OLD DOMINION FREIGHT LINE, INC.

TRACKING API DEVELOPMENT GUIDE

Helping The World
Keep Promises®

Getting Started

Overview

The Tracking API is a REST service which provides the shipment's tracking status and can be used to integrate freight movement data into your systems.

You can find more information on all the API services we provide on our Shipping API Integrations page at ODFL.com.

Testing

We provide a QA environment for your use while onboarding new services or when you require testing.

When you're ready to begin, visit Shipping API Integrations and click **Email an Expert** for assistance.

Authentication

To use this service, you will need an ODFL.com account with a username and password. This grants you access to data for your specific accounts. Visit our website at ODFL.com and click Sign Up to register.

Have questions about your ODFL account? We're here to help, Monday-Friday, 7 a.m. – 8 p.m. ET:

- Telephone: 1-800-235-5569
- Email: Internet.CustomerService@odfl.com

Request

Obtain a session token by making a GET request to:

Environment	URL
QA	https://apiq.odfl.com/auth/v1.0/token
Production	https://api.odfl.com/auth/v1.0/token

- Authorization Type: Basic Auth
- Username: Provide your ODFL.com Username
- Password: Provide your ODFL.com Password

Response

Code	Message	Notes
200		A session token and expiration are returned. Session tokens expire one hour after issue.
400	invalid credentials	The ODFL Username or Password you've provided is incorrect or your account is disabled. Contact Customer Service for assistance.
503	Service Unavailable	Verify that the URL and Authorization Type is correct. If the problem persists, please notify us at Internet.CustomerService@odfl.com.

Request

Authorization

Provide the session token obtained during Authentication as Authorization:

- Type: Bearer Token

Base Path

Perform a POST to:

Environment	URL
QA	https://apiq.odfl.com/tracking/v2.0/shipment.track
Production	https://api.odfl.com/tracking/v2.0/shipment.track

Fields

Field	Definition	Data Type	Minimum Length	Maximum Length	Required?	Default
reference Type	The type of reference number being used to find and track the shipment.	String	3	4	Yes	N/A
reference Number	The reference number being used to track the shipment.	String	9	11	Yes	N/A

Values

Field	Value	Definition
referenceType	BOL	Bill of Lading
	LOAD	Load Number
	PKU	Pickup Number
	PO	Purchase Order
	PPID	Pre-Pickup ID
	PRO	Pro Number

Sample

```
{
    "referenceType": "PRO",
    "referenceNumber": "99999999999"
}
```

Response

The response fields provided by this service vary. Fields in the **Standard Response** section are always present. Fields in the **Authorized Response** section are included only when the OD account username you provide in the token request has permission to view them.

Fields

Standard Response

Field	Definition	Data Type
referenceType	The type of reference number being used to find and track the shipment.	string
referenceNumber	The reference number being used to find and track the shipment.	string
traceInfo	Contains all the tracing information for given referenceNumber.	array
trackTraceDetail	Contains the tracking events for the shipment.	array
status	The tracking event that occurred for the shipment.	string
desc	Additional description information regarding the tracking event if available.	string
dateTime	The timestamp of when the tracking event occurred.	ISO-8601
city	The city where the tracking event occurred.	string
state	The state where the tracking event occurred.	string
zipCode	The zip code where the tracking event occurred.	string
originSvcCity	The city for the Old Dominion pickup service center.	string
originSvcState	The state for the Old Dominion pickup service center.	string
originSvcZip	The zip code for the Old Dominion pickup service center.	string

