

SHIPMENT TRACKING – UNIFIED PUSH API

101 GUIDE

DEFINITION

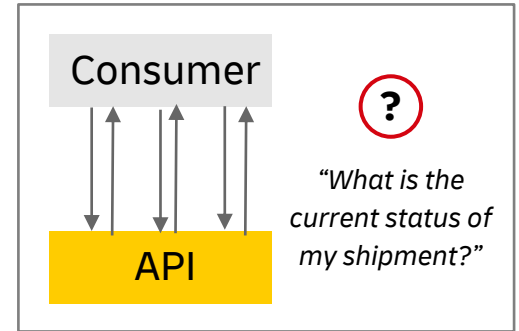
DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

A “Push” API proactively pushes updates to a user, so there is no need to make a call every time they want to check a status.

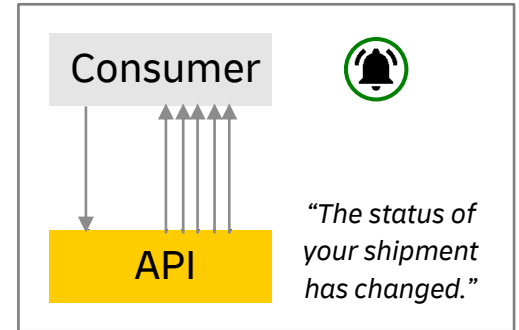
Different to other APIs, Shipment Tracking - Unified Push calls are composed in the “Body” section.

Although this API “unifies” the sources of shipment data information, it does not provide a “unified” structure in the response. Then, the response structure you can get from tracking a Post and Parcel Germany shipment can be different to the one of an Express shipment.

Standard (request response) API



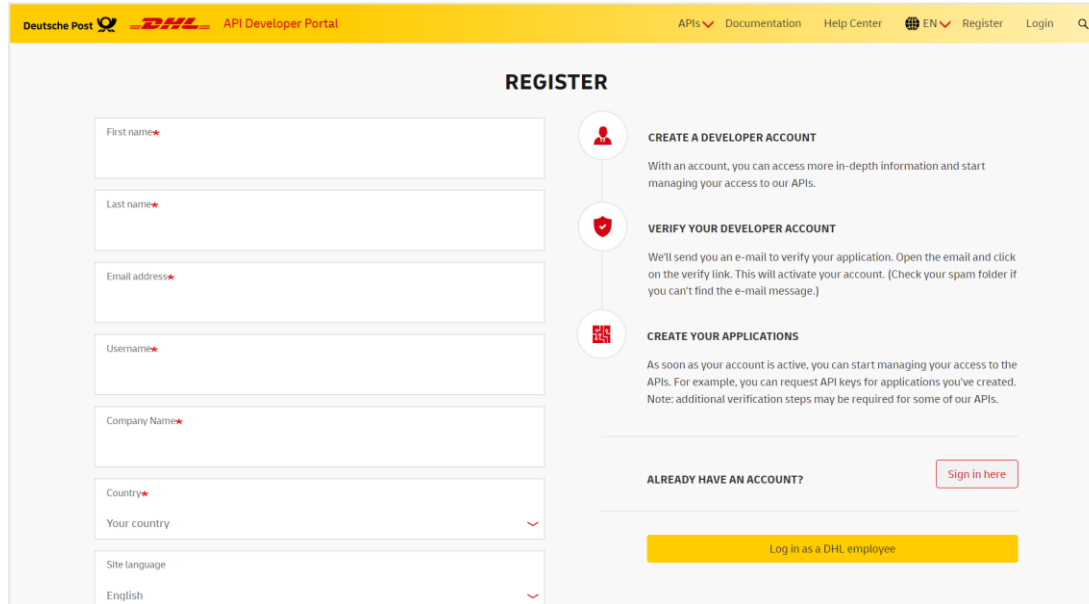
Push API



ACCESS

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

Register in the DHL Developer Portal: <https://developer.dhl.com/user/register>



The screenshot shows the registration page of the DHL Developer Portal. The page has a yellow header with the Deutsche Post and DHL logos, and the text "API Developer Portal". On the right side of the header, there are links for "APIs", "Documentation", "Help Center", "EN", "Register", and "Login".

The main content area is titled "REGISTER" and is divided into two columns. The left column contains a registration form with the following fields:

- First name*
- Last name*
- Email address*
- Username*
- Company Name*
- Country* (with a dropdown menu showing "Your country")
- Site language (with a dropdown menu showing "English")

The right column contains three sections:

- CREATE A DEVELOPER ACCOUNT**: Accompanied by a person icon. Text: "With an account, you can access more in-depth information and start managing your access to our APIs."
- VERIFY YOUR DEVELOPER ACCOUNT**: Accompanied by a shield icon. Text: "We'll send you an e-mail to verify your application. Open the email and click on the verify link. This will activate your account. (Check your spam folder if you can't find the e-mail message.)"
- CREATE YOUR APPLICATIONS**: Accompanied by a QR code icon. Text: "As soon as your account is active, you can start managing your access to the APIs. For example, you can request API keys for applications you've created. Note: additional verification steps may be required for some of our APIs."

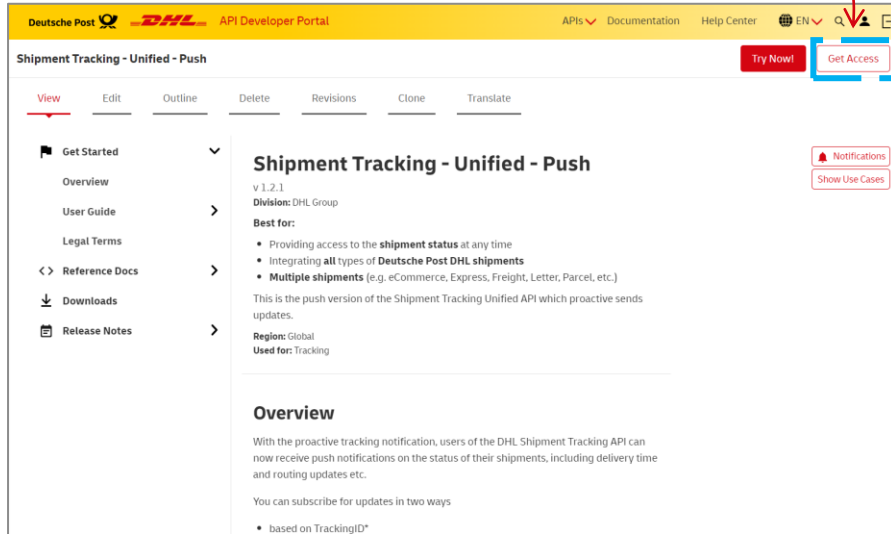
At the bottom of the right column, there is a section titled "ALREADY HAVE AN ACCOUNT?" with a "Sign in here" button. Below this is a yellow button labeled "Log in as a DHL employee".

