

Shipping Rates by Destination & Transport



Shipping Rates by Destination & Transport Version 19.0.1.0.0 English

One freight pricing grid by destination, transport mode and product category, applied consistently on the eCommerce checkout, in quotations, on invoices and at the Point of Sale.

Overview

Carriers price freight by where the goods go, how they travel and what they are: a parcel flown to an island is not priced like a pallet shipped by sea to the mainland. The standard Odoo delivery methods (fixed price, price rules on weight or volume) cannot express such a grid.

This module adds a **Shipping Rates** application in which you describe:

- the **destinations** you ship to, optionally grouped by region and zone,
- the **transport modes** you use (sea freight, air freight, road carrier...),
- the **routes**: which transport modes serve which destination,
- the **shipping categories** of your products (parcel, bulky goods...),
- the **rates**: how goods of a category are priced on a route or on a transport mode.

The same pricing engine is then used everywhere a shipping cost is needed:

- on the **website checkout**, where the customer picks a destination and a transport mode in the delivery method block,
- on **quotations**, through the standard *Add shipping* button and the *Compute Shipping* wizard,
- on **invoices**, where the destination and the transport mode are printed,
- at the **Point of Sale**, through the *Shipping cost* button.

How Pricing Works

Concepts

Shipping category

Assigned to each product to be shipped (for example *Parcel* or *Bulky goods*). A category can be *volume-based*: every product or variant of that category must then carry a volume.

Region and zone

Two optional levels used to group destinations (a country and its counties, an archipelago and its islands...). They organise the lists and are shown in the destination names.

Destination

A place goods are shipped to. A destination can list postal codes (`10000`, `100*`) used to suggest it from the delivery address.

Transport mode

A way of moving goods: sea freight, air freight, road carrier...

Route

A destination served by a transport mode. Only routes are offered to customers: a destination without route cannot be selected, and a transport mode is offered for a destination only if a route exists.

Rate

How goods of a category are priced on a route (*specific route*) or on a transport mode (*fallback*, applying to every destination served by that transport mode).

Which rate applies

For an order, the engine works category by category:

1. If an **All categories** rate exists for the route (or, failing that, for the transport mode), it is applied once to the whole order and the category rates are ignored.
2. Otherwise, for each shipping category present in the order, the rate defined on the **specific route** is used first, then the rate defined on the **transport mode**.
3. A product without shipping category (its own or inherited from its product category), whose category has no rate on that route or transport mode, or of a volume-based category while it has no volume, is **uncovered**. The delivery method decides what happens then (see *Delivery method options* below).

Among several rates matching the same scope, the one with the lowest *sequence* wins. Rates outside their validity dates, archived rates and rates of another company are ignored.

Price types

Each rate has one price type:

- **Fixed price**: charged per unit for a category rate, once per order for an *All categories* rate.
- **Price per m3**: the price multiplied by the consolidated volume of the category (sum of the product volumes times the quantities).

- **Formula:** a Python expression evaluated in the Odoo sandbox, either *per order line* or *per category* on the consolidated quantity, volume and value.

On top of the base amount:

- a **minimum charge** raises the amount when the computed price is below it. It also applies to a fixed price, which a category rate charges per unit: 5.00 per unit with a minimum charge of 20.00 bills 20.00 up to four units. Only an *All categories* fixed price, already charged once per order, makes it redundant,
- an **insurance** can be added, as a percentage of the shipping cost or of the goods value (rate written as a decimal: `0.01` for 1%),
- the **free delivery** flag makes the rate explicitly free, which is different from a missing rate.

Formulas

A formula can use the following variables:

- `qty`: the quantity (of the line, or of the category when consolidated),
- `volume`: the total volume in m3,
- `value`: the goods value, taxes included,
- `unit_price`: the unit price of the line (average price when consolidated),
- `min_charge`, `fixed_price`, `price_per_m3`: the corresponding fields of the rate,

and the functions `min`, `max`, `round`, `ceil` and `floor`.

Example, a volume rate with a minimum and 1% of the goods value as insurance:

```
max(min_charge, 25.0 * volume) + 0.01 * value
```

The formula is validated when the rate is saved. Any evaluation error at pricing time is reported to the user with the name of the rate.

Currencies

Each rate carries a currency. The computed amounts are converted to the currency of the order (or of the company at the Point of Sale) at the exchange rate stored in Odoo on the order date.

Requirements

- Odoo 19.0 with the **Sales**, **Invoicing**, **eCommerce**, **Delivery Costs** and **Point of Sale** applications: the module depends on `delivery`, `website_sale`, `sale_management`, `point_of_sale` and `account`.
- Product **volumes** for every product of a volume-based category.

