

User Guide

UPS Universal Shipping for Magento 2.x — Extmag_UpsShipping

2026-05-21

1 About the module

1.1 What you can do day-to-day

2 First-time setup checklist

3 Daily workflows

3.1 Show UPS rates at checkout

3.2 Create a label

3.3 Print a label

3.4 Create a return label

3.5 Issue an International Invoice

3.6 Mark a product as dangerous goods

3.7 Schedule pickups

3.8 Track shipments

3.9 Hand over to a UPS Access Point

3.10 Ship LTL (Freight)

4 Per-website / per-direction / per-country configuration

5 Customer-account artefacts

6 Email templates

7 Logs

8 Troubleshooting cheatsheet

9 Demo



logo

1 About the module

UPS Universal Shipping connects a Magento 2.x store to the full UPS REST API (OAuth 2.0). It manages the complete shipping cycle inside the Magento admin: real-time rates at checkout, label creation (forward and return), commercial invoice, pickup scheduling, tracking, dangerous goods, freight (LTL), and Access Point delivery — without leaving the order screen.

The module is built on the shared `Extmag_Shiplab` framework. The framework owns shipper accounts, addresses, package boxes, shipping methods, the label storage, and the unified shipping log. The UPS package owns the UPS-specific configuration, the rate / label / pickup / tracking implementations and the Hyva integration glue.

1.1 What you can do day-to-day

- Show real-time UPS rates at checkout with arrival date / time per service.
- Create thermal (ZPL, ZPL2, EPL, EPL2, STARPL, SPL) or PDF shipping labels automatically, in bulk, or one-by-one.
- Print labels directly from the admin via the el-Print or QZ Tray helper.
- Generate return labels (PRL printed / ERL emailed) alongside the outbound label or on customer request.
- Issue Paperless Commercial Invoices for international shipments — HS / Schedule B codes, dangerous goods, terms of shipment, declaration statement.
- Schedule end-of-day pickups, or request a pickup per label.
- Track each shipment until UPS reports delivery or a terminal error.
- Validate / correct the customer shipping address through UPS.
- Calculate dimensional (volumetric) weight, pack items into boxes that fit the cheapest UPS rate.

- Hand over the parcel to a UPS Access Point — map-driven choice at checkout, with Google or Bing as the map provider.
- Ship LTL (Freight) — class, NMFC code, handling unit.

2 First-time setup checklist

The order below is the same one a fresh install needs.








1. Install the module and the optional integration packages (see the **Installation Guide**).
2. Approve the UPS API products on the UPS Developer portal.
3. Add a Shipper Account (Extmag → Settings → Shipper Accounts).
4. Add at least one Address (Extmag → Settings → Addresses) — Shipper + Ship From.
5. Optional — define your Package Boxes (Extmag → Settings → Package Boxes).
6. Configure Stores → Configuration → Extmag → UPS Configuration (every tab). Per-website / per-direction / per-country overrides supported.
7. Create one or more Shipping Methods (Extmag → Shipping Methods → Shipping Methods). The method is what the customer sees on checkout.
8. Optional — install eI-Print or QZ Tray on the workstation that prints labels, then wire it under Stores → Configuration → Extmag → Printers .
9. Place a test cart with a UPS-eligible destination — the rates appear.

3 Daily workflows

3.1 Show UPS rates at checkout

Once a Shipping Method is **Active** for the visitor's website + customer group and the cart matches its conditions, the rate is rendered next to the UPS service name with the arrival date / time the customer can expect.

Shipping Methods

- \$37.85** UPS Ground (Arrival: 2022.08.16 23:00) 
- \$198.55** UPS Three-Day Select (Arrival: 2022.08.15 23:00) 
- \$231.77** UPS Second Day Air (Arrival: 2022.08.12 23:00) 
- \$319.15** UPS Second Day Air A.M. (Arrival: 2022.08.12 23:00) 
- \$366.83** UPS Next Day Air Saver (Arrival: 2022.08.11 23:00) 
- \$385.54** UPS Next Day Air (Arrival: 2022.08.11 10:30) 
- \$421.62** UPS Next Day Air Early A.M. (Arrival: 2022.08.11 08:00) 

Next

Checkout — UPS shipping methods with arrival date / time

If a rate does **not** show:

1. Extmag → Shipping Logs → Shipping Logs — find the latest Rate request for the cart and read the response.
2. Confirm the cart total weight + dimensions fit at least one Package Box, or that an Average Product Weight is set.
3. Confirm the Shipper Address is in the same country as the configured UPS account (UPS rejects rate requests from mismatched origin countries).

3.2 Create a label

- **Automatic** — Configuration → Automatic tab → set Enabled = Yes , pick Allowed Order Statuses and Allowed Shipping Methods. Magento cron creates the

label when the order moves into a matching status.

- **Mass action** — Orders or Shipments grid → mass select → action *Create UPS Labels*. Behaviour controlled by `Configuration → Mass Actions`.
- **Manual** — open an order → *Shipping → Create UPS Label* → pick the UPS service from the offered rate list → confirm. Behaviour controlled by `Configuration → Manual Actions`.

