

JUMINGO CUSTOMER API (V1) – INTEGRATION GUIDE

Version 1.0.3

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1. RELEASE FEATURES

January 2022: Version 1.0.1:

- Introduction of PATCH `/v1/shipments/{shipment_id}` request:
 - o This request can be used update/add specific data for an existing shipment entity and keep other shipment data unchanged
- Added new shipment objects:
 - o Shipment -> `from_address`: new settings object added to provide a delivery email address which can be required for some international shipment rates
 - o Shipment -> `details` -> `settings`: new settings object added to provide `export_reason`, and `extended_parcel_content` which is required data for international shipping

July 2022: Version 1.0.2:

- New insurance logic: When an insurance should be booked for a shipment, the insurance type (standard/premium) needs to be specified
- Added new `label_format` option: the desired format of the shipping label (A4 or A6) can be specified for each shipment
- Changed country code Kosovo from 'XK' to 'KV' and state code for Quebec, Canada from 'PQ' to 'QC'

March 2023: Version 1.0.3:

- New data structure for customs information added. Parcel content for a shipment should be added using the new `customs_invoice` and `customs_line_item` objects.

2. GENERAL INFORMATION

The JUMiNGO Customer API allows you to connect any shop system or ERP directly to your JUMiNGO account and automate the process of adding, editing new shipments, ordering shipping labels and getting latest tracking data and other information for your JUMiNGO shipments.

This integration guide complements the official JUMiNGO API documentation which can be found here: <https://developers.jumingo.com/>

This guide will explain the most important business logic and describe best-practice workflows.

3. CREATE A SHIPMENT

One core functionality of the JUMiNGO API is adding new shipment data for a customer account into JUMiNGO's system. To create a new shipment id, the **POST /v1/shipments** endpoint must be used.

Shipment request

The following table below provides an overview of the different properties associated with a JUMiNGO shipment and when certain elements are required or not allowed in the request according to JUMiNGO's business logic.

Request field - column

Specifies the element's name and its hierarchy in the request payload

Required? - column

- Yes: indicates the element must be present in the request or response.
- Yes*: indicates the element must be present in the request if the parent container is present in the request.
- No: indicates the element is optional and may be used if it applies to the request.
- Cond: indicates the element is required under certain conditions.

Value or Constraints – column

Specifies the accepted data for this element. This includes format, max. char length and possible validations or enumerations.

Comments – column

Description of the element. If relevant, an explanation about the conditionally required status of an element will be provided here.

Request field	Required?	Value or Constraints	Comments
Shipments			
Shipments/from_address	Yes		Container for sender address
company	Cond	max. 35 chars	The sender's company name - can be required for certain shipping rates
name	Yes	max. 35 chars	The sender's name
street	Yes	max. 35 chars	The sender's street name
street2	No	max. 35 chars	The sender's additional street name
zip	Cond	max. 10 chars - regex validation	- Required if the country has post codes - Not allowed if the country is post code free See list of countries with/without post codes
city	Yes	max. 35 chars	The sender's city
state	Cond	Enum. - ISO 3166-2 state code	- Required if the country is US or CA - Not allowed for other country codes
country	Yes	Enum. - ISO 3166-1 alpha-2 country code	The sender's country code

phone	Cond	max. 35 chars	The sender's phone number - can be required for certain shipping rates
Shipments/to_address	Yes		Container for receiver address
company	Cond	max. 35 chars	The receiver's company name - can be required for certain shipping rates
name	Yes	max. 35 chars	The receiver's name
street	Yes	max. 35 chars	The receiver's street name
street2	No	max. 35 chars	The receiver's additional street name
zip	Cond	max. 10 chars - regex validation	- Required if the country has post codes - Not allowed if the country is post code free See list of countries with/without post codes
city	Yes	max. 35 chars	The receiver's city
state	Cond	Enum. - ISO 3166-2 state code	- Required if the country is US or CA - Not allowed for other country codes
country	Yes	Enum. - ISO 3166-1 alpha-2 country code	The receiver's country code
phone	Cond	max. 35 chars	The receiver's phone number - can be required for certain shipping rates
Shipments/to_address /settings	Cond		Container for delivery address settings
email	Cond	Email address regex	The receiver's email address