ACCESS

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

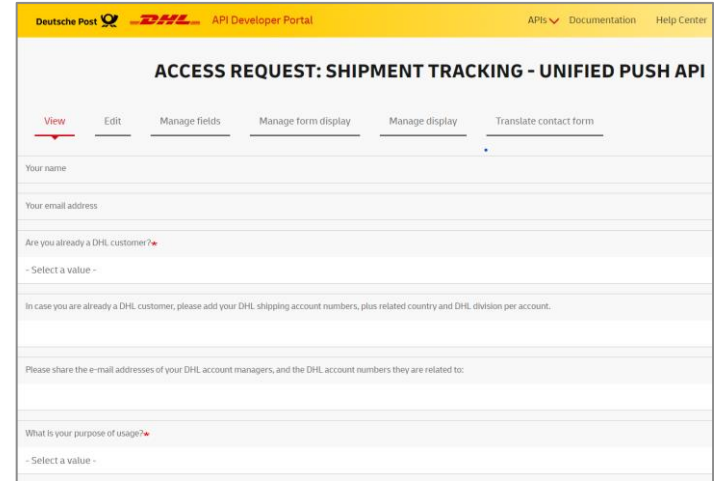
Go to the API documentation: <https://developer.dhl.com/api-reference/shipment-tracking-unified-push#get-started-section>

Click on the “Get Access” button:

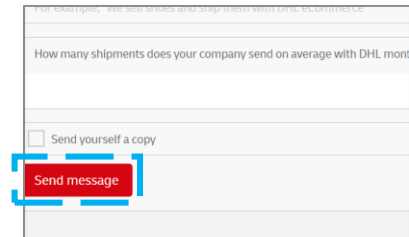


The screenshot shows the DHL API Developer Portal interface. The page title is "Shipment Tracking - Unified - Push". The navigation menu includes "View", "Edit", "Outline", "Delete", "Revisions", "Clone", and "Translate". The main content area displays the API details for "Shipment Tracking - Unified - Push" (v 1.2.1), including the division (DHL Group), best for (Providing access to the shipment status at any time, Integrating all types of Deutsche Post DHL shipments, Multiple shipments), region (Global), and used for (Tracking). The "Get Access" button is highlighted with a red box, and a red arrow points to it from the text above.

Fill out the form and send



The screenshot shows the "ACCESS REQUEST: SHIPMENT TRACKING - UNIFIED PUSH API" form. The form includes fields for "Your name", "Your email address", and "Are you already a DHL customer?". Below these fields are instructions for existing customers to provide shipping account numbers and related country and DHL division. There is also a field for "What is your purpose of usage?". The "Get Access" button is highlighted with a red box.

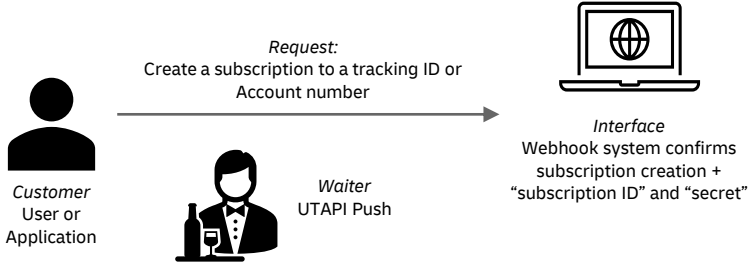


The screenshot shows a form section with a "Send message" button highlighted with a red box. The form includes a checkbox for "Send yourself a copy" and a text input field for "How many shipments does your company send on average with DHL monthly?".

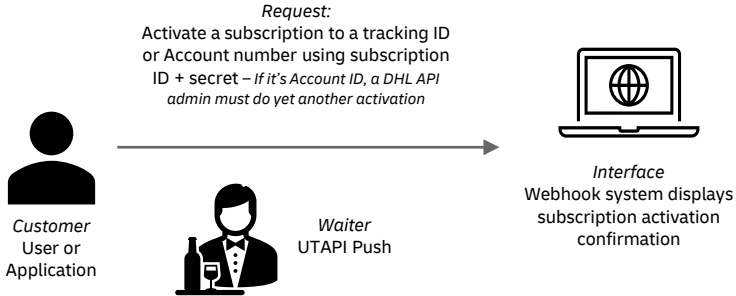
USE FLOW

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

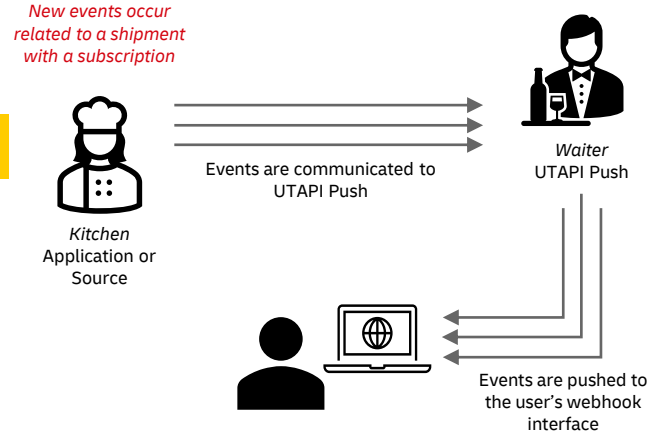
1



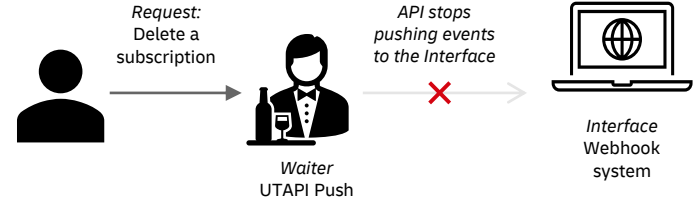
2



3



4



THE “WHY” OF THE API

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

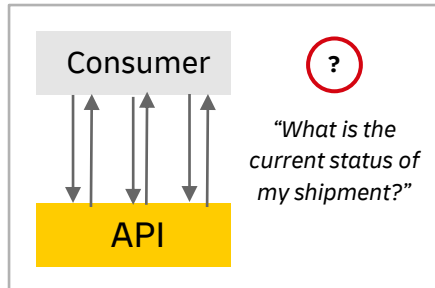
Customers, merchants and marketplaces always want the most up-to-date information about their shipments. With the regular UTAPI, they must send a request every time they want to know the status.

Some users want updated information up to the minute, and they bombard the API with requests, quickly consuming their quota. This process is costly and not the most efficient.

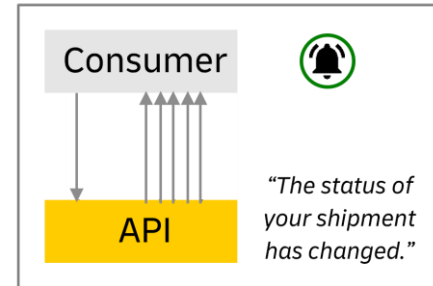
UTAPI Push solves this issue by proactively sending notifications to the user whenever there's a new event update related to a subscribed shipment.

In this way, users don't need to program to knock our door several times a day, but simply wait until we send them the new notifications, and then they can program their systems to work with them.

Standard (request response) API



Push API



THE “WHY” OF THE API

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

The added benefits are the same as the general Shipment Tracking – Unified API.

Merchants can use this data to provide up to date notifications to their customers about their shipments, instead of making the customer open a new tab and consult on DHL.

Our Push API makes this possible by providing the event status data to the merchants or marketplaces in a machine-readable format that can be easily adapted to their user interface.

The screenshot shows the DHL tracking interface. At the top, there is a yellow header with the text "Track shipment" and a search bar containing "Enter shipment number" and a "Search" button. Below the header, there is a red arrow pointing left with the text "To dashboard". The main content area is divided into three sections: 1. "DHL shipment" with a green checkmark icon, the shipment number "00340434315000000000000000000000", and the status "Delivery successful." with the timestamp "We, 22.11.2023, 20:38 hours". 2. "Detailed tracking history" with a red minus sign icon. 3. A vertical timeline of events: - "We, 22.11.2023, 20:38" with a green checkmark icon: "The recipient has picked up the shipment from the PACKSTATION". - "We, 22.11.2023, 17:11, Bonn" with a green checkmark icon: "The shipment is ready for pick-up at the Packstation 112, Sankt Augustiner Str. 145, 53225 Bonn." - "We, 22.11.2023, 09:51" with a green checkmark icon: "The shipment is on its way to the PACKSTATION". - "We, 22.11.2023, 09:51" with a green checkmark icon: "The shipment has been loaded onto the delivery vehicle".

