



# Programmer's Reference Guide

## IFTA File Upload

### Overview

The IFTA file upload feature of the MoDOT Carrier Express system ([www.modot.org/mce](http://www.modot.org/mce)) allows a customer or other authorized agent to upload an original quarterly tax return for processing. **To do this, the customer will log into the MCE system and select the IFTA Tax Upload option from the Customer drop down menu.** Once on this page, the customer will enter an e-mail address and browse to a file located on their local computer to select for uploading.

The e-mail address is required. It is used by MoDOT to send a notice confirming the file receipt and the status of the return.

The screenshot shows the MoDOT Carrier Express web interface. At the top, there is a navigation menu with links: HOME, APPLICATIONS, UCR, PAYMENT, CUSTOMER, SEARCH, REPORTS, MY SETTINGS, DATA ADMIN, and CHANGE PASSWORD. The main content area is titled "IFTA Tax Return File Upload". It displays customer information: Customer ID: 61348, Customer Name: TEST TRUCKING 2008, USDOT No: 123456, FMCSA No: (blank), Tax ID: 123456789, and Status: (blank). Below this, there is a section for "Original IFTA Tax Filing File Upload" with the following fields: MoDOT MCS Customer ID: 61348, Email Address For Notification: (input field), Tax File To Upload: (input field with a "Browse..." button), and two buttons: "Upload File" and "Cancel". At the bottom, there is a note: "Use this page to upload IFTA Original Tax Return files. The file that is uploaded must be a file that was created by an approved IFTA tax program."

Example Upload Page 1

The file that is uploaded through this process must be an XML file that meets a standard format. If the file is not formatted correctly, an error message will appear to the customer and no processing takes place.

## File Contents

Typically the XML file that is uploaded is created from a program used to collect fuel tax filing information. After the data is collected, the ideal program offers the option of creating an XML file of information needed to file electronically. MoDOT is working with software providers to incorporate this feature into their software programs.

An example file is posted below. The account number in the file contains the carrier's tax id number followed by the fleet number. The filing period must reflect the start and end date for the quarter that is being filed.

```
<?xml version='1.0' encoding='iso-8859-1' ?>
<taxReturns>
  <accountNumber>1112233301</accountNumber>
  <filingPeriod startDate='10/1/2009' endDate='12/31/2009' />
  <taxReturn>
    <fuelUsage fuelType='D' totalMiles='1040007' totalGallons='83344' otherMiles='0' />
    <jurTaxes>
      <jurTax jurisdiction='CT' sequence='1' totalMiles='5906' taxableMiles='5906' taxPaidGallons='800' />
      <jurTax jurisdiction='DE' sequence='1' totalMiles='530' taxableMiles='530' taxPaidGallons='0' />
      <jurTax jurisdiction='GA' sequence='1' totalMiles='4478' taxableMiles='4478' taxPaidGallons='3214' />
      <jurTax jurisdiction='IL' sequence='1' totalMiles='18472' taxableMiles='18472' taxPaidGallons='929' />
      <jurTax jurisdiction='IN' sequence='1' totalMiles='32607' taxableMiles='32607' taxPaidGallons='1476' />
      <jurTax jurisdiction='KY' sequence='1' totalMiles='5895' taxableMiles='5895' taxPaidGallons='0' />
      <jurTax jurisdiction='MA' sequence='1' totalMiles='45976' taxableMiles='45976' taxPaidGallons='1412' />
      <jurTax jurisdiction='MD' sequence='1' totalMiles='5092' taxableMiles='5092' taxPaidGallons='125' />
      <jurTax jurisdiction='ME' sequence='1' totalMiles='3107' taxableMiles='3107' taxPaidGallons='0' />
      <jurTax jurisdiction='MI' sequence='1' totalMiles='4143' taxableMiles='4143' taxPaidGallons='0' />
      <jurTax jurisdiction='NC' sequence='1' totalMiles='21565' taxableMiles='21565' taxPaidGallons='2332' />
      <jurTax jurisdiction='NH' sequence='1' totalMiles='5338' taxableMiles='5338' taxPaidGallons='1326' />
      <jurTax jurisdiction='NJ' sequence='1' totalMiles='26537' taxableMiles='26537' taxPaidGallons='306' />
      <jurTax jurisdiction='NY' sequence='1' totalMiles='334883' taxableMiles='334883' taxPaidGallons='47294' />
      <jurTax jurisdiction='OH' sequence='1' totalMiles='197168' taxableMiles='197168' taxPaidGallons='7840' />
      <jurTax jurisdiction='PA' sequence='1' totalMiles='186675' taxableMiles='186675' taxPaidGallons='8626' />
      <jurTax jurisdiction='RI' sequence='1' totalMiles='949' taxableMiles='949' taxPaidGallons='0' />
      <jurTax jurisdiction='SC' sequence='1' totalMiles='8458' taxableMiles='8458' taxPaidGallons='1044' />
      <jurTax jurisdiction='TN' sequence='1' totalMiles='1212' taxableMiles='1212' taxPaidGallons='119' />
      <jurTax jurisdiction='VA' sequence='1' totalMiles='13979' taxableMiles='13979' taxPaidGallons='1939' />
      <jurTax jurisdiction='VT' sequence='1' totalMiles='16150' taxableMiles='16150' taxPaidGallons='2245' />
      <jurTax jurisdiction='WI' sequence='1' totalMiles='78443' taxableMiles='78443' taxPaidGallons='2147' />
      <jurTax jurisdiction='WV' sequence='1' totalMiles='22444' taxableMiles='22444' taxPaidGallons='170' />
    </jurTaxes>
  </taxReturn>
</taxReturns>
```

