

## Presto 22 Manual

There are more resources to learn how to use Presto on the website.

### *Technical notes*

Describe components or possibilities of Presto that are not in general use, such as variables or Earned Value Method, as well as detailed processes, ideas, and examples of use.

### *Technical inquiries*

Most frequent resolved doubts in the use and installation. Also accessible from Presto, menu "Help: FAQ database".

### *Training*

Official centers and certified trainers of Presto. You can hire custom online or face-to-face courses. There are regular webinars on the basic use or on specific processes.

### *Books about Presto*

Publications available.

### *Technical support*

Personalized support and help service.

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# User interface

## General criteria

Presto uses the criteria of the Windows operating system, Microsoft Office, and other common programs, whenever applicable.

*The manual only describes behaviors that represent a Presto specific functionality.*

Código	NaC	Resumen	CanPres	Ud	Pres	ImpPres
1	Revit	Edificio educativo RIB Spain	1		1,873,310.84	1,873,310.84
2	E04	CIMENTACIONES	1		52,723.68	52,723.68
3	E05	ESTRUCTURAS	1		244,525.57	244,525.57
4	E05AAT110	PILAR PERFIL TUBULAR S275 J2H RSH 250x4 mm HA-30	16.00	m	77.18	1,281.19
5	E05HSA240	HORMIGÓN ARMADO HA-35/P20/I PILAR ENCOFRADO CARTÓN D=36 cm	1.74	m3	431.30	750.46
6	E05HSA280	HORMIGÓN ARMADO HA-25/B20/I BLANCO ENCOFRADO METÁLICO PILARES 30x30 cm	383.97	m3	316.27	121,406.56
7	E05HSM080	HORMIGÓN BLANCO PARA ARMAR EN PILAR HA-25/B20/I	1,000	m3	118.21	118.21
8	O01OB010	Oficial 1º encofrador	0.250	h	19.99	5.00
9	O01OB020	Ayudante encofrador	0.250	h	18.76	4.69
10	O01OB025	Oficial 1º grúa	0.250	h	19.47	4.87
11	M02GT002	Grúa pluma 30 m/0.75 t	0.250	h	18.82	4.71

Espacio	Planta	Área	Zona	FamiliaTpoBIM	N	Longitud	Anchura	Altura	Cantidad	CanPres	Pres	BIMLong	BIMSup	BIMVol
03 - Planta										383.87				
1	01 - Entrada	01 - Entrada	Circulation 3	Corridor 131	Muro básico: Generic - 200mm	1	8.39	0.20	11.40	95.65			94.1279	18.82558
2	01 - Entrada	01 - Entrada	Circulation 3	Lobby 102	Muro básico: Generic - 200mm	1	8.40	0.20	11.40	95.76			94.05	18.81
3	01 - Entrada	01 - Entrada	Circulation 3	Lounge 111	Muro básico: Generic - 200mm	1	8.33	0.20	11.40	94.96			94.05	18.81
4	01 - Entrada	01 - Entrada	Circulation 3	Stair 132	Muro básico: Generic - 200mm	1	8.33	0.20	11.40	97.50	383.87		97.5042	19.50084

### Main Presto window with estimate and take-off lines

The Office ribbon contains the different Presto options, organized in menus and panels. The quick access toolbar, at the top left, allows direct access to the most used options.

## Frames and windows

The "View" menu options, such as "Estimate" or "Gantt Chart", are the main *windows*, which appear as tabs within a common frame.

- A new frame can be created by dragging a tab to the edge.
- You can move tabs between the different frames, as well as adjust the width or height of each frame.

Windows are closed by clicking on the tab [x] or with the middle mouse button.

The options "Start: IFC: CAD", "Start: BIM: Open-IFC" and "Start: Reports: Design" open windows independent of the general window.

## Subordinate windows

Each main window has subordinate windows, such as "Take-off lines" or "Text", which appear within a subordinate frame. Subordinate windows can be moved within the frame by dragging and dropping a tab it into any of the arrows that will appear.

