

# OLD DOMINION FREIGHT LINE, INC. **PICKUP API DEVELOPMENT GUIDE**



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# Getting Started

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## Overview

The Pickup API is a REST service which provides the ability to schedule and cancel freight pickups.

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

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## Testing

We provide a QA environment for use while Onboarding to new services or when testing is required.

When you're ready to begin, visit Shipping API Integrations and click [Email an Expert](#) for assistance.

# Authentication

Using this service requires an ODFL.com account. Your account Username and Password grant access to API data for your specific account(s). 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](mailto:Internet.CustomerService@odfl.com)

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## Request

Obtain a session token by making a GET request to:

Environment	URL
QA	<a href="https://apiq.odfl.com/auth/v1.0/token">https://apiq.odfl.com/auth/v1.0/token</a>
Production	<a href="https://api.odfl.com/auth/v1.0/token">https://api.odfl.com/auth/v1.0/token</a>

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

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## 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 Internet.CustomerService@odfl.com.

# Request

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## Authorization

Provide the session token obtained during Authentication as Authorization:

- Type: Bearer Token
- 

## Base Path

Perform a POST to:

Environment	URL
QA	<a href="https://apiq.odfl.com/pickup/v3.0/">https://apiq.odfl.com/pickup/v3.0/</a> *
Production	<a href="https://api.odfl.com/pickup/v3.0/">https://api.odfl.com/pickup/v3.0/</a> *

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## End Points

Name	Purpose
<a href="#">/create</a>	Create a new Pickup request
<a href="#">/cancel</a>	Cancel a Pickup request
<a href="#">/update</a>	Update a Pickup request
<a href="#">/info</a>	Query a Pickup request



# Create

## Fields

### Required

Name	Type	Description	Maximum Length	Format
pickupTime	String	The requested time of Pickup. Required if appointmentFlag is true and open and close time are not provided.	8	HH:MM:SS
openTime	String	The shipper dock open time. Required if appointmentFlag is true and pickupTime is not provided.	8	HH:MM:SS
closeTime	String	The shipper dock close time. Required if appointmentFlag is true and pickupTime is not provided.	8	HH:MM:SS
shipper	object	Information about the shipper.		
shipper.firstName	String	The shipper contact's first name.	15	
shipper.telephoneNumber	String	The shipper's telephone number (e. g. "9995551212x12345"). The extension is optional.	16	[area code] [phone no] x[extension]
shipper.streetAddressOne	String	Line one of the shipper street address.	33	

Name	Type	Description	Maximum Length	Format
shipper.city	String	The shipper's city name.	24	
shipper.state	String	The shipper's state.	2	
shipper.zipCode	String	The shipper's zip code.	9	
shipper.companyName	String	The shipper's company name.	33	
requester	object	Information about the requester.		
requester.firstName	String	The requester's first name.	15	
requester.telephoneNumber	String	The requester's telephone number (e. g. "9995551212x12345"). The extension is optional.	16	[area code] [phone no] x[extension]
shipments	array	Contains shipment details: Includes consignee info, requested delivery date and time, total weight and total handling units, comments and shipment item details(height, length, width, and units).		
shipments.consignee.city	String	The consignee's city.	24	
shipments.consignee.state	String	The consignee's state.	2	
shipments.consignee.zipCode	String	The consignee's zip code.	9	

## Optional

Name	Type	Description	Maximum Length	Format
pickupDate	String	The requested pickup date.	10	YYYY-MM-DD

Name	Type	Description	Maximum Length	Format
		The date must be greater than or equal to today. Defaults to today.		
appointmentFlag	boolean	Indicates whether a pickup appointment is desired. Defaults to false.	1	
notificationEmailAddresses	array	Contains notification email addresses ex. [" <a href="mailto:abc@email.com">abc@email.com</a> ", "def@email.com"].		
shipper.lastName	String	The shipper contact's last name.	15	
shipper.emailAddress	String	The shipper's email address.		Must match regex ".+@.+.+"
shipper.streetAddressTwo	String	Line two of the shipper's street address.	33	
shipper.customerAccountNumber	number	The shipper's account number	11	
shipper.country	String	The shipper's country (see Values).	4	
requester.lastName	String	The requester's last name.	15	
requester.emailAddress	String	The requester's email address.		Must match regex ".+@.+.+"