## File Validation

When a file is uploaded it is validated using standard XML schema validation. If the file does not pass the validation, an error message appears to the customer. If the file passes the validation check, it is checked to ensure that the data is valid for the customer. The XSD file and the supporting file is displayed here:

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="http://modot.mo.gov/namespaces/ifta-tax-return"
  xmlns:tns="http://modot.mo.gov/namespaces/ifta-tax-return"
  elementFormDefault="qualified">
<xs:include schemaLocation="./custom-types.xsd" />
<!-- XML schema definition. -->
<xs:element name="taxReturns">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="accountNumber" type="tns:iftaAccountNumber"
        minOccurs="1" maxOccurs="1" />
      <xs:element name="filingPeriod" minOccurs="1" maxOccurs="1">
        <xs:complexType>
          <xs:attribute name="startDate" type="tns:date" />
          <xs:attribute name="endDate" type="tns:date" />
        </xs:complexType>
      </xs:element>
      <xs:element name="taxReturn" minOccurs="1" maxOccurs="unbounded">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="fuelUsage" minOccurs="1" maxOccurs="1">
              <xs:complexType>
                <xs:attribute name="fuelType" type="tns:fuelType" />
                <xs:attribute name="totalMiles" type="tns:miles" />
                <xs:attribute name="totalGallons" type="tns:gallons" />
                <xs:attribute name="otherMiles" type="tns:miles" />
              </xs:complexType>
            </xs:element>
            <xs:element name="jurTaxes" minOccurs="1" maxOccurs="1">
              <xs:complexType>
                <xs:sequence>
                  <xs:element name="jurTax" minOccurs="1" maxOccurs="unbounded">
                    <xs:complexType>
                      <xs:attribute name="jurisdiction" type="tns:jurisdiction" />
                      <xs:attribute name="sequence" type="tns:sequence" />
                      <xs:attribute name="totalMiles" type="tns:miles" />
                      <xs:attribute name="taxableMiles" type="tns:miles" />
                      <xs:attribute name="taxPaidGallons" type="tns:gallons" />
                    </xs:complexType>
                  </xs:element>
                </xs:sequence>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
</xs:schema>
```

The custom\_types.xsd that is included in the iftaUpload.xsd follows.

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="http://modot.mo.gov/namespaces/ifta-tax-return"
  xmlns:tns="http://modot.mo.gov/namespaces/ifta-tax-return"
  elementFormDefault="qualified">

  <xs:simpleType name="iftaAccountNumber">
    <xs:restriction base="xs:unsignedLong">
      <xs:pattern value="[1-9][0-9]{0,10}" />
    </xs:restriction>
  </xs:simpleType>

  <xs:simpleType name="date">
    <xs:restriction base="xs:string">
      <xs:pattern value="\d{1,2}/\d{1,2}/20\d{2}" />
    </xs:restriction>
  </xs:simpleType>

  <xs:simpleType name="fuelType">
    <xs:restriction base="xs:string">
      <!-- Diesel -->
      <xs:enumeration value="D" />
      <!-- Gas -->
      <xs:enumeration value="G" />
      <!-- Ethanol -->
      <xs:enumeration value="H" />
      <!-- Natural Gas -->
      <xs:enumeration value="N" />
      <!-- Propane -->
      <xs:enumeration value="P" />
    </xs:restriction>
  </xs:simpleType>

  <xs:simpleType name="miles">
    <xs:restriction base="xs:nonNegativeInteger">
      <xs:pattern value="[0-9]*" />
    </xs:restriction>
  </xs:simpleType>

  <xs:simpleType name="gallons">
    <xs:restriction base="xs:nonNegativeInteger">
      <xs:pattern value="[0-9]*" />
    </xs:restriction>
  </xs:simpleType>

  <xs:simpleType name="sequence">
    <xs:restriction base="xs:positiveInteger">
      <xs:pattern value="[1-9]" />
    </xs:restriction>
  </xs:simpleType>

  <xs:simpleType name="jurisdiction">
    <xs:restriction base="xs:string">
      <!-- Alberta -->
      <xs:enumeration value="AB" />
      <!-- British Columbia -->
      <xs:enumeration value="BC" />
      <!-- Manitoba -->
      <xs:enumeration value="MB" />
    </xs:restriction>
  </xs:simpleType>


