

DHL Shipping for Magento® 2

The module *DHL Shipping* for Magento® 2 enables merchants with a DHL account to create shipments and retrieve shipping labels.

The module supports the following webservices:

- DHL Paket Business Customer Shipping (Geschäftskundenversand) API
- DHL eCommerce Global Shipping API

Which of these webservices can actually be used depends on the shipping origin.



End user documentation

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1 Requirements

The following requirements must be met for a smooth operation of the module.

1.1 Magento® 2

The following Magento® 2 versions are supported:

• Community Edition 2.1.4 or higher

1.2 PHP

To connect to the API (webservice), the PHP SOAP extension must be installed and enabled on the web server.

These PHP versions are supported:

- PHP 5.6.5+
- PHP 7.0.6+

Further information can also be found in these files inside the module package / repository:

- README.md
- composer.json

If in doubt: the version information in the file *composer.json* supersedes any other information.

Repository: https://github.com/netresearch/dhl-module-shipping-m2/



2 Hints for using the module

2.1 Shipping origin and currency

When using the *DHL Business Customer Shipping (Geschäftskundenversand) API* shipments must originate from Germany or Austria. The sender address of the shop must be located in one of those countries.

When using the *eCommerce Global Label API* shipments can be sent from the following countries: Australia, Canada, Chile, China, Hongkong, India, Japan, Malaysia, New Zealand, Singapore, Thailand, USA, Vietnam.

Please also note the information in section International shipments.

In any case, make sure that the sender address information in the configuration sections mentioned in Module configuration is correct.

The base currency is assumed to be the official currency of the sender country which is set in the Magento® configuration. There is no automated conversion between currencies.



3 Installation and configuration

3.1 Installation

Install the module according to the instructions from the file *README.md* which you can find in the module package. It is very important to follow all steps exactly as shown there. Do not skip any steps.

The file README.md also describes the database changes which are made during installation.

The README.md can be found in the repository which is linked in the section Requirements.

3.2 Module configuration

There are three configuration sections which are relevant for creating shipments:

Make sure that the following required fields in the sections *Store Information* and *Origin* are filled in completely:

- Store Information
 - Store Name
 - Store Contact Telephone
- Origin
 - Country
 - Region / State
 - ZIP / Postal Code
 - City
 - Street Address

If you are shipping from multiple countries, you can configure different sender addresses on *Website* or *Store* level.

Note

The section Shipping Methods \rightarrow DHL is a core part of Magento® 2 which connects to the webservice of DHL USA only. These settings are not relevant for the DHL Shipping module.



3.2.1 General Settings

The first dropdown in the configuration section *General Settings* shows which API connection is about to be configured.

- DHL Business Customer Shipping (DE, AT), or
- DHL eCommerce Global Label API

This field is pre-selected according to the current shipping origin and does not need to be changed manually.

Note

The actual API connection to be used depends on the origin address of the shipment and is selected automatically during transmission to DHL. The dropdown only makes the configuration fields visible.

You can choose if you want to run the module in *Sandbox Mode* to test the integration, or using the production mode.

If the logging is enabled in the DHL module, the webservice messages will be recorded in the log files in var/log. There will be *no separate* log file for the DHL module.

You can choose between three log levels:

- Error: Records communication errors between the shop and the DHL webservice.
- *Warning:* Records communication errors and also errors due to invalid shipment data (e.g. address validation failed, invalid services selected).
- Debug: Record all messages, including downloaded label raw data in the log.

Note

Make sure to clear or rotate the log files regularly. The log level *Debug* should only be set while resolving problems, because it will result in very large log files over time.

Configuration options that are not described here are not relevant.



3.2.2 Account Data

This configuration section holds your access credentials for the DHL webservice which are required for production mode. You will get this information directly from DHL.

When using DHL Business Customer Shipping (Geschäftskundenversand) in sandbox mode, no additional input is necessary.

When using *DHL Business Customer Shipping (Geschäftskundenversand)* in production, enter the following data:

- Username (German: Benutzername)
- Signature (German: Passwort)
- EKP (DHL account number, 10 digits)
- Participation numbers (German: Teilnahmenummern, two digits per field)

When using the eCommerce Global Label API, enter the following data:

- Pickup Account Number (5 to 10 digits)
- Customer Prefix (up to 5 digits)
- Distribution Center (6 digits)
- Client ID
- Client Secret

3.2.3 General Shipping Settings

In this section, the basic configuration for creating shipments via the DHL webservice is made.