Name	Type	Description	Maximum Length	Format
instructions	array	Contains instructions about the pickup.		
instructions.type	String	Indicates whether instructions are for the PICKUP or the SHIPPER (see Values)	7	
instructions.instructionComment	String	The body of the instructions (e.g., "DO NOT STACK OR TURN ON ITS SIDE").		
shipments.proNumber	number	The Pro Number assigned to the shipment.  Must be 9 to 11 digits.  If the pro number has eBoL data that was submitted to the BoL API, data from the eBoL will be used to fill out missing data in the Pickup API request	11	
shipments.totalHandlingUnits	number	The number of handling units in the shipment. Minimum is one handling unit.		
shipments.totalWeight	number	The weight of the shipment. Maximum weight is 500,000 pounds.		
shipments.comments	String	The shipment comments.		
shipments.requestedDeliveryDate	String	The shipment requested delivery date.	10	YYYY-MM-DD

Name	Type	Description	Maximum Length	Format
shipments.requestedDeliveryTime	String	The shipment requested delivery time.	8	HH:MM:SS
shipments.consignee.firstName	String	The consignee contact's first name.	15	
shipments.consignee.lastName	String	The consignee contact's last name.	15	
shipments.consignee.telephoneNumber	String	The consignee contact's telephone number (e. g. "9995551212x12345"). The extension is optional.	16	[area code] [phone no] x[extension ]
shipments.consignee.emailAddress	String	The consignee contact's email address.		Must match regex <u>.+@.+.</u>
shipments.consignee.streetAddressOne	String	Line one of the consignee's street address.	33	
shipments.consignee.streetAddressTwo	String	Line two of the consignee's street address.	33	
shipments.consignee.customerAccountNumber	String	The consignee's account number.	11	
shipments.consignee.companyName	String	The consignee's company name.	33	
shipments.consignee.country	String	The consignee's country (see Values).	4	
shipments.billTo	object	Information about the bill-to account.		

Name	Type	Description	Maximum Length	Format
shipments. billTo.firstName	String	The bill-to contact's first name.	15	
shipments. billTo.lastName	String	The bill-to contact's last name.	15	
shipments. billTo.telephoneNumber	String	The bill-to contact's telephone number (e. g. "9995551212x12345"). The extension is optional.	16	[area code] [phone no] x[extension ]
shipments. billTo.emailAddress	String	The bill-to contact's email address.		Must match regex <u>.+@.+.</u>
shipments. billTo.streetAddressOne	String	Line one of the bill-to's street address.	33	
shipments. billTo.streetAddressTwo	String	Line two of the bill-to's street address.	33	
shipments. billTo.customerAccountNumber	String	The bill-to account number.	11	
shipments. billTo.city	String	The bill-to city.	24	
shipments. billTo.state	String	The bill-to state.	2	
shipments. billTo.zipCode	String	The bill-to zip code.	9	
shipments. billTo.companyName	String	The bill-to company name.	33	
shipments. billTo.country	String	The bill-to country (see Values).	4	

Name	Type	Description	Maximum Length	Format
shipments.hazmatInfo.hazMatUN	String	The UN number for the hazardous units.		
shipments.hazmatInfo.hazMatClass	String	The hazardous material class.		
shipments.hazmatInfo.hazMatPackageGroup	String	The hazardous material package group.		
shipments.shipmentServices.serviceCode	String	Services required to be performed for this shipment (see Values).	3	
shipments.shipmentItems.cube	String	The cube value of the shipment item (see Values).		
shipments.shipmentItems.lineDescription	number	Description of the shipment item.	28	
shipments.shipmentItems.weight	number	The weight of the shipment item.		
shipments.shipmentItems.units	number	The number of units of the shipment item.		
shipments.shipmentItems.height	number	The height of the shipment item.	3	
shipments.shipmentItems.width	number	The width of the shipment item.	3	
shipments.shipmentItems.length	number	The length of the shipment item.	3	
shipments.shipmentItems.itemClass	String	The class of the shipment item.	4	

Name	Type	Description	Maximum Length	Format
shipments.shipmentItems.lineNumber	number	The line number of the shipment item.		
shipments.shipmentItems.nmfcItem	String	The NMFC code of the shipment item.	6	
shipments.shipmentItems.nmfcItemSub	String	The NMFC sub of the shipment item.	2	
shipments.shipmentReferences.referenceType	String	The reference type of the shipment item (see Values).	4	
shipments.shipmentReferences.referenceNumber	String	The reference number of the shipment item.	25	



---

# Sample

## Request

### Required

```
{
  "pickupTime": "00:00:00",
  "requester": {
    "firstName": "string",
    "telephoneNumber": "9995551212x12345"
  },
  "shipper": {
    "firstName": "string",
    "telephoneNumber": "9995551212x12345",
    "streetAddressOne": "string",
    "city": "string",
    "state": "VA",
    "zipCode": "90210",
    "companyName": "string"
  },
  "shipments": [
    {
      "consignee": {
        "city": "string",
        "state": "VA",
        "zipCode": "90210"
      }
    }
  ]
}
```