## Reference to options

Each option, icon, and column header have a tip that is displayed when posing the cursor.

The options accessible through menus are referred this manual by listing the main menu, the panel, and the option itself, for example:

### *View: Settings: Time*

When multiple options are cited from the same menu, only the last step is displayed.

The options of the context menu, with the right mouse button, are indicated by the mouse icon:

### *[ox] <Option name>*

The action depends on the cursor situation:

- In the header, they are applied to the entire column, such as "Hide column".
- Over a field in the table or the middle area of a window, they apply to the field or the entire row, such as color filters.

### Function keys or accelerators

The key or key combination is indicated in square brackets, separated by "+".

[Shift + F7]

### Colors

Customizable colors in fields or reports can be selected in the Windows dialog box or entering the RGB number:

$$\text{RGB} = \text{R} + \text{G} \times 256 + \text{B} \times 256 \times 256$$

"R", "G" and "B" are the respective components of red, green, and blue, integers between 0 and 255.

The project "Colores" in the "Project/ESP" directory contains a large set of named colors and RGB equivalents.

---

*The Windows selector box can be used to select colors in the more intuitive HSL model and copy the RGB values.*

---

### Fields

All data is stored in tables, which contain similar data sets. Each item or record in a table has a set of fields with a fixed meaning, such as code or price, which are usually displayed in columns.

---

*The tables and number of elements in each one can be seen in "View: Project: Settings: Tables".*

---

The tip that appears when hovering over the column headers displays the field name, exactly as it should be used in expressions and reports, and a short description:

#### Concepts.Code

#### Unique code for identifying the concept

The table name is omitted when it is evident from the context or is repeated in several fields.

The complete list of fields can be seen, among other places:

- In the expression builder appearing with the options "Insert user column" in the tables header and "Operate" over a range of cells.

- In the "Field list" option of the window "Start: Reports: Design".

Both places include the description, the values of the enumerated types and, in some cases, an example.

For example, the help for the "Concepts.State" field is:

0: Normal (black) 1: Non-compliant (red) 2: Not approved (gray) 3: Compliant (green)

---

*This manual does not contain information, like this, that can be consulted directly in Presto.*

---

### Editing fields

Editable fields can be modified with a slow double-click or with [F2].

- In some fields the value is chosen from a fixed list, such as categories or orientations.
- Dates can be chosen in the calendar or typing directly in the appropriate format.

To copy the values of the nearest fields:

*[ox] Copy above field [F9]*

Copies the value above the active field to this field or the selected range.

*[ox] Copy left field [Shift + F9]*

Copy the content of the field on the left.

---

### Suggest box

Most Presto fields show the suggest box or button on the right.



The suggest box presents a list of data with two possibilities:

- Values useful to automatically populate the field
- Information related to the field, even if it is not useful as a value

If the value comes from an expression, Presto calculates the result for every element, so several cells in a range can be filled applying the desired choice just once.

---

*The suggest box cannot be used in fields that for any reason cannot be modified.*

---



Fields can be quickly filled with suggestions using the following keys, which can be pressed repeatedly or held down:

*[ox] Suggest [F7]*

Fill in and move to the next field

*[Shift + F7]*

Fill in and move to the bottom field

---

*The suggested values can be filtered typing the starting letters of the name or the description in the header*

---

Suggested values can have three sources, appearing in this order:

- User predefined values (blue)
- Presto predefined values (magenta)
- The values used in the cells above the field if there are not predefined values

Some Presto predefined values:

FIELD	SUGGESTION
Code	Automatic codes for new concepts
Unit	Standard units of take-off
Price	Price adjusted for inflation or assigned to entities
Description	Case conversion
Code2	Decimal encoding of the concept
City	City that corresponds to the postal code
Quantity	Inverse of the quantity
Duration	Estimation by cost and quantity of resources

### Customize suggestions

The "File: Working environment: Suggest" tab shows the list of customizable fields.

---

*Use the contextual options [ox] for using filters based in text color to quickly select the user defined fields*

---

The suggested value is written using Presto's normal syntax, described in the expression builder. The result must be a string or a number, depending on the field; use conversion functions if needed.