			- optional, if the delivery country is a non-EU country - can be required for certain shipping rates
Shipments/details	Yes		Container for shipment details
value_amount	Cond	integer	The total parcel value of the shipment. Should be the sum of all line item values on the customs invoice. Net value. Required for international shipments
value_currency	No	Enum. ISO 4217 code	Deprecated – use customs_invoice.currency instead!
content_description	Cond	Max. 35 chars	The parcel's content, to be printed on the label
reference_number	No	Max. 35 chars	Individual reference number of the shipper
email	Cond	Email address regex	
email_tracking	No	Email address regex	If specified, an email with tracking information for the shipment will be sent after the label has been created
email_label_copy	No	Email address regex	If specified, an email with a copy of the label file will be sent after the label has been created
insurance_amount	No		Only for internal use
insurance_currency	No		Only for internal user
extra_insurance_value	Cond		If included in the request, an extra transport insurance will be added to the shipment in the specified amount.

			Requires extra_insurance_type
extra_insurance_type	Cond	Enum. standard, premium	For specification of the insurance type for the shipment. If present, also extra_insurance_value must be sent
export_license	No	true/false	If set to "true", an extra export declaration will be added to the shipment
hs_tariff_number	Cond	8-digit customs tariff number code. Official list can be found Here	The international customs tariff number for the main type of goods - can be required for certain shipping rates
packaging_type	Yes	Enum.	Possible values: parcel, document, bulk, pallet, tires, suitcase, n_s_pallet
Shipments/details /settings	Cond		Container for additional shipment details
value_amount			Only for internal use
value_currency			Only for internal use
Shipments/label_format	No	Enum. A4, A6	If sent in the request, the shipping label will be provided in the given format. As default, the label format of the user account will be used for all shipments. The default for a user account can be changed in account settings .
Shipments/packages	Yes		Container for shipping rate, each objects represents one package in the shipment. Min. 1 package object must be present inside
weight	Yes	Float	Weight of the package in kg

width	Yes	Integer	Width of the package in cm
length	Yes	Integer	Length of the package in cm
height	Yes	Integer	Height of the package in cm
Shipments/rate	Yes		Container for shipping rate
shipper_tariff_id	Yes	Valid tariff id	
shipping_type	Yes	Enum.	Possible values: 'pickup', 'shop'
Pickup_date	Yes	ISO 8601 Date & time in UTC	The desired date of the shipment being picked up or dropped off in a parcel shop Date must not be in the past
Pickup_min_time	Yes	string	The start of the pickup time range If shipping_type = 'shop', this value should be '00:00:00'
Pickup_max_time	Yes	string	The end of the desired pickup time range If shipping_type = 'shop', this value should be '00:00:00'
Shipments/connection	No		Container for connection data (only for internal use)
Shipments/customs_invoice	Cond		Container for the customs invoice data. Required, for international shipments
invoiceNumber	No	string	Invoice number of the commercial invoice that is used for customs clearance. Leave empty when JUMiNGO proforma invoice should be used

invoiceDate	No	date	Invoice date of the commercial invoice that is used for customs clearance. Leave empty when JUMiNGO proforma invoice should be used
currency	Yes	Enum. ISO 4217 code	The currency of the parcel value. Required for international shipments
exportReason	Yes	Enum. Gift, Commercial, Personal, Return, Claim	The reason for export, used for customs clearance processes in origin and destination country of the shipment. Required for international shipments
remarks	No	Array	Used to provide additional information about the invoice. Max. 3 items of each 45 chars allowed
lineItems	Yes		Container for line items on a commercial invoice
content	Yes	String	The content description of the line item in the shipment
quantity	Yes	Integer	The quantity of the line item in the shipment
unitOfMeasurement	Yes	Enum. PCS, M, M2, M3, L	The unit that the quantity of the line item is measured in. Options are pieces (PCS), meter (M), square meter (M2), cubic meter (M3) & liter (L)
netWeight	No	Float	The net weight of the line item. Total weight, not the weight of an individual piece
value	Yes	Float	The total net value of the line item in the shipment.

