



InsureShield®  
Shipping Insurance  
by UPS Capital

# Technical Implementation Reference Guide

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## V1 Direct

Two-call API

Requires shipment-level detail for quote

US Version

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## Overview

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### What is an API?

The acronym "API" stands for "Application Programming Interface".

APIs in their simplest form allow the transmission of data. APIs are an industry standard interface designed for external/internal software programs to accomplish specific tasks, usually for retrieving or modifying data in applications. In more advanced approaches, APIs are deployed to deliver streaming video, audio, and telephone services via smartphones, televisions, or internet-enabled kiosks.

The most popular approach to APIs is the open-data movement. Using APIs, data owners can easily expose information from data silos, allowing public or private access to large and small datasets.

UPS Capital APIs provide methods to interact/perform operations on their client transactional data within the UPS Capital network.

Programmers use the APIs to make interactive applications, websites and other projects. These programs will talk to the UPS Capital IT systems over industry standard network protocols. APIs are built using existing web technology, specifically the HTTP/HTTPS protocol that the World Wide Web employs to deliver content around the globe.

We conform to the design principles of Representational State Transfer (REST). Typically, we use a RESTful design for our APIs. The concept of REST is to separate the API structure into logical resources.

We use the HTTP methods GET, DELETE, POST and PUT to operate with the resources.

- Methods to retrieve data from the API require a GET request.
- Methods that create data require a POST request.
- Methods that update data require a PUT request.
- Methods that delete data require a DELETE request.

The API presently supports the JSON format only.

APIs require a particular HTTP method to return an error response if the request is not made with the correct payload (aka input).

### Getting Started

The first step is to ensure all the contractual agreements between UPS Capital (UPSC) and the new customer are completed. Once the agreements are finalized, the UPSC IT API integration team will setup a sandbox environment for the new customer with sample rates

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to enable the API interactions. The customer IT team will reach out to the UPSC API team for user credentials and other information for enabling secure REST API- based interactions with UPS Capital IT systems.

### Security / Authentication

UPS Capital APIs use secure OAUTH tokens for service authentication. During the customer onboarding process, the customer procures credentials for accessing the Token API. Any calls to the REST API endpoints (excluding Token API) should be made with bearer tokens in the request headers. The token can be retrieved from the Token API specified below. The token will be usable for 4 hours. It is refreshed after 4 hours and it is required to be updated to a new token once refreshed.

#### TOKEN API

**Endpoint:** <https://onlinetoolsuat.ups.com/ent-services/security/v1/oauth/token>

##### Request Parameters

**No request body**

##### Request Headers

Username

Password

##### Token API (Response)

```
{
  "token_type": "Bearer",
  "issued_at": "1747851532915",
  "client_id": "",
  "access_token": "",
  "expires_in": "14399",
  "status": "approved"
}
```

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<b>Token_type</b>	<b>String</b> Indicates token type
<b>Issued_at</b>	<b>String</b> Indicates the time token was requested in Epoch format.
<b>Client_id</b>	<b>String</b> Indicates a unique identifier of customer (same as username).
<b>Access_token</b>	<b>String</b> Indicates token to be used for calling other APIs
<b>Expires_in</b>	<b>String</b> Indicates the time token will expire in Epoch format.
<b>Status_</b>	<b>String</b> Indicates if token retrieval is approved.

### Multi-Piece Shipments (If Applicable)

Package level detail is preferred for each transaction. This means that each box's aligned tracking number and individual insured value is sent via the API. In the event you are unable to send package level detail, we ask that you send us the lead or parent tracking number for the group of packages, as well as the total insurable value for all packages included in the shipment.

- Example Scenario #1 (Preferred) ○ 3 packages being sent to the same recipient on the same day ○ Total insured value for shipment: \$700 ○  
What is sent via API:
  - BOL/ Tracking # 123XYZ; Package 1 value - \$150
  - BOL/ Tracking # 456XYZ; Package 2 value - \$350
  - BOL/ Tracking # 789XYZ; Package 3 value - \$200
- Example Scenario #2 (Alternative) ○ 3 packages being sent to the same recipient on the same day ○ Total insured value for shipment: \$700 ○  
What is sent via API:
  - Lead or Parent BOL/ Tracking # 123XYZ; Package 1 value - \$700

In the event of a claim for a multi-piece shipment, the shipper must file against the lead or parent tracking number passed to us via API. A manifestation of all tracking numbers included within the shipment, paired with invoices for all packages within the shipment must be provided via the Document section of our online claims process.