---

*Note that the decimal point must be used, according to the rules of expressions.*

---

Suggest a price based on increasing the current price:

CONCEPTS.EST [N]	DESCRIPTION
Concepts.Est * 1.05	Actual price + 5%
Concepts.Est * 1.10	Actual price + 10%
Concepts.Est * 1.15	Actual price + 15%
Concepts.Est * 1.20	Actual price + 20%
Concepts.Est * 1.25	Actual price + 25%
Concepts.Est * 1.30	Actual price + 30%

Suggest comments to take-off lines based on other fields:

TAKEOFFLINES.COMMENT [A64]	DESCRIPTION
TakeoffLines.Floor	Level
TakeoffLines.Floor + " / " + TakeoffLines.Zone	Floor and room
TakeoffLines.GridX + TakeoffLines.GridY	Grid XY

Conditions and any other Presto function can be used. For example, to create a field that populates the BIM family and type of the take-off line only if the field is empty:

`iif (Concepts.Description2=="", Concepts.FamilyBIM + " | " + Concepts.BIMType, Concepts.Description2)`

---

*Custom suggestion can be saved in "File: Working environment: Export: User profile", in the "Suggest" section, and can be imported from other profiles.*

---

---

## Navigation and display

To scroll in table windows, in addition to the standard Windows options, the following keys and combinations can be used:

ACTION	EFFECT
[Intro] (numeric keypad)	Acts as the [Tab] key on the main keyboard
[Home] [End]	Moves to the first and last field in the row
[Ctrl] + [Home]	Moves to the first field and item in the table
[Ctrl] + [End]	Moves to the last item in the table
"Previous" "Next"	Moves to the previous and next item in the table
"First element"	Moves to the first item in the table
"Last item" (table management prior to Presto 21)	It moves faster to the table last item, but it blocks working in other windows at the same time. Return to normal mode by pressing "Cancel".

### *Active concept*

It is the concept of the main window of which the information is displayed in the subordinate windows.

The option " File: Working environment: General: View header concept data in subordinate windows" allows to change the active concept between:

- The concept of the table where the cursor is. Better when working on a price database, since the breakdown and the text are seen simultaneously.
- The concept of the header. More useful when developing the estimate, as the work units are seen together with the take-off lines.

Double-click on some windows places the concept as active:

- Window "Concepts"
- Main window "Take-off lines".

- Window "Spaces", subordinated window "Work units".

### *Go to concept*

Allows to search for concepts using the code. The list of concepts to choose from is progressively reduced as the initial characters are typed.

### *Specific possibilities in the "Estimate" window*

ACTION	EFFECT
Click on the path at the head	Allows access to any of the top-level concepts, as well as the previous and the next of the same level.
Double-click the header "Up" icon or [F3]	Ascend to the top-level concept.
Double-click on a concept [Shift + F3]	Descend to the concept.
"Previous"   "Next"	Move to the concepts of the same level without the need to ascend and descend
"First element"   "Last item"	Move to the first or last concept of the same level.

### **Hierarchical windows**

These windows, such as "Tree," "Agenda" and "Gantt Chart," display information organized in levels. The behavior is like table windows, but they present the information that corresponds to the open nodes and do not support filters.

The visible nodes can be selected:

- From the drop-down list showing the hierarchy levels, which applies to selected nodes, in its case.
- With the symbols [+] and [-] to the left of each concept.

Double-click on any field also opens or closes the level.

---

## Edit items

### Add items

There are different procedures for adding an item to a table.

ACTION	PROCEDURE
Add a line at the end	[Enter] or down arrow from the last line.
Insert a line	[ox] "Insert Line" or [Insert].
Drag and drop	It can be an element from another window of the same project or from another project; the cursor takes a rectangular shape. If the target is the "Tree" window, the dragged item is inserted into the last position of the target level.

In some tables, mandatory fields, such as the concept or document code, must first be filled in.

