>
        <M2MDiscount>7500</M2MDiscount>
        <M5MDiscount>7500</M5MDiscount>
        <M10MDiscount>7500</M10MDiscount>
        <M20MDiscount>7500</M20MDiscount>
        <M30MDiscount>7500</M30MDiscount>
        <M40MDiscount>7500</M40MDiscount>
        <AbsoluteMC>08700</AbsoluteMC>
        <FuelSurcharge>2550</FuelSurcharge>
</RequestQuote>
```

Rated Quote Schema

Element	Description
RatedQuote	The root element for the rated quote.
ReturnCode	A two-character value that indicates if the shipment was rated successfully, and if not, why the shipment could not be rated. See Return Codes below.
ReturnMessage	A message that describes the ReturnCode.
RatedAs	Tells how the shipment was rated. Possible values: ACTUAL, DEFICIT, MINIMUM, AMC.
CommodityCharges	Signifies the beginning of the commodity detail area.
Commodity	One instance for each of the commodities in the Request Quote XML document, with the following two child elements present for each instance.
Rate	The applicable gross rate for this commodity, in cents.
Charge	The gross charge for this commodity, in cents.
ActualWeight	The total weight of all commodities in the shipment.
SumOfCharges	The sum of the gross charges for each commodity in the shipment, in cents.
DeficitClass	If the shipment was deficit rated, the class used to determine the rate for the deficit weight (valid classes listed in the Request Quote Schema).
DeficitWeight	The difference between the actual shipment weight and the billed weight.
DeficitRate	The applicable gross rate for the deficit, in cents.
DeficitCharge	The gross charge for the deficit, in cents.
BilledWeight	The weight at which the shipment was rated at.
SubtotalCharge	The sum of the SumOfCharges element and the DeficitCharge element, in cents.
DiscountPercent	The discount percentage used in rating the shipment. Shown as a four-digit number with two implied decimal places.
DiscountAmount	The amount of the discount, in cents.
TotalCharge	The net shipment charge after discount, in cents.
FuelSurcharge	The amount of the fuel surcharge to be added to the net shipment charge, in cents.

Return Codes and Messages

00 – SUCCESSFUL
01 – TARIFF NOT AVAILABLE
03 – ORIGIN ZIP CODE NOT FOUND
04 – DESTINATION ZIP CODE NOT FOUND
05 – RATE BASE NUMBER NOT FOUND
06 – TARIFF DATA NOT FOUND
11 – INVALID ORIGIN ZIP CODE
12 – INVALID DESTINATION ZIP CODE
13 – INVALID CLASS
14 – INVALID WEIGHT
15 – INVALID DISCOUNT
16 – INVALID ABSOLUTE MC
17 – INVALID FUEL SURCHARGE

Example Rated Quote XML Document

```xml
<?xml version="1.0" encoding="UTF-8"?>
<RatedQuote xmlns="http://www.middlewest.com/">
        <ReturnCode>00</ReturnCode>
        <ReturnMessage>SUCCESSFUL</ReturnMessage>
        <RatedAs>DEFICIT</RatedAs>
        <CommodityCharges>
                <Commodity>
                        <Rate>9566</Rate>
                        <Charge>388380</Charge>
                </Commodity>
                <Commodity>
                        <Rate>9566</Rate>
                        <Charge>355855</Charge>
                </Commodity>
        </CommodityCharges>
        <ActualWeight>7780</ActualWeight>
        <SumOfCharges>744235</SumOfCharges>
        <DeficitClass >70</DeficitClass>
        <DeficitWeight>2220</DeficitWeight>
        <DeficitRate>9566</DeficitRate>
        <DeficitCharge>212365</DeficitCharge>
        <BilledWeight>10000</BilledWeight>
        <SubtotalCharge>956600</SubtotalCharge>
        <DiscountPercent>8800</DiscountPercent>
        <DiscountAmount>841808</DiscountAmount>
        <TotalCharge>114792</TotalCharge>
        <FuelSurcharge>29272</FuelSurcharge>
        <GrandTotalCharge>153064</GrandTotalCharge>
</RatedQuote>
```