

Packs – General information

The feature of packs allows the user to group all or some document items, determining how to package given items.

The *Packs* tab is available on the forms of documents for received items and on the WM- document form.

No.	Pack Code	Pack UPC	Quantity	Pack Type
1	PC1		1	Box
[abc]	[abc]	[abc]	[abc]	[abc]

List of packs on a document form

The list of packs presents the following details:

- **Pack code**
- **Pack UPC**
- **Quantity** – the *Quantity* column always presents the value 1
- **Pack type**

Characteristic features of packs:

- It is possible to define an empty pack to which no document items are assigned; such a pack is not copied to a subsequent, generated document
- A document can contain any number of packs
- On the list of packs, the user may:
 - Add new packs
 - Edit packs
 - Delete packs
 - Copy packs
 - Generate documents for specified packs

Defining packs

To define a pack, it is necessary to select one of the following buttons:

- [Add Through Form]
- [Add Many Packs]

Both forms opened with these buttons allow the addition of packs grouping document items in which the items are to be delivered.

[Add Through Form] option

In order to add a pack through a form, it is necessary to select the button [Add Through Form]. With the use of this option, it is possible to add a single pack.

The screenshot shows a software interface for defining a pack. It has three tabs: General, Attributes, and Attachments. The General tab is active and contains the following fields:

- Code: [text input]
- UPC Type: [dropdown]
- UPC: [text input]
- Description: [text input]

The Calculation section includes:

- Quantity: [input: 1]
- Pack Type: [dropdown: Box]
- Value (S): [input: 0.00] EUR
- Pack Status: [dropdown: Received]
- Net Weight: [input: 0.0000] kg
- Gross Weight: [input: 0.0000]
- Volume: [input: 0.0000] m3

The Items section has a toolbar with icons for adding, deleting, and editing items, and a Warehouse dropdown set to Main Warehouse.

Below the items section is a table with the following headers: No., Code, Name, Features, Quantity, UOM, Price, Subtotal Value, Discount, VAT Rate. The table body is currently empty.

Pack addition form

General tab

The first section of this tab contains fields identifying a given pack:

- **Code** (required) – it presents the code of a pack, definable while adding a pack into a document. The field may be filled in manually or with the use of a barcode scanner.
- **UPC Type** – it determines a code type to be entered in the *UPC* field. It must be specified before entering any value in the *UPC* field. Available options include:
 - *Empty* – it means that a UPC code will not be defined
 - *UPC-13* – a UPC to be entered must consist of 13 digits and have a correct check digit
 - *UPC-8* – a UPC to be entered must consist of 8 digits and have a correct check digit
 - *Other* – a UPC may have any form (any number and type of characters)
- **UPC** – it presents a UPC code assigned to a pack. Depending on the option selected in the field *UPC Type*, the system verifies the code's correctness. It is also possible to verify the uniqueness of UPC codes – in order to do so, it is necessary to select the parameter *Check uniqueness of pack barcodes* in *System* → *Configuration* → *Trade*. If the parameter is selected and:
 - *A document is being issued manually* – the system verifies whether an entered UPC code has not been already assigned to another pack, used for an uncanceled document of the same type (including the document currently being issued). If the system finds such a duplicated UPC code, it does not block the saving of a given pack but only informs the user about it.

- *A document is being generated* – if an entered UPC code has been assigned in another document of the same type, the system verifies whether a pack in the document currently being generated and a pack in a document where the same UPC code has been found have a common source pack (i.e. a pack in a document from which subsequent documents with packs have been generated). If so, the system does not inform the user about the duplication of UPC codes.
- **Description** – it presents a pack's description; it can be edited until a given document is sent
- On the right-hand side of the *Description* field, the section presents the **number of a document** to which a given pack belongs. This information is especially important while opening a pack form through the **pack monitor**.

The *Calculation* section presents basic data on a given pack:

- **Quantity** – this field is non-editable and always presents the value 1; two packs with the same content should be added separately
- **Pack Type** – it presents the type of a pack to which document items have been added. The list of pack types is retrieved from the generic directory *Pack Type* included in the group *General (Configuration → (General) → Generic Directories)*. Changing a value in the *Pack Type* field is possible until a document is confirmed, but only in the case of packs not associated with another pack (an associated pack is created during document generation).
- **Time of Delivery (days)** – this field is displayed for P0 documents. It is editable until document confirmation and is connected with the field *Expected Date*. The time of delivery is calculated as the difference between a pack's expected date and a document's date of issue. By

default, during the addition of a new pack, the time of delivery is set as the number of days specified in the field *Expected Date* of a PO document. In the case of packs copied as a result of the copying of a document, the time of delivery is calculated as the difference between a new PO document's date of issue and a current pack's expected date.