- *Shipping Methods for DHL Shipping*: Select which shipping methods should be used for calculating shipping costs in the checkout. Only shipping methods that are selected here will be handled by the DHL extension when creating shipments.
- *Default product*: Set the DHL product which should be used by default for creating shipments. Please note the information in section Module configuration regarding the sender (origin) address.

3.2.4 DHL Business Customer Shipping Settings

This section contains settings which are relevant if the DHL Business Customer Shipping (Geschäftskundenversand) is used.

• Cash On Delivery payment methods for DHL Shipping: Select which payment methods should be treated as Cash On Delivery (COD) payment methods. This is necessary to transmit the additional charge for Cash On Delivery to the DHL webservice and create Cash On Delivery labels.

When using the eCommerce Global Label API, the service Cash On Delivery is currently not available.

3.2.5 Additional Service Default Values

This configuration sections defines the default values for additional DHL services.

- *Print only if codeable*: If this is enabled, only shipments with perfectly valid addresses will be accepted by DHL. Otherwise, DHL will reject the shipment and issue an error message. If this option is disabled, DHL will attempt to correct an invalid address automatically, which results in an additional charge (Nachkodierungsentgelt). If the address cannot be corrected, DHL will still reject the shipment.
- Parcel announcement. The customer gets notified via email about the status of the shipment.



- *Visual Check of Age:* Select if the service for age verification should be booked, and what the minimum age is. Options:
 - *No*: The service will not be booked.
 - *A16:* Minimum age 16 years.
 - A18: Minimum age 18 years.
- *Return Shipment:* Select if a return label should be created together with the shipping label. See also Printing a return slip.
- Additional Insurance: Select if an additional insurance should be booked for the shipment.
- Bulky Goods: Select if the service for bulky goods (bulk freight) should be booked.

3.2.6 Contact Data

In this section, you configure which sender (shipper) information should be transmitted to DHL in addition to the general Magento® configuration settings.

When using the eCommerce Global Label API no additional information can be entered here.

3.2.7 Bank Data

In the section *Bank Data* you configure the bank account to be used for Cash On Delivery (COD) shipments with DHL. The Cash On Delivery amount from the customer will be transferred to this bank account.

Please note that you might also have to store the bank data in your DHL account. Usually, this can be done through the DHL Business Customer Portal (Geschäftskundenportal).

This section is not visible when using the *eCommerce Global Label API* because it does not allow Cash On Delivery shipments.

3.2.8 eCommerce Global API Shipping Settings

In this section you can configure the label size, page size, and layout.

3.2.9 Automatic Shipment Creation

The section *Automatic Shipment Creation* lets you choose if shipments should be created and package labels retrieved automatically.

You can also configure which order status an order must have to be processed automatically. You can use this to exclude specific orders from being processed automatically.

Also, you can choose whether or not an email will be be sent to the customer when the shipment has been created. This refers to the Magento® shipment confirmation email, not the parcel announcement from DHL.



4 Workflow and features

4.1 Creating an order

The following section describes how the DHL extension integrates itself into the order process.

4.1.1 Checkout

In the Module configuration the shipping methods have been selected for which DHL shipments and labels should be created. If the customer now selects one of those shipping methods in the checkout, the shipment can later be processed by DHL.

In the checkout step *Payment information* the Cash On Delivery payment methods will be disabled if Cash On Delivery is not available for the selected delivery address (see *Cash On Delivery payment methods for DHL Shipping*).

4.1.2 Admin Order

When creating orders via the Admin Panel, the Cash On Delivery payment methods will be disabled if Cash On Delivery is not available for the delivery address (same behaviour as in the checkout).

4.1.3 DHL Delivery Addresses (Packing Stations, Post Offices)

The module offers limited support for DHL delivery addresses in the checkout:

- The format Packstation 123 in the field Street will be recognized.
- The format *Postfiliale 123* in the field *Street* will be recognized.
- A numerical value in the field *Company* will be recognized as Post Number.

