

NextUp Integration for OpenCart 2.3.0.x

User's manual

- version 1.0.0 -



Introduction

This extension is built for merchants using NextUp ERP for stock-keeping and accounting, who also wish to integrate the features provided by NextUp ERP with their online OpenCart store.

Features

Core features

- Connecting OpenCart products to NextUp ERP articles:
 - single and bulk product stocks sync;
 - single and bulk product prices sync;
 - single and bulk product tax information sync.
- Connecting OpenCart customers to NextUp ERP partners:
 - customers are sent to NextUp whenever an OpenCart order is exported to a NextUp Document (sale order or sale invoice);
 - ANAF data validation for company-type customers.
- Export OpenCart orders as NextUp ERP documents (using either valid or temporary status, either manually or automated):
 - sale orders;
 - sale invoices.
- Detailed logging of regular and unusual events (such as errors).

Tools

- If you are currently using OpenCart Romania's NextUp integration module, this extension provides a tool for you to extract existing product associations from its internal data store;
- If you are new to NextUp ERP, this extension provides a tool for you to export your store products in a format understood by NextUp ERP's importer;
- If you recently added a considerable amount of new products in NextUp ERP, this extension provides a tool for you to bring those products quickly in your OpenCart store.

Widgets

- Sidebar widget showing the NextUp ERP order export progress.



Requirements

OpenCart Compatibility

Tested with versions 2.3.0.0 to 2.3.0.2.

General requirements

- PHP 7.4.0 or newer;
- NextUp ERP with Server component activated (8.38.0 or newer suggested);
- Required PHP extensions:
 - Reflection
 - Curl
 - Json
 - MbString
 - Mysqli
 - Pcre
 - Spl
 - Zlib

Required NextUp ERP Server methods

- AddPartner;
- AddSaleInvoice;
- AddSaleOrder;
- DeleteDocument;
- GetAllArticles;
- GetAllPartners;
- GetAllStocksForArticles;
- GetAllWarehouses;
- GetArticleByCode;
- GetArticleById;
- GetPartnerByCode;
- GetPartnerById;
- SelectFromView;
- UpdatePartner.

NextUp Server Authentication Notes

If you are accessing the web services exposed by the NextUp ERP server you need to understand that, regardless of what application you are using to consume them (this extension included), you need to use a separate NextUp ERP user account for each application.

This is not a strict technical requirement but, if you share a user account between applications, you will end up with one authentication token overriding a previous one for that account, which, in turn, will lead to web service method calls for that all token failing.

Other Notes

- Integration with OpenCart Romania's extension is provided as a best-effort implementation: there are no hard guarantees for correctness or that it will work at all.
- Compatibility with other OpenCart modules is not guaranteed, although this extension does not rely on any 3rd party module.



Limitations

1. There is no automatic stock update feature;
2. Migrating connected products from OpenCart Romania's extension is done on a best-effort basis: if the expected structure differs from the actual one, results may differ;
3. Due to the way OpenCart stores order and order item costs and prices, this extension needs to deduce some costs and prices that NextUp ERP expects, the result being that there may be differences between the OpenCart order costs and prices and NextUp ERP document costs and prices;
4. Since OpenCart product options don't have reference/SKU codes, they cannot be mapped to NextUp ERP articles/products.



Sidebar artefacts

This extension adds a new top level menu item to OpenCart's sidebar, as well as a new widget to OpenCart's existing sidebar progress widget.

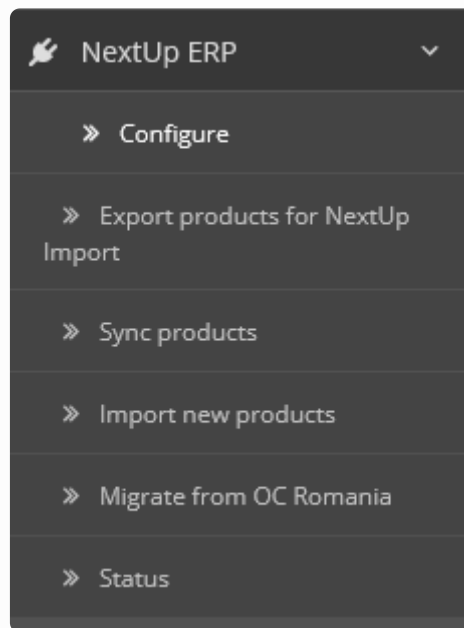
See below for more details.