The screenshot shows the Shoes.com merchant interface. At the top, there is a blue header with the text "Shoes.com" and a shoe icon. Below the header, there is a white content area. On the left, there is a product image of a pair of purple leather shoes. To the right of the image, the text reads "Fashion shoes Size 40 EU" and "Leather Purple New". Below the product image, there is a red arrow pointing towards the tracking history section of the screenshot on the left. On the right, there is a section titled "Your order status" with a green checkmark icon. Below this, there is a "DHL shipment" section with the shipment number "00340434315000000000000000000000" and the status "Delivery successful." with the timestamp "We, 22.11.2023, 20:38 hours". Below this, there is a "Detailed tracking history" section with a red minus sign icon. The tracking history is identical to the one shown in the screenshot on the left. Below the tracking history, there is a section titled "More shoes like this" with a row of seven product images and their names: "Ind. Men Zip", "Gesswein - Wood", "Valencia - Oxford", "Gesswein - Merivo", "Gesswein - Wood", "Valencia - Sneakers", "Gesswein - Wood", and "Ind. Men Zip".

SCOPE

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

This Push API does not support every single kind of shipment and service offered by the DHL group.

The list and the supported services are constantly updated in [the documentation's Scope](#). Please check the most recent version on the website.

Service availability as of August of 2024:

DHL Parcel Germany

Subscription by shipment ID: No
Subscription by account ID: No

DHL Post Germany (*post-de*)

Subscription by shipment ID: Yes*
Subscription by account ID: No

DHL Global Forwarding SBR** (*dgf*)

Subscription by shipment ID: Yes
Subscription by account ID: Yes

DHL Global Forwarding Sameday (*sameday*)

Subscription by shipment ID: Yes
Subscription by account ID: Yes

DHL Express

Subscription by shipment ID: No
Subscription by account ID: No

DHL Parcel Connect (*ecommerce-europe*)

Subscription by shipment ID: Yes
Subscription by account ID: Yes

DHL eCommerce BENELUX (*parcel-nl*)

Subscription by shipment ID: Yes
Subscription by account ID: No

PPL (DHL eCommerce Czechia) (*ecommerce-ppl*)

Subscription by shipment ID: Yes
Subscription by account ID: No

DHL eCommerce UK (*parcel-uk*)

Subscription by shipment ID: Yes
Subscription by account ID: Yes

DHL eCommerce Iberia (ES, PT)

Subscription by shipment ID: No
Subscription by account ID: No

DHL eCommerce Americas

Subscription by shipment ID: No
Subscription by account ID: No

DHL eCommerce APAC

Subscription by shipment ID: No
Subscription by account ID: No

DHL Freight

Subscription by shipment ID: No
Subscription by account ID: No

DHL Supply Chain

Subscription by shipment ID: No
Subscription by account ID: No

*The API supports Registered mail. Internetmarke is not included.

→ Registered mail is the service customers get at the DHL service points; Internetmarke are stamps customers can print at home and put directly on envelopes.

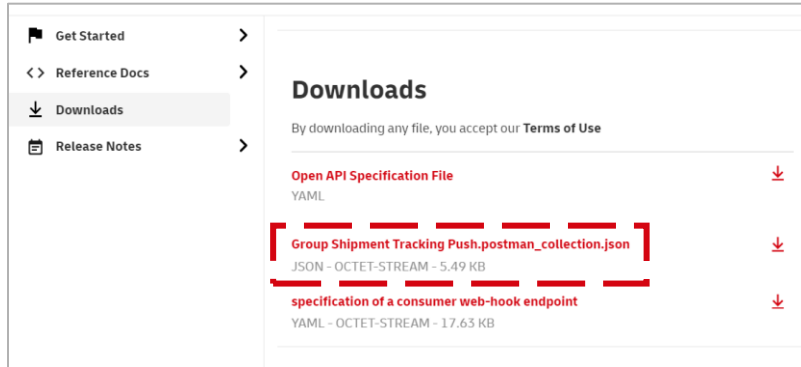
**SBR: Star Broker

SETTING UP THE API

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

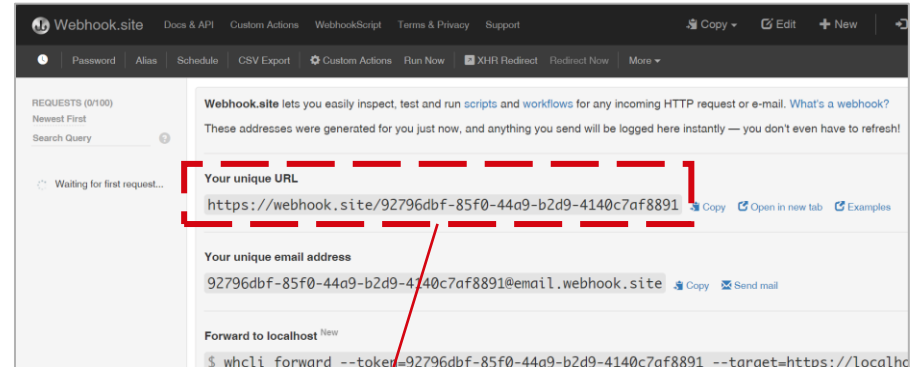
In order to directly and easily test the API, please install the provided Postman collection on the API documentation:

<https://developer.dhl.com/api-reference/shipment-tracking-unified-push#downloads-section>



A user will also need to connect a Webhook system to our Push API, where the responses and notifications can be fed into.

For testing purposes, the following website can be used:
<https://webhook.site/>



The given URL in this section will need to be provided later when doing the Create Request to the API

ENVIRONMENTS

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

An Environment is an instance where a given system works. For APIs, there are often Production, Acceptance, Test and Development environments, all living at once.

This Push API does only offer the Production environment to users, they will use it for their regular operations and must use it as well for user testing in case it's needed.

Even though there are more environments, these are restricted to developers-use only.

Production Environment URL/URI address:

<https://api-eu.dhl.com/tracking/push/v1>

ENDPOINTS

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

An Endpoint is a specific “location” within an API that can accept requests and send back responses. UTAPI PUSH has multiple Endpoints:

- > **POST** create subscription (by Account) --> This endpoint creates a subscription request for an account ID
- > **POST** create subscription (by Shipment) --> This endpoint creates a subscription request for a shipment ID
- > **POST** activate -----> This endpoint activates a previously requested creation of account or shipment ID
- > **GET** get subscriptions -----> This endpoint gets all subscriptions (account or shipment) related to an API key
- > **GET** get subscription details -----> This endpoint gets all subscription details related to one subscription ID
- > **DEL** delete subscription Copy -----> This endpoint deletes a subscription, be it account ID or shipment ID

Make sure the right Endpoint is selected, otherwise the call won't be successful



AUTHENTICATION

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

Different to the regular Shipment Tracking – Unified API, for the Push solution the users will need initially their API key to create a subscription. Then they will need the “subscription ID” and a “secret” to activate a subscription. More details on how to use the API in the following slides.