Installation

1. Copy the `nm_shipping` folder into your addons path and update the apps list.
2. Install **Shipping Rates by Destination & Transport**. A delivery method of type *Rates by destination & transport*, named *Shipping by destination & transport*, is created and published on the website. It uses the service product *Shipping (rates by destination)*.
3. Give the **Shipping Rates / Manager** access right to the users maintaining the grid. Sales managers have it by default; other users see the fields on quotations and invoices but not the *Shipping Rates* app.

Demo data (regions, destinations, transport modes, routes, rates and three products) is loaded when demo data is enabled on the database.

Configuration

All the configuration lives in the **Shipping Rates** app:

- **Rates** and **Routes** on the main menu,
- **Shipping Categories**, **Transport Modes**, **Destinations**, **Zones**, **Regions** and **Delivery Methods** under *Configuration*.

Set up the grid in the following order.

Shipping categories

Go to *Shipping Rates -> Configuration -> Shipping Categories* and create one category per way of pricing goods (for example *Parcel*, *Bulky goods*, *Vehicles*). Tick **Volume-based** for the categories priced per m3: Odoo then refuses to assign the category to a product without volume.

Transport modes

Go to *Shipping Rates -> Configuration -> Transport Modes* and create your transport modes (*Sea freight*, *Air freight*, *Road carrier...*). The *Main Region* is informative only.

Regions, zones and destinations

Regions and zones are optional; create them first if you use them (*Shipping Rates -> Configuration -> Regions* and *Zones*).

Then go to *Shipping Rates -> Configuration -> Destinations* and create every place you ship to. On each destination:

- pick the **Zone** (the region follows) or the **Region**,
- fill in the **Postal Codes**: a comma-separated list, where a trailing `*` matches a prefix (`10000`, `100*`). They are used to suggest the destination from the delivery address on the website checkout, on quotations and at the Point of Sale. An exact match wins over a prefix match.

Routes

Go to *Shipping Rates* -> *Routes* (or to the *Routes* tab of a destination) and create one route per destination and transport mode pair. A route can be archived to stop offering a transport mode for a destination without losing its rates.

Rates

Go to *Shipping Rates* -> *Rates* and create the rates. On the form:

- **Scope:** *Specific route* (pick the route) or *Transport mode (fallback)* (pick the transport mode, the rate applies to every destination it serves).
- **All categories:** tick it to price the whole order with this rate; otherwise pick the **Shipping Category**.
- **Validity:** *Valid from* and *Valid until*, and the *Sequence* used to order rates of the same scope.
- **Pricing:** *Free delivery*, or the *Price type* with its price (*Fixed price*, *Price per m3*, or the *Formula* with its scope) and the *Minimum charge*.
- **Insurance:** none, a percentage of the shipping cost, or a percentage of the goods value, with the *Insurance rate*.

The rate name is computed from its scope and category, for example *Coral Island (Western Islands, Outer Islands) - Sea freight - Parcel*.

Products

The shipping category of a product is either set on the product itself or inherited from its **product category**:

- On a product category (*Inventory* -> *Configuration* -> *Product Categories*, or *Sales* -> *Configuration* -> *Product Categories*), set the **Shipping Category**: it applies to every product of that category and of its sub-categories, unless a sub-category or a product defines its own. This is the quickest way to cover a whole catalogue, and new products get their shipping category automatically.
- On a product form, right after the product category, the **Shipping Category** field overrides the inherited one. When it is empty, the inherited category is displayed below it. The fields are hidden for services, which are never shipped.

For a volume-based category, set the volume of the product (*Inventory* tab) or of each of its variants: Odoo refuses to save a product without volume in such a category. Mapping a volume-based shipping category on a product category whose products have no volume is allowed, with a warning listing them: those products are reported *without rate* until their volume is set.

The product list shows the applied shipping category (own or inherited), can be grouped by it and filtered on it.

Delivery method options

The delivery method created at installation is listed under *Shipping Rates -> Configuration -> Delivery Methods*. Two options are specific to the *Rates by destination & transport* type:

- **Products without rate:** *Refuse the shipment* (default), or *Ship the product for free*. In the first case, an order containing an uncovered product cannot be delivered with this method; in the second, uncovered products are shipped at no cost and a warning names them on the order.
- **Suggest from postal code** (enabled by default): on the website checkout, pre-select the destination matching the postal code of the delivery address, and the cheapest transport mode serving it.

The standard delivery method features apply on top of the computed rate: margin, free delivery above an amount, taxes and fiscal positions, countries and websites restrictions, invoicing policy.

Warning

Removing a rate, a route or a destination changes the prices offered to your customers immediately. Prefer archiving (the *Active* toggle) or closing the validity dates: the rate then stops applying while the past orders keep their references.

Daily Use

Website checkout

When the customer selects the *Shipping by destination & transport* delivery method, two lists appear right below it: **Destination** and **Transport mode**. With *Suggest from postal code* enabled, the destination matching the delivery address and the cheapest transport mode are pre-selected.