## Insurance Service – APIs



### Insurance Service - URLs

UPS Capital Insurance Coverage API

The API's purpose is to allow SMB and Enterprise customers to receive quotes and confirm insurance coverage for safe and timely package/cargo delivery.

### Create Quote API

Customer's request for a new insurance quote by providing the necessary shipment information.

#### Post

<https://onlinetoolsuat.ups.com/ent-services/capon-insurance/v2/quotes/ca>

This method creates a quote in the system for insurance coverage.

#### Request

##### Request Parameters

**body** \* (required)

Quote object needs to be sent to the API as a request payload...

##### Request Headers

**Content Type** : application/json

**Authorization: Bearer:** < secure token>

Model :

Quote



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```
{
    Status                String
                          Required
                          Indicates status of the package that is
                          being insured by the customer

    partnerId             String
                          Required
                          Indicates assigned Partner Id of customer.

    shipDate              String($date)
                          Required Indicates package
                          shipment date.
                          Fmt: YYYY-MM-DD
                          Eg: "2017-10-20"

    bol                   String
                          Required
                          Indicates Bill of Lading number or tracking number for
                          the shipment. Accepts alphanumeric values

    insuredValue          Number($double)
                          Required
                          Indicates Insured Value of the shipment.
```

```
    carrier               String
                          Required
                          Indicates transportation carrier. Accepts alphanumeric
                          values

    shipmentType          String
                          Required Indicates Mode of
                          Transportation.
                          1 - Truck or Train
                          3 - Small Package
                          5 - Ocean Freight
                          6 - Air Freight
                          7 - Mail or Parcel Post

    commodity             String
                          Indicates numeric commodity code of item in the
                          shipment.

    originAddress1        String
                          Required
                          Indicates the first line of the address/location from
                          where the insured package is shipped.
```

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<code>originAddress2</code>	<b>String</b> Indicates the second line of the address/location from where the insured package is shipped.
<code>originCity</code>	<b>String</b> <b>Required</b> Indicates the city from where the insured package is shipped.
<code>originState</code>	<b>String</b> Indicates the state from where the insured package is shipped.
<code>originPostalCode</code>	<b>String</b> <b>Required</b> Indicates the origin postal code. Accepts alphanumeric values.
<code>originCountry</code>	<b>String</b> <b>Required</b> Indicates the country from where the insured package is shipped.
<code>consigneeName</code>	<b>String</b> Indicates the name of the consignee.
<code>destinationAddress1</code>	<b>String</b> <b>Required</b> Indicates the first line of the address/location to where the insured package is shipped.
<code>destinationAddress2</code>	<b>String</b> Indicates the second line of the address/location to where the insured package is shipped.
<code>destinationCity</code>	<b>String</b> <b>Required</b> Indicates the city to where the insured package is shipped.
<code>destinationState</code>	<b>String</b> Indicates the state to where the insured package is shipped.

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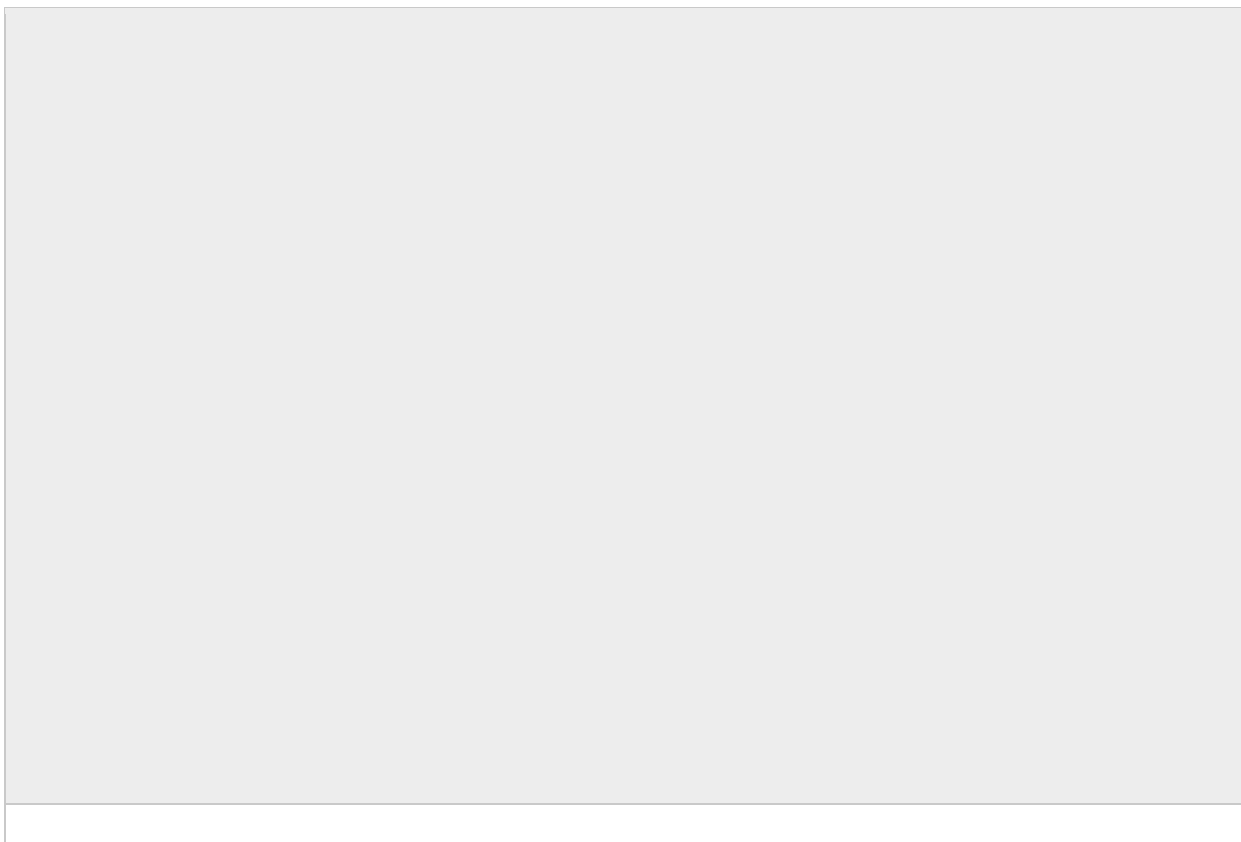
<code>destinationPostalCode</code>	<b>String</b> Indicates the destination postal code. Accepts alphanumeric values.
<code>destinationCountry</code>	<b>String</b> <b>Required</b> Indicates the country to where the insured package is shipped.
<code>serviceLevel</code>	<b>String</b> Indicates the service level for small packages.
<code>packageQuantity</code>	<b>Int</b> Indicates the number of packages being insured for small packages (1-9).
<code>referenceFields</code>	<b>String</b> Description field if needed.
}	

### Example:

```
{
  "status": "UNCONFIRMED",
  "partnerId": "1017668999",
  "shipDate": "2023-08-31",
  "bol": "1Z5RX2510333768492",
  "insuredValue": "200",
  "carrier": "UPS",
  "shipmentType": "3",
  "commodity": "400",
  "originAddress1": "2600 NW LOWER RIVER ROAD",
  "originAddress2": null,
  "originCity": "VANCOUVER",
  "originState": "WA",
  "originPostalCode": "98660",
  "originCountry": "US",
  "consigneeName": "Dan Burrow",
  "destinationAddress1": "STATE ROUTE 101A",
  "destinationAddress2": null,
  "destinationCity": "AMHERST",
  "destinationState": "NH",
  "destinationPostalCode": "03031",
  "destinationCountry": "US",
  "serviceLevel": null,
  "packageQuantity": null,
  "referenceFields": "abcd"
}
```

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### Response

Response Headers	
content type : application/json	
Code	Description
200	<p>Successful Operation</p> <p><b>QuoteReturn</b><sub>{ quoteId</sub>      <b>string</b>(\$UUID) Indicates the uniquely generated QuoteId by UPS Capital for the customer requested shipment information. (Quote ID is valid for 30 days)</p> <p><b>status</b>      <b>string</b> Indicates the status of the insurance coverage selected by the customer for the shipment</p>

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	<pre> premiumAmount      number(\$double)                     Indicates the insurance premium value for the                     Shipment Value &amp; carrier in the quote request  bol                string                     Indicates the Bill of Lading for the shipment as                     input by the customer </pre>
	<pre> quoteValidTo       string(\$datetime)                     Indicates the date &amp; time the QuoteId is Valid for                     customer to purchase shipment coverage } </pre>
400	<p><b>Invalid payload format</b></p> <p><b>ApiResponseFault</b></p> <pre> {   "errors": [     {       "errorCode": "400",       "errorMessage": ""     }   ] } </pre>

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### Authentication Error

#### ApiResponseFault