After a label is created it is attached to:

- the order (visible on the order page), and
- a shipment / invoice / credit memo, depending on the *Create Shipment / Create Invoice* toggles on the active configuration scope.

The label file is stored on the server and can be re-downloaded / re-printed at any time from `Extmag → Shipping Labels → UPS`.

3.3 Print a label

Three options.

1. **From the admin via eI-Print or QZ Tray.** Direct printing — no download. Install one of the helpers on the workstation, then under `Stores → Configuration → Extmag → Printers` set Application, Type (`Local PC` or `Network`), Port (9109 for eI-Print), Auto Print, and the per-document-type printer name. With Auto Print = Yes the label is sent straight to the printer when it is created.
2. **From the admin as a download.** `Extmag → Shipping Labels → UPS → action Download` — PDF or thermal file (ZPL / EPL / SPL / ...).
3. **Mass print.** From the same grid — bulk print all selected labels. `Configuration → Printing → Mass Print` selects either *Unprinted* or *All*.

3.4 Create a return label

Two paths, configurable independently.

- **With the outbound label.** `Configuration → Returns → Creating Return Label With Shipping Label = Yes`. The return label is generated together with the forward label and stored next to it.
- **Customer self-service.** `Configuration → Returns → Customer → Allow Create = Yes` and `Allow Print = Yes`. The customer sees a *Create RMA* link in *My Orders → order page* and can list / print the issued return labels under the *RMA* tab.

The return service can be:

- `UPS Print Return Label (PRL)` — printed, ships in the outbound package or is handed over later.

- **UPS Electronic Return Label (ERL)** – UPS emails the label to the customer.

Order # 2000000004 COMPLETE

Reorder [Create Rma](#) Print Order

Items Ordered	Invoices	Order Shipments	RMA	
Product Name	SKU	Price	Qty	Subtotal
Zing Jump Rope	24-UG04	\$12.00	Ordered: 1 Shipped: 1	\$12.00
				Subtotal
				\$12.00
				Shipping & Handling
				\$252.51
				Grand Total
				\$264.51

Order Information

Shipping Address Lucan Vental Privat Person United States VAT: 56789123	Shipping Method UPS - UPS Next Day Air Saver (Arrival: 2021.04.01 23:00)	Billing Address Lucan Vental Privat Person United States VAT: 567891234	Payment Method Check / Money order
--	---	--	--

Access Point Address
THE UPS STORE
321 WALNUT ST
NEWTONVILLE, MA, 02460
United States

Customer account – order page with Create RMA, RMA tab, Access Point block

Order # 2000000004 COMPLETE

Reorder [Create Rma](#) Print Order

Items Ordered	Invoices	Order Shipments	RMA		
Tracking Number #	Carrier	Date	Products	Comment	Action
1ZE369839090245285	UPS		Zing Jump Rope Sku: 24-UG04 Qty: 1		Print Label
1ZE369839099917006	UPS		Zing Jump Rope Sku: 24-UG04 Qty: 1		Print Label
1ZE369839090797279	UPS		Zing Jump Rope Sku: 24-UG04 Qty: 1		Print Label
1ZE369839093082660	UPS		Zing Jump Rope Sku: 24-UG04 Qty: 1		Print Label
1ZE369839093345457	UPS		Zing Jump Rope		Print Label

Customer account – RMA tab with Print Label actions

3.5 Issue an International Invoice

For every international shipment the module submits a UPS Paperless Commercial Invoice (when `Configuration → International Invoice → Enabled = Yes` and `Paperless = Yes`). The invoice carries:

- Terms of Shipment (Incoterms),
- Reason for Export,
- HS / Schedule B codes per product line,
- Dangerous Goods / Hazardous Materials markers,
- Declaration Statement,
- Shipper VAT/Tax/EORI ID,
- Consignee VAT/Tax/EORI ID,
- Sold-To address,
- Invoice Number, Comments — macro-driven, store-aware.

Pick the product attributes that carry HS code, Schedule B, country of origin, description, and unit of measurement under `Configuration → International Invoice → Product Attributes`. If the attribute is missing on a product, the API call fails — `Shipping Logs` shows the rejected line.

3.6 Mark a product as dangerous goods

UPS requires explicit Dangerous Goods (DG) flagging for hazardous shipments.

1. `Catalog → Categories` — create a category dedicated to dangerous goods (you can disable its frontend visibility).
2. Assign the DG products to that category.
3. `Configuration → Dangerous Goods → Product Categories with Dangerous Goods` — select the category in the *Choose Categories* widget (the widget supports hidden / disabled categories and the full category tree).
4. Fill the DG product attributes (UN number, packing group, ...) — these are mapped under the Shiplab DG attribute set.

