



WEB SERVICE INTEGRATION SPECIFICATIONS

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INTRODUCTION & OVERVIEW

The OnTrac web service interface is designed using the REST approach. In order to interact with the OnTrac system the user must first identify the proper resource they need and then pick the proper HTTP method to use. OnTrac currently has four exposed resources: shipments, zips, rates, and pickups. Using the HTTP methods GET and POST along with these resources will allow the user to fully interface with the OnTrac system.

By transmitting API shipment data and producing integrated labels, the account holder agrees to OnTrac's terms and conditions of carriage; see ontrac.com for more information.

A set of XSDs will be included in this document that describes the format of requests and responses for interacting with OnTrac. Please note that the response structures are subject to change and the XSD should be used as a development guide only to prevent unwanted failures due to these changes.

For example, if a user would like to rate a package, they must use an HTTP GET on the rates resource to receive a quote. If the user then decides to ship the package they must create a shipment. To create a shipment, the user would perform an HTTP POST to the shipments resource. To track the progress of the package the user may then perform an HTTP GET on the shipments resource. In a similar manner, all necessary functions required for integration can be performed.

Below is a list of the existing resources, the methods you may perform on them, and a brief description of the action.

Shipments

- GET – Track a package or get package detail updates
- POST – Create a new shipment in the OnTrac system
- There is no method to delete a shipment in the OnTrac system. All packages are considered inactive until the tracking number is physically scanned. If a package is never scanned, the customer will not be charged.

Rates

- GET – Requests rate quotes for one or more packages

Pickups

- POST – Request a pickup from an OnTrac driver

ZIPs

- GET – Request a detailed list of ZIPs serviced by OnTrac



TERMS OF USE

Any customer or 3rd party developer may use our API if the application is designed to help active OnTrac account holders successfully rate, ship and track OnTrac shipments. Users are not to exceed a reasonable amount of API calls. When developing on our platform you agree to all of the terms listed below:

Application Restrictions

Tracking –

1. Only packages tendered to OnTrac should be tracked; do not track UPS, FedEx or DHL shipments
2. Shipments should not be tracked prior to being tendered to OnTrac
3. Once delivered, shipments should not be tracked again
4. Tracking shipments several times a day is acceptable, but limited to 5 calls per package per day
5. Shipments older than two weeks, regardless of status, should not be tracked. Contact Customer Care, at 800-334-5000, for problem package resolution
6. No attempt to retrieve historical data via the API should ever be made. Special requests for this data should be sent via email to SoftwareSupport@ontrac.com

Rating –

7. As a regional carrier, OnTrac provides service in 8 western states; rating should be limited to the following states: California, Arizona, Nevada, Oregon, Washington, Utah, Colorado and Idaho

Users in violation of Terms of Use will be contacted by OnTrac and will be expected to take immediate action to rectify outlined issues. If full compliance is not demonstrated, OnTrac may restrict or terminate access to our API services.

CONTACT INFORMATION

To activate an OnTrac API password, please contact the OnTrac Software Support: 877.225.6837 or softwaresupport@ontrac.com. OnTrac Software Support Desk hours are: Monday through Friday, 8am to 6pm PST. API passwords will be issued within 24 hours of the request, excluding weekends and holidays.

For integration questions or to report errors email: APISupport@ontrac.com

ACCESS

For testing purposes, use your issued account number and API password. To request a password contact SoftwareSupport@ontrac.com, please include the account number in the email. Once ready to send test shipments or get rates, make calls to our production server.

The root URL of the TEST site is:

<https://www.shipontrac.net/OnTracTestWebServices/OnTracServices.svc>

The root URL of the PRODUCTION site is:

<https://www.shipontrac.net/OnTracWebServices/OnTracServices.svc>

*Note – Any packages transmitted to the test server will not be trackable on the production server and vice versa. Also, any rates that are requested from the test server may not be accurate.

API UPDATES

Scheduled updates to the OnTrac web services will occur on a quarterly basis, when required. Any requested changes will be held until the next scheduled maintenance period. Updates will be published to the test server approximately 30 days prior to going live and all API customers will be notified of the details of the new changes. This is to allow all users time to incorporate the new features and to verify their existing code is functioning properly.

All quarterly API changes will be backwards compatible. Any issues encountered with legacy code should be communicated to OnTrac immediately so that we may address any concerns and delay the move to production, if necessary. If OnTrac has not received any requests for delay after the 30 day testing period, the changes will be published to the production server on the following Monday. These quarterly updates will be fully backwards compatible and will not require customer integration changes. Any changes that require alteration of the customer's API integration will only be implemented with a six month notice and full testing opportunities during that period.

There may be times when an out-of-cycle update is required, based on business needs. If this occurs, all API customers will be notified and a shortened testing period will be provided. Specific details will be provided at the time. All efforts will be made to avoid unscheduled changes and to minimize customer impact when such a change is required.

ZIPS**LOCATION****PRODUCTION**

<https://www.shipontrac.net/OnTracWebServices/OnTracServices.svc/V4/{account}/Zips>

TEST

<https://www.shipontrac.net/OnTracTestWebServices/OnTracServices.svc/V4/{account}/Zips>

*Note – {account} represents a valid OnTrac user account in the above URLs

AVAILABLE METHODS**GET**

The GET method will return a list of serviced OnTrac ZIP codes and their relevant service information. The list will be returned as an XML document in the body of the HTTP response.

PARAMETERS

Name	Required	Format
pw	yes	string
lastUpdate	no	string "yyyy-MM-dd"

The “pw” should contain the web password associated with the OnTrac account making the request.

The “lastUpdate” parameter should contain the date of the last Zip request made to the OnTrac system. Only Zips that have been added or changed since this date will be returned. If this parameter is not included, all Zips will be returned.

RETURN STRUCTURE

The structure of the XML response is described OnTracZipResponse.xsd. Below is a brief description of the XML data elements and their formats.