Field	Definition	Data Type
originSvcAlpha	The alpha code for the Old Dominion pickup service center.	string
destSvcCity	The city for the Old Dominion delivery service center.	string
destSvcState	The state for the Old Dominion delivery service center.	string
destSvcZip	The zip code for the Old Dominion delivery service center.	string
destSvcAlpha	The alpha code for the Old Dominion delivery service center.	string
pieces	The number of pieces in the shipment.	integer
weight	The gross weight of the shipment.	integer
deliverySign	The name of the person that signed for delivery.	string
standardEta	The estimated date of arrival of the shipment, based on information we have at the time of pickup.	ISO-8601
updatedEta	The updated estimated date of arrival of the shipment, based on new information as it is obtained.	ISO-8601
proNumber	Provides the PRO number for the shipment so you can track the shipment with PRO if you did not already have that information.	long
billOfLading	Provides all the bill of lading numbers assigned to the shipment being tracked. These are customer reference numbers.	array(string)
purchaseOrders	Provides all the purchase order numbers assigned to the shipment being tracked. These are customer reference numbers.	array(string)
loads	Provides all the load numbers assigned to the shipment being tracked. These are customer reference numbers.	array(string)

Authorized Response

Field	Definition	Data Type
shipperNo	The Old Dominion account code for the shipper location.	long
shipperNationalAccount	The Old Dominion account code for the shipper national account.	long
shipperCity	The city for the shipper location.	string
shipperState	The state for the shipper location.	string
shipperZip	The zip code for the shipper location.	string
consigneeNo	The Old Dominion account code for the consignee location.	long
consigneeNationalAccount	The Old Dominion account code for the consignee national account.	long
consigneeCity	The city for the consignee location.	string
consigneeState	The state for the consignee location.	string
consigneeZip	The zip code for the consignee location.	string
billToAccNo	The Old Dominion account code for the bill-to location.	long
billToNationalAccount	The Old Dominion account code for the bill-to national account.	long
appointmentDate	The date of the delivery appointment if one has been scheduled.	ISO-8601
appointmentStatus	The status of the delivery appointment.	string
apptBeginDateTime	The beginning of the delivery window set in the delivery appointment.	ISO-8601
apptEndDateTime	The end of the delivery window set in the delivery appointment.	ISO-8601
ppid	Provides pre-pickup id for the shipment assigned by OD.	long

Field	Definition	Data Type
guaranteed	Guaranteed flag. This identifies if the shipment has a guaranteed delivery	boolean
pickupNumber	Contains pickupNumber assigned by OD as a given referenceNumber.	long
trailerNumber	Contains the trailer number the freight was delivered on.	long

Values

Field	Values
Status	Pickup Requested
	Pickup Rescheduled
	Pickup Cancelled
	Pickup Completed
	Out for Delivery
	Delivered
	Delivery Confirmed
	In Transit
	Appointment Set/Confirmed
	Appointment Cancelled

Field	Values
	Appointment Attempted
	Appointment Rescheduled
	Delayed
	Agent Handoff
	Interline Handoff
	Returned To Dock
	Received At Dock

Response Codes

Code	Message	Details
200	Note: Messages are sometimes returned with response code 200.	See the Business Codes section below for more information.
401	Unauthorized	The token provided in the request is invalid or expired.

Business Response Codes

Response Code	Message	Details
400	"Invalid Reference Type. Valid values are BOL, PO, LOAD, PKU and PPID."	Provide a valid Reference Type.
404	"No results found for Reference No: 999999"	
404	"Records Not Found for Pro: 99999999999"	

