


Tutorial on Lalamove Webhook

Lalamove Developers
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Objectives

- This deck explains the details of Lalamove's webhook in Sandbox and Production
- We use  **webhook.site** to demonstrate the idea
- We will demonstrate 2 ways of setting up the webhook:
 - Through API, OR
 - Through Partner Portal

Setup Option 1: API

- Call PATCH /v3/webhook:
 - Set the URL depending on the environment that you are currently configuring, i.e:
 - Sandbox: <https://rest.sandbox.lalamove.com/v3/webhook>
 - Production: <https://rest.lalamove.com/v3/webhook>
 - Include your Webhook URL in the body:

```
{
  "data": {
    "url": "YOUR_WEBHOOK_URL"
  }
}
```

- Make sure your Webhook URL is sending '200' to our requests

Setup Option 2: Partner Portal

1. Navigate to partnerportal.lalamove.com
2. Select the market that you are granted access
3. Login with the provided credentials

A screenshot of the Lalamove Partner Portal login page. The page features the Lalamove logo and the text 'PARTNERS Partner Portal Manage your channel orders'. It includes a dropdown menu for 'Market' with 'Hong Kong' selected, an input field for 'Email or Mobile', and a password field with a strength indicator. A 'Log In' button is prominently displayed. Below the button, there is a link for 'Forgot password?' and a note for new users to 'Create new account'. At the bottom, there is a contact email: 'Contact partner.support@lalamove.com for assistance'.

PARTNERS
Partner Portal
Manage your channel orders

Market
Hong Kong

Email or Mobile

Password

[Forgot password?](#)

Log In

Login with your Lalamove account.
New to Lalamove? [Create new account](#)

Contact partner.support@lalamove.com for assistance



Setup Option 2: Partner Portal

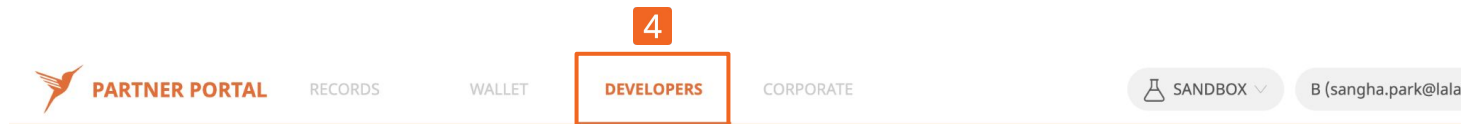
1. API credentials, commonly known as **key** AND **secret**
2. Go to Lalamove' Partner Portal (**partnerportal.lalamove.com**)
 - o Choose either environment (Sandbox or Production)



3. For demonstration, we will use the Sandbox environment

Setup Option 2: Partner Portal

- Click “Developers” at the header bar



- Enter the Webhook URL, click “Save”
(We use webhook.site for the demonstration)
- Adjust the Webhook Version as preferred. For this demonstration, we will use 'Version 3')

Webhook URL **5** <https://webhook.site/e44cc811-f4c2-40cd-8507-20d5eca234db?> [Change](#)

Webhook Version **6**

Receiving the webhooks

1. **For initial connection, make sure to send status 200 even when Lalamove doesn't send anything in the body. It is recommended that you send 200 before any complex logic.**
2. Once the connection is successful, make sure to validate the receive Webhook update's signature. (Our Webhook fields are subject to change, so please don't hard code any fields)
3. Whenever there is a status update, our Webhook will try to send **the update 10 times within 24 hour day window**. We will try again with exponential delay in between. By the 10th status update, if we still don't receive any, we will disable the URL. At this point, the client is responsible for going back to Partner Portal to update their Webhook URL.
4. **Our Webhooks may not be sent in the right chronological order, so please make sure to sort them in the right order based on the timestamp after you've received them**
5. You can also check the Webhook Attempts through Webhook Tab in Partner Portal

Webhook attempts
Attempts to send an event to your endpoint in the past 7 days All ▾

	EVENT TYPE	EVENT ID	CREATED
– Succeeded ✓	ORDER_STATUS_CHANGED	0E6865B0-D7F2-758B-34FE-F9A54113A062	2022-04-22 10:27:58

HTTP status code 200

Request to your endpoint

```
{  
  "items": [  
    {  
      "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b"  
      "timestamp": 1650594477  
    }  
  ]  
}
```