### All

```
{
  "appointmentFlag": false,
  "closeTime": "00:00",
  "instructions": [
    {
      "type": "PICKUP",
      "instructionComment": "string"
    },
    {
      "type": "SHIPPER",
      "instructionComment": "string"
    }
  ]
}
```

```

],
"notificationEmailAddresses": [
  "abc@email.com"
],
"openTime": "00:00",
"pickupDate": "2023-01-01",
"pickupTime": "00:00:00",
"requester": {
  "emailAddress": "abc@email.com",
  "firstName": "string",
  "lastName": "string",
  "telephoneNumber": "9995551212x12345"
},
"shipments": [
  {
    "billTo": {
      "city": "string",
      "companyName": "string",
      "country": "USA",
      "customerAccountNumber": 0,
      "emailAddress": "abc@email.com",
      "firstName": "string",
      "lastName": "string",
      "state": "VA",
      "streetAddressOne": "string",
      "streetAddressTwo": "string",
      "telephoneNumber": "9995551212x12345",
      "zipCode": "90210"
    },
    "comments": [
      {
        "comment": "string"
      }
    ],
    "consignee": {
      "city": "string",
      "companyName": "string",
      "country": "USA",
      "customerAccountNumber": 0,
      "emailAddress": "abc@email.com",
      "firstName": "string",
      "lastName": "string",
      "state": "VA",
      "streetAddressOne": "string",
      "streetAddressTwo": "string",
      "telephoneNumber": "9995551212x12345",
      "zipCode": "90210"
    }
  },

```

```
"hazmatInfo": {
  "hazMatClass": "string",
  "hazMatPackageGroup": "string",
  "hazMatUN": "string"
},
"proNumber": 123456789,
"requestedDeliveryDate": "2023-01-01",
"requestedDeliveryTime": "00:00:00",
"shipmentItems": [
  {
    "cube": "FULL",
    "height": 0,
    "itemClass": "50",
    "length": 0,
    "lineDescription": "string",
    "lineNumber": 0,
    "nmfcItem": "",
    "nmfcItemSub": "",
    "units": 1,
    "weight": 1000,
    "width": 10
  }
],
"shipmentReferences": [
  {
    "referenceType": "BOL",
    "referenceNumber": "123456789"
  }
],
"shipmentServices": [
  {
    "serviceCode": "HYO"
  }
],
"totalHandlingUnits": 1,
"totalWeight": 1000,
"unitType": "CRT"
},
"shipper": {
  "city": "string",
  "companyName": "string",
  "country": "USA",
  "customerAccountNumber": 0,
  "emailAddress": "abc@email.com",
  "firstName": "string",
  "lastName": "string",
  "state": "VA",
```

```
"streetAddressOne": "string",
"streetAddressTwo": "string",
"telephoneNumber": "9995551212x12345",
"zipCode": "90210"
}
}
```

## Response

```
{
  "ok": true,
  "response": {
    "pickupNumber": 111111111,
    "listOfPreProIdentifiers": [
      222222222
    ],
    "shipments": [
      {
        "preProIdentifier": 222222222,
        "proNumber": null,
        "shipperZipCode": "90210",
        "consigneeZipCode": "22408"
      }
    ],
    "messages": [
      {
        "MessageText": "Pickup created successfully! Thank you!"
      }
    ]
  }
}
```

# Cancel

## Fields

Name	Type	Description	Maximum Length	Required?	Default
pickupNumber	number	The unique identification number for the pickup request.	11	Yes	
preProIdentifier	number	The unique identifier for the shipment item.	11	Yes	
cancelPickupReason	String	The reason for cancellation.		Yes	

## Sample

### Request

```
{  
  "pickupNumber": 12345678,  
  "preProIdentifier": 123456789,  
  "cancelPickupReason": "string"  
}
```

## Response

```
{
  "status": "200",
  "errors": {},
  "ok": true,
  "response": [
    {
      "pickupNumber": 12345678,
      "message": "Pickup canceled successfully! Thank you!"
    }
  ]
  "timestamp": "2023-01-01T00:00:00.000Z "
}
```

# Update

## Fields

### Required

Name	Type	Description	Maximum Length	Default
pickupNumber	number	The unique identification number for the pickup request.	11	
preProIdentifier	number	The unique identifier for the shipment item.	11	