Name	Format	Description
zipCode	string	5 digit USPS Zip
saturdayServiced	byte	0 - Available 1 - Unavailable
pickupServiced	byte	0 - Available 1 - Unavailable
palletizedServiced	byte	0 - Available 1 - Unavailable
sortCode	string	3 character OnTrac sort code

EXAMPLES

EXAMPLE REQUEST URI

<https://www.shipontrac.net/OnTracTestWebServices/OnTracServices.svc/V4/37/Zips?pw=testpass&lastUpdate=2012-10-12>

EXAMPLE XML RESPONSE

```
<OnTracZipResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <Zips>
    <Zip>
      <zipCode>90210</zipCode>
      <saturdayServiced>1</saturdayServiced>
      <pickupServiced>1</pickupServiced>
      <palletizedServiced>1</palletizedServiced>
      <sortCode>COM</sortCode>
    </Zip>
  </Zips>
  <Error/>
</OnTracZipResponse>
```


SHIPMENTS**LOCATION****PRODUCTION**

<https://www.shipontrac.net/OnTracWebServices/OnTracServices.svc/V4/{account}/shipments>

TEST

<https://www.shipontrac.net/OnTracTestWebServices/OnTracServices.svc/V4/{account}/shipments>

*Note – {account} represents a valid OnTrac user account in the above URLs

AVAILABLE METHODS**POST**

An HTTP POST to this resource with an XML structure as described in OnTracShipmentRequest.xsd will create a new shipment in the OnTrac system. The response will contain a XML structure as described in OnTracShipmentResponse.xsd. This response will contain shipping costs and all necessary information for creating/printing an OnTrac shipping label. Shipment requests are limited to 100 packages per request.

* Note – The tracking element in the request is for use if the client is generating tracking numbers locally using a seed number from OnTrac. If the tracking element is left blank, the server will assign a tracking number to the shipment and it will be returned in the response.

PARAMETERS

Name	Required	Format
pw	yes	string

The “pw” should contain the web password associated with the OnTrac account making the request.

REQUEST STRUCTURE

The structure of the XML request is described OnTracShipmentRequest.xsd. Below is a brief description of the XML data elements and their formats. All elements are required in the XML document, but only elements marked as required must have a value, e.g. you must include a <Reference> element but <Reference /> is valid.

Name	Format	Max Length	Required	Description
UID	string	none	no	For customer use only to associate a response to a request.
Name	string	30	yes	Company Name
Addr1	string	Del - 60 PU - 43	yes	Delivery Street Address
Addr2	string	60	no	Suite if required
Addr3	string	60	no	Not currently used
City	string	20	yes	

State	string		yes	2 character USPS state abbreviation
Zip	string	10	yes	5 digit Zip code
Contact	string	20	no	Contact Name
Phone	string	13	yes	Contact Phone
Service	string	2	yes	S – Sunrise G – Sunrise Gold H – Palletized Freight C – Ground DC – Same Day
SignatureRequired	boolean		yes	
Residential	boolean		yes	Indicates a residential delivery
SaturdayDel	boolean		yes	Indicate Saturday delivery service
Declared	float		no	Declared value of the package
COD	float		no	COD amount to be collected
CODType	string		yes	Valid values are NONE, UNSECURED, SECURED. SECURED indicates that secured funds only will be accepted for payment
Weight	float		yes	Package weight in lbs. A zero indicates a letter; all other values will be rated as a package
BillTo	integer		no	Contains a valid OnTrac account number for third party billing
Instructions	string	100	no	Special delivery instructions for the driver
Reference	string	50	no	Customer reference number
Reference2	string	50	no	Customer reference Number
Reference3	string	50	no	Not currently used. This is a space holder for future versions and values will be ignored
Tracking	string	15	no	Contains a valid OnTrac tracking number. Tracking numbers from previous requests or locally created tracking numbers should be placed here
DIM	float		no	Contains the length, width, and height of the package
LabelType	integer		no	0 – No label 1 – PDF label 9 – 4 x 6 ZPL label 11 – 4 x 6 EPL label * see below for EPL requests
ShipEmail	string	50 per address	no	Semicolon delimited list of email addresses to receive a notification from OnTrac when then shipment is created
DelEmail	string	50 per address	no	Semicolon delimited list of email addresses to receive a notification from OnTrac when then shipment is delivered
Letter	int		no	1 – letter 0 – package
CargoType	Int		no	Currently Always 0

* For EPL label requests, the label string is returned URL encoded to ensure the proper transfer of non-readable characters. Before printing, this string must be URL decoded to print properly.

An example in .Net is shown: `System.Web.HttpUtility.UrlDecode(LabelString);`

RETURN STRUCTURE

The structure of the XML response is described OnTracShipmentResponse.xsd. Below is a brief description of the XML data elements and their formats.

Name	Format	Description
UID	string	For customer use only to associate a response to a request
Error	string	Description of any error in creating the package
TransitDays	integer	Estimated days to the delivery date from the date of shipment
ExpectedDeliveryDate	Date	Expected Delivery Date in yyyyMMdd format
CommitTime	Time	Service commit time in HH:mm:ss format
ServiceChrg	float	Delivery service charge
ServiceChargeDetails	float	Container for charges embedded in the service charge
BaseCharge	float	Base charge
CODCharge	float	COD Fee
DeclaredCharge	float	Insurance Fee
AdditionalCharges	float	Additional accessorial fees
AdditionalChargesDetails		List of details of any additional fees
AdditionalCharge		Holds details of specific additional fees
Description	String	Description of the additional fee
Value	float	The amount of the additional fee
SaturdayCharge	float	Saturday Delivery Fee
FuelChrg	float	Fuel surcharge amount
TotalChrg	float	Sum of service and fuel charges
TariffChrg	float	OnTrac published rate with no discounts or negotiated rates
Label	string	Base64 encoded string image of or printer code for an OnTrac shipping label for the requested package if requested
SortCode	string	3 character OnTrac Sort Code associated with the consignee Zip
RateZone	Int	OnTrac rate zone for the transmitted package

EXAMPLES

EXAMPLE REQUEST URI

<https://www.shipontrac.net/OnTracTestWebServices/OnTracServices.svc/V4/37/shipments?pw=testpass>

EXAMPLE XML REQUEST

```
<OnTracShipmentRequest>
  <Shipments>
    <Shipment>
      <UID> R6MJTD6K4NCZEAAAA</UID>
      <shipper>
        <Name>Shippers Inc.</Name>
        <Addr1>55 First St</Addr1>
        <City>Los Angeles</City>
        <State>CA</State>
        <Zip>90210</Zip>
        <Contact>John Doe</Contact>
      </shipper>
    </Shipment>
  </Shipments>
</OnTracShipmentRequest>
```

```

        <Phone>555-555-5555</Phone>
    </shipper>
    <consignee>
        <Name>Con Ltd</Name>
        <Addr1>555 Eastern Pkwy</Addr1>
        <Addr2>Suite 77</Addr2>
        <Addr3></Addr3>
        <City>Salinas</City>
        <State>CA</State>
        <Zip>90210</Zip>
        <Contact>Jane Doe</Contact>
        <Phone>555-555-5555</Phone>
    </consignee>
    <Service>S</Service>
    <SignatureRequired>true</SignatureRequired>
    <Residential>true</Residential>
    <SaturdayDel>false</SaturdayDel>
    <Declared>500</Declared>
    <COD>0</COD>
    <CODType>NONE</CODType>
    <Weight>5</Weight>
    <BillTo>0</BillTo>
    <Instructions>Ring Bell</Instructions>
    <Reference>Awe343</Reference>
    <Reference2></Reference2>
    <Reference3></Reference3>
    <Tracking></Tracking>
    <DIM>
        <Length>0</Length>
        <Width>0</Width>
        <Height>0</Height>
    </DIM>
    <LabelType>0</LabelType>
    <ShipEmail></ShipEmail>
    <DelEmail></DelEmail>
    <ShipDate>2012-12-17</ShipDate>
    <CargoType>0</CargoType>
</Shipment>
</Shipments>
</OnTracShipmentRequest>

