

MPL API tracking, PUSH method

In this API, a stream of the information can be achieved, shortly after a subscription.

As a result of the subscription, the data about the last events of all parcels (mail items) belonging to the customer will be collected and will be streamed via a standard HTTPS connection.

After coming to an end in the life path of the mail item (mostly: "delivered"), the data will still be streamed for the following 24 hours.

Subscribing

Authentication (OAUTH2) is required to sign up.

To do so, you need to send a POST request to the <https://core.api.posta.hu/v2/mplapi-tracking/tracking/subscribe> endpoint, where:

- the client ID and requestID are included in the header (standard MPLAPI headers)
- in the json below, enter data in the grey-coloured fields as needed (the other fields can be omitted):

```
[
  {
    "sender": "string",
    "trackingNumber": "string",
    "accountCode": "string",
    "serviceEndpoint": "string",
    "dmlFlag": true,
    "language": "string",
    "param1": "string",
    "param2": "string",
    "param3": "string",
    "param4": "string",
    "param5": "string"
  }
]
```

Explanation:

- sender – its fixed value is "API"
- dmlFlag - true if subscribed, false if unsubscribed
- language – in which language do you want to receive tracking data; the default is Hungarian: "HU"

The response to subscribing has the following structure:

```
[
  {
    "identifier": "string",
    "errors": [
      {
        "code": "103",
        "parameter": "sender.agreement",
        "text": "string",
        "text_eng": "string"
      }
    ]
  }
]
```

If the subscription is successful, a **GUID** will be sent in the identifier field that the subscriber can use to refer to his tracking request.

If there was an error, additional information about the error will be provided in the **errors** section.

Collecting data (operation on side of MPL)

After the date of subscription, collection of data on events associated with the customer's mail will begin and it will continue until they reach their final state.

- Inclusion in tracking: completed with the subscription event
- Exclusion from tracking: 24 hours after the delivery event

When new event (transaction) occurs in the life path of a specific mail item, the data collected until then is published to the Push component responsible for the delivery of notifications (streaming), using the subscription token that has the valid value associated with the customer at that moment. If a new subscription is received from the customer, this value will be updated in the data of the last subscription (which still needs to be transferred).

Streaming data

To access the data, a standard HTTPS connection should be established via this URL:

[https://net.posta.hu/tracking/public/tracking/TrackingData/\[subscription-token\]](https://net.posta.hu/tracking/public/tracking/TrackingData/[subscription-token])

where the **[subscription-token]** should be replaced with the **token (GUID)** included in the response was received after subscription.

This call is not made through APIGEE, as it is not an API-request.

Important conditions:

- a **HTTP "Transfer-Encoding: chunked"** header should be used
- the connection should be maintained.

The data packet includes **in an array** the event records and only the latest event (let's say: up-to-date status) for a mail item.

The **connection can be maintained for a maximum of 1 hour** before it is terminated at the Posta end, and can be re-established immediately and maintained as long as the 24-hour subscription token identifying the connection is valid. After that, the subscription process must be started over and the new token should be used to re-establish the connection.

In addition, to maintain the data connection, **an OPTIONS header must be injected every 25 seconds** into the data stream, otherwise the connection will be terminated. A broken connection can be re-established at any time within the lifetime of the token.

With other words: It's not a must have function to continuously maintain the connection, sending an options header again and again in the 24 hours period of token. It is also a proper solution, if not sending options header, but the connection will be re-established according to a demanded frequency.

If **for some reason, the connection is not established for a longer period of time**, then the received data can also be queried retroactively (since it may be necessary to track dozens or even hundreds of mail items simultaneously). This is done by using the parameter **lastRead=[last received time]**, which must be set to the time that was specified in the **"insertedAt"** field of the last received data packet. Then, once the connection is established, the data received from the given moment will arrive again first, and then the process will continue normally.

Data created on the PUSH server are available for 24 hours from the date of arrival of the information, so if a parcel reaches its final state, its life path can be queried from there for a maximum of 24 hours, after which it will be deleted.

The JSON format of the data packets is as follows:

```
[
  {
    "TrackingRecordId": number, // unique postal identifier
    "ConnectionToken": string, // token used for signing up
    "PackageId": string, // parcel identifier
    "PackageStatus": string, // parcel status category
    "PackageStatusText": string, // parcel status text } for referring table go: https://devportal.posta.hu/en/documentation
    "EventDateTime": string, // ISO encoded date and time: time of event
    "EventPlace": string, // location of event
    "InsertedAt": string // ISO-encoded date and time: date of inclusion in IKR tracking data collection
  },
  ...
]
```

Example of response JSON:

```
[
  {
    "TrackingRecordId": 2575,
    "ConnectionToken": "eeafb5bc-b809-4b6f-94c9-9418895dfb47",
    "PackageId": "PNAW250000715",
    "PackageStatus": "Delivered",
    "PackageStatusText": " Successfully delivered at address",
    "EventDateTime": "2022-06-30T12:08:44",
    "EventPlace": "Szeged Logistics Plant",
    "InsertedAt": "2022-07-01T10:30:01.0666667"
  },
  {
    "TrackingRecordId": 3461,
    "ConnectionToken": "eeafb5bc-b809-4b6f-94c9-9418895dfb47",
    "PackageId": "PNAW250000728",
    "PackageStatus": "Delivery",
    "PackageStatusText": " Item handed over to delivery man",
    "EventDateTime": "2022-07-01T10:36:47",
    "EventPlace": "Szeged Logistics Plant",
    "InsertedAt": "2022-07-01T11:00:00.6833333"
  }
]
```