Menu description

The top level menu entry for this extension is **NextUp ERP**, which has the following items:

- **Configure** - navigate to extension configuration panel;
- **Export products for NextUp Import** - navigate to the tool that allows you to export your store products in a format that understood by the NextUp ERP importer tool;
- **Sync products** - navigate to the tool that allows you to sync all your product information from NextUp ERP;
- **Import new products** - navigate to the tool that allows you to import products that you have recently added to NextUp ERP but not in your store;
- **Migrate from OC Romania** - navigate to the tool that allows you to import product connections from OpenCart Romania's NextUp integration module;
- **Status** - navigate to the tool that allows you to view the extensions status: basic information, error log and debug log.

Screenshots

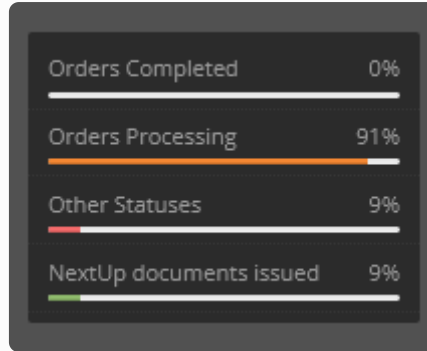




Sidebar widgets

Sidebar widget showing the NextUp ERP order export progress: what is the percentage of your OpenCart orders that have been exported to NextUp.

Screenshots





Installation

Install using the OpenCart interface

1. Navigate to OpenCart's extension installer via **Extensions** - **Installer** menu entry:

The screenshot shows the 'Extension Installer' page in OpenCart. At the top, there's a breadcrumb trail: 'Home / Extension Installer'. Below this is a section titled 'Upload your extensions' with a sub-header '* Upload File'. There are two buttons: 'Upload' (blue) and 'Clear' (red). A progress bar is shown below the buttons. Under the heading 'Files that will be overwritten', a list of files is displayed, including 'admin/controller/extension/ciel_connection_settings.php' through 'admin/controller/extension/ciel_status_customer_column.php'. At the bottom of this list is a blue 'Continue' button.

2. Click the **upload** button;
3. Choose the extension archive file (**nextup-opencart-integration.ocmod.zip**);
4. After installation, navigate to **Extensions** - **Modifications** and click refresh to fully enable the extension's features:

The screenshot shows the 'Modifications' page in OpenCart. At the top, there's a breadcrumb trail: 'Home / Modifications'. On the right side, there are three icons: a refresh icon (blue), an edit icon (orange), and a delete icon (red). Below these icons is a light blue notification box with the text: 'Whenever you enable / disable or delete a modification you need to click the refresh button to rebuild your modification cache!'. There is a close button (X) on the right of the notification box.

5. Navigate to **Extensions** - **Extensions** and chose **Modules** in the **Choose extension type** drop-down selector:

The screenshot shows the 'Extensions' page in OpenCart. At the top, there's a breadcrumb trail: 'Home / Extensions'. Below this is a section titled 'Extension List'. Under the heading 'Choose the extension type', there is a dropdown menu showing 'Modules (27)' and a 'Filter' button.

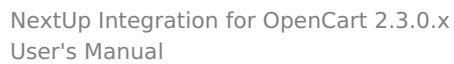
6. Scroll down to the extension's entry - **NextUp ERP Integration** - and click the **Install** button.



Configure Extension

To configure the extension, navigate to **NextUp ERP - Configure**. There are three sections:

- NextUp ERP Connection Options - specify the NextUp ERP server address and credentials;
- NextUp ERP Integration Options - specify integration options;
- NextUp ERP OpenCart Workflow Options - specify workflow options.