Note

For successful transmission to DHL, the above information must be entered in the correct format. See also Shipping to post offices and Shipping to Packstations.



4.2 Creating a shipment

The following section explains how to create a shipment for an order and how to retrieve the shipping label.

4.2.1 National shipments

In the Admin Panel, select an order with a shipping method linked to DHL (see Module configuration, section *Shipping Methods for DHL Shipping*).

Then click the button *Ship* on the top of the page.



You will get to the page New shipment for order.

Activate the checkbox Create shipping label and click the button Submit Shipment....

Shipment Options

| ~ | Create Shipping Label |
|---|------------------------|
| | Append Comments |
| | Email Copy of Shipment |

Submit Shipment...

Now a popup window for selecting the shipping items in the package will be opened. The default product from the section General Shipping Settings will be pre-selected.

Click the button Add products, select all products, and confirm by clicking Add selected product(s) to package.

The package dimensions are optional. Make sure the weight is correct.

The button *OK* in the popup window is now enabled. When clicking it, the shipment will be transmitted to DHL and (if the transmission was successful) a shipping label will be retrieved.

If there was an error, the message from the DHL webservice will be displayed at the top of the popup. You might have to scroll up inside the popup to see the error message.

The incorrect data can now be corrected, see also Troubleshooting.

4.2.2 International shipments

When using *DHL Business Customer Shipping (Geschäftskundenversand)* for destinations outside of the EU, additional fields will be displayed in the popup window. To create the customs declaration, enter at least the customs tariff number and the content type of the shipment.



When using the *eCommerce Global Label API* for destinations other than the origin country, additional fields will be displayed in the popup window. Enter at least the terms of trade (Incoterms) as well as the customs tariff number (HS Code) for each item.

Everything else is the same as described in the section National shipments.

4.2.3 Service selection

The available services for the current delivery address are shown in the packaging popup window.

The preselection of the services depends on the default values from the general Module configuration.

| Services | | | | | | | | |
|--|------------------|-----------------|-----------|-----------|-----------|-----------|-----------|--|
| ✓ Preferred day: Delivery at your preferred day | | | | | | | | |
| | 03 Sat | 04 Sun | 05 Mon | 06 Tue | 07 Wed | 08 Thu | 10 Sat | |
| ✓ Preferred time: Delivery during your preferred time slot | | | | | | | | |
| | 10 am - 12 noon* | 12 noon - 2 pm* | 2 - 4 pm* | 4 - 6 pm* | 6 - 8 pm | 7 - 9 pm | | |
| ¹ With the preferred time service, DHL offers a nationwide evening delivery between 0-8 pm and 7-9 pm. Preferred time during the day is currently only available in major urban centers in four time windows between 10 am - 6 pm. Yos the DHL shipping logistics system, you will receive information about the time windows, that will be available to your customers. Preferred location: Delivery to your preferred drop-off location o,g. garage or terrace Preferred neighbor: Delivery to a neighbor of your choice | | | | | | | | |
| Parcel announcement | , | | | | | | | |
| Visual Check of Age A16 | | | | | | | | |
| Return Shipment | | | | | | | | |
| Additional Insurance | | | | | | | | |
| Bulky Goods | | | | | | | | |
| Address Validation | | | | | | | | |

Note

This screenshot is just an example. Not all services shown here might be available yet.



4.3 Printing a shipping label

The successfully retrieved shipping labels can be opened in several locations of the Admin Panel:

- Sales \rightarrow Orders \rightarrow Mass action *Print shipping labels*
- Sales \rightarrow Shipments \rightarrow Mass action *Print shipping labels*
- Detail page of a shipment \rightarrow Button *Print shipping label*

Note

If you are using a German locale, the exact names of the German menu entries *Bestellungen* or *Lieferscheine* can differ slightly, depending on the installed Language Pack (e.g. *Aufträge* or *Lieferungen*). However, this is not important for the usage.



4.4 Printing a return slip

When shipping within Germany, within Austria, or from Austria to Germany, it is possible to create a return slip together with the shipping label.

Use the option *Retoure slip* when requesting a label in the packaging popup.