			Do not specify as price per piece.
hsTariffNumber	No	8-digit customs tariff number code. Official list can be found Here	The customs tariff number of the line item in the shipment
ManufacturingCountry	No	Enum. – ISO 3166-1 alpha-2 country code	The country of manufacturing for the line item

Type of Shipment (Domestic, EU, International)

Throughout this guide, shipments will be referred to as being “domestic”, “EU” or “international”. Different requirements regarding data that needs to be provided apply. The three types are defined as follows:

- domestic: origin country code equals destination country code
- EU: both origin country code and destination country code are in the list of EU countries (see [Appendix 8.1](#) for full list of country codes)
- international: at least origin country code or destination country code is not in the list of EU countries.

extra_insurance_value & extra_insurance_type

Despite the regular shipping service, it is possible to book an extra transportation insurance, to insure the shipment against loss, damage and theft. Two types of insurance exist: standard and premium insurance. If a value for extra insurance value is present in the shipment resource, also extra_insurance_type must be specified and vice versa. More information on the insurance types can be found in our [helpcenter](#). The insurance will be booked as soon as the shipment is ordered. The additional costs for the insurance can be checked using the cart total call:

```
"extra_insurance_price_netto": "8.2",
"extra_insurance_price_brutto": "8.2",
```

export_license

For international shipments originating from Germany (from_country = DE), where either the total value of the shipment exceeds 1000€ or the weight of all packages exceeds 1000kg, an export declaration is mandatory for the outbound customs clearance process. JUMiNGO provides the option to issue an export declaration. If the value for export license is set to true in the shipment resource, an export declaration will be booked for the shipment, as soon as it is ordered. The additional costs for the export declaration can be checked using the cart total call:

```
"export_license": true,
"export_license_price_brutto": "49.95",
```

packaging_type

The type of packaging you are using for this shipment. Note that all packages that you will add will inherit this packaging type. In other words: all packages in a shipment entity always have the same packaging type. Possible packaging types are:

Packaging_type	Name	Description
parcel	parcel	A normal parallelepiped cardboard that is stackable.
document	document	documents
bulk	bulky goods	Bulky, unshaped items that take up an unusually large amount of space or require special handling due to their external nature. This includes for example: bags, wooden boxes, plastic buckets, canisters, packages with protruding parts, fabric bales etc.
pallet	pallet	Euro or one-way pallet. The pallet must be moved by a person using a standard fork lift truck. The pallet is stackable.
tires	tires	Not in carton-packaged tire (tire only wrapped with foil)
suitcase	suitcase	Attention: If a suitcase is sent without additional packaging, this itself counts as packaging. In the event of damage, there is then no claim for compensation.
n_s_pallet	non stackable pallet	This category includes packages to which other packages can only be stacked to a limited extent or cannot be stacked at all, such as conical

		pallets. Such shipments prevent efficient use of transport capacities and their handling also requires additional time.
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Customs data for a shipment

International shipments need to be cleared by customs authorities in the country of dispatch and in the destination country. This process gets increasingly digital. To ensure a fast and hassle-free customs clearance, all information from the commercial or proforma invoice should be available in digital form. This includes a detailed list of all the parcel contents with correct customs tariff codes, parcel value, the reason for export and address information about the shipper and the receiver. All customs-relevant data are added in the `customs_invoice` and `customs_line_item` objects. Some data is required to be additionally provided as master data to print on the shipping label. This includes `content_description`, `value_amount` and `hs_tariff_number` in shipment details. Best practice is to use data from the first line item of the customs invoice for `content_description` and `hs_tariff_number`. For `value_amount`, send the sum of values from all line items on the invoice.

In customs data, users can also select a currency for the commercial or proforma invoice that's different to their JUMiNGO account currency. The currency code must be sent under `customs_invoice.currency`. This currency will also be transmitted to carriers as the shipment currency. `Details.value_currency` is deprecated and should not be used anymore. This field defines the currency only for the parcel value. It has no effect on the shipping rates or prices for additional service such as insurance or export declaration. The invoice for the JUMiNGO order will still be issued in the user's account currency.