### Item selection

Most actions in a table can be applied to all the elements or to a selection of rows, columns, or cells, using the usual Windows criteria.

---

*To check and uncheck groups of rows or columns use the [Ctrl] or [Shift] keys.*

---

You can use the following options from the "Start: Locate: Select" menu.

#### Select all (Ctrl + E)

Select all items in the active window. It is equivalent to clicking on the upper left corner when no row is selected.

#### Invert selection

Reverses the active selection. It is equivalent to clicking on the upper left corner.

#### Deselect

Deletes the active selection.

### [\[ox\] Select by mask | Deselect by mask](#)

Above the column header, they select rows based on the content of the column.

---

*Unselected items are still visible, unlike filter options, which temporarily remove from the window elements not meeting the conditions.*

---

## Copy, paste, and delete

### [Copy | Paste](#)

Inserts the information contained in the clipboard into the table.

- If the information has been copied from an equivalent table, from the same project or from another, it is inserted into a new line at the cursor position.
- If the information comes from any other program, or from Presto, but the source and destination tables are not supported, the fields are filled in from the active field, as if you manually typed the same data.

Hidden and inactive fields and information that is not supported, such as text in a numeric field, are ignored. Line breaks in the clipboard content generate a new line, and tabs change columns.

---

*Data copied from Presto has priority over data copied from clipboard afterwards. To copy from the clipboard, in this case, unselect or click in the upper-left corner of the table window.*

---

### [Cut](#)

Deletes text from a field and copies it to the clipboard.

### [Eliminate](#)

Select the desired lines and press [Del].

- Deleting an item deletes all associated information.
- If removing a concept from the last breakdown in which it appears, the concept itself is deleted from the project
- Items with information associated with cost control, such as concepts or suppliers with documents, cannot be deleted.

The following table provides ideas for performing mass deletions.

TO DELETE	OPTION
Complete tables	"View: Project: Settings: Tables". Gray tables cannot be deleted because they contain information required in other tables.
Texts	"Tools: Texts: Format or delete".
Associated files	"Files" window.
Phases	Clear the fields with quantities in the "Spaces and phases" window.
Take-off lines	Main window "Take-off lines".
Planning	Remove all dependencies in the "Link" window, subordinate to "Gantt Chart".

---

*When manually deleting or modifying a calculated value, in magenta color, the values on which its calculation depends, such as the quantities of a breakdown or a phase, or the take-off lines, are eliminated.*

---

### [ox] Duplicate

This option, which appears in the "Code" field of all windows that refer to concepts, creates a concept identical to the original and all its associated information, with different code.

### *Rename a concept*

When you write or paste non-existent code into the code of a concept, the concept is renamed.

If the code already exists, the concept is replaced by the new one, maintaining the information associated with the previous concept, such as the quantities.

---

*The exception is the case of the supply window, where the code change represents a change of the supplied concept.*

---

## Move [F4]

Inserts concepts or take-off lines copied to the clipboard into the cursor position and deletes them from their previous position.

If the clipboard is empty, Presto requests a mask, inserting all the concepts that meet it and removing from their former position the concepts with only one superior.

## Undo | Redo

Undo and redo actions are unlimited during the session, except:

- Other users' actions working on the same project.
- CAD and BIM windows.
- Actions on the interface, such as opening or closing windows
- Changes on the working environment

Text windows have specific, internal undo options.

---

*See also "Main Menus and Options: Start: Undo: Auditing".*

---

## Undo special

List of actions that can be undone or redone, with identifying data, such as the price in that moment.

Double-clicking on a line undoes or redoes all operations up to it at once.

## Activate

Turn off these options to speed up project when performing time-consuming operations.

---

*If you save a project and click "Cancel" while saving the undo actions, the option is disabled.*

*If the option is disabled during a work session, it is automatically enabled again when a new session is started.*

---

## Create snapshot

Useful to easily create a returning point.



## Copy

Copy the list of actions to the clipboard to combine those of different users and control or audit operations.