```

EXAMPLE XML RESPONSE

```

<OnTracShipmentResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <Error/>
    <Shipments>
        <Shipment>
            <UID>R6MJTD6K4NCZEAAAA</UID>
            <Tracking>D10010709411534</Tracking>
            <Error/>
            <TransitDays>1</TransitDays>
        </Shipment>
    </Shipments>
</OnTracShipmentResponse>

```

```

<ExpectedDeliveryDate>20140906</ExpectedDeliveryDate>
<CommitTime>14:00:00</CommitTime>
<ServiceChrg>172.55</ServiceChrg>
<ServiceChargeDetails>
  <BaseCharge>145.9</BaseCharge>
  <CODCharge>9.5</CODCharge>
  <DeclaredCharge>0.5</DeclaredCharge>
  <AdditionalCharges>1.65</AdditionalChargesDetails>
  <AdditionalChargesDetails>
    <AdditionalCharge>
      <Description> RESIDENTIAL DELIVERY</ Description >
      <Value>1.65</ Value >
    </AdditionalCharge>
  </AdditionalCharges>
  <SaturdayCharge>15</SaturdayCharge>
</ServiceChargeDetails>
<RateZone>1</RateZone>
<BilledWeight>46</BilledWeight>
<FuelChrg>1.91</FuelChrg>
<TotalChrg>174.46</TotalChrg>
<TariffChrg>177.43</TariffChrg>
<Label></Label>
<SortCode>COM</SortCode>

</Shipment>
</Shipments>
</OnTracShipmentResponse>

```

GET

An HTTP GET to this resource will return shipment details about one or more packages. Depending on the query string parameters you can either get tracking/POD information and update shipment information, or you can get only updated shipment details. The shipment information may change, once OnTrac has received the physical package, includes weight and charges, etc. Tracking requests are limited to 100 packages per request.

PARAMETERS

Name	Required	Format
pw	yes	string
requestType	yes	"details" or "track"
logoFormat	no	BMP, GIF, PNG, or JPG
sigFormat	no	BMP, GIF, PNG, or JPG
tn	yes	Comma delimited list of OnTrac tracking numbers or customer reference numbers

The “pw” should contain the web password associated with the OnTrac account making the request.

The “requestType” specifies the type of shipment update requested.

If “logotype” has a valid value, an OnTrac logo will be returned as a base64 encoded string in the requested format.

If “sigFormat” has a valid value, a POD signature will be returned as a base64 encoded string in the requested format if one is available.

* Note – These last two parameters are only available for tracking requests and not for details requests.

RETURN STRUCTURE

The structures of the XML responses are described OnTracTrackingResponse.xsd and OnTracUpdateResponse.xsd. Below is a brief description of the XML data elements and their formats.

Name	Format	Description
Event	string	A tracking event for the shipment
Status	string	* OnTrac status code of the event
Description	string	A description of the OnTrac status code
EventTime	string	DateTime of the event in YYYY-MM-DDT00:00:00±00:00 format
Facility	string	The name of the OnTrac facility at which the event occurred
Event-City	string	OnTrac facility city
Event-State	string	OnTrac facility state
Event-Zip	string	Ontrac facility ZIP
Tracking	string	OnTrac Tracking number of the shipment
Exp_Del_Date	Datetime	YYYY-MM-DD date that the package should be delivered
ShipDate	Datetime	Date that the package was shipped
Delivered	boolean	Indicates the delivery status of the package
Name	string	Name of the consignee
Contact	string	Consignee contact
Addr1-3	string	Consignee address
City	string	Consignee city
State	string	Consignee state
Zip	string	Consignee Zip
Service	string	OnTrac Service Type
POD	string	POD name that the driver recorded if available
Error	string	Description of any error occurring while tracking the shipment
Reference	string	Shipment reference
Reference2	string	Shipment reference2
Reference3	string	Not currently used
Signature	string	Base64 encoded string of requested signature when available
Logo	string	Base64 encoded string of the OnTrac logo when requested

* A list of the OnTrac status codes is available at the end of this document.

EXAMPLES

EXAMPLE REQUEST URLS

<https://www.shipontrac.net/OnTracTestWebServices/OnTracServices.svc/V4/37/shipments?pw=testpass&tn=D10010515798960&requestType=track&logoFormat=GIF&sigFormat=GIF>

<https://www.shipontrac.net/OnTracTestWebServices/OnTracServices.svc/V4/37/shipments?pw=testpass&tn=D10010515798960&requestType=details>

EXAMPLE XML RESPONSE

TRACK

```

<OnTracTrackingResult xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <Shipments>
    <Shipment>
      <Events>
        <Event>
          <Status>XX</Status>
          <Description>DATA ENTRY</Description>
          <EventTime>2012-04-06T14:53:21.45</EventTime>
          <Facility>Commerce </Facility>
          <City>COMMERCE</City>
          <State>CA</State>
          <Zip>90040</Zip>
        </Event>
      </Events>
      <Tracking>D10010466126749</Tracking>
      <Exp_Del_Date>2012-04-09T00:00:00</Exp_Del_Date>
      <ShipDate>2012-04-06T00:00:00</ShipDate>
      <Delivered>>false</Delivered>
      <Name>JOHN DOE</Name>
      <Contact/>
      <Addr1>580 LOMMEL ROAD </Addr1>
      <Addr2/>
      <Addr3/>
      <City>CALISTOGA</City>
      <State>CA</State>
      <Zip>94515</Zip>
      <Service>S </Service>
      <POD/>
      <Error/>
      <Reference>TESTIN</Reference>
      <Reference2/>
      <Reference3/>
      <ServiceCharge>11.25</ServiceCharge>
      <FuelCharge>1.71</FuelCharge>
      <TotalChrg>12.96</TotalChrg>
      <Residential>>false</Residential>
      <Weight>3</Weight>
      <Signature>---<Signature/>
    </Shipment>
  </Shipments>
  <Note>Results Provided by OnTrac at 10/11/2012 9:19 AM</Note>
  <Logo>---</ Logo>
  <Error/>
</OnTracTrackingResult>