Authentication for Subscription Creation:

Group Shipment Tracking Push / create subscription (by Shipment)

POST https://api-eu.dhl.com/tracking/push/v1/subscription

Params	Authorization	Headers (9)	Body	Pre-request Script	Tests	Settings
<input checked="" type="checkbox"/>		Host		<calculated when request is sent>		
<input checked="" type="checkbox"/>		User-Agent		PostmanRuntime/7.36.1		
<input checked="" type="checkbox"/>		Accept		/*/*		
<input checked="" type="checkbox"/>		Accept-Encoding		gzip, deflate, br		
<input checked="" type="checkbox"/>		Connection		keep-alive		
<input checked="" type="checkbox"/>		DHL-API-Key		{{API_KEY}}		
		Key		Value		

Header text must be exactly “DHL-API-Key”

Request Details

POST https://webhook.site/eb07b7e3-cafc-4c15-a24c-5468be2428eb

Host 34.107.84.18 Whole Shodan Netly Censys

Date 01/12/2024 3:04:06 PM (10 minutes ago)

Size 258 bytes

Time 0.001 sec

ID 5bf37cb8-fc8a-4b65-a1eb-3c562a447b08

Query strings (empty)

Files

Raw Content

```
{
  "self": "https://api-eu.dhl.com/tracking/push/v1/subscription/a1f63e7-5f32-4665-8583-051bbebcb44f",
  "scope": "subscription.validate",
  "expires": "2024-01-17T14:04:05.810855158Z",
  "secret": "z1sxoJZZeek0EzH3k5qme",
  "note": "Subscription validation token provided."
}
```

Authentication for Subscription Activation:

Group Shipment Tracking Push / activate

POST https://api-eu.dhl.com/tracking/push/v1/subscription/a1f63e7-5f32-4665-8583-051bbebcb44f

Params	Authorization	Headers (9)	Body	Pre-request Script	Tests	Settings
<input checked="" type="checkbox"/>		Host		<calculated when request is sent>		
<input checked="" type="checkbox"/>		User-Agent		PostmanRuntime/7.36.1		
<input checked="" type="checkbox"/>		Accept		/*/*		
<input checked="" type="checkbox"/>		Accept-Encoding		gzip, deflate, br		
<input checked="" type="checkbox"/>		Connection		keep-alive		
<input checked="" type="checkbox"/>		DHL-API-Hook-Secret		z1sxoJZZeek0EzH3k5qme		The S
<input checked="" type="checkbox"/>		DHL-API-Key		{{API_KEY}}		htps:

AUTHENTICATION

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

When creating a subscription request, you may also add additional lines to provide a Header authentication (commonly an API key to your webhook system – Please note that such header and token are different to your DHL Developer Account app API key).

Below examples of the Body text subscription creation request with the additional authentication lines:

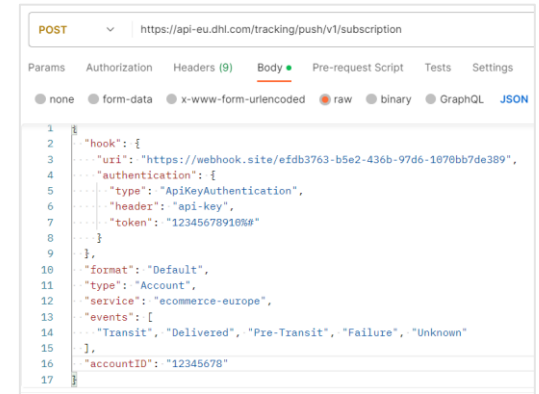
Account ID subscription creation:

```
{
  "hook": {
    "uri": "ADD HERE THE URL OF YOUR WEBHOOK SYSTEM",
    "authentication": {
      "type": "ApiKeyAuthentication",
      "header": "ApiKey",
      "token": "ADD HERE YOUR AUTHENTICATION CHARACTERS"
    }
  },
  "format": "Default",
  "type": "Account",
  "service": "ADD HERE THE SERVICE",
  "events": [
    "Transit", "Delivered", "Pre-Transit", "Failure", "Unknown"
  ],
  "accountID": "ADD HERE THE ACCOUNT ID"
}
```

Shipment ID subscription creation:

```
{
  "hook": {
    "uri": "ADD HERE YOUR WEBHOOK SYSTEM URL",
    "authentication": {
      "type": "ApiKeyAuthentication",
      "header": "ADD HERE YOUR HEADER",
      "token": "ADD HERE YOUR HEADER TOKEN"
    }
  },
  "format": "Default",
  "type": "Shipment",
  "service": "ADD HERE THE SERVICE",
  "events": [
    "Transit", "Delivered", "Pre-Transit", "Failure", "Unknown"
  ],
  "shipmentIDs": ["ADD HERE YOUR SHIPMENT ID"]
}
```

Example on Postman:



WEBHOOK SETUP PER ENDPOINT

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

1a

POST call:
Create a subscription
by **account ID**

→ You will get a
“subscription ID” and
a “secret”

2

POST call:
Activate a subscription
with the subscription
ID and the secret

→ You will get a pre-
approval message, still
need a business
approval

2a

Send a request to the
business to activate
your Account ID
subscription

→ You will need to
provide your
subscription ID

2b

The business approves
your request

→ You will receive a
webhook message
confirmation of
subscription ready for
notifications

3

Receive push
messages

→ Every time there is a
new event of a
shipment related to the
account, a new push
message will arrive to
the Webhook system

1b

POST call:
Create a subscription
by **shipment ID**

→ You will get a
“subscription ID” and
a “secret”

2

POST call:
Activate a subscription
with the subscription
ID and the secret

→ Your subscription is
now activated

3

Receive push
messages

→ Every time there is a
new event of the
shipment, a new push
message will arrive to
the Webhook system

CREATE A SUBSCRIPTION BY ACCOUNT ID

CREATE SUBSCRIPTION BY ACCOUNT ID

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

The Parameters define variable elements of a URL path when calling an API. They can be query parameters, headers, or request body. Different to regular APIs, our parameters won't be filled in at the "Parameters" section, but directly editing the "Body" and URL of the call.

The screenshot shows the 'Params' tab in an API client. The 'Query Params' section is empty, with a table containing two columns: 'Key' and 'Value'. A red arrow points to the empty table with a note.

Note that the "Params" section is empty.

The screenshot shows the 'Headers' tab. A header is defined with the key 'DHL-API-Key' and the value '{{API_KEY}}'. A red arrow points to the value field with a note.

Remember to fill in the API key in the "Headers" section



Please note:

API Key ≠ Webhook URL ≠ Secret ≠ accountID ≠ shipmentID ≠ subscription ID

1 Create the subscription

The screenshot shows the 'Body' tab in an API client. The request body is a JSON object. Red dashed boxes highlight the 'uri', 'service', and 'accountID' fields, with red arrows pointing to explanatory text on the right.

```
1 {
2   "hook": {
3     "uri": "https://hook.yourdomain.com"
4   },
5 },
6 "format": "Default",
7 "type": "Account"
8 "service": "express",
9 "events": [
10  "Transit", "Delivered", "Pre-Transit", "Failure", "Unknown"
11 ],
12 "accountID": "123456"
13 }
14
```

The hook URL must be replaced with the webhook system. Refer to slide 8

The service value must be replaced. Possible options: *sameday, dgf, ecommerce-europe, parcel-uk*

The accountID must be replaced. This value should be known by the customer.