4. UPDATE AN EXISTING SHIPMENT

When data about an existing shipment in the system shall be changed, either the **PUT /v1/shipments/{shipment_id}** or the **PATCH /v1/shipments/{shipment_id}** request can be used.

While **PUT /v1/shipments/{shipment_id}** will replace the entire record with data from the new request, **PATCH /v1/shipments/{shipment_id}** will only affect the properties of the existing shipment that are present in the body (update existing data or add new elements). For most operations, the PATCH request will be more suitable.

The element & business logic description from paragraph 3 also applies to these two requests.

Limitations:

- Only shipments that have not yet been paid and thus are not yet included in an order can be edited with the two API requests

5. GET SHIPMENT RATES AND ASSIGN ONE RATE TO A SHIPMENT

The “rate” object assigns a specific shipping rate to the shipment ID. Each shipping rate has a unique id (shipper_tariff_id).

Whether or not a shipper tariff ID is valid for a given shipment depends on the specifications of the shipment. This mainly affects from_address, to_address and package data. Valid shipper tariffs for the given input data can be requested using the ShipmentRate call.

Address restrictions

The availability of shipping rates depends on the origin and destination country pair that has been set for from_address and to_address. Some shipping rates can also have further restrictions regarding post codes: Availability might be limited to specific post code ranges.

Package data restrictions

The availability of shipping rates depends on the package input data such as dimensions, amount of packages and the packaging type.

Shipping type “pickup”

Pickup shipping rates include a pickup of the parcels at the provided from_address. The pickup time must be indicated with Pickup_min_time and Pickup_max_time in the rate object of the shipment. Use the ShipmentRate call to check available rates for the given pickup minimum and maximum times.

Possible restrictions for a pickup shipping-rate:

1. **Minimum pickup time range:** The provided time range for pickup_min_time and pickup_max_time must be equal or greater than `ShipmentRate/tariffs/tariff/dates/pickup/pickupTimeMinPeriodMinutes`

2. **Minimum pickup time:** The provided time for pickup_min_time must be equal or greater than ShipmentRate/tariffs/tariff/dates/pickup
3. **Maximum pickup time:** The provided time for pickup_max_time must be equal or less than ShipmentRate/tariffs/tariff/dates/pickup
4. **Cut-off time:** Defined as the maximum time that a shipping rate can be applied successfully to a shipment with pickup still for the same day. If the cut-off time has been exceeded, the earliest possible pickup will be the next working day.

Shipping type "shop"

These shipping rates can be used to book a label without requesting a driver to pick up the parcels at the provided from_address. The IDs of these shipping rates have the prefix "s-" e.g., s-663. Pickup_min_time and Pickup_max_time need to be set to '00:00:00' when requesting drop-off shipping rates.

6. MAKE A PURCHASE

To finalize a transaction for shipments that you want to purchase, a payment must be made using the **POST /v1/orders** call. It creates a chargeable order and starts the label creation of included shipments.

Orders must only contain shipments that are in "ready" status. If any shipment ID is added that has not a ready state, the response will be an error message.

Request field	Required?	Value or Constraints	Comments
shipmentIds	Yes	Array of shipment uuids	Only shipment uuids with import_status = 'ready' should be used for this request
method	Yes	Enum.	Possible values: 'lastschrift', 'rechnung', 'sammelrechnung' The chosen payment method must be enabled for your user account. If none of the above mentioned payment options are activated for your account, you need to request access. In this case, please apply for one of those payment

			methods by sending a support ticket or contacting your key account manager.
voucherCode	No	string	If included, the voucher code must be valid and applicable to the shipments in the order
Orders/data	Cond		Container for additional payment method data Required, when method = 'lastschrift'
accountOwner	Yes*	String	Company name that was provided to JUMiNGO in the SEPA mandate form
iban	Yes*	String	IBAN that was provided to JUMiNGO in the SEPA mandate form
bic	Yes*	String	BIC that was provided to JUMiNGO in the SEPA mandate form
agreement	Yes*	Boolean, must be set to true	The agreement to the SEPA transaction