```

DETAILS

```
<OnTracUpdateResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <Shipments>
    <Shipment>
      <Tracking>D10010466126749</Tracking>
      <Delivered>>false</Delivered>
      <ServiceCharge>11.25</ServiceCharge>
      <FuelCharge>1.71</FuelCharge>
      <TotalChrg>12.96</TotalChrg>
      <Residential>>false</Residential>
      <Weight>0</Weight>
    </Shipment>
  </Shipments>
</OnTracUpdateResponse>
```

SHIPMENT ERRORS

Billing Account is Invalid or Does Not Allow Third Party Billing
Delivery Zip Not Serviced
Insufficient Consignee Address Information
Insufficient Shipper Address Information
Invalid Consignee City
Invalid Consignee State
Invalid Shipment Information - (Invalid Data Format).
Invalid Shipper City
Invalid Shipper State
Invalid Tracking Number
Invalid Tracking String
Invalid Username or Password
Outside the Bounds of the Array (batch of shipments over 100)
Palletized Freight must be at least 150 lbs.
Palletized Shipments Unavailable for + ZIP
Pickup Zip Not Serviced
Saturday Service Unavailable for + ZIP
Service Temporarily Unavailable
The Requested Service Type is not Available For This Account
Package Exceeds Maximum Weight of 150 Lbs For Non-Heavyweight Shipments
*Also, if the XML is malformed or errors out during deserialization an error will also be sent

RATES**LOCATION****PRODUCTION**

<https://www.shipontrac.net/OnTracWebServices/OnTracServices.svc/V4/{account}/rates>

TEST

<https://www.shipontrac.net/OnTracTestWebServices/OnTracServices.svc/V4/{account}/rates>

* Note – {account} represents a valid OnTrac user account in the above URLs

AVAILABLE METHODS**GET**

The GET method will return a rate quote for one or more packages as described in the query string. The body of the HTTP response will have an XML document containing the rate quote information as described in OnTracRateResponse.xsd. In the OnTrac system, there is no distinction between packages and shipments. Each package is treated as an independent unit. The web interface allows the user to rate more than one package in a single request, but the user must total the charges on the client side if that is their wish.

For example rating three packages (p1, p2, and p3) will return three quotes (q1, q2, and q3). Determining the sum of the three quotes is the client's responsibility.

There is also an optional parameter "letter" to specify that the shipments in the request are to be rated as letters. This will cause any weights and/or dimensions in the request to be ignored. Letter rating can also be accomplished by simply passing in zeroes for the shipment weights and dimensions

In addition, there is a Cargo Type parameter that may be used at the end of the request. Currently it is reserved for future use and should only be populated with a zero. If this parameter is to be passed, a 1 or 0 MUST be passed into the Letter parameter.

PARAMETERS

Name	Required	Format
pw	yes	string
packages	Yes	* string

*** PACKAGES PARAMETER**

The packages parameter is a comma separated list of packages that are to be rated.
&packages={package},{package}... e.g.

Each package itself is a list of parameters describing each package that is to be rated.

Below is a description of each of the parameters of a package"

Name	Required	Format
UID	yes	For customer use only. This value is returned in the response
PUZip	yes	5 digit origination Zip of the package
DelZip	yes	5 digit destination Zip of the package
Residential	yes	boolean indicating if the package destination is residential
COD	yes	COD value of the package
SaturdayDel	yes	boolean indicating if the package is for Saturday delivery
Declared	yes	Declared value of the package
Weight	yes	Weight of the package in lbs
DIM	yes	Dimensions of the package in the format: (length)X(width)X(height)
Service	yes	2 character OnTrac Service code. An empty service parameter will return quotes for all available services S – Sunrise G – Sunrise Gold H – Palletized Freight C – Ground DC – Same Day
Letter	yes	1 – Letter 0 – Package
Cargo Type	no	For future use. Should always be 0
Signature Required	no	Boolean
Ship Date	No	MM-DD-YY formatted date of shipment

Package example:

...&packages={UID;PUZip;Delzip;Residential;COD;SaturdayDe;Declared;Weight;DIM;Service;Letter;CargoType}

...&packages=ID1;90210; 93903;false;0.00;false;0;5;4X3X10;S;0;0

This request will return a quote for:

- UID = ID1
- From 90210 to 93903
- Non-residential delivery
- No COD
- Non Saturday Delivery
- No declared value
- Weight of 5 pounds
- Dimensions of 4 by 3 by 10 inches
- Shipped using OnTrac Sunrise service

RETURN STRUCTURE

The structures of the XML response can be found in onTracRateResponse.xsd. Below is a brief description of the XML data elements and their formats.

Name	Format	Description
UID	string	For customer use only. This value is returned in the response
PUZip	string	5 digit origination Zip of the package
DelZip	string	5 digit destination Zip of the package
Residential	boolean	boolean indicating if the package destination is residential
COD	float	COD value of the package
SaturdayDel	boolean	Indicates if the package is for Saturday delivery
Declared	float	Declared value of the package
Weight	float	Weight of the package in lbs
DIM	yes	Dimensional container
Length	float	Package length in inches
Width	float	Package width in inches
Height	float	Package height in inches
ExpectedDeliveryDate	Date	Expected Delivery Date in yyyyMMdd format
CommitTime	Time	Service commit time in HH:mm:ss format
ServiceCharge	float	Delivery service charge
ServiceChargeDetails	float	Container for charges embedded in the service charge
BaseCharge	float	Base charge
CODCharge	float	COD Fee
DeclaredCharge	float	Insurance Fee
AdditionalCharges	float	Additional accessorial fees
AdditionalChargesDetails		List of details of any additional fees
AdditionalCharge		Holds details of specific additional fees
Description	String	Description of the additional fee
Value	float	The amount of the additional fee
SaturdayCharge	float	Saturday Delivery Fee
FuelCharge	float	OnTrac fuel surcharge
TotalCharge	float	Sum of the service and fuel charges
TransitDays	integer	Estimated days in transit
GlobalRate	float	Total OnTrac delivery charge without negotiated rates or discounts
Error	String	Contains details of any error in retrieving a rate from OnTrac
RateZone	Int	OnTrac RateZone for the rated package

EXAMPLES

EXAMPLE REQUEST URI

<https://www.shipontrac.net/ontractestwebservice/OnTracServices.svc/V4/37/rates?pw=testpass&packages=ID1;85286;90210;true;3.00;true;200;10;17X27X17;C;1;0>