### Optional

Name	Type	Description	Maximum Length	Default
pickupDate	String	The requested pickup date. Must be greater than or equal to today. Defaults to today.	10	YYYY-MM-DD
pickupTime	String	The requested time of Pickup. Required if appointmentFlag is true and open and close time are not provided. pickupTime is expected to be in the shipper's time zone.	8	HH:MM:SS
openTime	String	The shipper dock open time	8	HH:MM:SS

Name	Type	Description	Maximum Length	Default
		Required if appointmentFlag is true and pickupTime is not provided.		
closeTime	String	The shipper dock close time. Required if appointmentFlag is true and pickupTime is not provided.	8	HH:MM:SS
shipper	object	Information about the shipper.		
shipper.firstName	String	The shipper first name.	15	
shipper.lastName	String	The shipper last name.	15	
shipper.telephoneNumber	String	The shipper telephone number (e. g. "9995551212x12345"). The extension is optional.	16	[area code] [phone no] x[extension]
shipper.streetAddressOne	String	Line one of the shipper street address.	33	
shipper.streetAddressTwo	String	Line two of the shipper street address.	33	
shipper.city	String	The shipper city name.	24	
shipper.state	String	The shipper state.	2	
shipper.zipCode	String	The shipper zip code.	9	
shipper.country	String	The shipper country (see Values).	4	
shipper.companyName	String	The shipper company name.	33	



Name	Type	Description	Maximum Length	Default
shipper.emailAddress	String	The shipper email address.		Must match regex ".+@.+.+"
shipper.customerAccountNumber	number	The shipper account number	11	
shipper.scacCode	String	The alpha code for the OD origin service center.		
shipper.attention	String	The shipper attention.		
consignee	object	Information about the consignee		
consignee.firstName	String	The consignee first name.	15	
consignee.lastName	String	The consignee last name.	15	
consignee.telephoneNumber	String	The consignee telephone number (e.g. "9995551212x12345"). The extension is optional.	16	[area code] [phone no] x[extension]
consignee.streetAddressOne	String	Line one of the consignee street address.	33	
consignee.streetAddressTwo	String	Line two of the consignee street address.	33	
consignee.city	String	The consignee city.	24	
consignee.state	String	The consignee state.	2	

Name	Type	Description	Maximum Length	Default
consignee.zipCode	String	The consignee zip code.	9	
consignee.country	String	The consignee country (see Values).	4	
consignee.companyName	String	The consignee company name.	33	
consignee.emailAddress	String	The consignee email address.		Must match regex <u>.+@.+..+</u> .
consignee.customerAccountNumber	String	The consignee account number.	11	
consignee.scaCode	String	The alpha code for the OD destination service center.		
shipper.attention	String	The shipper attention.		
shipments.shipmentReferences.referenceType	String	The shipment reference type (see Values).	4	
shipments.shipmentReferences.referenceNumber	String	The shipment reference number.	25	

---

# Sample

## Request

```
{
  "pickupNumber": 12345678,
  "preProIdentifier": 123456789,
  "pickupDate": "2023-01-01",
  "appointmentFlag": true,
  "pickupTime": "00:00:00",
  "openTime": "",
  "closeTime": "",
  "shipper": {
    "attention": "string",
    "city": "string",
    "companyName": "string",
    "country": "USA",
    "customerAccountNumber": 123456789,
    "emailAddress": "abc@email.com",
    "firstName": "string",
    "lastName": " string ",
    "scacCode": "ABC",
    "state": "VA",
    "streetAddressOne": "string",
    "streetAddressTwo": "string",
    "telephoneNumber": "9995551212x12345",
    "zipCode": "90210"
  },
  "consignee": {
    "city": "string",
    "companyName": "string",
    "country": "USA",
    "customerAccountNumber": 123456789,
    "emailAddress": "abc@email.com",
    "firstName": "string",
    "lastName": "string",
    "scacCode": "ABC",
    "state": "VA",
    "streetAddressOne": "string",
    "streetAddressTwo": "string",
    "telephoneNumber": "9995551212x12345",
    "zipCode": "90210"
  },
  "shipmentServicesForUpdate": [
    {
      "serviceCode": "FOD",
      "actionType": "ADD"
    }
  ]
}
```

```
},
{
  "serviceCode": "HYO",
  "actionType": "ADD"
}
],
"shipmentItems": [
  {
    "actualRate": 0,
    "height": 0,
    "itemClass": "",
    "length": 0,
    "lineDescription": "",
    "lineExtAmount": 0,
    "lineNumber": 0,
    "lineType": "",
    "nmfcItem": "",
    "nmfcItemSub": "",
    "rate": 0,
    "units": 2,
    "weight": 0,
    "width": 0
  }
],
"shipmentReferences": [
  {
    "referenceType": "BOL",
    "referenceNumber": "string"
  }
],
"instructions": [
  {
    "type": "PICKUP",
    "instructionComment": "string"
  },
  {
    "type": "SHIPPER",
    "instructionComment": "string"
  }
],
"comments": [
  {
    "comment": "string"
  }
],
"shipment": {
  "proNumber": 123456789,
  "requestedDeliveryDate": "2023-01-01",
```

```
"requestedDeliveryTime": "00:00",
"totalHandlingUnits": 1,
"totalWeight": 150000,
"unitType": "BAG",
"bolNumber": "",
"loadNumber": "",
"customerAccountNumber": 123456789
},
"notificationEmailAddresses": [
  "abc@email.com"
]
}
```