## [ox] Operate

Applies operations to a column or a range of cells in the same column, opening the expression builder. Check its specific information to see all the possibilities.

The result must be compatible with the field type.

To apply the operations suggested in the upper line of the dialog box, select the field and the operation, type the desired factor and press "Apply" and "OK".

- Percentage or read-only fields are not operated.
- When operating on calculated prices Presto asks if you want to lock the price or suppress the breakdown.

In alphanumeric fields some options are equivalent to the numeric ones:

- Match a content (==)
- Add a text at the end (+)
- Subtract a text from the position where it is located (-)

---

*Remember that modifying calculated fields removes the values from which the value came.*

---

## Find and replace

Finds text in the selected columns or range of cells, or in the column where the cursor is located, if the content is text-type.

### *Features (valid for filtering by words)*

- To search in the numeric or date fields, the value to be searched must be written in the same format, that is, with decimal, thousands, or date separators.
- Diacritic characters, like accents or tildes, are not considered.
- Words do not need to be complete; searching for "door" will find also "indoor" and "doors".

- Expressions can be in in quotation marks, such as "pine door" to search for exact texts.
- If blank spaces are searched, they should be within quotation marks.
- With the prefix "+" only elements that have this word are searched.
- With the prefix "-" elements that have this word are avoided.

The text to search can include the special characters:

CHARACTER	MEANING
^p	Paragraph break
^t	Tabulator
^0nnn	Any character, given by its ASCII code with three digits

The searched text can be separated from the rest of the text by whitespace, punctuation marks, tabs, and carriage return.

### *Search all texts in the active window*

This option can be enabled in list-type windows, such as concepts, contracts, entities, or documents.

If the cursor is in a subordinate text window with this option enabled, it also searches in the texts of the concepts or documents visible in the main window.

---

## **Tables**

### **Reorder tables**

Non-hierarchical tables can be displayed in the order of any field, using the header options.

### *[ox] Ascending sort in screen | Descending sort in screen*

The on-screen sorting is maintained while the window is open until:

- The layout is restored or changed
- The sorting field is not visible.

- The key [F5] is pressed

In windows with more than one key field, such as "Invoices", the "Display Order" drop-down list also allows to choose the order.

### *Final order*

In some tables, such as estimate and take-off line tables, the new order can be maintained in the database.

### *[ox] Ascending sort | Descending sort*

Reorder the entire table and remain so for the future.

---

*The initial order is lost. To retrieve afterwards a certain order, fill and save first the desired order in an appropriate field. For example, in take-off lines you can use the "Mark" field.*

---

### *[ox] Move up | Move down*

These options move the concept before or after the adjacent concept. In the "Spaces" window, the "Number" field also changes.

### *[ox] Increase level | Decrease level*

In hierarchical tree and Gantt chart windows, these options move a concept to the higher concept in the hierarchy or under the previous concept of the same level.

---

*These options can be used with multiple selections and are only active when the action is possible, and their meaning is unambiguous.*

---

## **Export table to Excel**

Consult the technical note "Interoperability between Excel and Presto".

## **Analyze**

This option, available in all non-hierarchical table-type windows, creates a temporary two-level tree with a combination of two fields, chosen from those in the window's main table.

Each node displays the number of elements that correspond to it, and you can easily select the elements of one or more nodes.

For example:

- In the take-off lines table, you can obtain the elements grouped by floors and, within each floor, by zones.
- In the table of concepts, you can obtain the elements grouped by natures and in each one, the units of take-off used.
- In the table of variables, you can get the elements grouped by groups and by the variables of each group.

If the second field is empty, a single-level tree is generated,

*Sort alphabetically*

If it is not checked, nodes are sorted in decreasing order of elements.

*Accept*

When accepting, all the rows related to the marked nodes are selected, so that all the possibilities of Presto can be applied later to the selected set.

---

## Columns

The information in the tables is organized into columns, which can contain:

- Presto predefined fields
- User expressions
- Multiple fields with predefined fields or custom variables

Columns are organized into layouts, described below.