EXAMPLE XML RESPONSE

```
<OnTracRateResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <Shipments>
    <Shipment>
      <Rates>
        <Rate>
          <Service>C</Service>
          <ServiceCharge>60.84</ServiceCharge>
          <ServiceChargeDetails>
            <BaseCharge>34.19</BaseCharge>
            <CODCharge>9.5</CODCharge>
            <DeclaredCharge>0.5</DeclaredCharge>
            <AdditionalCharges>1.65</AdditionalCharges>
            <AdditionalChargesDetails>
              <AdditionalCharge>
                <Description> RESIDENTIAL
                DELIVERY</ Description >
                <Value>1.65</ Value >
              </AdditionalCharge>
            </AdditionalCharges>
            <SaturdayCharge>15</SaturdayCharge>
          </ServiceChargeDetails>
          <FuelCharge>1.05</FuelCharge>
          <TotalCharge>61.89</TotalCharge>
          <BilledWeight>39</BilledWeight>
          <TransitDays>1</TransitDays>
          <ExpectedDeliveryDate>20140906</ExpectedDeliveryDate>
          <CommitTime>17:00:00</CommitTime>
          <RateZone>2</RateZone>
          <GlobalRate>48.53</GlobalRate>
        </Rate>
      </Rates>
      <UID>ID1</UID>
      <Delzip>90210</Delzip>
      <PUZip>85286</PUZip>
      <Declared>200</Declared>
      <Residential>true</Residential>
      <COD>3</COD>
      <SaturdayDel>true</SaturdayDel>
      <Weight>10</Weight>
      <DIM>
```

```

        <Length>17</Length>
        <Width>27</Width>
        <Height>17</Height>
    </DIM>
    <Error/>
</Shipment>
</Shipments>
<Error/>
</OnTracRateResponse>

```

PICKUPS

LOCATION

PRODUCTION

<https://www.shipontrac.net/OnTracWebServices/OnTracServices.svc/V4/{account}/pickups>

TEST

<https://www.shipontrac.net/OnTracTestWebServices/OnTracServices.svc/V4/{account}/pickups>

* Note – {account} represents a valid OnTrac user account in the above URLs

AVAILABLE METHODS

POST

The POST method is used to request to schedule an OnTrac driver to make a pickup. This service is to request a pickup outside of a normally scheduled pickup.

PARAMETERS

Name	Required	Format
pw	yes	string

The “pw” should contain the web password associated with the OnTrac account making the request.

REQUEST STRUCTURE

The structure of the XML request is described OnTracPickupRequest.xsd. Below is a brief description of the XML data elements and their formats. All Elements are required in the XML document, but only elements marked as required must have a value, e.g. you must include a <Reference> element but <Reference /> is valid

RETURN STRUCTURE

Name	Format	Max Length	Required	Description
Date	date		no	Date of pickup
ReadyAt	time		yes	Earliest pickup time, 24 time HH:MM:SS
CloseAt	time		yes	Latest pickup time 24 hour time HH:MM:SS
Name	string	30	no	Pickup location name
Address	string	38	no	Pickup street address
City	string	20	yes	Pickup City
State	string	2	yes	2 character USPS state abbreviation for Pickup state
Zip	string	10	yes	5 digit pickup Zip code
DelZip	string	10	no	5 digit destination Zip code
Instructions	string	90	no	Special delivery instructions for the driver
Phone	string	13	yes	Contact Phone
Contact	string	20	yes	Contact Name

The structures of the XML responses are described OnTracTrackingResponse.xsd and OnTracUpdateResponse.xsd. Below is a brief description of the XML data elements and their formats.

Name	Format	Description
Tracking	string	The tracking/confirmation number for the pickup
Error	string	Error detail

EXAMPLES

EXAMPLE REQUEST URI

<https://www.shipontrac.net/OnTracTestWebServices/OnTracServices.svc/V4/37/pickups?pw=testpass>

EXAMPLE XML REQUEST

```
<OnTracPickupRequest >
  <Date>2012-10-12</Date>
  <ReadyAt>12:00:00.0Z</ReadyAt>
  <CloseAt>17:00:00.0Z</CloseAt>
  <Name>DOE CORP</Name>
  <Address>44 MAIN ST.</Address>
  <City>LOS ANGELES</City>
  <State>CA</State>
  <Zip>90004</Zip>
  <DelZip>90210</DelZip>
  <Instructions>String</Instructions>
  <Phone>5555555555</Phone>
  <Contact>JOHN DOE</Contact>
</OnTracPickupRequest>
```

EXAMPLE XML RESPONSE

```
<OnTracPickupResponse xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <Tracking>299531027</Tracking>
  <Error/>
</OnTracPickupResponse>
```

ONLINE TRACKING STRING SPECIFICATIONS

Our real-time package tracking system offers several options to track and receive information on the status of your delivery:

1. Search by Tracking Number. Replace **123456789012345** with your Tracking Number:

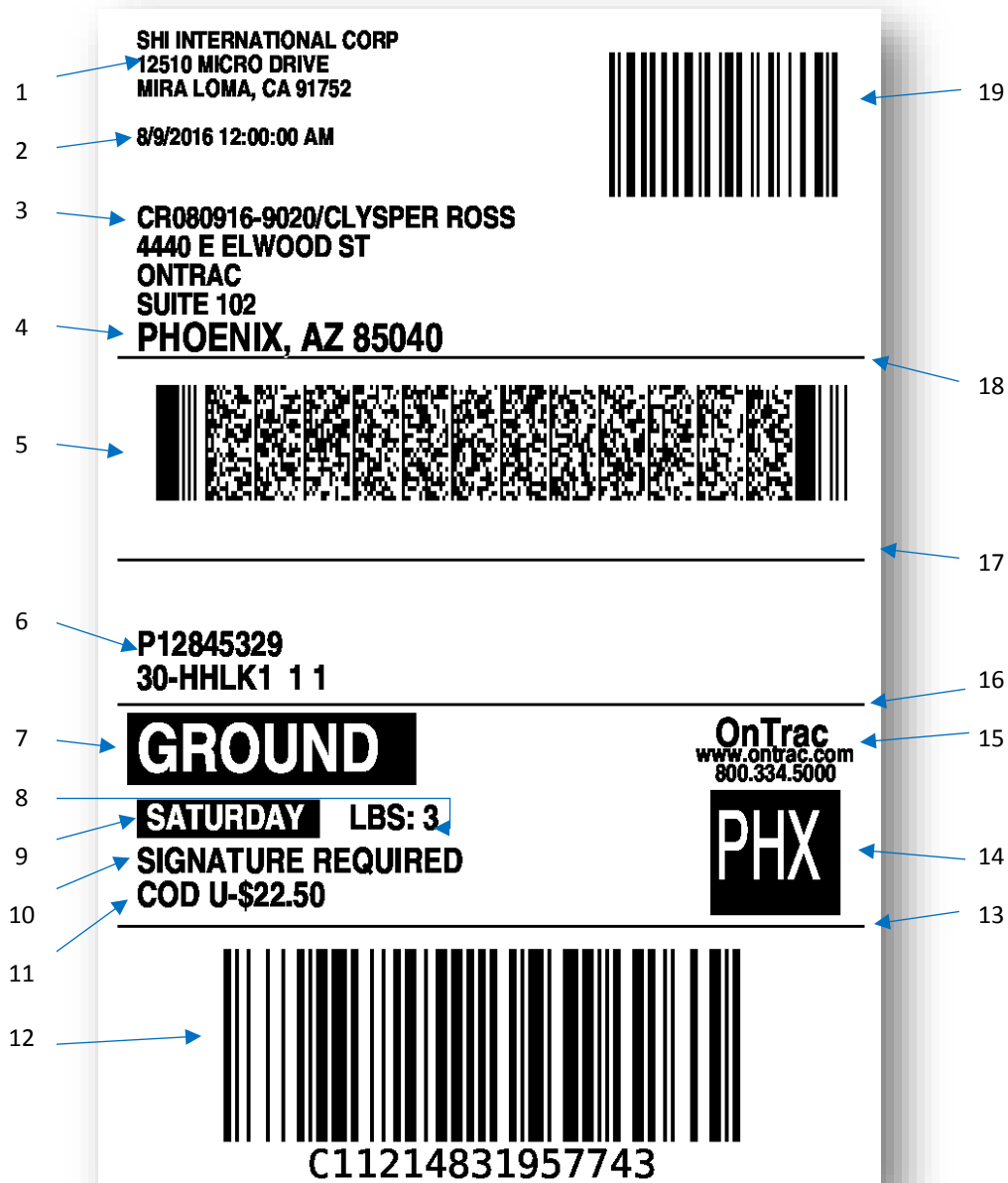
http://www.ontrac.com/trackres.asp?tracking_number=123456789012345

2. Search by Account & Reference Number. Replace **123456** with your Account Number and **abcdefghij** with your Reference Number:

<http://www.ontrac.com/trackref.asp?account=123456&reference=abcdefghij>

ONTRAC SHIPPING LABEL FORMATION

An image of the OnTrac Shipping label is provided below, along with explanations of its various components. The Code 128-B symbol, the Code 128-C symbol, and the PDF-417 symbol specifications, and associated data fields, are detailed in sections that follow. We prefer white label stock to be used, and require a white background in the areas where the barcodes are printed.



ONTRAC SHIPPING LABEL DIAGRAM

1. Shipper Information
 - a. Name, Address lines, City, State, and Postal Code – Arial Bold, Caps 0.25 cm tall
2. Label Creation Date – Arial, 0.25 cm tall, Time component is optional
3. Recipient Information
 - a. Recipient Contact Name, Company Name, Address lines 1-3 – Arial bold, Caps 0.30 cm tall
4. Recipient City, State, Postal Code
 - a. Arial, Bold, Caps 0.40 cm tall
5. 2D Barcode Symbol
 - a. PDF-417 ANSI MH10
 - b. Module Width – x Dimension must be 10 mil
 - c. Module Height – y Dimension must be 5 times x Dimension at 50 mil
 - d. Overall barcode width - 9.0 cm
 - e. Whitespace – minimum of 0.50 cm between left and right label edges and barcode
6. Shipper discretionary Area (optional)
 - a. This area between Line 16 and Line 17 may be used as desired by Shipper for References, Purchase Orders, Product ID, etc. Text, images, or symbols must be 0.40 cm below Line 17, 0.40 cm above Line 16, and 0.40 cm from both right and left label edges.
 - b. For labels produced by OnTrac systems such as OnTrac Desktop Shipping and WebOnTrac, this area will contain the Shipper's Reference1 and Reference2 information, if provided. The sample label presented above depicts this situation
7. Service Indication – Arial, Reverse Bold, All Caps, 0.60 cm tall. Please see 19.(f) below for Service Indicator Translation Map.
8. Actual Weight in LBS – Integer-only weight and "LB" Acronym, Arial, Bold Caps, 0.30 cm tall
9. Saturday Delivery Indicator - Arial, "SATURDAY" in Reverse Bold, All Caps, 0.30 cm tall (optional)
10. Signature Required – Arial, All Caps, 0.30 cm tall (optional)
11. Collect on Delivery Service (optional)
 - a. "COD" Acronym, Funds Type, Funds Amount – Arial Bold, All Caps, 0.30 cm tall
 - b. Funds Type Options: S - Secured, U - Unsecured
12. 1D Barcode Symbol
 - a. Code 128B – Force Code 128 printing, or leave minimum 1.2 cm white space between label edge and barcode on both right and left sides. Whitespace of minimum 0.20 cm between Horizontal line 13 and top of barcode
 - b. Barcode Modulus ("x") Dimension 15 mil
 - c. Barcode overall Height 2.5 cm minimum
 - d. ANSI Quality - Minimum B
 - e. Tracking Number Font: Arial bold, Caps 0.30 cm tall
13. Line Horizontal – Minimum 0.254 mm thick. Locate 11.80 cm from top edge of label
14. Sort Code for Destination - Arial, Reverse Bold, All Caps, 1.20 cm tall.

For instructions on how to determine the OnTrac Sort Code, please reference the OnTrac Multi-Shipping System Integration Specification document.
15. OnTrac Logo Area Text
 - a. "OnTrac" – Arial Bold, Cap "O", small "n", Cap "T", small "rac", Caps 0.40 cm tall
 - b. "ontrac.com" – Arial, all small letters, 0.15 cm tall

- c. "800.334.5000" – Arial, 0.20 cm tall
- 16. Line Horizontal – Minimum 0.254 mm thick. Locate 9.0 cm from top edge of label
- 17. Line Horizontal – Minimum 0.254 mm thick. Locate 6.80 cm from top edge of label
 - a. Whitespace of variable size (dependent on barcode size) between horizontal line 17 and 2D barcode
 - b. Whitespace of 0.350 cm between horizontal line 18 and 2D barcode
- 18. Line Horizontal – Minimum 0.254 mm thick. Locate 4.20 cm from top edge of label
- 19. 1D Barcode symbol representing two-digit Service Indicator code plus 5-Digit Delivery zip code. The two-digit service indicator shall be prefixed with a leading zero; no spaces.
 - a. Code 128C
 - b. Top of barcode located 0.3 cm from top edge of label. Right edge of barcode located 0.70 cm from right edge of label
 - c. Barcode Modulus ("x") Dimension 15 mil
 - d. ANSI quality – Minimum B
 - e. Service Indicator Code translation map

Two Digit Code	Service Description
01	Ground
02	Sunrise
03	Sunrise Gold
04	Palletized Freight
05	Same Day Anytime

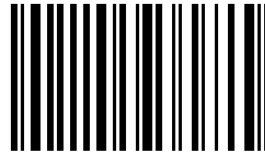
SAMPLE LABELS

* Note – All labels must be certified by OnTrac before production use. Please send a sample label to softwaresupport@ontrac.com for approval.