## Response

```
{
  "status": "200",
  "errors": {},
  "ok": true,
  "response": [
    {
      "pickupNumber": 12345678,
      "preProIdentifer": 123456789,
      "shipment": {
        "preProIdentifer": 123456789,
        "proNumber": 123456789,
        "shipperZipCode": 90210,
        "consigneeZipCode": 90210
      }
    }
  ],
  "message": "Pickup updated successfully! Thank you!"
}
"timestamp": "2023-01-01T00:00:00.000Z"
}
```

# Info

---

## Fields

At least one shipment identifier is required.

Name	Type	Description	Maximum Length	Required?	Default
referenceType	String	The reference type (see Values).	4	Yes	
referenceNumber	number	The reference number.		Yes	

---

## Sample

### Request

```
{  
  "referenceType": "PKU",  
  "referenceNumber": 12345678  
}
```

### Response

```
{  
  "status": "200",  
  "errors": {},  
  "ok": true,  
  "timestamp": "2023-01-01T00:00:00.000Z",  
  "response": {  
    "pickupDate": "2023-01-01",  
    "pickupTime": "00:00:00",  
    "requester": {  
      "firstName": "string",  
      "telephoneNumber": "9995551212x12345"  
    }  
  },  
}
```

```

"shipper": {
  "firstName": "string",
  "telephoneNumber": "9995551212x12345",
  "streetAddressOne": "string",
  "city": "string",
  "state": "VA",
  "zipCode": "90210",
  "companyName": "string"
},
"instructions": [
  {
    "type": "PICKUP",
    "instructionComment": "string"
  },
  {
    "type": "SHIPPER",
    "instructionComment": "string"
  }
],
"shipments": [
  {
    "unitType": "CRT",
    "totalHandlingUnits": 1,
    "totalWeight": 1000,
    "consignee": {
      "firstName": "string",
      "telephoneNumber": "9995551212x12345",
      "streetAddressOne": "string",
      "city": "string",
      "state": "VA",
      "zipCode": "90210"
    },
    "shipmentReferences": [
      {
        "referenceType": "BOL",
        "referenceNumber": "string"
      }
    ]
  }
]
}

```

# Values

Field	Value	Definition
appointmentFlag	true	A pickup appointment is required
	false	A pickup appointment is not required
instructions.type	PICKUP	Pickup
	SHIPPER	Shipper
shipments.unitType	BAG	Bag
	BALE	Bale
	BOX	Box
	BDL	Bundle
	BSKD	Banded Skid
	CAN	Can
	CTN	Carton
	CASE	Case
	CRT	Crate



Field	Value	Definition
	DRUM	Drum
	LSE	Loose
	MULT	Mixed
	OTH	Other
	PAIL	Pail
	REEL	Reel
	ROLL	Roll
	SKID	Skid
	TOTE	Tote
	WSKD	Wrapped Skid
shipmentService.serviceCode	AIP	Airport Pickup
	EXD	Trade Show Delivery
	EXO	EXP CENTER - PICKUP
	FOD	Food and Food products
	HAZ	Hazard materials

Field	Value	Definition
	HYO	Liftgate Service Pickup
	LPC	Secured/Limited Access Pickup
	OVL	Overlength Article
	PFF	Protect from Freezing
	PRB	Perishable Goods
	PSN	Poison and Toxic Substances
	SDS	Security Divider Service
Country	USA	United States
	CAN	Canada
	MEX	Mexico
shipments.shipmentItems.cube	1/4	
	1/2	
	3/4	
	FULL	
referenceType	PKU	Pickup Number

Field	Value	Definition
	PRO	Pro Number
	PPID	Pre-Pro Identifier
shipmentReference.referenceType	BOL	Bill of Lading
	CPH	Customer Phone Number
	LOAD	Load Number
	PO	Purchase Order Number
actionType	ADD	Add action for shipment service
	REMOVE	Remove action for shipment service