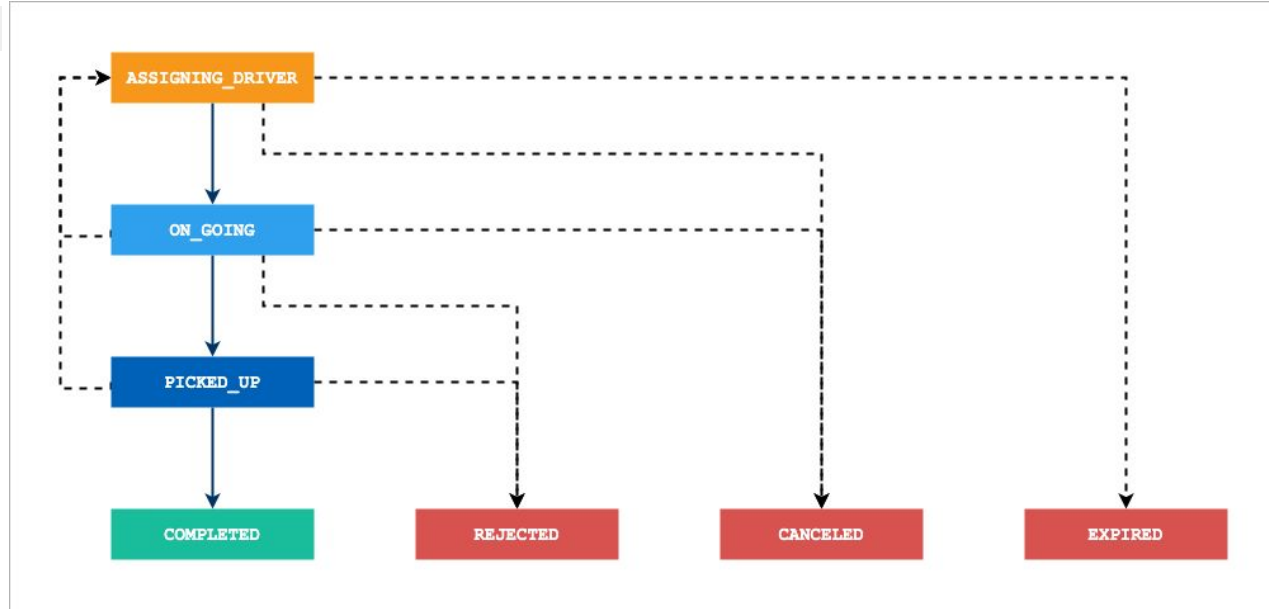
When will Lalamove push message to your webhook?

8. You will receive a webhook push if any of the followings happen to your orders:
 - a. Status Change (`ORDER_STATUS_CHANGED`)
 - b. Driver Assigned (`DRIVER_ASSIGNED`)
 - c. Order Amount Changed (`ORDER_AMOUNT_CHANGED`) i.e: Priority fee added
 - d. Order Replaced (`ORDER_REPLACED`)
 - e. Wallet Balance Changed (`WALLET_BALANCE_CHANGED`)

Status Change (ORDER_STATUS_CHANGED)

ORDER_STATUS_CHANGED has 7 different statuses

- ASSIGNING_DRIVER
- ON_GOING
- PICKED_UP
- COMPLETED
- EXPIRED
- CANCELED
- REJECTED



General Updates in V3

- A new `eventType`: Driver Assigned (`DRIVER_ASSIGNED`) is added
- `eventVersion` field is populated based on the Webhook version in Partner Portal
- `updatedAt` is taken is placed right under `data` section
- For `ORDER_STATUS_CHANGED`
 - `id` is updated to become `orderId` to align with V3 API specification.
 - `city` is updated to become `market` to align with V3 API specification.
 - `createdAt` and `scheduleAt` are added to `order`.

ORDER_STATUS_CHANGED

ORDER_STATUS_CHANGED: ASSIGNING_DRIVER (v3)

```
{
  "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b",
  "timestamp": 1650553157,
  "signature": "571f1aa89dd301c1ab78e2e26aefb3cb4e9767ba0b35c6d31b4704fbb1615f15",
  "eventId": "06F6465C-9E9D-630D-2138-4EDD1174CEAA",
  "eventType": "ORDER_STATUS_CHANGED",
  "eventVersion": "v3",
  "data": {
    "order": {
      "orderId": "153590306286",
      "market": "HK_HKG",
      "driverId": "",
      "shareLink": "https://share.sandbox.lalamove.com/?HK100220421225917404910010098642208&lang=zh_HK&source=api_wrapper&sign=d195ceab8afa788ac9d757c4edab22bc",
      "status": "ASSIGNING_DRIVER",
      "previousStatus": "",
      "createdAt": "2022-04-21T22:59.00Z",
      "scheduleAt": "2022-04-21T22:58.00Z"
    },
    "updatedAt": "2022-04-21T22:59.00Z"
  }
}
```