CREATE SUBSCRIPTION BY ACCOUNT ID

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

2

```
1 {
2   "self": "https://api-eu.dhl.com/tracking/push/v1/subscription/50bed0c5-2d21-40a2-8169-97df1134fa87",
3   "scope": "subscription.create",
4   "expires": "2024-01-28T20:19:03.363038311Z",
5   "note": "Subscription request created."
6 }
```

This how the response from the API will look like after creating a request to create a subscription by Account ID

This is the subscription ID, it will also appear in the hook website

3

```
{
  "self": "https://api-eu.dhl.com/tracking/push/v1/subscription/50bed0c5-2d21-40a2-8169-97df1134fa87",
  "scope": "subscription.validate",
  "expires": "2024-01-28T20:19:03.363038311Z",
  "secret": "IvXZemrmD7q88y7l8mhSwk",
  "note": "Subscription validation token provided."
}
```

This how the response from the API will look like in the Webhook system after creating an Account ID subscription request

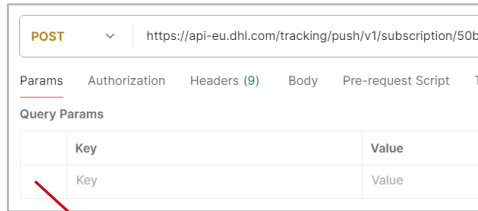
This is the subscription ID, it will need to be provided when activating the subscription

This is the “secret” for this subscription request, it will need to be provided when activating the subscription

CREATE SUBSCRIPTION BY ACCOUNT ID

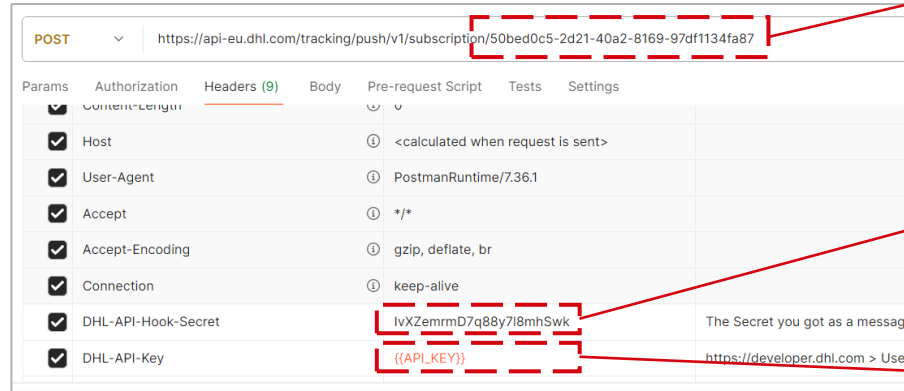
DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

4 Activate a subscription



The screenshot shows the 'Params' tab of a REST client. The 'Query Params' section is empty, with a table that has two columns: 'Key' and 'Value'. A red arrow points from the 'Params' section to a yellow callout box.

Note that the “Params” section is empty.



The screenshot shows the 'Headers' tab of a REST client. The URL is `https://api-eu.dhl.com/tracking/push/v1/subscription/50bed0c5-2d21-40a2-8169-97df1134fa87`. The 'Headers' section contains the following entries:

Header	Value
Content-Length	<calculated when request is sent>
Host	<calculated when request is sent>
User-Agent	PostmanRuntime/7.36.1
Accept	*/*
Accept-Encoding	gzip, deflate, br
Connection	keep-alive
DHL-API-Hook-Secret	lvXZemrD7q88y7l8mhSwk
DHL-API-Key	{{API_KEY}}

Red dashed boxes highlight the subscription ID in the URL, the 'DHL-API-Hook-Secret' value, and the 'DHL-API-Key' value. Red arrows point from these boxes to external text annotations.

The subscription ID obtained before must be filled in here, in the URL section

The “secret” value obtained before must be filled in here, in the “DHL-API-Hook-Secret” section

Remember to fill in the API key

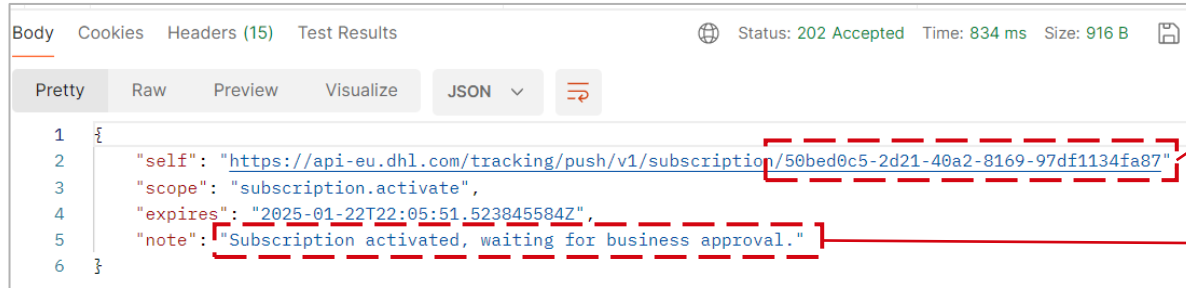
Nothing else should be filled in the “Body” section, after filling the subscription ID and the Secret, click on “Send”

CREATE SUBSCRIPTION BY ACCOUNT ID

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

This how the response from the API will look like after requesting to activate a subscription by account ID

5



```
Body Cookies Headers (15) Test Results Status: 202 Accepted Time: 834 ms Size: 916 B
Pretty Raw Preview Visualize JSON
1 {
2   "self": "https://api-eu.dhl.com/tracking/push/v1/subscription/50bed0c5-2d21-40a2-8169-97df1134fa87"
3   "scope": "subscription.activate",
4   "expires": "2025-01-22T22:05:51.523845584Z",
5   "note": "Subscription activated, waiting for business approval."
6 }
```

This is the subscription ID, it will also appear in the hook website

The activation of a subscription for an account ID will require yet another activation from an API admin. To complete this, please send the details to the original ticket on the DHL Help Center where you requested access to the API (refer to slide 4)



Trying to repeat a call for the activation of a subscription ID and secret that has been sent before will result in an error

CREATE SUBSCRIPTION BY ACCOUNT ID

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

6

To activate subscription as admin (**once you have completed the requirements from step 0**). You will simply need to add the subscription ID in the URL and send the call on Postman

POST https://api-eu.dhl.com/tracking/push/v1/admin/subscription/355f98dd-6124-4d14-957e-de2753f21809

Headers (8)

Key	Value	Description
DHL-API-Key	{(key)}	https://developer.dhl.com > User Dashboard T...

Body

```
1 {
2   "self": "https://api-eu.dhl.com/tracking/push/v1/subscription/355f98dd-6124-4d14-957e-de2753f21809",
3   "scope": "subscription.activate",
4   "expires": "2025-06-19T08:20:11.881Z",
5   "note": "Subscription authorization request accepted."
6 }
```

Status: 202 Accepted Time: 211ms Size: 997 B

This how the response looks on the API

Request Details

Host: 34.187.181.99

Date: 06/19/2024 10:20:18 AM (2 minutes ago)

Size: 213 bytes

Time: 0.000 sec

ID: 247936d8-b903-4dd9-93d7-4c0be3c4f8160

Headers

Host	Value
connection	close
host	webhook.site
content-type	application/json
correlation-id	fe322dce-87cb-4a31-bf5b-1749...
content-length	213

Query strings

Form values

Raw Content

```
{
  "self": "https://api-eu.dhl.com/tracking/push/v1/subscription/355f98dd-6124-4d14-957e-de2753f21809",
  "scope": "subscription.ready",
  "expires": "2025-06-19T08:20:11.881Z",
  "note": "Subscription ready for notifications."
}
```

This how the response looks on the webhook system. If everything is correct, the push messages will start arriving as soon as there's a change in a related shipment

CREATE A SUBSCRIPTION BY SHIPMENT ID

CREATE SUBSCRIPTION BY SHIPMENT ID

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

1 Create the subscription

POST https://api-eu.dhl.com/tracking/push/v1/subscription

Params Authorization Headers (9) Body Pre-request Script

Query Params

Key	Value
Key	Value

Note that the "Params" section is empty.