SHI INTERNATIONAL CORP
12510 MICRO DRIVE
MIRA LOMA, CA 91752

8/9/2016 12:00:00 AM

CLYSPER ROSS
ONTRAC-CLYSPER ROSS
4440 E ELWOOD ST
STE 102
ONTRAC
PHOENIX, AZ 85040



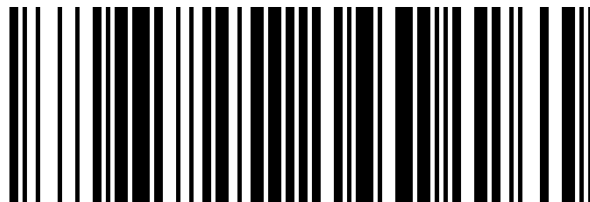
P12845329
30-HHLK1 1 1

GROUND

SATURDAY LBS: 3
SIGNATURE REQUIRED
COD U-\$22.20

OnTrac
www.ontrac.com
800.334.5000

PHX



C11214831957743

ONTRAC SHIPPING LABEL PDF-417 SYMBOL SPECIFICATIONS

The physical aspects of the OnTrac PDF-417 symbol have been chosen to give the various types of scanning equipment a high percentage chance of obtaining an accurate scan on each first attempt. Most PDF-417 symbols will be generated by off-the-shelf software, so the specification for the dimensions presented below should be basic configuration settings provided to these systems. White Label Stock should always be used to print PDF-417 symbols for Shipping Labels.

Module Height/Width

- a. X-Dimension (Module Width) 10 mil
- b. Y-Dimension (Module Height) 5 times X dimension at 50 mil

Number of Columns

- a. 12 Columns wide (10 Data fields)

Aspect Ratio

- a. The Row-to-Column Aspect Ratio should be selected as low as possible in order to produce a rectangular barcode.
- b. A one-to-two ratio is suggested.

Width

- a. X-Dimension (Overall Symbol Width) 9.0 cm

Height

- a. Y-Dimension (Relative to X-Dimension)

Quiet Zone

- a. Top and Bottom 0.35 cm minimum

Error Correction

- a. Level 5

ONTRAC DATA STREAM FORMAT FOR ANSI MH10.8.3 COMPLIANCE

Description	Data Format	Max Data Length	Notes
Message Header	[]><RS>		Constant Value Indicating ANSI MH10.8.3 Compliance
Format Envelope Header	01<GS>02		Transportation Format 01, Version 02
Recipient Postal Code	(an, 5 or 6)<GS>	5	Delivery Zip Code - 5 Digit
Recipient Country Code	(n, 3)<GS>	3	Always 840 for US shipments
Class of Service	(an,1-3)<GS>	3	Service Requested**
Tracking Number	(an,15)<GS>	15	OnTrac Tracking Number
Origin Carrier SCAC	(an, 2-4)<GS>	4	EMSY for OnTrac
Account Number	(an, 1-8)<GS>	8	OnTrac Shipper Account Number
Julian Pickup Date	(n, 3) <GS>	3	For calendar year
Shipper ID Number	<GS>		Not used
Container n of Total of x	(n, 1-4/ n, 1-4)<GS>	3	Always 1/1
Weight in Pounds	(r, 1-8,2,a02) <GS>	10	Formatted as nnnnn.nnLB, leading zeroes not required

Cross Match Zip Code to State	(a,1)<GS>	1	Always N
Recipient Address Line 1	(an, 1-30)<GS>	30	Street Number, Street Name, Suite, etc. Maximum of 30 Characters Total
Recipient City	(an, 1-30)<GS>	30	
Recipient State/Province	(an, 2)<GS>	2	
Recipient Contact Name	(an,1-35)	35	Recipient Contact Name
Format Separator	<RS>		Constant Value - Format Separator
Format Envelope Header	06<GS>		Format Group 6, Category 26, Mutually Agreed-upon DI's
OnTrac Version Number	3Z(an,2)<GS>	2	OnTrac Barcode Version Identifier Current Version = 01
Ship-to Company Name	11Z(an,1-25)<GS>	25	If no Company name available, use Recipient Contact name
Ship-to Phone Number*	12Z(n,10)<GS>	10	Digits only, no parentheses or hyphens
Ship-to Address Line 2*	14Z(an,1-30)<GS>	30	Additional address info
Ship-from zip code	15Z(an,5)<GS>	5	Origination zip code
COD Amount, Funds Type, and Declared Value***	20Z(r,1-8,2)<FS>(a1)<FS>(r,1-8,2)<GS>	17	COD Types are U-Unsecured Funds, S-Secured Funds and/or Declared Value
Signature Required	21Z(n,1)<GS>	1	0=No, 1=Yes
Letter	22Z(n,1)<GS>	1	0=No, 1=Yes
3rd Party Billing Account #*	23Z(n,1-8)<GS>	8	If Different from OnTrac Shipper Account Number provided above in format Group 1, otherwise pass 0
Saturday Delivery	24Z(n,1)<GS>	1	0=No, 1=Yes
Customer Reference*	9K(an,1-30)<GS>	30	Customer generated Reference Number. Reference Field 1 data to be passed here.
Format Separator	<RS>		Constant Value - Format Separator
Message Trailer	<EOT>		Constant Value - Message Trailer

Notes:

an – indicates alpha-numeric data; Value is a sequence of any printable characters

a – indicates alphabetic data

n – indicates numeric data; Value is a sequence of any digits

r – indicates radial data; Value is a sequence of any digits and a decimal point. Decimal point is not included for whole numbers

* Indicates optional use

** Valid services selections are: (01) Ground, (02) Sunrise, (03) Sunrise Gold, (04) Palletized Freight, and (05) Same Day Anytime. Use the two-digit designations for MH10.8.3 data stream and print full descriptions on the physical label.