ORDER_STATUS_CHANGED: ON_GOING (V3)

```
{
  "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b",
  "timestamp": 1650553235,
  "signature": "bae5523bfac2925ca8c02e66a08f9d8b333b5bedd5338479fc118d1e37447d4d",
  "eventId": "9F8CFF06-27D1-F6E8-49CA-8A54E4317EDD",
  "eventType": "ORDER_STATUS_CHANGED",
  "eventVersion": "v3",
  "data": {
    "order": {
      "orderId": "153590306286",
      "market": "HK_HKG",
      "driverId": "79973",
      "shareLink": "https://share.sandbox.lalamove.com/?HK100220421225917404910010098642208&lang=zh_HK&source=api_wrapper&sig
n=d195ceab8afa788ac9d757c4edab22bc",
      "status": "ON_GOING",
      "previousStatus": "ASSIGNING_DRIVER",
      "createdAt": "2022-04-21T22:59.00Z",
      "scheduleAt": "2022-04-21T22:58.00Z"
    },
    "updatedAt": "2022-04-21T23:00.00Z"
  }
}
```

ORDER_STATUS_CHANGED: PICKED_UP (v3)

```
{
  "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b",
  "timestamp": 1650553585,
  "signature": "06accd20a4a37c9de499d5457c426f33e15df5952b0f3b6ecc50df9e924245ca",
  "eventId": "494AC431-23F0-3904-EAD7-7073BF6D5049",
  "eventType": "ORDER_STATUS_CHANGED",
  "eventVersion": "v3",
  "data": {
    "order": {
      "orderId": "153590306286",
      "market": "HK_HKG",
      "driverId": "79973",
      "shareLink": "https://share.sandbox.lalamove.com/?HK100220421225917404910010098642208&lang=zh_HK&source=api_wrapper&signature=d195ceab8afa788ac9d757c4edab22bc",
      "status": "PICKED_UP",
      "previousStatus": "ON_GOING",
      "createdAt": "2022-04-21T22:59.00Z",
      "scheduleAt": "2022-04-21T22:58.00Z"
    },
    "updatedAt": "2022-04-21T23:06.00Z"
  }
}
```

ORDER_STATUS_CHANGED: COMPLETED (v3)

```
{
  "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b",
  "timestamp": 1650553589,
  "signature": "2a424fc008c3aad5622b95ae4bceb2e5aeb6e81e6796563a0fc78ef86a4ee611",
  "eventId": "305B2D77-C4EA-FC74-9206-B1C1B5B0C5B8",
  "eventType": "ORDER_STATUS_CHANGED",
  "eventVersion": "v3",
  "data": {
    "order": {
      "orderId": "153590306286",
      "market": "HK_HKG",
      "driverId": "79973",
      "shareLink": "https://share.sandbox.lalamove.com/?HK100220421225917404910010098642208&lang=zh_HK&source=api_wrapper&sig=n=d195ceab8afa788ac9d757c4edab22bc",
      "status": "COMPLETED",
      "previousStatus": "PICKED_UP",
      "createdAt": "2022-04-21T22:59.00Z",
      "scheduleAt": "2022-04-21T22:58.00Z"
    },
    "updatedAt": "2022-04-21T23:06.00Z"
  }
}
```

ORDER_STATUS_CHANGED: EXPIRED (v3)

```
{
  "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b",
  "timestamp": 1650530949,
  "signature": "c7da879be1144055ad87d5f2598b1a919d48cab43d4a3cccefd9ad421fac61b6",
  "eventId": "ECB1D9E7-EAAF-925E-0757-748B0A14EDC1",
  "eventType": "ORDER_STATUS_CHANGED",
  "eventVersion": "v3",
  "data": {
    "order": {
      "orderId": "155490308236",
      "market": "HK_HKG",
      "driverId": "",
      "shareLink": "https://share.sandbox.lalamove.com/?HK100220421161458370910010087364673&lang=zh_HK&source=api_wrapper&signature=fbc49601a3bef89c7a50792adb772bc4",
      "status": "EXPIRED",
      "previousStatus": "ON_GOING",
      "createdAt": "1970-01-01T08:00.00Z",
      "scheduleAt": "2022-04-21T16:14.00Z"
    },
    "updatedAt": "2022-04-21T16:49.00Z"
  }
}
```