DHL-API-Key {{APL_KEY}}

Remember to fill in the API key in the "Headers" section



Please note:

API Key ≠ Webhook URL ≠ Secret ≠ accountID ≠ shipmentID ≠ subscription ID

POST https://api-eu.dhl.com/tracking/push/v1/subscription

Params Authorization Headers (9) Body Pre-request Script Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1 {
2   "hook": {
3     "uri": "https://webhook.site/384cd95f-30dc-4bcb-b065-64d46ea74e57",
4     "authentication": {
5       "type": "ApiKeyAuthentication",
6       "header": "HeaderTest",
7       "token": "HeaderToken"
8     }
9   },
10  "format": "Default",
11  "type": "Shipment",
12  "service": "parcel-uk",
13  "events": [
14    "Transit", "Delivered", "Pre-Transit", "Failure", "Unknown"
15  ],
16  "shipmentIDs": ["12345678"]
17 }
18 }
```

The hook URL must be replaced with the webhook system. Refer to slide 8

The service value must be replaced. Possible options: *sameday, post-de, parcel-de, dgf, ecommerce-europe, parcel-nl, ecommerce-ppl, parcel-uk*

The shipmentID must be replaced. This value should be known by the customer.

CREATE SUBSCRIPTION BY SHIPMENT ID

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

Multiple shipments subscription request

It is possible to create a shipment ID subscription with up to 10 shipment IDs at the time.

Please note that all the shipments added in the query must belong to the same service.

It's not possible to create a Shipment ID subscription request for more than one service. A new request must be made if there is the need of subscribing for more than 10 shipments, or if the shipments belong to different services.

Request example:

```
1  {
2    --"hook": {
3      --"uri": "https://webhook.site/384cd95f-30dc-4bcb-b065-64d46ea74e57",
4      --"authentication": {
5        --"type": "ApiKeyAuthentication",
6        --"header": "ApiKey",
7        --"token": "zxF9V6Lme9wN"
8      }
9    },
10   --"format": "Default",
11   --"type": "Shipment",
12   --"service": "sameday",
13   --"events": [
14     --"Transit"
15   ],
16   --"shipmentIDs": [
17     --"12345678",
18     --"23456789",
19     --"34567890",
20     --"45678901",
21     --"93828585"
22   ]
23 }
```

CREATE SUBSCRIPTION BY SHIPMENT ID

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

2

```
Body Cookies Headers (15) Test Results Status: 201 Created Time: 219 ms Size: 888 B
Pretty Raw Preview Visualize JSON
1 {
2   "self": "https://api-eu.dhl.com/tracking/push/v1/subscription/aa16f3e7-5f32-4665-8583-051bbebcb44f",
3   "scope": "subscription.create",
4   "expires": "2024-01-17T14:04:05.810855158Z",
5   "note": "Subscription request created."
6 }
```

This how the response from the API will look like in Postman after creating a request to create a subscription by Shipment ID

This is the subscription ID, it will also appear in the hook website

3

```
Request Details Permalink Raw content Copy as - Headers
POST https://webhook.site/eb07b7e3-cafc-4cf5-a24c-5408ba2428eb
Host 34.107.84.18 Whoa Shodan Neffy Cenaya
Date 01/12/2024 3:04:06 PM (11 days ago)
Size 258 bytes
Time 0.001 sec
ID 5b37cb8-fcbe-4bb5-a1eb-3b5b2a447b08
Query strings (empty)
Files
Raw Content Format JSON Word-Wrap Copy
{"self": "https://api-eu.dhl.com/tracking/push/v1/subscription/aa16f3e7-5f32-4665-8583-051bbebcb44f",
"scope": "subscription.validate",
"expires": "2024-01-17T14:04:05.810855158Z",
"secret": "z1sxaJZ2Zeqk0EzH3k5qme",
"note": "Subscription validation token provided."}
```

This how the response from the API will look like in the Webhook system after creating a Shipment ID subscription request

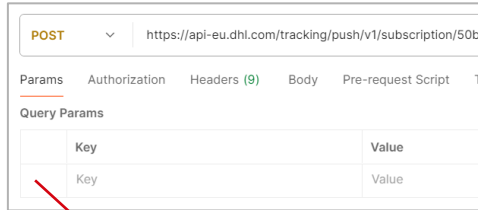
This is the subscription ID; it will need to be provided when activating the subscription

This is the "secret" for this subscription request, it will need to be provided when activating the subscription

CREATE SUBSCRIPTION BY SHIPMENT ID

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

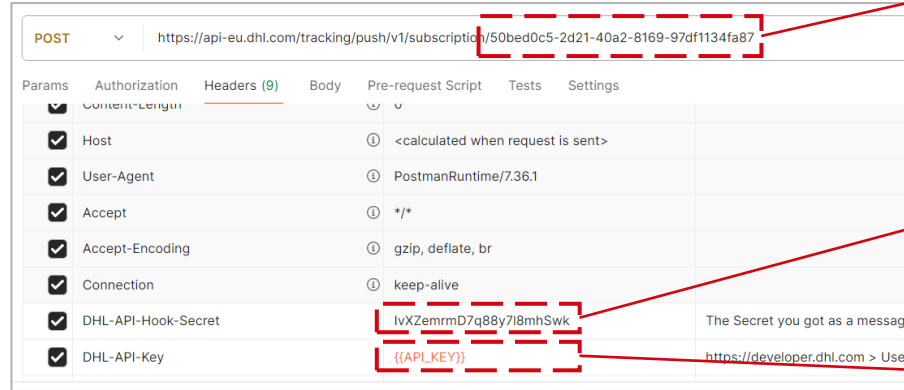
4 Activate the subscription



The screenshot shows the 'Params' tab in Postman. The 'Query Params' section is empty, with a table with two columns: 'Key' and 'Value'.

Key	Value
Key	Value

Note that the “Params” section is empty.



The screenshot shows the 'Headers' tab in Postman. The URL is `https://api-eu.dhl.com/tracking/push/v1/subscription/50bed0c5-2d21-40a2-8169-97df1134fa87`. The headers list includes:

- Content-Length
- Host
- User-Agent
- Accept
- Accept-Encoding
- Connection
- DHL-API-Hook-Secret
- DHL-API-Key

The values for 'DHL-API-Hook-Secret' and 'DHL-API-Key' are highlighted with red dashed boxes.

Header	Value
Content-Length	
Host	<calculated when request is sent>
User-Agent	PostmanRuntime/7.36.1
Accept	*/*
Accept-Encoding	gzip, deflate, br
Connection	keep-alive
DHL-API-Hook-Secret	lvXZemrD7q88y7l8mhSwk
DHL-API-Key	{{API_KEY}}

The subscription ID obtained before must be filled in here, in the URL section

The “secret” value obtained before must be filled in here, in the “DHL-API-Hook-Secret” section

Remember to fill in the API key

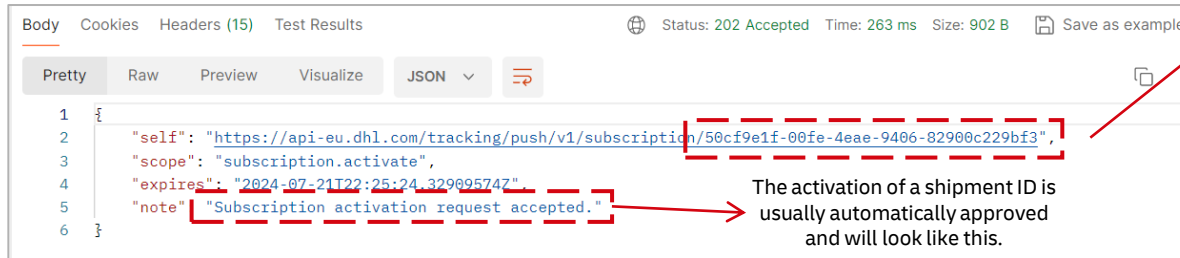
Nothing else should be filled in the “Body” section, after filling the subscription ID and the Secret, click on “Send”

CREATE SUBSCRIPTION BY SHIPMENT ID

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

5

This how the response from the API will look like after requesting to activate a subscription by Shipment ID.