*** Optional, but if any of the three fields are used, all three items need a minimum of an <FS>; e.g., '20Z300.00<FS>U<FS><GS>'

NON-PRINTABLE ASCII CHARACTERS USED IN DATA STREAM

<FS> Field Separator, Decimal 28
 <GS> Group Separator, Decimal 29
 <RS> Format Separator, Decimal 30
 <EOT> End of Transmission, Decimal 04

ANSI MH10.8.3 DATA STREAM EXAMPLE

```
[ ]<RS>01<GS>0285040<GS>840<GS>01<GS>C11214831957743<GS>EMSY<GS>37<GS>222<GS><GS>1/1<GS>
3LB<GS>N<GS>4440 E ELWOOD ST<GS>PHOENIX<GS>AZ<GS>CLYSPER ROSS<RS>06<GS>3Z01<GS>
11ZONTRAC-CLYSPER ROSS<GS>12Z8887648888<GS>14ZSTE102<GS>15Z91752<GS>20Z22.20<FS>U<FS>0.00<GS>
21Z1<GS>22Z0<GS>24Z1<GS>9KP12845329<GS><RS><EOT>
```

Data Stream Sample formatted below with Carriage Returns for readability purposes only

```
[ ]<RS>
01<GS>02
85040<GS>
840<GS>
01<GS>
C11214831957743<GS>
EMSY<GS>
37<GS>
222<GS>
<GS>
1/1<GS>
3LB<GS>
N<GS>
4440 E ELWOOD ST<GS>
PHOENIX<GS>
AZ<GS>
CLYSPER ROSS<RS>
06<GS>
3Z01<GS>
11ZONTRAC-CLYSPER ROSS<GS>
12Z8887648888<GS>
14ZSTE102<GS>
15Z91752<GS>
20Z22.20<FS>U<FS>0.00<GS>
21Z1<GS>
22Z0<GS>
24Z1<GS>
9KP12845329<GS>
<RS>
<EOT>
```

ONTRAC SHIPPING LABEL CODE 128-C ROUTING SYMBOL SPECIFICATIONS

The physical aspects of the OnTrac Code 128-C, one-dimensional barcode are listed below.

1. Barcode modulus ("X") dimension 15 mil
2. Barcode Height 1.90 cm
3. ANSI quality Minimum B

Barcode Content

The Code 128-C Routing symbol will contain a leading zero plus a two-digit encoded service indicator plus the five-digit zip code of the delivery address, as itemized below.

Position 1 Always 0

Positions 2-3 Two- digit Encoded Service Indicator. Valid services selections are:

- (01) Ground
- (02) Sunrise
- (03) Sunrise Gold
- (04) Palletized Freight
- (05) Same Day Anytime.

Positions 4-8 Five-digit Zip code of Delivery address

ONTRAC SHIPPING LABEL CODE 128-B TRACKING NUMBER SYMBOL SPECIFICATIONS

The physical aspects of the OnTrac Code 128-B, one-dimensional barcode are listed below.

4. Barcode modulus ("X") dimension 15 mil
5. Barcode Height 2.5 cm
6. ANSI quality Minimum B

The OnTrac Code 128-B barcode symbol shall include the 15 character OnTrac tracking number. The human-readable representation of this information will look similar to C10734902081420

ONTRAC TRACKING NUMBER

OnTrac uses a 15-character tracking number consisting of the character 'C' plus a 6-digit sequence number that OnTrac will assign, plus a 7 digit sequence starting at 1, plus one check digit.

The 6-digit sequence number that we provide will remain static throughout a range of 0-999999 tracking numbers.

Each unique tracking number will be generated by the customer's shipping system, utilizing the 7-digit range, beginning with 0000001 and ending with 9999999.

This format provides a range of 9,999,999 tracking numbers per each assigned 6-digit sequence. After the range of 9,999,999 has been used, OnTrac will assign a new 6-digit static range.

Example: C 154113 1441672 7

First character is always C

Next 6 characters, 154113, is the static 6-digit sequence assigned by OnTrac

Next 7 characters, 1441672, is the 7-digit sequence customer uses to generate unique tracking numbers

Last digit, 7, is the calculated check digit

The customer's shipping system must assign unique tracking numbers to each shipment. Below we will demonstrate how to calculate the check digit when utilizing our tracking numbers.

CHECK DIGIT CALCULATION

1. Convert the initial alpha character to its numeric equivalent, which is always 4 for "C"
2. From left, add all odd positions.
3. From left, add all even positions.
4. Multiply result of step three by 2.
5. Add results of steps two and four.
6. Subtract result from the next highest multiple of 10.
7. The remainder is your check digit.

CHECK DIGIT EXAMPLE 1

Tracking number without check digit: C 100100 0000001

1. Convert the alpha character to its numeric equivalent: 4 100100 0000001
 2. From left, add all odd positions: $4 + 0 + 1 + 0 + 0 + 0 + 0 = 5$
 3. From left, add all even positions: $1 + 0 + 0 + 0 + 0 + 0 + 1 = 2$
 4. Multiply the result of step three by 2: $2 \times 2 = 4$
 5. Add results of steps two and four: $5 + 4 = 9$
 6. Subtract result from the next highest multiple of 10: $10 - 9 = 1$
 7. The remainder is the check digit: 1
- Result: C 100100 0000001 **1**

CHECK DIGIT EXAMPLE 2

Tracking number without check digit: C 175435 5831526

1. Convert the alpha character to its numeric equivalent: 4 175435 5831526
 2. From left, add all odd positions: $4 + 7 + 4 + 5 + 8 + 1 + 2 = 31$
 3. From left, add all even positions: $1 + 5 + 3 + 5 + 3 + 5 + 6 = 28$
 4. Multiply the result of step three by 2: $28 \times 2 = 56$
 5. Add results of steps two and four: $31 + 56 = 87$
 6. Subtract result from the next highest multiple of 10: $90 - 87 = 3$
 7. The remainder is the check digit: 3
- Result: C 175435 5831526 **3**

CHECK DIGIT EXAMPLE 3

Tracking number without check digit: C 100100 0000011

1. Convert the alpha character to its numeric equivalent: 4 100100 0000011
2. From left, add all odd positions: $4 + 0 + 1 + 0 + 0 + 0 + 1 = 6$
3. From left, add all even positions: $1 + 0 + 0 + 0 + 0 + 0 + 1 = 2$

4. Multiply the result of step three by 2: $2 \times 2 = 4$
5. Add results of steps two and four: $6 + 4 = 10$
6. Subtract result from the next highest multiple of 10: $20 - 10 = 10$
7. The remainder is the check digit: *IF TEN, THE CHECK DIGIT IS ZERO*

Result: C 100100 0000011 **0**

Revised 01-30-18