- The transport mode list only contains the modes serving the destination and able to ship every product of the cart.
- The price badge of the delivery method and the cart summary update as soon as the selection changes, without reloading the page.
- Until a destination and a transport mode are chosen, the delivery method shows *Select a destination and a transport mode to get your shipping cost* and the order cannot be paid.
- When the chosen destination is served by no transport mode at all, the transport mode list is disabled and the block explains that the customer should contact you or pick another delivery method.

The selection is stored on the sales order, so the salesperson sees it in the backend and it flows to the invoice.

Quotations

On a quotation, the standard **Add shipping** button (above the total) works with the delivery method *Shipping by destination & transport*. When that method is selected, the wizard shows the **Shipping Destination** (suggested from the postal code of the delivery address) and the **Transport Mode** (the cheapest one), rates the order as soon as the selection changes, and **Add** stores the selection on the order and adds the standard delivery line.

For the detail of the cost, click **Compute Shipping** instead. The wizard opens with the delivery method, the destination (suggested from the postal code of the delivery address) and the cheapest transport mode:

- the **Shipping Cost** is displayed, with the detail **By category** (the rate used, its price type, the quantity, the volume and the amount) and **By product**,
- products without rate are listed in a warning,
- **Add to quotation** stores the selection on the order and adds the standard delivery line of the delivery method,
- **Save selection only** stores the destination and the transport mode without adding a line.

The *Shipping Destination* and *Transport Mode* fields are also visible on the order form, next to the customer, and can be changed while the quotation is a draft. Changing them flags the delivery line for recomputation, like any change of address on a standard delivery method.

Invoices

The destination and the transport mode of the sales order are shown on the customer invoice and printed in a *Shipping* block of the invoice PDF. When an invoice covers several orders, the values of the first order are used.

Point of Sale

The **Shipping cost** button of the register opens a dialog:

1. pick the **Destination**: when a customer is set on the order, the destination matching their postal code is suggested,
2. pick the **Transport mode**, among the modes serving the destination and able to ship every product of the order,
3. click **Compute**: the amount and the detail by category are displayed,
4. click **Add to order**: a service line *Shipping: destination - transport* is added to the order for that amount.

The line uses the service product of the delivery method; the amount is computed in the currency of the company.

Access Rights

- **Shipping Rates / Manager:** create and modify categories, transport modes, regions, zones, destinations, routes and rates, and see the *Shipping Rates* app. Sales managers have it by default.
- Every internal user can read the grid (needed on quotations, invoices and at the register).
- Website visitors never access the grid directly: the checkout only exposes the names of the destinations and of the transport modes.

Rates are shared between companies unless a company is set on them; a company only sees its own rates and the rates without company.

Known Limitations

- Rates are evaluated on quantities, volumes and values, not on weights.
- The Point of Sale adds the shipping cost as an order line: the register does not create a delivery order.
- The delivery method returns no tracking link: the module prices the shipment, it does not book it with a carrier.

Troubleshooting

The destination and transport lists do not appear at checkout

- Check that the delivery method is published on the website and that its type is *Rates by destination & transport*.
- Check that the delivery method is not restricted to countries or websites excluding the customer.
- The lists appear only once the delivery method is selected.

A transport mode is missing from the list

- Check that a **route** exists and is active for the destination and that transport mode.
- With *Products without rate* set to *Refuse the shipment*, a transport mode is only offered when every product of the order has a rate: check the shipping category of the products and the rates of that route or transport mode.

The order cannot be paid

The message *Please select a shipping destination and a transport mode* means the selection is incomplete; *Some products of your cart cannot be shipped with the selected destination and transport mode* means a product is uncovered while the delivery method refuses such shipments.

The suggested destination is wrong

Check the **Postal Codes** of your destinations: an exact match is preferred, then the first destination whose prefix matches. Two destinations sharing a postal code are resolved by their order in the list.

A product cannot be assigned to a category

The message *The shipping category is priced by volume* means the category is volume-based and the product (or one of its variants) has no volume. Set the volume on the Inventory tab of the product.

Disclaimer

This module computes the shipping cost charged to your customers from your own configuration: rates, formulas, routes, exchange rates. As stated in the Odoo Proprietary License v1.0, the Software is provided “as is”, without warranty of any kind.

It remains your responsibility to:

- check the grid on a staging database before opening it to customers,
- keep the rates and their validity dates up to date,
- verify with your accountant that the delivery lines and the invoices meet your legal requirements.

Bugs in the advertised features are handled through the support channel.

Support

- Email: odoo@natimai.solutions
- Website: <https://natimai.solutions>

Please mention your Odoo version and the module version (see `__manifest__.py`) in support requests.

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