*Header*

The tip of the column header displays the variable as it should be written in user expressions or reports, like "Concepts.Description".

The header field has the same content as the column fields, applied to the concept of the header, if it exists and it is meaningful sense.

*Adjust column width*

The "Adjust width" option in the "Start: Tables" menu assigns each column the minimum possible width, as well as pressing the standard Windows shortcut [Ctrl] [+].

A single column can be adjusted manually by moving the vertical line of the separation header with the column to its right. Double-clicking on the line adjusts the width of the column to its content.

---

*Adjusting a column turns off the automatic adjustment.*

---

### [\[ox\] Choose visible columns](#)

Allows to modify the combination of visible columns using a dialog box that displays the possible and the chosen columns.

Read-only columns are identified by the "\*" character.

To select and columns double-click on their name or use the arrows. The "Move up" and "Move down" buttons reorder the columns.

### [\[ox\] Sum](#)

Calculates and shows the sum of the values visible in the column, considering the filters, appearing between brackets.

### [\[ox\] Hide column](#)

Removes the selected column or columns from the layout.

### [\[ox\] Freeze column | Unfreeze column](#)

Locks or unlocks the columns when the columns at the right move to the left.

### [\[ox\] Protect column | Unprotect column](#)

Prevents accidental modification of read and write columns, appearing in a lighter color.

## **User columns**

User columns display the result of user-created expressions, based on other values and data of the estimate.

User columns can be created:

- With the option "Insert user column".
- Using "Choose visible columns", inserting one of the available user columns and then editing the contents using "Edit user column".

---

*User columns, unlike custom variables, display calculated values and are not editable one by one. See the technical note "Using variables".*

---

### [\[ox\] Insert user column](#)

Opens the expression builder to choose an existing field in "Fields and expressions" or to create a new expression.

Consult the technical note "Creating expressions".

The user column receives a column name "User\_NN", which identifies it in the box to choose visible columns, a provisional name for the expression "User\_NN", which appears in the header, and a default format, which can be modified in the option described below.

---

*The expression builder allows to save new expressions with a new name, instead of the provisional one. It also shows in which layout each expression is used as it only can be deleted when not used.*

---

### [\[ox\] Edit user column](#)

Allows to modify and format a user column, defining its properties in the same way as the expression builder and the reports.

FIELDS	DESCRIPTION
Name	Identifies the expression and must not exist in the list of fields and properties. If modified, it will be saved in this list with the new name. It is useful to insert the expression in other layouts.
Help	Tip for the field header.
Source	Expression that calculates the value.
Format	It allows to customize the appearance, choosing between different possibilities of text, numeric and date formats.
Text color	RGB number, as defined in the "Colors" section of the manual.
Background color	It can be the result of an expression, so it can depend on the field value or of other condition.

The formatting properties are like those in report text boxes, described in "Designing reports," with the following differences.

### *Type*

If the result of the expression is a number, the usual formatting for numeric fields is applied. If it is text it is justified on the left.

### *Header*

Defines the value that appears in the column header, under the name:

- "Default" displays the result of the expression applied to the top element, when it exists, as in estimate windows. It does not display values in hierarchical or list windows.
- "Sum" shows the sum of the visible cells in the column.

### *Multiple fields*

These repetitive fields appear to the right in some windows and layouts.

Multiple fields do not appear in the "Choose visible columns" option. There is a limit of sixty and they have a specific behavior with respect to normal fields.

### *Fields of spaces and phases*

They present the information of the concept broken down by spaces or by phases, depending on the chosen layout. One or two drop-down lists in the header allow to choose the fields to display, or none.

You can choose the initial space or phase number to begin with.

### *Price comparison fields*

They appear in the layouts of the estimate and tree windows with the terms "OFFERS" or "PRICES" and are described in "Multiple prices and comparison of offers".

### *User variables*

The layouts with the text "VARIABLES" in the name and all layouts of the main and subordinate windows of take-off lines allow to add user variables, which are described in the technical note "Use of variables".