```
"response": {
  "errors": [
    {
      "code": "250002",
      "message": "Invalid Authentication Information."
    }
  ]
}
```

404

Resource not found

#### ApiResponseFault{

```
code      integer($int32)
message    String
description String
```

```
errors    [errors{
            code      string
            field     string
            message   string
          }]
```

```
}
```

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Internal Server Error

```
ApiResponseFault{ code
                    integer($int32)
    message         String
    description      String

    errors           [errors{ code    string
                              field   string
                              message string
                              }]
}
```

### Example:

200 – Successful Operation

```
{
  "quoteId": "0da2fdcd5582455793a01889a269e014",
  "premiumAmount": "22.00",
  "quoteDateTime": "2020-06-15T13:53:24.767",
  "quoteValidTo": "2020-07-15T13:53:24.767",
  "quoteInfo": {
    "partnerId": "111156234510",
    "status": "UNCONFIRMED",
```

```
    "shipmentInfo": {
      "carrier": "RLCA",
      "shipDate": "2020-06-25",
      "bol": "86603021",
      "insuredValue": "130120.00",
      "commodityCode": "400",
      "consigneeName": "Joe Burrow",
      "shipmentType": "1"
    },
    "originAddress": {
      "address1": "3053520 SE 843rd St.",
      "address2": ".",
      "city": "Wombat",
      "state": "WA",
      "postalCode": "98010",
      "countryCode": "US"
    },
    "destinationAddress": {
      "address1": "5034503 Leftsboro Rd ",
```



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```

    "address2": ".",
    "city": "Preston",
    "state": "GA",
    "postalCode": "30290",
    "countryCode": "US"
  }
},
"serviceLevel": "",
"packageQuantity": "1",
"referenceFields": ""
}

```

### 400 – Invalid Payload format

```

{
  "errors": [
    {
      "errorCode": "400",
      "errorMessage": ""
    }
  ]
}

```

### 400 – Authentication Error

```

"response": {
  "errors": [
    {
      "code": "250002",
      "message": "Invalid Authentication Information."
    }
  ]
}

```

### 404 – Resource Not Found

```

{
  "errors": [
    {
      "errorCode": "404",
      "errorMessage": "The resource was not found."
    }
  ]
}

```

```

}

500 – Internal Server Error

{
  "errors": [
    {
      "errorCode": "500",
      "errorMessage": "Internal Server Error."
    }
  ]
}

```

### Confirm Coverage API

Customer's request for confirming shipment for which insurance coverage was previously quoted by providing the necessary coverage information.

#### Post

**<https://onlinetoolsuat.ups.com/ent-services/capon-insurance/v2/coverages>**

This method places the insured shipment picked up by the carrier in a confirmed status and eligible for future claim requests.

#### Request

##### Request Parameters

**body \* (required)**

Quote object needs to be sent to the API as a request payload...

##### Request Headers

**Content Type :** application/json

**Authorization: Bearer:** < secure token>

Model :

Confirm Coverage

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```
{
  quoteId      String
               Required
               Indicates assigned quote Id of customer

  partnerId    String
               Required
               Indicates assigned partner Id of customer

  bol          String
               Required
               Indicates Bill of Lading Number or tracking number for the
               shipment.

  status       String
               Required
               Indicates current status of the Package that is being insured by
               the customer.

  ShipmentStatus
  Enum:
  [ UNCONFIRMED, CONFIRMED, VOID ]

  For Confirm Shipment request, "CONFIRMED" & "VOID" are the only
  value allowed.
    - UNCONFIRMED status can change to CONFIRMED or VOID.
    - CONFIRMED status can change to VOID if within 180 minutes
      of status being CONFIRMED.
  VOID status cannot be changed. To purchase valid coverage, one
  need to start over by submitting a new create quote request
  again.
}
```

### Example:

```
{
  "quoteId": "1e9c036e423b4b59adec5e87464ed251",
  "partnerId": "1017668999",
  "bol": "478752615478997919926",
  "status": "Confirmed"
}
```

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### Response

Response content type : application/json	
Code	Description
200	Successful Operation
	<p><b>ConfirmReturn</b></p> <pre>{   quoteId: string(\$UUID)     Indicates the uniquely generated QuoteId by UPS Capital for the customer requested shipment information    premiumAmount: number(\$double)     Indicates the insurance premium value for the Shipment Value &amp; carrier in the quote request    status: string     Indicates the status of the insurance coverage selected by the customer for the shipment }</pre>
400	<p><b>Invalid payload format</b></p> <p><b>ApiResponseFault</b></p> <pre>{   "errors": [     {       "errorCode": "400",       "errorMessage": ""     }   ] }</pre>

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### Authentication Error

#### ApiResponseFault

```
"response": {  
  "errors": [  
    {  
      "code": "250002",  
      "message": "Invalid Authentication Information."  
    }  
  ]  
}
```

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404	<p>Resource not found</p> <pre> <b>ApiResponseFault</b> {     code                integer(\$int32)     message             String     description         String     errors              [errors{                             code      string                             field     string                             message   string                         }] } </pre>
500	<p>Internal Server Error</p> <pre> <b>ApiResponseFault</b>{ code     integer(\$int32)     message      String     description  String     errors       [errors{                     code      string                     field     string                     message   string                 }] } </pre>
Example:	

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### *200 – Successful Operation*

```
{  
  "quoteId": "0da2fdcd5582455793a01889a269e014",  
  "premiumAmount": "22.00",  
  "status": "CONFIRMED"  
}
```

### 400 – Invalid Payload format

```
{  
  "errors": [  
    {  
      "errorCode": "400",  
      "errorMessage": ""  
    }  
  ]  
}
```

### 401 – Authentication Error

```
"response": {  
  "errors": [  
    {  
      "code": "250002",  
      "message": "Invalid Authentication Information."  
    }  
  ]  
}
```



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### *404 - Resource Not Found*

```
{
  "errors": [
    {
      "errorCode": "404",
      "errorMessage": "The resource was not found."
    }
  ]
}
```

### *500 - Internal Server Error*