In this section, you specify the NextUp ERP server address and credentials. The following fields are available:

Field	Type	Description
Web service URL	URL	The URL for which NextUp ERP server is configured to listen
Username	String	The username used for authentication with the NextUp ERP server
Password	String	The password used for authentication with the NextUp ERP server
Society code	String	The society code to which the store will be bound to operate
Timeout	Number	The maximum duration, in seconds, for which any call to NextUp ERP server will be allowed to run

Configure NextUp ERP Integration

[Home](#) / [Module](#) / [Configure NextUp ERP Integration](#)

 NextUp ERP Connection Options

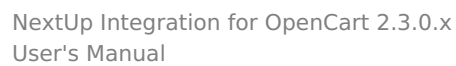
* Webservice URL:	<input type="text" value="http://127.0.0.1:8888/NextUpServices/Services/POST"/>
* Username:	<input type="text" value="super"/>
* Password:	<input type="text" value="Password used for NextUp webservice server logon"/>
* Society code:	<input type="text" value="scpaiesrl"/>
* Timeout:	<input type="text" value="30"/>
<input type="button" value="Test connection"/>	



NextUp ERP Integration Options

In this section, you specify the main integration options, such as what warehouse to use. The following fields are available:

Field	Type	Description
Warehouse	Option	The warehouse to which this store will be bound to operate
Issue document type	Option	What document to issue for each OpenCart order
Automatically issue document for these order statuses	Multiple Option	When an OpenCart order transitions into one of the selected statuses, a document will be automatically issued in NextUp ERP
Automatically remove document for these order statuses	Multiple Option	When an OpenCart order transitions into one of the selected statuses, the document will be automatically removed from NextUp ERP, if previously issued
Issue document with status	Option	When a document is issued in NextUp ERP from the store, use this status
Document due days	Number	When a document is issued in NextUp ERP from the store, use this number of days for calculating the due date, starting from the moment the document is issued
Shipping VAT Quota	Option	Use this VAT quota for ALL shipping methods in your store. When saved, the extension will attempt to reconfigure all your shipping methods to use this VAT quota. This is necessary to match NextUp ERP vat quotas when adding shipping to documents.



Screenshots

NextUp ERP Integration Options	
* Warehouse:	D1 (0000001, En-Gross) ▼
* Issue document type:	Sale invoice ▼
Automatically issue document for these order statuses:	<input type="checkbox"/> Canceled <input type="checkbox"/> Canceled Reversal <input type="checkbox"/> Chargeback <input type="checkbox"/> Complete <input type="checkbox"/> Denied <input type="checkbox"/> Expired <input type="checkbox"/> Failed <input type="checkbox"/> Pending <input type="checkbox"/> Processed <input type="checkbox"/> Processing <input type="checkbox"/> Refunded <input type="checkbox"/> Reversed <input type="checkbox"/> Shipped <input type="checkbox"/> Voided
Automatically remove document for these order statuses:	<input type="checkbox"/> Canceled <input type="checkbox"/> Canceled Reversal <input type="checkbox"/> Chargeback <input type="checkbox"/> Complete <input type="checkbox"/> Denied <input type="checkbox"/> Expired <input type="checkbox"/> Failed <input type="checkbox"/> Pending <input type="checkbox"/> Processed <input type="checkbox"/> Processing <input type="checkbox"/> Refunded <input type="checkbox"/> Reversed <input type="checkbox"/> Shipped <input type="checkbox"/> Voided
* Issue document with status:	Valid ▼
* Document due days:	15



NextUp ERP OpenCart Workflow Options

In this section, you specify additional workflow integration options, mostly OpenCart-specific. The following fields are available:

Field	Type	Description
VAT applicable on payment	Yes/No	Whether or not to send the "is vat applicable on payment" flag to NextUp ERP when issuing a document. If not sent, then NextUp will use its default settings.
Add shipping to document	Yes/No	Whether or not to add shipping cost to the document issued to NextUp ERP.
Stock status for in-stock products	Option	When the stock quantities are updated from NextUp ERP and some products are found to be in-stock, use this status when updating the product stock status.
Stock status for out-of-stock products	Option	When the stock quantities are updated from NextUp ERP and some products are found to be out-of-stock, use this status when updating the product stock status.
Client group used for individuals	Option	OpenCart client group used for customers that are billed as individuals. If there is not per-billing type segregation, then set this to None . You need to creat this customer group yourself.
Client group used for legal persons	Option	OpenCart client group used for customers that are billed as legal persons/companies. If there is not per-billing type segregation, then set this to None . You need to creat this customer group yourself.
Custom field used for VAT Code entry	Option	OpenCart custom field used for VAT code entry. The extension will use this when looking up the customer's VAT code. If you don't have any need for this, then set it to None . If You need to creat this field yourself.
Custom field used for reg. com. number entry	Option	OpenCart custom field used for reg. com. number entry. The extension will use this when looking up the customer's reg. com. number. If you don't have any need for this, then set it to None . If You need to creat this field yourself.
Custom field used for bank account (IBAN) entry	Option	OpenCart custom field used for bank account number entry. The extension will use this when looking up the customer's bank account number. If you don't have any need for this, then set it to None . If You need to creat this field yourself.
Custom field used for bank name entry	Option	OpenCart custom field used for bank name entry. The extension will use this when looking up the customer's bank name. If you don't have any need for this, then set it to None . If You need to creat this field yourself.



Field	Type	Description
Customer group used for NextUp-imported new tax rates	Option	When importing tax rates from NextUp, assign them to this customer group by default. Mandatory.
Geozone used for NextUp-imported new tax rates	Option	When importing tax rates from NextUp, assign them to this geozone by default. Mandatory.
Weight class used for NextUp-imported new products	Option	When importing product from NextUp, assign them to this weight class by default. Mandatory.
Length class used for NextUp-imported new products	Option	When importing product from NextUp, assign them to this length class by default. Mandatory.

Below is a screenshot representing the relevant section of the configuration page:

NextUp ERP OpenCart Workflow Options

* VAT applicable on payment:

☒

* Add shipping to document:

☒

* Stock status for in-stock products:

2-3 Days

▼

* Stock status for out-of-stock products:

2-3 Days

▼

* Client group used for individuals:

Persoane fizice

▼

* Client group used for legal

Persoane juridice

▼



Product synchronization

The products in your OpenCart store and the products in your NextUp ERP instance you currently operate are connected based on the product SKU:
the SKU code in your store must match the product code in your NextUp ERP instance.

Introduction

An explicit connection between the products in your store and the products in your NextUp ERP instance must be established before the products can:

- be updated from NextUp ERP;
- be added to documents issued to NextUp ERP from OpenCart orders.

This explicit connection is required for the following reasons:

- because NextUp does not automatically create products when issuing documents (sale invoice or sale order) so this is a way to insure that only OpenCart orders for which a document can actually be issued are allowed to be exported to NextUp ERP;
- to allow you to have products in your store that are not present in NextUp ERP, and viceversa;
- as an optimization, because only connected products are synchronized, so, if not all your store products are also created in NextUp ERP, then only the ones that are will be updated.

Once this connection is established, the following product information will be extracted from NextUp ERP.

Stock quantity

For storable NextUp ERP products, the stock quantity will be read, for the warehouse you selected in the extension configuration page.

If the product is out-of-stock, then the out-of-stock status you configured will also be set.

If the product is in-stock, the in-stock status you configured will also be set.

Price

The product price will be read from NextUp ERP, for the warehouse you selected in the extension configuration page, according to the following rules:

- the price actually assigned to the store product will not include any tax;
- if the warehouse you selected does have a price for the product, then that price will be extracted;
- otherwise:
 - if you selected an **en-gross** warehouse, then the generic en-gross price will be extracted;
 - if you selected an **en-detail** warehouse, then the generic en-detail price will be extracted.
- if needed, the sale price without VAT will be calculated and will be rounded to 4 digit decimal precision.