```

```
<!-- New Brunswick -->
<xs:enumeration value="NB" />
<!-- Newfoundland -->
<xs:enumeration value="NF" />
<!-- Nova Scotia -->
<xs:enumeration value="NS" />
<!-- Northwest Territories -->
<xs:enumeration value="NT" />
<!-- Ontario -->
<xs:enumeration value="ON" />
<!-- Prince Edward Island -->
<xs:enumeration value="PE" />
<!-- Saskatchewan -->
<xs:enumeration value="SN" />
<!-- Saskatchewan -->
<xs:enumeration value="SK" />
<!-- Quebec -->
<xs:enumeration value="QC" />
<!-- Quebec -->
<xs:enumeration value="PQ" />
<!-- Yukon Territory -->
<xs:enumeration value="YT" />
<!-- Aguascalientes -->
<xs:enumeration value="AG" />
<!-- Baja California Norte -->
<xs:enumeration value="BN" />
<!-- Baja California Sur -->
<xs:enumeration value="BS" />
<!-- Coahuila -->
<xs:enumeration value="CH" />
<!-- Chihuahua -->
<xs:enumeration value="CI" />
<!-- Colima -->
<xs:enumeration value="CL" />
<!-- Campeche -->
<xs:enumeration value="CP" />
<!-- Chiapas -->
<xs:enumeration value="CS" />
<!-- Distrito Federal -->
<xs:enumeration value="DF" />
<!-- Durango -->
<xs:enumeration value="DG" />
<!-- Guerrero -->
<xs:enumeration value="GE" />
<!-- Guanajuato -->
<xs:enumeration value="GJ" />
<!-- Hidalgo -->
<xs:enumeration value="HD" />
<!-- Jalisco -->
<xs:enumeration value="JA" />
<!-- Michoacan -->
<xs:enumeration value="MC" />
<!-- Morelos -->
<xs:enumeration value="MR" />
<!-- Nayarit -->
<xs:enumeration value="NA" />
<!-- Nuevo Leon -->
<xs:enumeration value="NL" />
<!-- Oaxaca -->
<xs:enumeration value="OA" />
<!-- Puebla -->
<xs:enumeration value="PU" />
```

```
<!-- Queretaro -->
<xs:enumeration value="QE" />
<!-- Quintana Roo -->
<xs:enumeration value="QI" />
<!-- Sinaloa -->
<xs:enumeration value="SI" />
<!-- San Luis Potosi -->
<xs:enumeration value="SL" />
<!-- Sonora -->
<xs:enumeration value="SO" />
<!-- Tamaulipas -->
<xs:enumeration value="TA" />
<!-- Tabasco -->
<xs:enumeration value="TB" />
<!-- Tlaxcala -->
<xs:enumeration value="TL" />
<!-- Veracruz -->
<xs:enumeration value="VC" />
<!-- Yucatan -->
<xs:enumeration value="YU" />
<!-- Zacatecas -->
<xs:enumeration value="ZA" />
<!-- Alaska -->
<xs:enumeration value="AK" />
<!-- Alabama -->
<xs:enumeration value="AL" />
<!-- Arkansas -->
<xs:enumeration value="AR" />
<!-- American Samoa -->
<xs:enumeration value="AS" />
<!-- Arizona -->
<xs:enumeration value="AZ" />
<!-- California -->
<xs:enumeration value="CA" />
<!-- Colorado -->
<xs:enumeration value="CO" />
<!-- Connecticut -->
<xs:enumeration value="CT" />
<!-- District of Columbia -->
<xs:enumeration value="DC" />
<!-- Delaware -->
<xs:enumeration value="DE" />