- **Expected Date** – this field is displayed for PO documents. It is editable until document confirmation, provided that the expected date cannot be earlier than a PO document's date of issue. The field is closely connected with the field *Time of Delivery (days)*. By default, during the addition of a new pack, the expected date is set on the basis of the field *Expected Date* in the header of a PO document.
- **Pack Status** – it presents the current status of a pack. It can be modified anytime, regardless of a given document's status. The list of pack statuses is retrieved from a corresponding list in configuration (*Configuration* → (*Trade/Warehouse*) → *Pack Statuses* → *Pack Statuses* tab) and includes active statuses only. Except for manual modifications, a pack status can also be automatically modified by the system when one of actions defined in the system is performed (*Configuration* → (*Trade/Warehouse*) → *Pack Statuses* → *Actions for Packs* tab). Each action is assigned a specific status, which is then set for a given pack once the action is performed. More information on actions for packs and pack statuses may be found in the article *Pack statuses*.
- **Value** (non-editable) – depending on the settings of a VAT direction in a given document, this field presents either the subtotal or total value of a pack, calculated on the basis of the final value of pack items in a document currency. A relevant currency symbol is presented on the right-hand side of the *Value*
- **Net Weight, Gross Weight, Volume** – they present the net

weight/gross weight/volume of a given pack. They can be defined manually by the operator until document confirmation or automatically calculated by the system on the user's request. In order to calculate weight/volume, it is necessary to select the button **[Recalculate Weight]/[Recalculate Volume]** located next to a given field. The calculation is carried out as the sum of item weights, which are in turn calculated as the product of an item quantity and weight/volume assigned to a unit used for a given item.

- If a new pack is created with the use of the button **[Create Pack]** on the list of document items, weight and volume are calculated automatically; other methods of pack definition do not calculate weight/volume for a pack. In such cases, it is necessary to use the buttons **[Recalculate Weight]/[Recalculate Volume]**.
- Weight/volume units are by default displayed as basic mass/volume units, with a possibility to change them to other active units. If the user changes a unit, the system performs a recalculation on the basis of previous weight/volume and recalculates a new unit to a previous unit. If none of weight/volume units is a basic unit, the system recalculates them to basic units, and then to new units selected by the user.
- **Warehouse** – this field presents a warehouse to which pack items are to be sent. Also, it enables the user to open the list of warehouses and select a relevant warehouse. In the case of trade documents PO and PI, this button is only active if the option *<All>* has been selected in the field *Warehouse* in the document header. Additionally, in the case of PI documents, the button is only active if the given document has not been generated from a POR document. The user can select active warehouses assigned to the definition of a relevant document type in a center in which a given document is

being issued – with the exception of own consignment warehouses which, in the case of PO documents, are only available if they are associated with a vendor defined in the document header, and in the case of PI documents are not available at all. If the option <All> has been selected in the document header, the system by default fills in the *Warehouse* field with a default warehouse set for a given document type in a center in which a given document is being issued, unless the default warehouse is an “unpermitted” consignment warehouse. In such a case, the system sets an active warehouse with the lowest ID in the database, that is the one created earliest. If a warehouse has already been specified in the document header, the same warehouse is set for packs, with no possibility to change it.

Note

Changing a warehouse in the document header changes it also for packs.

The list of item packs is identical as the list of document items. It presents the same information and provides the same methods of item addition and modification, with the following exceptions:

- The pack form displays only those items which are assigned to a given pack
- An item added on the pack form is automatically associated with that pack
- In PO documents, the time of delivery and expected date of a new item is set on the basis of the time of delivery and expected date of a current pack, and not on the basis of the time of delivery from a price list
- A warehouse for subitems is set according to a warehouse set for an entire pack

Additionally, an added pack item is automatically presented on the list of document items as well.

The *Items* section contains information on a warehouse to which pack items are to be sent and the list of items of a given pack, presenting the following item details:

- **Code/Name**
- **Features**
- **Quantity**
- **UOM**
- **Price/Subtotal value**
- **Discount**
- **VAT rate**

Remaining tabs available on the form have been described in the articles *Attributes tab* and *Attachments tab*.