Tax information

The product tax information will be read from Nextup ERP and the following actions will be taken:

- a tax class will be created for the product's VAT quota value, if one does not already exist;
- a percentage-type tax rate will be created for the products' VAT quota value, if one does not already exist and it will be assigned to the above mentioned tax class, based on the payment address and associated with the customer groups and geo zone selected in the extension configuration page;
- the above mentioned tax class will be assigned to the store product.



Connecting products

Individually

To connect a single product, navigate to that product's editor page, then to the **Nextup ERP Integration** tab.

If the product cannot be connected, a warning message will be displayed:

Products

Home / Products

Edit Product

General

Data

Links

Attribute

Option

Recurring

Discount

Special

Image

Reward Points

Design

NextUp ERP Integration

The product does not have any SKU, so it cannot be connected to a corresponding NextUp ERP article by code.

Connected to NextUp ERP	No
NextUp ERP article ID	-
NextUp ERP VAT option name	-
NextUp ERP VAT quota value	-
Batch tracking enabled	-
Available actions	No actions available at this time

If the product can be connected, then the **connect to NextUp ERP by SKU** button will be shown. Click it to connect the product.

Products

Home / Products

Edit Product

General

Data

Links

Attribute

Option

Recurring

Discount

Special

Image

Reward Points

Design

NextUp ERP Integration

Connected to NextUp ERP	No
NextUp ERP article ID	-
NextUp ERP VAT option name	-
NextUp ERP VAT quota value	-
Batch tracking enabled	-
Available actions	<div>Connect to NextUp ERP by SKU</div>

If the operation has been successful, then a confirmation message will be displayed and the page will automatically reload in 5 seconds.



In bulk

To connect products in bulk, navigate to **catalog - Products**, check the desired products in the product list

and then use the right-most button in the header button bar, the one with the plug icon:











For each selected product, the operation result will be shown below that product's row.



Consulting product connected status

To see which products are connected to NextUp ERP navigate to **catalog - Products**, and check the value of the **connected to NextUp ERP** column:

<input type="checkbox"/>	Image	Product Name ▾	Model	Price	Quantity	Status	Connected to NextUp ERP	Action
<input type="checkbox"/>		Art 0008	0000008	11.0000	1111	Enabled	Yes	
<input type="checkbox"/>		Art 0009		22.0000	2222	Disabled	Yes	
<input type="checkbox"/>		ART1		93.2773	5	Disabled	Yes	
<input type="checkbox"/>		ART2		186.5546	191	Disabled	Yes	



Consulting NextUp ERP-related product information

To view NextUP ERP-related product information for a product that has previously been connected to NextUp ERP,
navigate to that product's editor page, then to the **Nextup ERP Integration** tab.

The following information is displayed:

- **Connected to NextUp ERP** - whether or not the product is connected to NextUp ERP;
- **NextUp ERP article ID** - the internal NextUp ERP product ID;
- **NextUp ERP VAT option name** - the VAT option name assigned to the product in NextUp ERP;
- **NextUp ERP VAT quota value** - the VAT quota value assigned to the product in NextUp ERP;
- **Batch tracking enabled** - whether or not batch tracking is enabled in NextUp ERP for the product.

The following actions are available for connected products:

- **Update entire information from NextUp ERP** - Updates both stock quantities and prices;
- **Update stock information from NextUp ERP** - Only updates stock quantities.

Products

Home / Products

Edit Product

GeneralDataLinksAttributeOptionRecurringDiscountSpecialImageReward PointsDesign

NextUp ERP Integration

Connected to NextUp ERP	Yes
NextUp ERP article ID	16
NextUp ERP VAT option name	Taxabile
NextUp ERP VAT quota value	19%
Batch tracking enabled	nu
Available actions	<div><div>Update entire information from NextUp ERP</div><div>Update stock information from NextUp ERP</div></div>



Customer synchronization

This extension establishes a connection between the customers in your store and the customers in your NextUp ERP instance, first by searching them in NextUp ERP and then, when found, by retaining the NextUp ERP customer code.