Sample Request:

```
{
  "shipmentIds": [
    "s_4d02151b480e417f9440f2fee299d97e"
  ],
  "method": "lastschrift",
  "voucherCode": "jum100",
  "data": {
    "accountOwner": "Test GmbH",
    "iban": "DE2710077770209299700",
    "bic": "NORSDE51",
    "agreement": true
  }
}
```

Sample Response:

```
{
  "id": 1,
  "success": true,
  "returnUrl": null,
  "failureUrl": null,
  "message": null,
  "paymentRedirectUrl": null,
  "returnData": null,
  "orderNumber": "220210U3D7",
  "token": null,
  "customerNumber": null,
  "hadOrderBefore": true,
  "shipmentIds": [
    "s_fb7d797081d74c37af840fded86a58b7"
  ]
}
```

7. RETRIEVE LABELS AND TRACKING DATA FOR A SHIPMENT

With the JUMiNGO API it is possible to retrieve data about completed orders and shipments such as labels and other documents (invoice, order confirmation and proforma invoice) if they are available. But also important shipment-related information such as the tracking number, pickup number as well as the latest tracking status information can be returned by the JUMiNGO API.

This section will cover most use cases that occur after an order has been completed.

7.1 Get general information about your JUMiNGO orders

With the **GET /v1/orders** call, information about all orders for the account will be returned. Use the created[before] and created[after] parameters to select only a specific time range or the search parameter to perform a full text search among the orders.

When you require information for a specific order number, append it by using the more specific **GET /v1/orders/{id}** call. The format of the order number is always the date of the order + 4 randomly assigned characters, e.g. 2202084EKN.

The response to this call will also include all tracking numbers for all shipments inside this order if they are already present.

7.2. Retrieve documents for a specific JUMiNGO order

Documents for a completed order include the invoice and order confirmation + label file and proforma invoice for all shipments that have been purchased within this order. To get all existing documents for an order, use the **GET /v1/orders/{id}/documents** call. ID must be an existing order number in your account in the usual order number format, e.g. 2202084EKN. The document files are returned as Base64 hashes.

Document type	Comment
Invoice	One file per order. If your account has collective invoice enabled, the invoice will usually be available one week after purchase. In this case, one invoice file can include several orders and API will return the same collective invoice file for all those orders.
Order confirmation	One file per order that includes the confirmation page for all shipments from this order.
Label	One file per shipment that includes the carrier label for all packages.
Proforma invoice	One file per shipment that includes a proforma invoice for customs. A proforma invoice is only created for international shipments where no German export declaration is required. A proforma invoice will not be created if the package type of the shipment is 'document'.

7.3. Get tracking status and other tracking data

It is possible to retrieve the latest tracking data for your purchased JUMiNGO shipments. Using **GET /v1/shipments/{id}** you will receive all tracking-related data which is stored in the "tracking" object of the response data. Most important data include the current tracking status and more detailed tracking details listed in individual steps.

8. APPENDIX

8.1 LIST OF EU COUNTRY CODES

AT
BE
BG
CY
CZ
DE
DK
EE
ES
FI
FR
GR
HR
HU
IE
IT
LT
LU
LV
MT
NL
PL
PT
RO
SE
SI
SK

8.2 LIST OF COUNTRIES WITHOUT POST CODE

AE	BV	ET	KE	MR	SB	TZ
AF	BW	FJ	KH	MS	SC	UG
AG	BZ	GA	KI	MT	SD	UM
AI	CD	GD	KM	MU	SL	UY
AL	CF	GH	KN	MW	SN	VE
AO	CG	GI	KP	MZ	SO	VG
AQ	CI	GM	KW	NA	SR	VN
AS	CK	GN	LA	NE	ST	VU
AW	CL	GQ	LB	NG	SV	WS
BB	CM	GT	LC	NI	SX	YE

BF	CR	GY	LK	NP	SY	ZW
BI	CV	HK	LR	NR	TD	
BJ	CW	HN	LS	OM	TG	
BM	DJ	HT	LY	PA	TK	
BO	DM	IE	MF	PE	TL	
BQ	DO	IQ	ML	PY	TO	
BS	EG	IR	MM	QA	TT	
BT	ER	JM	MO	RW	TV	