ORDER_STATUS_CHANGED: CANCELED (v3)

```
{
  "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b",
  "timestamp": 1650560644,
  "signature": "12a65bc5232550213f824986ade7e537c7cc1e1c77f72e3767ff93001108f81d",
  "eventId": "B7C0FFBC-4AF0-2595-4564-F7AE0228AAE1",
  "eventType": "ORDER_STATUS_CHANGED",
  "eventVersion": "v3",
  "data": {
    "order": {
      "orderId": "159690308216",
      "market": "HK_HKG",
      "driverId": "",
      "shareLink": "https://share.sandbox.lalamove.com/?HK100220422010355309910010073062883&lang=zh_HK&source=api_wrapper&sig
n=2060f8858ff2665c829c842b0f820da7",
      "status": "CANCELED",
      "previousStatus": "ASSIGNING_DRIVER",
      "createdAt": "2022-04-22T01:03.00Z",
      "scheduleAt": "2022-04-22T01:03.00Z",
      "cancelParty": "USER",
      "cancelReason": "other"
    },
    "updatedAt": "2022-04-22T01:04.00Z"
  }
}
```

- `cancelParty` are added to `order`.

ORDER_STATUS_CHANGED: REJECTED (v3)

```
{
  "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b",
  "timestamp": 1650560079,
  "signature": "286cf3aaeaa89b7d11937d338ec98691cbbd9e4850ddeabcd57fc763ab766bd7",
  "eventId": "DB13842C-A769-9835-7D1B-AB13BCCA0538",
  "eventType": "ORDER_STATUS_CHANGED",
  "eventVersion": "v3",
  "data": {
    "order": {
      "orderId": "157690302216",
      "market": "HK_HKG",
      "driverId": "",
      "shareLink": "https://share.sandbox.lalamove.com/?HK100220422004154925910010088503903&lang=zh_HK&source=api_wrapper&signature=08d542efd02c5dcb4d2cfb272f4776c7",
      "status": "REJECTED",
      "previousStatus": "ON_GOING",
      "createdAt": "2022-04-22T00:41.00Z",
      "scheduleAt": "2022-04-22T00:41.00Z"
    },
    "updatedAt": "2022-04-22T00:54.00Z"
  }
}
```

DRIVER_ASSIGNED

DRIVER_ASSIGNED (v3)

```
{
  "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b",
  "timestamp": 1650553235,
  "signature": "e649f6f1a14084f7ac764fb7e916b9557bd31531dbf6721baf912b702defcc25",
  "eventId": "9F8CFF06-27D1-F6E8-49CA-8A54E4317EDD",
  "eventType": "DRIVER_ASSIGNED",
  "eventVersion": "v3",
  "data": {
    "order": {
      "orderId": "153590306286"
    },
    "driver": {
      "driverId": "79973",
      "name": "TestDriver 88888",
      "phone": "+85288888888",
      "plateNumber": "VP7815702",
      "photo": ""
    },
    "location": {
      "lat": 22.5758304,
      "lng": 114.0551593
    },
    "updatedAt": "2022-04-21T23:00.00Z"
  }
}
```

- This is a new `updatedAt` introduced in Webhook Version 3
- `updatedAt` is taken out from `order` object to be right under `data` section

ORDER_AMOUNT_CHANGED

ORDER_AMOUNT_CHANGED (v3)

```
{
  "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b",
  "timestamp": 1650559334,
  "signature": "3a046d7d7ef8bb6dd8e335f7d554580c3152ee8a400990ab563445ff3167f3e3",
  "eventId": "CE12C111-FA53-3258-14D7-EAABC0DC4028",
  "eventType": "ORDER_AMOUNT_CHANGED",
  "eventVersion": "v3",
  "data": {
    "order": {
      "orderId": "157690302216",
      "market": "HK_HKG",
      "status": "ASSIGNING_DRIVER",
      "price": {
        "currency": "HKD",
        "subTotal": "103",
        "priorityFee": "20",
        "totalPrice": "123"
      }
    },
    "balance": {
      "currency": "HKD",
      "amount": "721"
    },
    "updatedAt": "2022-04-22T00:42.00Z"
  }
}
```

WALLET_BALANCE_CHANGED

WALLET_BALANCE_CHANGED (v3)

```
{
  "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b",
  "timestamp": 1650550936,
  "signature": "4bfa237c9cb7818b107cae9643ffd4f112555aeaa6ca4313d7277ae765705cf1",
  "eventId": "F938A456-83B2-7804-EB14-4B9DBB9E99D6",
  "eventType": "WALLET_BALANCE_CHANGED",
  "eventVersion": "v3",
  "data": {
    "balance": {
      "currency": "HKD",
      "amount": "844"
    },
    "updatedAt": "2022-04-21T22:22.00Z"
  }
}
```