Sample

Standard Response

```
{
    "ok": true,
    "referenceType": "PRO",
    "referenceNumber": "78099999999",
    "traceInfo": [
        {
            "trackTraceDetail": [
                {
                    "status": "Delivery Confirmed",
                    "dateTime": "2000-11-08T05:05:22.000-05:00"
                },
                {
                    "status": "Delivered",
                    "dateTime": "2000-11-07T13:09:36.000-05:00",
                    "city": "SPOKANE VALLEY",
                    "state": "WA",
                    "zipCode": "99216"
                },
                {
                    "status": "Out for Delivery",
                    "dateTime": "2000-11-07T12:09:14.000-05:00",
                    "city": "SPOKANE VALLEY",
                    "state": "WA",
                    "zipCode": "99027"
                },
                {
                    "status": "In Transit",
                    "desc": "Arrived at Destination Service Center",
                    "dateTime": "2000-11-06T09:58:25.000-05:00",
                    "city": "SPOKANE VALLEY",
                    "state": "WA",
                    "zipCode": "99027"
                },
                {
                    "status": "In Transit",
                    "desc": "Departed from Service Center",
                    "dateTime": "2000-11-06T03:00:00.000-05:00",
                    "city": "PORTLAND",
                    "state": "OR",
                    "zipCode": "97217"
                },
                {
                    "status": "In Transit",
                    "desc": "Arrived at Service Center",
                    "dateTime": "2000-11-05T02:50:50.000-04:00",
                    "city": "PORTLAND",
```

```
      "state": "OR",
      "zipCode": "97217"
   },
   {
      "status": "In Transit",
      "desc": "Departed from Service Center",
      "dateTime": "2000-11-04T22:16:48.000-04:00",
      "city": "CENTRAL POINT",
      "state": "OR",
      "zipCode": "97502"
   },
   {
      "status": "In Transit",
      "desc": "Arrived at Service Center",
      "dateTime": "2000-11-04T21:06:08.000-04:00",
      "city": "CENTRAL POINT",
      "state": "OR",
      "zipCode": "97502"
   },
   {
      "status": "In Transit",
      "desc": "Departed from Service Center",
      "dateTime": "2000-11-04T11:44:31.000-04:00",
      "city": "FRESNO",
      "state": "CA",
      "zipCode": "93725"
   },
   {
      "status": "In Transit",
      "desc": "Arrived at Service Center",
      "dateTime": "2000-11-04T08:56:09.000-04:00",
      "city": "FRESNO",
      "state": "CA",
      "zipCode": "93725"
   },
   {
      "status": "In Transit",
      "desc": "Departed from Service Center",
      "dateTime": "2000-11-04T03:31:11.000-04:00",
      "city": "CARSON",
      "state": "CA",
      "zipCode": "90810"
   },
   {
      "status": "In Transit",
      "desc": "Arrived at Origin Service Center",
      "dateTime": "2000-11-03T15:14:54.000-04:00",
      "city": "CARSON",
      "state": "CA",
      "zipCode": "90810"
   },
```

```
            {
                "status": "Pickup Completed",
                "desc": "",
                "dateTime": "2000-11-03T11:22:24.000-04:00",
                "city": "LONG BEACH",
                "state": "CA",
                "zipCode": "90813"
            },
            {

                "status": "Pickup Requested",
                "desc": "Pickup Requested",
                "dateTime": "2000-11-01T11:46:18.000-04:00",
                "city": "CARSON",
                "state": "CA",
                "zipCode": "90810"
            }
        ],
        "originSvcCity": "CARSON",
        "originSvcState": "CA",
        "originSvcZip": "90810",
        "originSvcAlpha": "LGB ",
        "destSvcCity": "SPOKANE VALLEY",
        "destSvcState": "WA",
        "destSvcZip": "99027",
        "destSvcAlpha": "SPK ",
        "pieces": 1,
        "weight": 2345,
        "deliverySign": "BEN",
        "standardEta": "2000-11-07",
        "updatedEta": "2000-11-07",
        "proNumber": 78099999999,
        "billOfLadings": [
            "9999999"
        ],
        "purchaseOrders": [
            "9999"
        ],
        "loads": [
            "CONFIRMATION # 9999999999"
        ]
    }
  ]
}
```

