PORTFOLIO – PAACK BLOG

Paack Labeler API: Offering labelling automation to retailers.

The parcel's journey, starts with the label.

...and ends with it too.

The label. The omnipresent sticker on parcels is a key piece in the vast puzzle of the delivery planning. From all the unpredictable factors impacting the delivery, this component in particular is the one that you, as a shipper, have the most control of. There may be, however, a number of elements involved and integrations to do for the fulfilment of a correct service,... so why not let us make it easier for you?

Introducing Paack's Labeler API

Our Labeler service is available through an API whose purpose is to generate labels for Paack delivery orders.

Paack requires a label containing minimally a readable barcode for each parcel we are to deliver, so it is uniquely identified.

The label is thus what links the physical parcel and the digital manifest that is represented by the barcode.

By using Paack's Labeler API you obtain a fully automated and time-saving solution.

The Adventure of the wooden pipe from Scotland

One foggy evening, arriving at his domicile in Baker Street, Mr. Sherlock Holmes inspects the mailbox with his magnifier and finds a mail order catalogue of fine gentlemen's grooming products from a renowned shop in Scotland.

Going through the pages, something grabs his attention: a luxurious shaving kit with a variety of accessories in an exquisitely carved wooden box. He remembers that the birthday of his eccentric flatmate, Dr. Watson, is due and he probably would appreciate it, so he merrily decides to go online and order it.

Meanwhile, in Scotland, a new order arrives to the high-street retailer's system.

Without delay, Alfred, the person in charge, gets to work and processes the order within Paack's order management system.

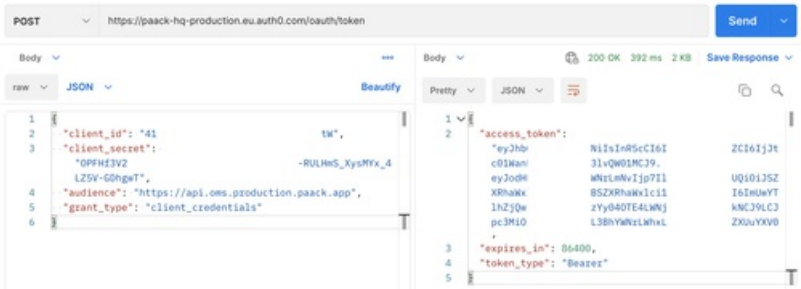
Single-parcel labels

After carefully completing the packaging, it is now time to glue a label with the populated information from the order. Alfred had obtained the following, beforehand, from our Customer Solutions team:

- Authentication URLs to generate access tokens.
- Parameters to generate access tokens. (*client ID*, *client_secret* and *audience*).
- URL to access the API.
- A technical specification of the service.
- Our API documentation to generate and print labels.

Our Alfred then proceeds to:

1. Create an access token from the authentication URL. The resulting time-bound JSON Web Token (JWT) authenticates each request. Alfred must secure first and then input this value in the header of each request. After carefully completing the packaging, it is now time to glue a label with the populated information from the order. But he will not use his rusty typewriter to print it.



2. Prepare the body of the request. Alfred must fill the necessary information of the label in the body of the JSON-formatted message to Labeler API, resulting in a message response that generates the label in the desired format (PDF or ZPL) and next, send the request to create the label.

POST https://api.paack.io/v3/labels — Send

Body — raw — JSON — Beautify

```
{
  "customer": {
    "first_name": "Sherlock",
    "last_name": "Holmes"
  },
  "delivery_address": {
    "city": "London",
    "country": "GB",
    "line1": "221B",
    "line2": "Baker Street",
    "post_code": "NW1 6XE"
  },
  "expected_delivery_ts": {
    "start": {
      "date": "1893-01-01",
      "time": "10:00:00"
    }
  },
  "order_details": [
    {
      "name": "sale_number",
      "type": "string",
      "value": "g_328298234984981"
    }
  ],
  "external_id":
    "5cef0f5-1a0-44-b0f-96faa0",
  "parcels": [
    {
      "barcode":
        "034724878233029420",
      "height": 28.2,
      "length": 38.1,
      "width": 48.3,
      "weight": 12.1
    }
  ],
  "pick_up_address": {
    "city": "Dunoon",
    "country": "GB",
    "line1": "78A",
    "line2": "Church St",
    "post_code": "PA23 7DD"
  },
  "service_type": "PT4"
}
```

Body — 200 OK 197 ms 15.56 KB — Save Response

3. Print the label and attach it to the parcel that will be delivered.

What information is contained in a label?

1. Delivery postcode
2. Service type
3. Barcode
4. Order number
5. Pickup address
6. Name of addressee
7. Delivery address
8. Number of packages
9. Beginning of delivery timeslot
10. Dimensions and weight of the package

Multi-parcel labels

Let's play with another scenario, in which Sherlock feels generous and decides to also buy an additional gift, an splendid wooden smoking pipe for his brother Mycroft, within the same order. There will be now two packages in Sherlock's order, therefore requiring two labels.

Alfred, then, repeats the process, although this time he reflects the additional item and its characteristics under the `parcels` section.

The JSON message block returns the labels as follows:

POST https://api.paack.io/v3/labels Send

Body raw JSON Beautify

```
{
  "customer": {
    "first_name": "Sherlock",
    "last_name": "Holmes"
  },
  "delivery_address": {
    "city": "London",
    "country": "GB",
    "line1": "221B",
    "line2": "Baker Street",
    "post_code": "NW1 6XE"
  },
  "expected_delivery_ts": {
    "start": {
      "date": "1893-01-01",
      "time": "10:00:00"
    }
  },
  "order_details": [
    {
      "name": "sale_number",
      "type": "string",
      "value": "g_18298234984981"
    }
  ],
  "external_id":
    "5cef0f5-1a0-44-b0f-96faa0",
  "parcels": [
    {
      "barcode":
        "034724878233029420",
      "height": 28.2,
      "length": 38.1,
      "width": 48.3,
      "weight": 12.1
    },
    {
      "barcode":
        "034724878233029499",
      "height": 19.0,
      "length": 12.33,
      "width": 33.1,
      "weight": 18.3
    }
  ],
  "pick_up_address": {
    "city": "Dunoon",
    "country": "GB",
    "line1": "78A",
    "line2": "Church St",
    "post_code": "PA23 7DD"
  },
  "service_type": "PT4"
}
```

Body 200 OK 111 ms 19 KB Save Response

Advantages of automating the labelling process by using Labeler

- Professional labels that adhere to industry standards (size, barcodes, QR codes, service type codes).
- Properly validated data, reducing the risk of incorrect deliveries or returned parcels and hence, unnecessary costs and wasted time.
- Having the label aligned with the order parameters, rather than maintaining repositories of local templates.
- Single-sourced data and consistency.
- Possibility to generate multiple labels in a single request while the associated parcels belong to the same order.

In conclusion:

Labels have a direct impact on the parcel's journey. A well-printed, well-designed and error-free label optimises inbound, warehouse operation and dispatch with readily available and accurate data.

If you decide that Paack's Labeler API meets the requirements of your business, contact us.

We'll take care of it.