To book this service, make sure the participation numbers for returns are properly configured:

- Retoure DHL Paket (DE \rightarrow DE)
- Retoure DHL Paket Austria (AT \rightarrow AT)
- Retoure DHL Paket Connect (AT \rightarrow DE)



4.5 Canceling a shipment

As long as a shipment has not been manifested, it can be canceled at DHL.

You can click the link Delete in the box Shipping and tracking information next to the tracking number.

When using DHL Business Customer Shipping, this will also cancel the shipment at DHL.

| Shipping and Tracking Information | | | | | |
|---|--|-------------------|------------|--|--|
| Track this shipment Flat Rate - Fixed Total Shipping Charge | k this shipment Rate - Fixed I Shipping Charges: 5,00 € | | | | |
| Create Shipping La | abel Print Shi | ipping Label Show | / Packages | | |
| Carrier | Title | Number | Action | | |
| DHL | DHL | 222222390104 | 40084357 | | |
| Custom Value | • | | Add | | |

Note for eCommerce Global Label API

If you are using the *eCommerce Global Label API* the above workflow will *not* cancel the shipment at DHL! It only deletes the tracking number in Magento®.

To cancel an *eCommerce Global Label API* shipment, please use the usual way via the DHL website (e.g. the DHL Business Customer Portal).

If you only delete the tracking number in Magento® without cancelling the shipment at DHL, you will be charged by DHL for the shipping cost.



4.6 Automatic shipment creation

The process for creating shipments manually can be too time-consuming or cumbersome for merchants with a high shipment volume. To make this easier, you can automate the process of creating shipments and transmitting them to DHL.

Enable the automatic shipment creation in the Module configuration and select which services should be booked by default.

Note

The automatic shipment creation requires working Magento® cron jobs.

Every 15 minutes all orders which are ready for shipping (based on the configuration) will be collected and transmitted to DHL.

If the transmission was successful, the label will be stored in Magento® and the Magento® shipments will be created.

Error messages will be shown in the order comments.

The automatic mode will not include shipments that require customs declarations, see also International shipments.



4.7 Troubleshooting

During the transmission of shipments to DHL, errors can occur. These are often caused by an invalid address or an invalid combination of additional services.

When creating shipments manually, the error message will be directly visible in the popup. You might have to scroll up inside the popup to see the message.

If the logging is enabled in the Module Configuration, you can also check the shipments in the log files.

Erroneous shipment requests can be corrected as follows:

- In the popup window for selecting the package articles, you can correct invalid information.
- On the detail page of the order or shipment, you can edit the receiver address and correct any errors. Use the link *Edit* in the box *Shipping address*.

Shipping Address Edit

| Veronica Costello | |
|------------------------------|--|
| 6146 Honey Bluff Parkway | |
| Calder, Michigan, 49628-7978 | |
| Vereinigte Staaten | |
| T: (555) 229-3326 | |

On this page, you can edit the address fields in the upper part, and the special fields for DHL shipping in the lower part:

- Street name (without house number)
- House number (separately)
- Address addition



| City * | |
|------------------|--|
| Leipzig | |
| Country * | |
| Deutschland 🗸 | |
| State/Province * | |
| Sachsen 🔻 | |
| Zip/Postal Code | |
| 04229 | |
| Phone Number * | |
| 123456 | |
| Fax VAT number | |
| | |
| | |
| Street Name | |
| Teststraße | |
| House number | |
| 1 | |
| Address Addition | |
| Hinterbaus | |

Afterwards, save the address. If the error has been corrected, you can retry Creating a shipment.

If a shipment has already been transmitted successfully via the webservice, but you want to make changes afterwards, please cancel the shipment first as described in the section Canceling a shipment. Then click *Create shipping label...* inside the same box *Shipping and tracking information*. From here on, the process is the same as described in Creating a shipment.



5 Uninstalling the module

To uninstall the module, follow these steps described in the file *README.md* from the module package.

The *README.md* is linked in the section Requirements.



6 Technical support

In case of questions or problems, please have a look at the Support Portal (FAQ) first: http://dhl.support.netresearch.de/

If the problem cannot be resolved, you can contact the support team via the Support Portal or by sending an email to dhl.support@netresearch.de