Authorized Response

```
{
    "ok": true,
    "referenceType": "PRO",
    "referenceNumber": "78099999999",
    "traceInfo": [
        {
            "trackTraceDetail": [
                {
                    "status": "Delivery Confirmed",
                    "dateTime": "2000-11-08T05:05:22.000-05:00"
                },
                {
                    "status": "Delivered",
                    "dateTime": "2000-11-07T13:09:36.000-05:00",
                    "city": "SPOKANE VALLEY",
                    "state": "WA",
                    "zipCode": "99216"
                },
                {
                    "status": "Out for Delivery",
                    "dateTime": "2000-11-07T12:09:14.000-05:00",
                    "city": "SPOKANE VALLEY",
                    "state": "WA",
                    "zipCode": "99027"
                },
                {
                    "status": "In Transit",
                    "desc": "Arrived at Destination Service Center",
                    "dateTime": "2000-11-06T09:58:25.000-05:00",
                    "city": "SPOKANE VALLEY",
                    "state": "WA",
                    "zipCode": "99027"
                },
                {
                    "status": "In Transit",
                    "desc": "Departed from Service Center",
                    "dateTime": "2000-11-06T03:00:00.000-05:00",
                    "city": "PORTLAND",
                    "state": "OR",
                    "zipCode": "97217"
                },
                {
                    "status": "In Transit",
                    "desc": "Arrived at Service Center",
                    "dateTime": "2000-11-05T02:50:50.000-04:00",
                    "city": "PORTLAND",
                    "state": "OR",
                    "zipCode": "97217"
                },
```

```json
{
    "status": "In Transit",
    "desc": "Departed from Service Center",
    "dateTime": "2000-11-04T22:16:48.000-04:00",
    "city": "CENTRAL POINT",
    "state": "OR",
    "zipCode": "97502"
},
{
    "status": "In Transit",
    "desc": "Arrived at Service Center",
    "dateTime": "2000-11-04T21:06:08.000-04:00",
    "city": "CENTRAL POINT",
    "state": "OR",
    "zipCode": "97502"
},
{
    "status": "In Transit",
    "desc": "Departed from Service Center",
    "dateTime": "2000-11-04T11:44:31.000-04:00",
    "city": "FRESNO",
    "state": "CA",
    "zipCode": "93725"
},
{
    "status": "In Transit",
    "desc": "Arrived at Service Center",
    "dateTime": "2000-11-04T08:56:09.000-04:00",
    "city": "FRESNO",
    "state": "CA",
    "zipCode": "93725"
},
{
    "status": "In Transit",
    "desc": "Departed from Service Center",
    "dateTime": "2000-11-04T03:31:11.000-04:00",
    "city": "CARSON",
    "state": "CA",
    "zipCode": "90810"
},
{
    "status": "In Transit",
    "desc": "Arrived at Origin Service Center",
    "dateTime": "2000-11-03T15:14:54.000-04:00",
    "city": "CARSON",
    "state": "CA",
    "zipCode": "90810"
},
{
    "status": "Pickup Completed",
    "desc": "",
```

```json
          "dateTime": "2000-11-03T11:22:24.000-04:00",
          "city": "LONG BEACH",
          "state": "CA",
          "zipCode": "90813"
        },
        {
          "status": "Pickup Requested",
          "desc": "Pickup Requested",
          "dateTime": "2000-11-01T11:46:18.000-04:00",
          "city": "CARSON",
          "state": "CA",
          "zipCode": "90810"
        }
      ],
      "shipperNo": 0,
      "shipperNationalAccount": 0,
      "shipperCity": "LONG BEACH",
      "shipperState": "CA",
      "shipperZip": "90813",
      "consigneeNo": 99999999,
      "consigneeState": "WA",
      "consigneeZip": "99216",
      "billToAccNo": 88888888,
      "originSvcCity": "CARSON",
      "originSvcState": "CA",
      "originSvcZip": "90810",
      "originSvcAlpha": "LGB ",
      "destSvcCity": "SPOKANE VALLEY",
      "destSvcState": "WA",
      "destSvcZip": "99027",
      "destSvcAlpha": "SPK ",
      "pieces": 1,
      "weight": 2345,
      "deliverySign": "BEN",
      "standardEta": "2000-11-07",
      "updatedEta": "2000-11-07",
      "proNumber": 78099999999,
      "ppid": 88888888,
      "billOfLadings": [
        "9999999"
      ],
      "purchaseOrders": [
        "9999"
      ],
      "loads": [
        "CONFIRMATION # 9999999999"
      ],
      "guaranteed": false,
      "pickupNumber": 999999999,
      "trailerNumber": 777777
    }
```

```
    ]
}
```