[Add Many Packs] option

In order to add multiple packs simultaneously, it is necessary to select the button [Add Many Packs].

The screenshot shows a software interface with two main panes: 'Items' and 'Packs'. Both panes contain a table with columns for item details and a toolbar with icons for adding, deleting, and filtering. The 'Items' table has columns: Code, Name, Featu..., Quan..., U..., Price, Subtot..., Discount, VAT Rate. The 'Packs' table has columns: No., Pack Code, UPC Type, Pack UPC, Qu... The 'Calculation' section at the top shows fields for Quantity (1), Pack Type (Box), Pack Status (Received), Value (5) (0.00 EUR), Net Weight (0.0000 kg), Gross Weight (0.0000), and Volume (0.0000 m3). The 'Description' field is empty, and the reference number 'POR/2020/00006' is visible in the top right.

Multiple pack addition form

The form is very similar to the **standard addition form of a single pack**, with the following exceptions:

- It contains an additional section *Packs*, presenting the list of packs to be created after saving the form
- It contains fields related to a pack code, UPC code type, and UPC code, included in the *Packs* section

The *Packs* section may be used to determine how many single packs, containing items defined in the *Items* section, are to be created. In this place, the operator may enter pack codes, UPC code types, and UPC codes, as well as warehouses to which the items of particular packs are to be sent.

Packs may be added with the use of the following buttons:

- **[Add]** – it adds a new row on the list of packs, where it is necessary to enter information on a pack
- **[Add Through Form]** – it opens a new form with the same fields identifying a pack as in the case of the single pack addition form, and including the list of warehouses based on data from the document header

Pack monitor

The pack monitor is a tool enabling the user to quickly find information on the current status of a given pack, track the pack's history, or generate appropriate documents for packs.

The pack monitor may be accessed in the following menus:

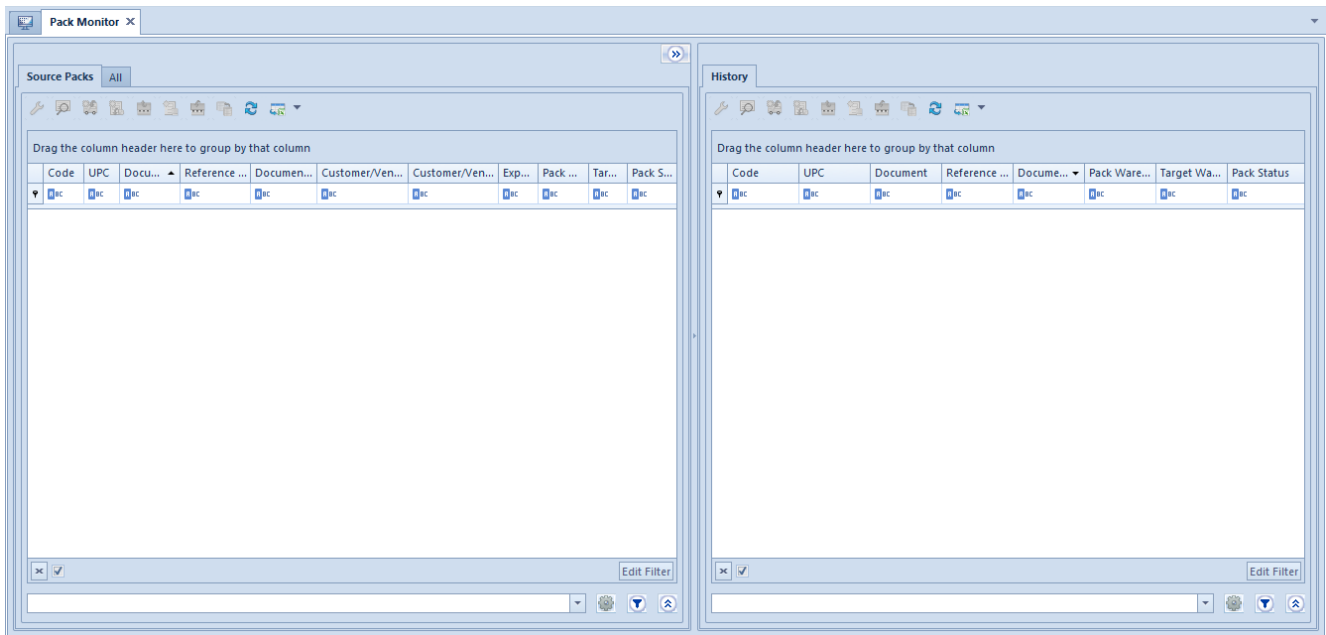
- *Purchase* → *Pack Monitor*
- *Warehouse* → *Pack Monitor*

Both the lists present the same data.