3.7 Schedule pickups

`Configuration → Pickups → Schedule`:

- `Active = Yes`.
- `Time of Creating` — when (HH:MM, store time zone) the cron sends the daily pickup request.
- `Allowed Days of Week` — days a pickup is requested.

If `Schedule` is disabled, the *Create Pickup* action remains available per-label and per-day from `Extmag → Shipping Labels`.

Configuration → Other Options → Saturday Pickup requests a Saturday pickup. UPS is the only major carrier with all-service Saturday pickup.

3.8 Track shipments

Configuration → Tracking → Tracking Schedule = Yes — Magento cron polls UPS for status of every shipment until it is delivered or terminally errored. The status timeline is rendered on the shipment screen and in Extmag → Shipping Logs .

A customer-facing tracking number is also sent by email when Configuration → Other Options → Send Tracking Number = Yes .

3.9 Hand over to a UPS Access Point

1. Configuration → Access Point → Type = Hold for Pickup at UPS Access Point or UPS Access Point Delivery .
2. Configuration → Access Point → Map → Enabled = Yes , pick Google Maps or Bing Maps , set the API Key.
3. Create (or update) a Shipping Method with UPS Access Point = Yes .
4. At checkout the customer opens the AP popup, picks a location on the map or list, and confirms.
5. The chosen AP location is rendered in:
 - the order page → *Access Point Address* block,
 - the *New Order* and *Shipment* customer emails (template override ships with the module).

3.10 Ship LTL (Freight)

UPS Freight rate / label / pickup are wired through a dedicated Freight tab in the configuration page. Fill the Service , Handling Unit , Packaging Type , Class and NMFC Commodity Code (8 digits, first 6 = Prime, last 2 = Sub-Prime). Freight shipments use the same outbound flow as parcel shipments — the module switches the UPS endpoint automatically when the cart weight crosses the parcel / LTL threshold (≥ 150 lbs).

4 Per-website / per-direction / per-country configuration

Every UPS field is annotated with four scope flags. Use them to model your business reality without duplicating data:

- **Website / Store View** — usual Magento native scope.
- **Direction** — *Domestic vs International*.
- **Country** — per destination country.

The most specific scope wins. Typical patterns:

- One website, two directions — different shipping descriptions / payers domestic vs international.
- One website, per-country overrides — different Paperless settings or Sold-To addresses per destination country.
- Multi-website — independent UPS accounts, addresses, Sold-To, currencies.

5 Customer-account artefacts

When the order is shipped via UPS the customer sees on [My Account](#) → [My Orders](#) → [order page](#) :

- **Shipping Method** block — the UPS service name + arrival date.
- **Access Point Address** block — when the order is bound to a UPS Access Point (configurable, also shown in the email).
- **Create Rma** link — when [Configuration](#) → [Returns](#) → [Customer](#) → [Allow Create = Yes](#) . Opens the RMA form for the order's items.
- **RMA** tab — listing of created return labels (Tracking Number, Carrier, Date, Products, Comment, [Print Label](#) action — when *Allow Print = Yes*).

6 Email templates

The module overrides the *New Order* and *New Shipment* templates to render the Access Point address. If your storefront already uses customised templates, merge the snippet below before the closing block:

```

{{depend order_data.is_not_virtual}}
  {{if formattedAccessPointAddress}}
    <td class="address-details">
      <h3>{{trans "Access Point Info"}}</h3>
      <p>{{var formattedAccessPointAddress|raw}}</p>
    </td>
  {{/if}}
{{/depend}}

```

7 Logs

Extmag → Shipping Logs → Shipping Logs is the primary diagnostic surface. Every UPS API call is recorded with:

- Action — Rate, Time In Transit, Ship, Void, Pickup, Tracking, Address Validation, Paperless Documents upload, Locator, Dangerous Goods, etc.
- Request and Response payloads.
- Carrier, order, date.

Filter by Order ID to inspect every UPS call made for a single order — the fastest way to diagnose an unexpected rate or a rejected label.

8 Troubleshooting cheatsheet

Symptom	First place to look
No rates at checkout	Shipping Logs → latest Rate request for the cart.
OAuth 401 / 403	Shipper Account → Live Account flag + clock skew.
Label rejected with weight/dimensions error	Configuration → Packaging — Average Product Weight + Average Dimensions. Confirm at least one Package Box fits.
International label rejected	Shipping Logs → Ship response. Usually a missing HS code, Schedule B, country of origin, or VAT ID.
Pickup not created automatically	Configuration → Pickups → Schedule. Magento cron status.
Tracking never updates	Configuration → Tracking → Tracking Schedule. Magento cron.
Customer can't create / print return	Configuration → Returns → Customer block.
Access Point not selectable	Configuration → Access Point → Map (Enabled, Provider, API Key) + Shipping Method UPS Access Point = Yes .
Print does nothing	Printers configuration + el-Print / QZ Tray running on the workstation.

9 Demo

Contact <https://extmag.com/contact> with the extension name, your name and the site URL to request a 14-day demo. After 14 days the demo must be removed from every install it was deployed to.