```
Body Cookies Headers (15) Test Results Status: 202 Accepted Time: 263 ms Size: 902 B Save as example
Pretty Raw Preview Visualize JSON
1 {
2   "self": "https://api-eu.dhl.com/tracking/push/v1/subscription/50cf9e1f-00fe-4eae-9406-8290c229bf3",
3   "scope": "subscription.activate",
4   "expires": "2024-07-21T22:25:24.329095747",
5   "note": "Subscription activation request accepted."
6 }
```

This is the subscription ID, it will also appear in the hook website

The activation of a shipment ID is usually automatically approved and will look like this.

Trying to repeat a call for the activation of a subscription ID and secret that has been sent before will result in an error

CREATE SUBSCRIPTION BY SHIPMENT ID

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

6

Request Details [Permalink](#) [Raw content](#) [Copy as](#) ▼

POST	https://webhook.site/eb07b7e3-cafc-4cf5-a24c-5468be2428eb
Host	34.107.84.18 Whois Shodan Netify Censys
Date	01/12/2024 2:00:50 PM (11 days ago)
Size	219 bytes
Time	0.000 sec
ID	5031d91e-aabf-471e-84ee-f3133dfd6ccf

Query strings
(empty)

Files

Headers

connection	close
host	webhook.site
content-type	application/json
correlation-id	af8b1b8d-79c9-44b9-a826-67b8d63794c3
content-length	219

Form values
(empty)

Raw Content Format JSON Word-Wrap [Copy](#)

```
{
  "self": "https://api-eu.dhl.com/tracking/push/v1/subscription/00555f53-5827-44c8-9a6d-5963cab40ae5",
  "scope": "subscription.ready",
  "expires": "2024-07-10T13:00:49.797817122Z",
  "note": "Subscription ready for notifications."
}
```

When a subscription has been activated, it will be shown like this

CREATE SUBSCRIPTION BY SHIPMENT ID – POSTAL CODE CHALLENGE

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

There is the possibility to add a “Postal Code Challenge” in the body for shipments with service set as “**parcel-de**”. If added correctly, and the postal code matches the real one, additional details will be displayed.

Here is the format of the Body with Postal Code Challenge:

```
{
  "hook": {
    "uri": "ADD HERE YOUR WEBHOOK SYSTEM URL",
    "authentication": {
      "type": "ApiKeyAuthentication",
      "header": "ADD HERE YOUR HEADER VALUE",
      "token": "ADD HERE YOUR TOKEN VALUE"
    }
  },
  "format": "Default",
  "type": "Shipment",
  "service": "parcel-de",
  "events": [
    "Transit", "Delivered", "Pre-Transit", "Failure", "Unknown"
  ],
  "shipmentIDsWithChallengeDetails": [
    {
      "shipmentID": "123456789",
      "postalCode": "12345"
    },
    {
      "shipmentID": "34567890",
      "postalCode": "12346"
    }
  ]
}
```

PUSH MESSAGES

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

Receiving notifications

The webhook system will receive notifications when the status of a shipment has changed, for example, when a parcel or a group of them have completed the customs inspection.



The format of the message will be often similar to what the source and business unit sends to the regular UTAPI, only that this time each event will be pushed independently to the webhook system

```
{
  "self": "https://api-eu.dhl.com/push/subscription/94d0131a-66b1-450d-82ac-4566b29c3dc1",
  "scope": "subscription.push",
  "expires": "2025-04-08T12:26:31.919Z",
  "note": "Event push message",
  "shipments": [
    {
      "id": "7777777770",
      "service": "express",
      "status": {
        "timestamp": "2023-03-02T07:53:47Z",
        "location": {
          "address": {
            "countryCode": "NL",
            "postalCode": "1043 AG",
            "addressLocality": "Oderweg 2, AMSTERDAM"
          }
        },
        "statusCode": "transit",
        "status": "in customs",
        "description": "The shipment is pending completion of customs inspection.",
        "piecelds": [
          "JD014600006281230701",
          "JD014600006281230702",
          "JD014600006281230703"
        ],
        "remark": "The shipment is pending completion of customs inspection.",
        "nextSteps": "The status will be updated following customs inspection."
      }
    }
  ]
}
```

PARAMETERS

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

GET

Get subscriptions

This endpoint gets all subscriptions (account or shipment) related to an API key

1

Params	Authorization	Headers (7)	Body	Pre-request Script	Tests	Settings
<input checked="" type="checkbox"/>	Postman-Token			①	<calculated when request is sent>	
<input checked="" type="checkbox"/>	Host			①	<calculated when request is sent>	
<input checked="" type="checkbox"/>	User-Agent			①	PostmanRuntime/7.36.1	
<input checked="" type="checkbox"/>	Accept			①	*/*	
<input checked="" type="checkbox"/>	Accept-Encoding			①	gzip, deflate, br	
<input checked="" type="checkbox"/>	Connection			①	keep-alive	
<input checked="" type="checkbox"/>	DHL-API-Key				<code>{{API_KEY}}</code>	

Only the API key must be filled in at the Headers section

PARAMETERS

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

GET

Get subscriptions

This endpoint gets all subscriptions (account or shipment) related to an API key

2

```
GET https://api-eu.dhl.com/tracking/push/v1/subscriptions

Params Authorization Headers (7) Body Pre-request Script Tests Settings

Body Cookies Headers (15) Test Results Status: 200 OK Time: 3...

Pretty Raw Preview Visualize JSON

1 [
2   {
3     "self": "https://api-eu.dhl.com/tracking/push/v1/subscription/d25c5b0a-0507",
4     "scope": "subscription_ready",
5     "expires": "2024-07-10T12:41:50.702Z",
6     "note": "Subscription information.",
7     "format": "Default",
8     "service": "ecommerce-europe",
9     "hook": {
10      | "uri": "https://webhook.site/eb07b7e3-cafc-4cf5-a24c-5468be2428eb"
11    },
12    "events": [
13      "pre-transit",
14      "transit",
15      "failure",
16      "delivered",
17      "unknown"
18    ],
19    "shipmentIDs": [
20      "JJ0149990200058441261"
21    ]
22  }
23 ]
```

```
GET https://api-eu.dhl.com/tracking/push/v1/subscriptions

Params Authorization Headers (7) Body Pre-request Script Tests Settings

Body Cookies Headers (15) Test Results Status: 200 OK Time: 349 ms Size: 3.95 KB Save