If the search yields no result, then the extension automatically creates a customer in your NextUp ERP instance, along with a corresponding address and then retains the newly created customer's code for further reference.

The extension searches for NextUp ERP customers when attempting to issue a document from your store to NextUp ERP and does so by using the following criteria, in this order:

1. Billing financial data: Tax attribute and Tax code;
2. Billing e-mail address;
3. Billing phone.

Names are not used as a search criteria, since they can overlap between two different persons or customers.

Customer data mapping

- the customer's e-mail or customer's billing address e-mail maps to NextUp ERP customer address e-mail;
- the customer's first name (or billing first name) and customer's last name (or billing last name) maps to NextUp ERP customer name;
- the customer's company name maps to NextUp ERP customer name (if present, takes precedence over first name and last name);
- if the customer's VAT code contains a tax attribute (eg. **ro**), then it is mapped to the NextUp ERP customer tax attribute;
- the remainder of the customer's VAT code is mapped to the NextUp ERP customer tax code;
- the customer's country is mapped to the NextUp ERP customer address country (match is automatically done by name by NextUp ERP, so duplicates may appear if names differ for the same country);
- the customer's county is mapped to the NextUp ERP customer address county (match is automatically done by name by NextUp ERP, so duplicates may appear if names differ for the same county);
- the customer's city is mapped to the NextUp ERP customer address city (match is automatically done by name by NextUp ERP, so duplicates may appear if names differ for the same city);
- the customer's entire remaining address (address line 1, address line 2) is mapped to the NextUp ERP customer address street.

Exported addresses

NextUp ERP supports, for each customer address, an external key.

This external key can be used to establish a correspondence between a NextUp ERP customer address and an address from an external system.

So this extension uses the external address key to map between a customer's billing address and a NextUp ERP customer address.

It uses the following fields to compute the external address key:

- country;
- county;
- city;



- postal code;
- e-mail address;
- phone number.

So, if any of these fields change, it will result in a new NextUp ERP customer address for the same customer (that has already been mapped).

Managing customer synchronization

There is no direct way to synchronize a store customer to a NextUp ERP customer: the extension does so automatically when a document is issued from the store to NextUp ERP, either as a sale order or a sale invoice.

You can, however, check the status, if a synchronization has been performed for a customer.

To do so, navigate to **Customers - Customers** and consult the column **Connected to NextUp ERP**:

Customers

Home / Customers

Customer List

Customer Name

Customer Name

Customer Group

Approved

Date Added

Date Added

E-Mail

E-Mail

Status

IP

IP

Filter

	Customer Name	E-Mail	Customer Group	Status	IP	Date Added	Connected to NextUp ERP	Action
	Alexandru BOIA	whatever@email.com	Persoane juridice	Enabled	127.0.0.1	28/02/2022	Yes	

For more details, navigate to the customer's edit form and check the **NextUp ERP Integration** tab:

Customers

Home / Customers

Edit Customer

General

History

Transactions

Reward Points

IP Addresses

NextUp ERP Integration

Connected to NextUp ERP	Yes
NextUp ERP partner code	0000001
NextUp ERP partner address worksite ID	12124



Sync product information in bulk

In order to sync product information for all connected products, navigate to **NextUp ERP - Sync products**.

You have the following options:

- sync all the product information (both stock quantities and prices) - choose **All information** from the available dropdown;
- sync product stock quantities only - choose **Stocks only** from the available dropdown.

Click the **Updated product information** button and wait for the operation to finish.

When the operation is completed, a report will be displayed with:

- **Eligible products** - then number of products that have been connected to NextUp ERP;
- **Updated products** - the number of products that have actually be updated.

Sync Product Information

Home / Module / Sync Product Information

This tool will help you update product information in your store from your NextUp ERP platform.

Sync Product Information

Product information successfully updated.

Eligible products	Updated products
7	7

All information

Update product information



Contact

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