<!-- Florida -->
<xs:enumeration value="FL" />
<!-- Federated States Of Micronesia -->
<xs:enumeration value="FM" />
<!-- Georgia -->
<xs:enumeration value="GA" />
<!-- Guam -->
<xs:enumeration value="GU" />
<!-- Iowa -->
<xs:enumeration value="IA" />
<!-- Idaho -->
<xs:enumeration value="ID" />
<!-- Illinois -->
<xs:enumeration value="IL" />
<!-- Indiana -->
<xs:enumeration value="IN" />
<!-- Kansas -->
<xs:enumeration value="KS" />
<!-- Kentucky -->
<xs:enumeration value="KY" />
```

```
<!-- Louisiana -->
<xs:enumeration value="LA" />
<!-- Massachusetts -->
<xs:enumeration value="MA" />
<!-- Maryland -->
<xs:enumeration value="MD" />
<!-- Maine -->
<xs:enumeration value="ME" />
<!-- Marshall Islands -->
<xs:enumeration value="MH" />
<!-- Michigan -->
<xs:enumeration value="MI" />
<!-- Minnesota -->
<xs:enumeration value="MN" />
<!-- Missouri -->
<xs:enumeration value="MO" />
<!-- Northern Mariana Islands -->
<xs:enumeration value="MP" />
<!-- Mississippi -->
<xs:enumeration value="MS" />
<!-- Montana -->
<xs:enumeration value="MT" />
<!-- Mexico -- Used for Hawaii on Missouri returns. -->
<xs:enumeration value="MX" />
<!-- North Carolina -->
<xs:enumeration value="NC" />
<!-- North Dakota -->
<xs:enumeration value="ND" />
<!-- Nebraska -->
<xs:enumeration value="NE" />
<!-- New Hampshire -->
<xs:enumeration value="NH" />
<!-- New Jersey -->
<xs:enumeration value="NJ" />
<!-- New Mexico -->
<xs:enumeration value="NM" />
<!-- Nevada -->
<xs:enumeration value="NV" />
<!-- New York -->
<xs:enumeration value="NY" />
<!-- Ohio -->
<xs:enumeration value="OH" />
<!-- Oklahoma -->
<xs:enumeration value="OK" />
<!-- Oregon -->
<xs:enumeration value="OR" />
<!-- Pennsylvania -->
<xs:enumeration value="PA" />
<!-- Puerto Rico -->
<xs:enumeration value="PR" />
<!-- Palau -->
<xs:enumeration value="PW" />
<!-- Rhode Island -->
<xs:enumeration value="RI" />
<!-- South Carolina -->
<xs:enumeration value="SC" />
<!-- South Dakota -->
<xs:enumeration value="SD" />
<!-- Tennessee -->
<xs:enumeration value="TN" />
<!-- Texas -->
<xs:enumeration value="TX" />
```

```
<!-- United States Minor Outlying Islands -->
<xs:enumeration value="UM" />
<!-- Utah -->
<xs:enumeration value="UT" />
<!-- Virginia -->
<xs:enumeration value="VA" />
<!-- Virgin Islands -->
<xs:enumeration value="VI" />
<!-- Vermont -->
<xs:enumeration value="VT" />
<!-- Washington -->
<xs:enumeration value="WA" />
<!-- Wisconsin -->
<xs:enumeration value="WI" />
<!-- West Virginia -->
<xs:enumeration value="WV" />
<!-- Wyoming -->
<xs:enumeration value="WY" />
</xs:restriction>
</xs:simpleType>
</xs:schema>
```