InsureShield®
Shipping Insurance
by UPS Capital

Technical Implementation Reference Guide

V2 Direct

Two-call API
Does not require shipment-level detail for quote

US Version

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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) ○ 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://upscapi-rzd.ams1907.com/apis/list-extstg/v3/quotes**

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

Request

Request Parameters

      body * (required)
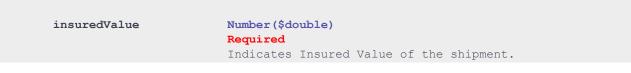
      Quote object needs to be sent to the API as a request payload…

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 :

Create Quote

```
{

        partnerId               String
                                Required
                                Indicates assigned Partner Id of customer.




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

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	

commodityCode   **String**
                      Conditional
                      Indicates numeric commodity code of item in the
                      shipment.

shipperId   **String**
                      Conditional
                      Indicates Customer shipper identifier. Value should be
                      unique for each shipper account.

originCountry   **String**
                      Required
                      Indicates the country from where the insured package is
                      shipped.

destinationCountry **String**
                        Required
                        Indicates the country to where the insured package is
                        shipped

Example:

```
{
    "partnerId": "9097818844",
    "insuredValue": "200",
    "shipmentType": "3",
    "commodityCode": "400"
}
```

Response

Response Headers
content type : application/json

Code	Description
200	**Successful Operation**
	QuoteReturn{ quoteId **string**($UUID) <mark>(Quote ID is valid for 30 days)</mark> Indicates the uniquely generated QuoteId by UPS Capital for the customer requested shipment information

	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
	
	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": {
      "insuredValue": "130120.00",
      "commodityCode": "400",
      "shipmentType": "1"
    },
    "originAddress": {
      "address1": "3053520 SE 843rd St.",
      "address2": ".",
      "city": "Wombat",
      "state": "WA",
      "postalCode": "98010",
      "countryCode": "US"
    },

}
```

400 – Invalid Payload data

```
{
  "errors": [
    {
      "errorCode": "401",
```

```
        "errorMessage": "Token does not match assigned PartnerID. Please verify with IT
resource."
    }
  ]
```

```
}

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-rzd.ams1907.com/apis/list-extstg/v3/confirmQuote

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 :

Coverage

```
{
    quoteId          String
                     Required


    partnerId        String
                     Required


    bol              String
                     Required


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


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


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


    shipperId        String
                     Conditional
                     Indicates the country from where the insured package is shipped.


    Carrier          String
                     Required
                     Indicates transportation carrier.


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


    commodityCode    String
                     Indicates numeric commodity code of item in the shipment


    consigneeName    String
                     Indicates the name of the consignee


    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
originPostalCode	**String** **Required**	
		Indicates the origin postal code
originState	**String** **Required**	
		Indicates the state from where the insured package is shipped.
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** **Required**	
		Indicates the state to where the insured package is shipped
destinationPostalCode	**String** **Required**	
		Indicates the destination postal code.
originCountry	**String** **Required**	
		Indicates the country from where the insured package is shipped
destinationCountry	**String** **Required**	
		Indicates the country to where the insured package is shipped
packageQuantity	**Int**	
		Indicates the number of packages being insured for small packages (1-9).

referenceFields	**String**
	Merchants use for description or data to appear on CSV invoice.
	
	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": "1eae38f1d156496894a1b948a45de0c5",
    "productId": "2",
    "partnerId": "8081238089",
    "locationId": "1212",
    "status": "CONFIRMED",
    "bol": "ExampleBOL",
    "shipDate": "2023-03-28",
    "insuredValue": "500.00",
    "shipperId": "W230499252",
    "carrier": "RLCA",
    "shipmentType": "1",
    "consigneeName": "Danny",
    "originAddress1": "5003WrightsboroRd",
    "originAddress2": "originAddress2",
    "originCity": "Preston",
    "originState": "GA",
    "originPostalCode": "30290",
    "destinationAddress1": "30520SE84thSt.",
    "destinationAddress2": ".",
    "destinationCity": "San Diego",
    "destinationPostalCode": "98010",
    "originCountry": "CA",
    "destinationCountry": "US",
    "packageQuantity": "2",
    "referenceFields": "test1"
}
```

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": "1.50",
  "quoteInfo": {
      "partnerID": "ZZZ001",
      "status": "CONFIRMED",
      "shipmentInfo": {
          "carrier": "RCLA",
          "shipDate": "2022-08-20",
          "bol": "86603075",
          "insuredValue": "300.00",
          "commodityCode": "400",
          "consigneeName": "Jon Doe",
          "shipmentType": "1"
      },
      "originAddress": {
          "address1": "123 Main St",
          "address2": ".",
          "city": "Preston",
          "state": "AL",
          "postalCode": "30290",
          "countryCode": "US"
      },
```

```
            "destinationAddress": {
                "address1": "456 Main St",
                "address2": ".",
                "city": "Wombat",
                "state": "CA",
                "postalCode": "98010",
                "countryCode": "US"
            }
    }
```