Pretty Raw Preview Visualize JSON

64 },
65 {
66   "self": "https://api-eu.dhl.com/tracking/push/v1/subscription/50bed0c5-2d21-40a2-8169-97df1134fa87",
67   "scope": "subscription_activate",
68   "expires": "2025-01-21T22:05:51.523Z",
69   "note": "Subscription information.",
70   "format": "Default",
71   "service": "express",
72   "hook": {
73     | "uri": "https://webhook.site/eb07b7e3-cafc-4cf5-a24c-5468be2428eb"
74   },
75   "events": [
76     "transit",
77     "delivered",
78     "pre-transit",
79     "failure",
80     "unknown"
81   ],
82   "accountID": "XXXX"
83 },
84 ]
```

The response will display this format describing every single subscription request and their status

PARAMETERS

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

GET

Get subscription details

1

This endpoint gets all subscription details related to one subscription ID, be it an account or a shipment

The screenshot shows a REST client interface with the following details:

- Method: GET
- URL: `https://api-eu.dhl.com/tracking/push/v1/subscription/fa7a1ad9-7468-4085-8ab1-2c0660f6d440`
- Active Tab: Headers (7)
- Headers Table:

Key	Value	Description
<input checked="" type="checkbox"/> Postman-Token	<calculated when request is sent>	
<input checked="" type="checkbox"/> Host	<calculated when request is sent>	
<input checked="" type="checkbox"/> User-Agent	PostmanRuntime/7.36.1	
<input checked="" type="checkbox"/> Accept	*/*	
<input checked="" type="checkbox"/> Accept-Encoding	gzip, deflate, br	
<input checked="" type="checkbox"/> Connection	keep-alive	
<input checked="" type="checkbox"/> DHL-API-Key	{{API_KEY}}	https://developer.dhl.com > User Da

The subscription ID must be filled in at the URL section

Don't forget to fill in the API key

PARAMETERS

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

GET

Get subscription details

2

GET https://api-eu.dhl.com/tracking/push/v1/subscription/fa7a1ad9-7468-4085-8ab1-2c0660f6d440

Params Authorization Headers (7) Body Pre-request Script Tests Settings

Key	Value	Description
<input checked="" type="checkbox"/> DHL-API-Key	{{(API_KEY)}}	https://developer.dhl.com > User De

Body Cookies Headers (15) Test Results Status: 200 OK Time: 199 ms Size: 1.05 KB Save

Pretty Raw Preview Visualize JSON

```
1  {
2    "type": "Shipment",
3    "self": "https://api-eu.dhl.com/tracking/push/v1/subscription/fa7a1ad9-7468-4085-8ab1-2c0660f6d440",
4    "scope": "subscription.ready",
5    "expires": "2024-07-10T13:00:04.443Z",
6    "note": "Subscription information.",
7    "format": "Default",
8    "service": "ecommerce-europe",
9    "hook": {
10     | "uri": "https://webhook.site/eb07b7e3-cafc-4cf5-a24c-5468be2428eb"
11   },
12   "events": [
13     "pre-transit",
14     "transit",
15     "failure",
16     "delivered",
17     "unknown"
18   ]
19 }
```

Similar to what has been shown before for the endpoint to get all subscriptions, this is how the response look for a single subscription

The API will also send an event to the webhook system, but the information provided there has little relevance

PARAMETERS

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

DEL

Delete subscription

This endpoint deletes a subscription, be it account ID or shipment ID

1

The screenshot shows the Postman interface for a DELETE request. The URL is `https://api-eu.dhl.com/tracking/push/v1/subscription/5301511c-6689-42fd-ac45-3604f04200a9`. The Headers section is expanded, showing the following headers:

Key	Value	Description
Postman-Token	<calculated when request is sent>	
Host	<calculated when request is sent>	
User-Agent	PostmanRuntime/7.36.1	
Accept	*/*	
Accept-Encoding	gzip, deflate, br	
Connection	keep-alive	
DHL-API-Key	{(API_KEY)}	https://developer.dhl.com > User Dashboard 1...
DHL-API-Hook-Secret	yd3tk85FYQ0gjYy7p1RMw	

The subscription ID must be filled in at the URL section

Remember to fill in your API key

The “secret” value obtained before must be filled in here, in the “DHL-API-Hook-Secret” section

Nothing else must be filled or changed. The “Body” section is empty

2

The screenshot shows the Postman response view. The status is `204 No Content`, the time is `239 ms`, and the size is `658 B`. The response body is empty, showing a single line with the number `1`.

If everything goes well, the response of the API is an empty line and a 204 code

PARAMETERS

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101

DEL

Delete subscription

3

Request Details		Permalink	Raw content	Copy as ▾	Headers		
POST	https://webhook.site/83a5b616-6d96-4597-be9a-3d05c100da9c				connection	close	
Host	34.107.84.18	Whois	Shodan	Netify	Censys	host	webhook.site
Date	01/26/2024 1:20:57 PM (6 minutes ago)					content-type	application/json
Size	197 bytes					correlation-id	efcdb2b6-bbe4-4acc-9142-03db
Time	0.001 sec					content-length	197
ID	cd11a865-64ad-43c8-ba4f-8f29efec4106						
Query strings		Form values					
(empty)		(empty)					
Files							
Raw Content <input checked="" type="checkbox"/> Format							
<pre>{ "self": "https://api-eu.dhl.com/tracking/push/v1/subscription/5301511c-6689-42fd-ac45-3604f04200a9", "scope": "subscription.remove", "expires": "2024-07-24T12:18:54.95Z", "note": "Subscription removed." }</pre>							

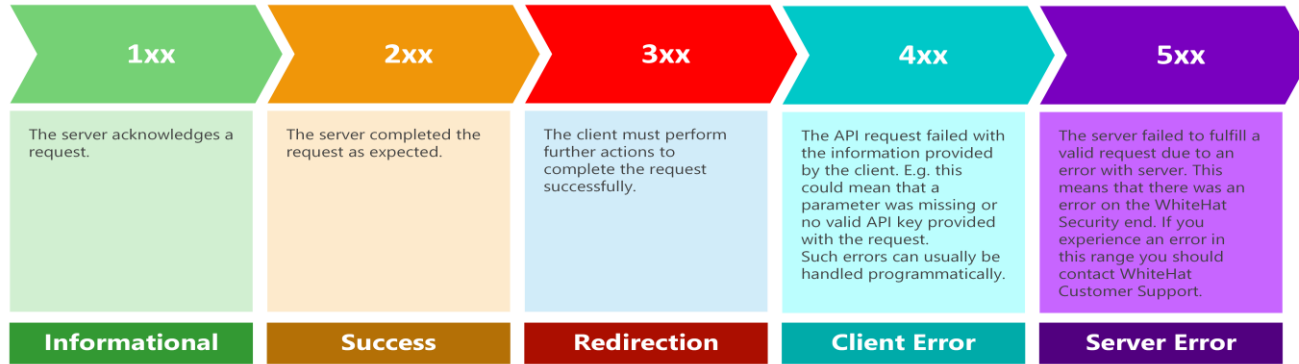


Different to the API response, the webhook system will display a notification with more details in it.

This notification contains information like the subscriptionID, confirmation of the subscription removal, etc.

RESPONSE CODES

DHL SHIPMENT TRACKING – UNIFIED PUSH API 101



Source: <https://apidocs.whitehatsec.com/whs/docs/error-handling>

- **200 – OK:** The response was successfully completed.
- **401 – Unauthorized error:** The user doesn't have the right credentials to do the call (API key is wrong, Endpoint is wrong).
- **404 – Not found:** The system didn't find the requested call. Something can be wrong with the URL, or the shipment ID is not supported/doesn't exist.
- **429 – Too many requests:** The user attempted to do more calls than possible, either with spike arrest or daily quota limit.
- **500 – Internal server error:** Something is wrong with the API systems.
- **504 – Gateway Timeout error:** The API spent too much time looking for a request and didn't find anything before timing out.