```
{
  "errors": [
    {
      "errorCode": "500",
      "errorMessage": "Internal Server Error."
    }
  ]
}
```

## Error Messages

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### Error Messages Matrix

API	Scenario	Error Code	Error Messages
Token API	Invalid credentials for Token API	10401	Client credentials are invalid
All APIs (excluding token API)	Token has timed out	250002	Invalid Authentication Information
<b>Create Quote</b>	status is invalid	400	Status must be set to CONFIRMED/UNCONFIRMED
<b>Create Quote</b>	partnerId field is invalid	400	The Token issued does not match Partner Id
<b>Create Quote</b>	shipDate field is missing	400	shipDate missing
<b>Create Quote</b>	shipDate field is invalid	400	shipDate is null or invalid format
<b>Create Quote</b>	shipDate field less than current date or greater than 30 days from current date	400	Shipdate must be within policy date limits, not a previously passed dated, and no greater than 30 days from current date
<b>Create Quote</b>	bol is invalid	400	bol is invalid, alphanumeric values only
<b>Create Quote</b>	insuredValue is missing	400	insuredValue null
<b>Create Quote</b>	insuredValue is invalid	400	Insured Value is invalid or null, please provide decimal value
<b>Create Quote</b>	carrier is invalid	400	carrier is invalid, alphanumeric values only
<b>Create Quote</b>	shipmentType is invalid	400	Shipment type not included in policy, invalid shipment type
<b>Create Quote</b>	commodity is invalid	400	Commodity code is null or invalid
<b>Create Quote</b>	originState Error	400	Please enter a valid US State Code for origin State
<b>Create Quote</b>	originAddress1 Error	400	Please enter a valid origin Address1
<b>Crete Quote</b>	originAddress2 Error	400	Please enter a valid origin Address2
<b>Create Quote</b>	originCity Error	400	Please enter a valid origin City
<b>Create Quote</b>	originPostalCode Error	400	Please enter a valid Origin Postal Code
<b>Create Quote</b>	originCountry Error	400	Please enter a valid originCountry
<b>Create Quote</b>	destinationAddress1 Error	400	Please enter a valid destination Address1
<b>Create Quote</b>	destinationAddress2 Error	400	Please enter a valid destination Address2



<b>Confirm Quote</b>	status is called "void" more than 180 minutes after "confirmation"	400	Void is not allowed on confirmed quote
<b>Confirm Quote</b>	partnerId field is invalid	400	The token issued does not match Partner Id
<b>Confirm Quote</b>	bol is invalid	400	BOL is invalid, alphanumeric values only
<b>Confirm Quote</b>	quoteId is missing	400	quoteId missing
<b>Confirm Quote</b>	quoteId is invalid	400	quoteId is invalid

Field Name	Validations
partnerId	Alphanumeric
All Address Fields- Address 1,2	Alphanumeric; Only the following special characters are allowed: - _ + & () / , ~ ` # . : ; " * ' " '
All Address Fields - City	Alphabetical
All Address Fields - Country	Alphabetical
All Address Fields - State	Valid US State Code for US, CA, or PR Country Code
All Address Fields – Postal Code	Alphanumeric
bol	Alphanumeric
carrier	Alphanumeric
commodity	Numeric
consigneeName	Alphanumeric; Only the following special characters are allowed: - _ + & () / , ~ ` # . : ; " * ' " '
insuredValue	Decimal

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packageQuantity	Int (1-9)
quoteID	Alphanumeric
referenceFields	Alphanumeric
serviceLevel	Alphanumeric
shipDate	Date/Validation
shipmentType	Numeric
status	Confirmed/Unconfirmed/Void

## Support Tables

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### 4.1 Carrier List

Carrier Name	SCAC
A. Duie Pyle, Inc	PYLE
AAA Cooper Transportation	AACT
ABF Freight System Inc/ArcBest	ABFS
AIT Worldwide	AIWL
APC Postal Logistics	
ARAMEX	AMIT
ASAP FREIGHT SERVICES	ASAJ
Arrow Express	ARWP
Averitt Express, Inc.	AVRT
CCT CANADA	CGVO
CEVA LOGISTICS	CUOT
CROWLEY LOGISTICS	CWYG
Central Freight Lines, Inc.	CENF
Central Transport	CTII
Con-Way Freight	CNWY
DAYLIGHT TRANSPORT	DYLT
Dayton Freight Lines, Inc.	DAFG
DHL	
DICOM EXPRESS	DEIR
DLS WORLDWIDE	DLSW
EASTERN CONNECTION Operating Inc	
Estes Express Lines	EXLA
EXPEDITORS	EXPD
Estes Forwarding Worldwide, LLC	EFWW
Forward Air, Inc.	FWDN
Ground Freight Expeditors, LLC	GFXP
FRONTLINE FREIGHT	FCSY
Forward Air, Inc.	FWDN
FedEx	FEDG
FedEx Freight	FEXF
Fedex Smart Post	FDEG



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GlobalTranz Enterprises, Inc.	GELJ
GLOVA-LINK Corporation	GLDI
GLS DENMARK	
HERCULES Freight	HRCF
USF Holland	HMES
JAS Forwarding	JASF
JP EXPRESS	
KUEHNE & NAGEL TRANSWORLD SHIPPING	
MIDWEST MOTOR EXPRESS	MMEI
Manna	MFSY
New Penn Motor Express	NPME
New England Motor Freight	NEMF
ONTRAC	OTCL
Old Dominion Freight Line, Inc.	ODFL
Pilot Air Freight LLC	PAAF
PILOT FREIGHT SERVICES	
Pitt Ohio Express, LLC	PITD
Plycon Van Lines, Inc	PLCN
PUROLATOR FREIGHT	
Panama Transfer, Inc.	PANA
R+L Carriers	GMLS
RADIANT GLOBAL LOGISTICS	RGLN
USF Reddaway	RETL
Roadrunner Freight	RDFS
Saia Motor Freight Line, LLC	SAIA
SMSA Express Transportation Company Ltd	
SOUTHWESTERN MOTOR TRANSPORT	SMTL
Spee-Dee Delivery	SDED
STD LOGISTICS LTD	
STI Transport, Inc	SQRC
STREAM LINK EXPRESS, INC.	SLXB
Streamline Transportation Systems, LLC	STYL
Southeastern Freight Lines, Inc.	SEFL

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TNT	
UPS Ground	UPSC
UPS Ground Freight	UPGF
UPS Mail Innovation	UMID
UPS Supply Chain Solutions - Express Critical	UPSE
UPS SUREPOST	UPSP
USF Holland	HMES
USF Reddaway	RETL
USPS	USPS
Ward Trucking, LLC	WARD
Watkins & Shepard Trucking, Inc.	WSVT
XPO Logistics Freight, Inc.	CNWX
XPO Logistics Freight, Inc.	CNWX
XPRESS GLOBAL	
YRC Freight	RDWX
You Shop We Ship Denmark ApS	