Pack monitor form

The pack monitor form is divided into two sections:

- The first one is composed of the tabs *Source Packs* and *All*
- The second one contains the tab *History*



Pack monitor

Source Packs tab

The tab presents the list of packs sorted by a document date; to be displayed, a pack needs to meet the following conditions:

- It cannot be created on the basis of other packs
- The status of a document to which a given pack belongs is other than *Canceled*
- The operator has been granted a permission for previewing a document to which a given pack belongs

The list of source packs is composed of the following columns:

- **Code**
- **UPC**

- **Document** – it displays the number of a document to which a given pack belongs
- **Reference Number** – the number is retrieved from a pack's document (it applies to P0, POR, and PI documents)
- **Document Date** (P0, IR+, WM- – date of issue; POR, PI – date of receipt)
- **Customer/Vendor Code** and **Customer/Vendor Name** – they are retrieved from a pack's main document (it applies to P0, POR, PI, and IR+ documents)
- **Expected Date** – it displays a pack's expected date (applies to P0 documents)
- **Pack Warehouse**
- **Target Warehouse** – it displays the name of a warehouse to which a given pack is to be sent (applies to WM-documents)
- **Pack Status** – it displays the status of the last pack associated with a source pack displayed on the list

All tab

This tab's layout is analogous to the one on the *Source Packs* tab. The only difference is that the *All* tab presents all packs registered in the system, and not source packs only. Moreover, the status of each pack refers to a specific pack only, and not to the last pack associated with a given source pack, as on the *Source Packs* tab.

History tab

The *History* tab does not need to be displayed. By default, it is hidden – to display the tab, it is necessary to select the arrow icon located in the top right corner of the form.

The pack history section is closely connected with the other section of the form. It presents the history of a pack currently selected on either the tab *Source Packs* or *All*, and is dynamically refreshed upon each change of selection.

The system understands pack history as the history of packs

directly or indirectly related to a currently selected pack. Historical records are limited to:

- Packs associated with documents with a status different than *Canceled*
- Packs that can be previewed by the operator – as in the case of the other tabs

Document generation

On the tabs *Source Packs* and *All* in the pack monitor window, it is possible to generate documents for selected packs. However, such documents are not always generated directly from a document with which a selected pack is associated, or from the specific pack as well.

Purchase order receipt

During the generation of a POR document, the system chooses one of the two generation types:

- Generation on the basis of unprocessed P0 items belonging to a selected pack
- Generation on the basis of “unreceived” PI items associated with a selected pack

When determining the list of packs for which a POR document is to be generated, the system verifies whether:

- A P0 document has the status *Confirmed* or *Pending*
- There is no non-deducted and uncanceled advance invoice related to the P0 document
- A PI document has the status *Confirmed* or *Posted*
- A warehouse specified for a given pack is assigned to the POR document definition in a center in which the generation process takes place

If all the abovementioned conditions are met, the system generates a POR document.

Purchase invoice

Generating a purchase invoice document also involves two generation types, as in the case of POR generation. The difference between the two generation processes performed in the pack monitor window is that while generating a purchase invoice, the system searches for "non-invoiced" POR items instead of "unreceived" PI items. Additionally, the system verifies the status of a POR document, instead of a PI document.

Warehouse movements

The generation of a **WM-** document in the pack monitor window aims to move a given pack to another warehouse. In order to make it possible, a relevant item must be received to a warehouse before. Therefore, if the operator selects a source pack originating from a PO document, the **WM-** generation process will only be available for such a pack if an associated POR document has been generated before, receiving the pack's resources to a warehouse.

The generation of a **WM+** document allows the user to receive items from packs to another warehouse. The system does not handle the generation of partial **WM+** documents from **WM-** documents, so **WM+** documents are always generated in relation to entire **WM-** documents. In order to maintain the rule of working on single packs, the user should accept the generation of separate **WM-** documents for packs.