**InsureShield®
Shipping Insurance**
by UPS Capital

Technical Implementation Reference Guide

V1 Direct

Two-call API
Requires shipment-level detail for quote

US Version

Table of Contents

Overview

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 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 JWT tokens for service authentication. Any calls to the REST API endpoint should be made bearer tokens in the request headers in addition to using the secured JWT tokens provided by the UPS Capital API Integration team.

During the customer onboarding process, the customer procures a unique Secure Token with certain customer credentials generated by the API Integration team for enabling communication between provider (UPS Capital) and consumer (Customer). The customer will also receive an IBM Client ID and IBM Client Secret from the UPS Capital API Integration team. These security features are placed in the header of each API call, along with the customer's bearer token.

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)
     o 3 packages being sent to the same recipient on the same day
     o Total insured value for shipment: $700
     o 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)
     o 3 packages being sent to the same recipient on the same day
     o Total insured value for shipment: $700
     o 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://upscapi.ams1907.com/apis/list-extstg/quote/v2

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*
Bearer : *< secure token issued by API integration team >*
X-IBM-Client-Id : *<provided by API integration team>*
X-IBM-Client-Secret : *<provided by API integration team>*

Model :

Quote

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

```
        destinationState        String
                                Indicates the state to where the insured package is
                                shipped.
        destinationPostalCode String
                                Indicates the destination postal code.
                                Accepts alphanumeric values.


        destinationCountry      String
                                Required
                                Indicates the country to where the insured package is
                                shipped.
        serviceLevel            String
                                Indicates the service level for small packages.
        packageQuantity         Int
                                Indicates the number of packages being insured for
                                small packages (1-9).
        referenceFields         String
                                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"
}
```

Response

Code	Description
200	*Successful Operation*
	QuoteReturn{
	quoteId **string**($UUID)
	Indicates the uniquely generated QuotedId by UPS Capital for the customer requested shipment information (Quote ID is valid for 30 days)
	status **string**
	Indicates the status of the insurance coverage selected by the customer for the shipment
	premiumAmount **number**($double)
	Indicates the insurance premium value for the Shipment Value & carrier in the quote request
	bol **string**
	Indicates the Bill of Lading for the shipment as input by the customer
	quoteValidTo **string**($datetime)
	Indicates the date & time the QuoteId is Valid for customer to purchase shipment coverage
	}
400	*Invalid payload format*
	ApiResponseFault{
	code **integer**($int32)
	message **string**
	description **string**
	errors **[errors{**
	code **String**
	Indicates the internal error code of individual
	field **string**
	message **string**
	}]
	}

401	Invalid payload data

```
ApiResponseFault{
    code          integer($int32)
    message       String
    description   String
    errors        [errors{
                       code        string
                       field       string
                       message     string
                   }]
}
```

404	Resource not found

```
ApiResponseFault{
    code          integer($int32)
    message       String
    description   String
    errors        [errors{
                       code        string
                       field       string
                       message     string
                   }]
}
```

500	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 ",
        "address2": ".",
        "city": "Preston",
        "state": "GA",
        "postalCode": "30290",
        "countryCode": "US"
    }
  },
  "serviceLevel": "",
  "packageQuantity": "1",
  "referenceFields": ""
}
```

400 – Invalid Payload format

```
{
   "errors": [
      {
         "errorCode": "400",
         "errorMessage": "Error.bol.Invalid.or.Null"
      }
   ]
}
```

401 – Invalid Payload data

```
{
   "errors": [
      {
         "errorCode": "401",
         "errorMessage": "The Token issued is not valid."
      }
   ]
```

```
}

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://upscapi.ams1907.com/apis/list-extstg/coverage/v2

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
  Bearer : < secure token issued by API integration team >

X-IBM-Client-Id : *<provided by API integration team>*
X-IBM-Client-Secret : *<provided by API integration team>*

Model :

Confirm Coverage

```
{       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"
}
```

Response

Response content type :	
application/json	

Code	Description
200	*Successful Operation*

```
ConfirmReturn{
    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 & carrier in the quote request

    status                  string
                            Indicates the status of the insurance coverage
                            selected by the customer for the shipment
```

400	Invalid payload format

```
ApiResponseFault{
    code            integer($int32)
    message         string
    description     string
    errors          [errors{
                        code            string
                        field           string
                        message         string
                    }]
}
```

401	Invalid payload data

```
ApiResponseFault{
    code            integer($int32)
    message         string
    description     string
    errors          [errors{
                        code            string
                        field           string
                        message         string
                    }]
}
```

404	Resource not found

```
ApiResponseFault{
```

```
        code            integer($int32)
        message         String
        description     String
        errors
                        [errors{
                            code            string
                            field           string
                            message         string
                        }]
    }
```

```
500     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",
  "status": "CONFIRMED"
  }


400 – Invalid Payload format

{
   "errors":[
     {
       "errorCode": "400",
       "errorMessage": "Error.bol.Invalid.or.Null"
     }
   ]
}

401 – Invalid Payload data

{
   "errors":[
     {
```

```
        "errorCode": "401",
        "errorMessage": "The Token issued is not valid."
     }
   ]
}

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

Error Messages Matrix

API	Scenario	Error Code	Error Messages
Create Quote	status is invalid	400	Status must be set to CONFIRMED/UNCONFIRMED
Create Quote	partnerId field is invalid	400	The Token issued does not match Partner Id
Create Quote	shipDate field is missing	400	shipDate missing
Create Quote	shipDate field is invalid	400	shipDate is null or invalid format
Create Quote	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
Create Quote	bol is invalid	400	bol is invalid, alphanumeric values only
Create Quote	insuredValue is missing	400	insuredValue null
Create Quote	insuredValue is invalid	400	Insured Value is invalid or null, please provide decimal value
Create Quote	carrier is invalid	400	carrier is invalid, alphanumeric values only
Create Quote	shipmentType is invalid	400	Shipment type not included in policy, invalid shipment type
Create Quote	commodity is invalid	400	Commodity code is null or invalid
Create Quote	originState Error	400	Please enter a valid US State Code for origin State
Create Quote	originAddress1 Error	400	Please enter a valid origin Address1
Crete Quote	originAddress2 Error	400	Please enter a valid origin Address2
Create Quote	originCity Error	400	Please enter a valid origin City
Create Quote	originPostalCode Error	400	Please enter a valid Origin Postal Code
Create Quote	originCountry Error	400	Please enter a valid originCountry
Create Quote	destinationAddress1 Error	400	Please enter a valid destination Address1
Create Quote	destinationAddress2 Error	400	Please enter a valid destination Address2
Create Quote	destinationCity Error	400	Please enter a valid destination city
Create Quote	destinationState Error	400	Please enter a valid US State Code for destination State
Create Quote	destinationPostalCode Error	400	Please enter a valid US State Code for destination State
Create Quote	destinationCountry Error	400	Please enter a valid destinationCountry
Confirm Quote	status is invalid	400	Status must be set to CONFIRMED/VOID
Confirm Quote	status is called "confirmed" after being called "void"	400	Confirm is not allowed on void quote

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

Field Validations

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

Support Tables

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
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
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.	CNWY
XPO Logistics Freight, Inc.	CNWY
XPRESS GLOBAL	
YRC Freight	RDWY
You Shop We Ship Denmark ApS	