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	partnerId field is invalid	400	Token does not match assigned PartnerID. Please verify with IT resource.
Create Quote	shipmentType is invalid	400	Shipment type is either not included in policy or is an invalid format. *ShipmentType indicates mode of transportation and must be a numeric value that aligns with the following modes: 1 –Truck or Train 3 –Small Package 5–Ocean Freight 6–AirFreight 7 –Mail or Parcel Post.*
Create Quote	commodity is invalid	400	Commodity code is missing or invalid. Please enter numeric characters only. *Commodity Code indicates numeric commodity code of item in the shipment.*
Create Quote	originCountry Error	400	Please enter a valid origin Country, only alphabetical characters allowed.
Create Quote	destinationCountry Error	400	Please enter a valid destination Country, only alphabetical characters allowed.
Create Quote	insuredValue is missing	400	Insured Value is missing or invalid. Please provide a numeric value with two decimal places. Ex: 100.00
Create Quote	insuredValue is invalid	400	Insured Value is missing or invalid. Please provide a numeric value with two decimal places. Ex: 100.00
Create Quote	shipperID	400	Shipper ID is missing or invalid. Please enter alphanumeric characters only, no special characters. *ShipperID indicates customer shipper identifier. Value should be unique for each shipper account.*

Coverage	quoteId is missing	400	Quote ID is missing or invalid. *Quote ID indicates the uniquely generated QuoteID by UPS Capital for the customer requested shipment information.*
Coverage	quoteId is invalid	400	Quote ID is missing or invalid. *Quote ID indicates the uniquely generated QuoteID by UPS Capital for the customer requested shipment information*.
Coverage	partnerId field is invalid	400	Token does not match assigned PartnerID. Please verify with IT resource.
Coverage	bol is invalid	400	bol has invalid characters, null or exceeding 34 character limit
Coverage	Bol is missing	400	bol has invalid characters, null or exceeding 34-character limit
Coverage	shipDate field is missing	400	Ship Date is invalid. Please enter date in YYYY-MM-DD format. Ex: 2022-07-06
Coverage	shipDate field is invalid	400	Ship Date is invalid. Please enter date in YYYY-MM-DD format. Ex: 2022-07-06
Coverage	insuredValue is missing	400	insuredValue null
Coverage	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
Coverage	insuredValue is invalid	400	Insured Value is missing or invalid. Please provide a numeric value with two decimal places. Ex: 100.00
Coverage	insuredValue is missing	400	Insured Value is missing or invalid. Please provide a numeric value with two decimal places. Ex: 100.00
Coverage	shipperID		Shipper ID is missing or invalid. Please enter alphanumeric characters only, no special characters.

			ShipperID indicates customer shipper identifier. Value should be unique for each shipper account.
Coverage	carrier is invalid	400	Carrier field is invalid. Please enter alphanumeric characters only.
Coverage	shipmentType is invalid	400	Shipment type is either not included in policy or is an invalid format. *ShipmentType indicates mode of transportation and must be a numeric value that aligns with the following modes: 1 –Truck or Train 3 –Small Package 5–Ocean Freight 6–AirFreight 7 –Mail or Parcel Post.*
Coverage	commodity is invalid	400	Commodity code is missing or invalid. Please enter numeric characters only. *Commodity Code indicates numeric commodity code of item in the shipment.*
Coverage	originAddress1 Error	400	Please enter a valid origin address. Please enter alphanumeric characters; Only the following special characters are allowed: - + & () / , ~ ` # . : ; " * '
Coverage	originAddress2 Error	400	Please enter a valid origin address. Please enter alphanumeric characters; Only the following special characters are allowed: - + & () / , ~ ` # . : ; " * '
Coverage	originCity Error	400	Please enter a valid origin city, only alphabetical characters allowed.
Coverage	originPostalCode Error	400	Please enter a valid origin Postal Code, only numerical characters allowed.
Coverage	originState Error		Please enter a valid destination US State Code for US, CA, or PR Country Code.
Coverage	originCountry Error		Please enter a valid origin Country, only alphabetical characters allowed.
Coverage	destinationAddress1 Error	400	Please enter a valid destination address. Please enter alphanumeric characters; Only the following special

			characters are allowed: - + & () / , ~ ` # . : ; " * '
Coverage	destinationAddress2 Error	400	Please enter a valid destination address. Please enter alphanumeric characters; Only the following special characters are allowed: - + & () / , ~ ` # . : ; " * '
Coverage	destinationCity Error	400	Please enter a valid destination City, only alphabetical characters allowed.
Coverage	destinationState Error	400	Please enter a valid destination US State Code for US, CA, or PR Country Code.
Coverage	destinationPostalCode Error	400	Please enter a valid destination Postal Code, only numerical characters allowed.
Coverage	destinationCountry Error		Please enter a valid destination Country, only alphabetical characters allowed.
Coverage	status is invalid	400	Status must be set to UNCONFIRMED
Coverage	status is called "confirmed" after being called "void"	400	Previously voided quotes cannot be confirmed.

Coverage	status is called "void" more than 30 minutes after "confirmation"	400	Quote status cannot be changed from Confirm to Void after a period of 180 minutes has elapsed. Please submit a new quote

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	Numerical
bol	Numeric
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	ASA
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	