Cancel-and-Clone

Cancel-and-Clone

- Currently, Lalamove cancels an old order and creates a new order by cloning when **post-match adjustments** (ex: driver waiting fees) need to be made for API orders.
- Previously clients didn't have an effective way of tracking which new orders were cloned from what.
- To solve this, we have also created Webhook updates for Cancel-and-Clone orders. We will sequentially send updates of two order statuses (Canceled & Assigning) and `ORDER_REPLACED` event to indicate the replacement

Normal Cancellation

This is what clients would see when they cancel the order themselves

```
{
  "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b",
  "timestamp": 1650560644,
  "signature": "12a65bc5232550213f824986ade7e537c7cc1e1c77f72e3767ff93001108f81d",
  "eventId": "B7C0FFBC-4AF0-2595-4564-F7AE0228AAE1",
  "eventType": "ORDER_STATUS_CHANGED",
  "eventVersion": "v3",
  "data": {
    "order": {
      "orderId": "159690308216",
      "market": "HK_HKG",
      "driverId": "",
      "shareLink": "https://share.sandbox.lalamove.com/?HK100220422010355309910010073062883&lang=zh_HK&source=api_wrapper&sig
n=2060f8858ff2665c829c842b0f820da7",
      "status": "CANCELED",
      "previousStatus": "ASSIGNING_DRIVER",
      "createdAt": "2022-04-22T01:03.00Z",
      "scheduleAt": "2022-04-22T01:03.00Z",
      "cancelParty": "USER",
      "cancelReason": "other" 1
    },
    "updatedAt": "2022-04-22T01:04.00Z"
  }
}
```

1 Note that the "cancelReason" is "other" (and **doesn't have "remark"** field)

Step 1: Cancel existing order

```
{
  "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b",
  "timestamp": 1650609923,
  "signature": "8f247e5ed1d8adde1e36d52ea4add0cfa3097bdad407862a96c3caab9d3e8428",
  "eventId": "989D7353-1E18-7D01-D2EA-4492335FB083",
  "eventType": "ORDER_STATUS_CHANGED",
  "eventVersion": "v3",
  "data": {
    "order": {
      "orderId": "151890303296",
      "market": "HK_HKG",
      "driverId": "",
      "shareLink": "https://share.sandbox.lalamove.com/?HK100220422144418750910010058995474&lang=zh_HK&source=api_wrapper&sign=4d0fc6ec06602a1b4e7e2216b1b3cb5b",
      "status": "CANCELED",
      "previousStatus": "ON_GOING",
      "createdAt": "2022-04-22T14:44.00Z",
      "scheduleAt": "2022-04-22T14:45.00Z",
      "cancelParty": "LALAMOVE_CUSTOMER_SUPPORT",
      "cancelReason": "Driver was too far away" 1
    },
    "updatedAt": "2022-04-22T14:45.00Z"
  }
}
```

1 Note that it will include the "**cancelledReason**"

Step 2: Create (Clone) new order

```
{
  "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b",
  "timestamp": 1650609968,
  "signature": "933e8aab70325f7117032ffccb57a6dfc0bf2cbab95a2ccc8ddc312eb6634b5b",
  "eventId": "A228619B-4A23-3BA1-E178-D3CD4B68219B",
  "eventType": "ORDER_STATUS_CHANGED",
  "eventVersion": "v3",
  "data": {
    "order": {
      "orderId": "154890304296",
      "market": "HK_HKG",
      "driverId": "",
      "shareLink": "https://share.sandbox.lalamove.com/?HK100220422144607920910010069479855&lang=zh_HK&source=api_wrapper&sign=50940f2a65d07967e96590a1bcbf8374",
      "status": "ASSIGNING_DRIVER",
      "previousStatus": "",
      "createdAt": "2022-04-22T14:46.00Z",
      "scheduleAt": "2022-04-22T14:55.00Z"
    },
    "updatedAt": "2022-04-22T14:46.00Z"
  }
}
```

- 1 Note that there may be several status updates of new order to match the previous order status (ASSINGING_DRIVER, ON_GOING, and etc.)

Step 3: Replacement

```
{
  "apiKey": "pk_test_c98241026e7b9a0b14ca5d6c8c7b4b9b",
  "timestamp": 1650610078,
  "signature": "0165f4a507eca3370582da4c237a506dd14d831c915b9a42a7195e8cd66f7f93",
  "eventId": "A5BFA90E-4578-5028-CD33-28D5315885E0",
  "eventType": "ORDER_REPLACED",
  "eventVersion": "v3",
  "data": {
    "order": {
      "orderId": "154890304296"
    },
    "prevOrderId": "151890303296",
    "updatedAt": "2022-04-22T14:47.00Z"
  }
}
```

Thank you!

Documentation: developers.lalamove.com

Questions? Contact api-support@lalamove.com