---

## Filter items

The elements visible in a table can be chosen by masks and different types of filters, entered in the "Start" menu, in the column's headers or in the context menu on the fields.

A filter of each type can be activated, which is displayed in the header of the window and whose effects are accumulating.

Unlike selection options, filters temporarily remove from display the items that do not meet the condition.

### *In tables with key fields*

A mask can be typed in the "Mask" drop-down list, supporting wildcards "?" and "\*".

A mask applies only to key fields in the table, usually of code type. If there are multiple key fields, such as in document windows, it is applied to the field selected for sorting.

### *In any field*

#### *[ox] Filter by content*

Displays the lines with the same content as the field on which the option is clicked.

---

*If a range of fields or rows is selected, all items that contain any of the values in the selection are displayed.*

---

Filtering a numeric field displays fields whose entire part has the same number of digits as the chosen value. For example, filtering on the value "19.45" presents all values between "10.00" and "99.99". Negative numbers are grouped into a single range.

In the multiple fields of values associated with variables, they act as in the texts.

#### *[ox] Filter by text color | background color*

Displays lines with the same text or background color in that field.

### *Accumulated filters*

#### *[ox] Add filter by content*

Accumulates a filter per content to any currently active filter.



**In columns**

*[ox] Filter by differences*

Displays a single line for each different value in the column, applying to the numeric fields the same behavior as for the content filter. The header is marked with a specific color.

---

*Adding a content filter to this filter will display all items that comply with it, even if they were not previously visible.*

---

*[ox] Add filter by differences*

Allows to add a filter for differences, which accumulates to the previous filter.

**In selected rows**

*Filter by selection*

Filters lines selected, removing the rest from display.

---

*For filtering the non-selected lines, invert the selection first.*

---

**Filter generator**

*Filter by expression*

Shows only the elements that meet the result of a Presto expression.  
Consult the technical note "Creation of expressions".

**Filter by words**

Filters items whose alphanumeric fields, visible or not, contain the words listed, as described in "User Interface: Start: Locate: Find and replace".

SEPARATOR	EQUIVALENT TO	EXAMPLE	FILTERS ITEMS WITH
	OR	door window	"door" or "window"
+	AND	+door +window	"door" and "window"
-	NOT	+door -window	"door", but not "window"

In the concept windows, also keywords associated with the concept are searched.

---

*The fields "Concepts.EDT", "Concepts.Guid" and "Concepts.BIMTypeGuid" are not considered.*

---

### *Include the text and associated files window*

It searches also in the text window and the associated text-type files associated with the concept.

### **Override filters**

Overrides all user filters and retrieves the predefined filter for the layout.

All filters are overridden when the window closes. Filters by content, text color, background color, and differences are also overridden when the layout changes.

To override only the mask, enter "\*".

If a filter by expression, words or selection is active, the related icon is marked in the "Start" menu. Clicking on it suppresses that filter.

---

## **Layouts**

Layouts are combinations of columns and filters useful for a specific task, within a table window, that are chosen by the drop-down list at the top left.

All the layouts of each window generally act on the same table, except for special cases, such as the "Files" window or the main "Take-off lines" window.

All windows also have customizable user layouts without a specific function, as described below.

### **Customize layouts**

Layout definitions include:

- Visible columns, including user columns and custom variables
- The status of user-protected columns
- Filters by expression
- The display order, in the windows that allow it

Context menu options in the header allow to manage user layouts.

---

*User modifications to layouts are maintained in the following work sessions until the "Start: Tables: Restore layout" option is enabled.*

---

### **Save default layout**

Saves the current configuration as default layout. After this, the option "Restore layout" restores this configuration, instead of the Presto initial default.

---

*Default layouts are saved in the user configuration directory, in the XML file "PrestoNNN.PrestoLayout", where NNN is the version.*

---

### **Save layout in the project**

The layout configuration file is saved in the project itself, associated with the root concept. To recover it, double-click on the file in the thumbnail window.

### **Recover original layout**

Retrieves the initial layout configuration installed with Presto.

### **Reuse and share layouts**

Layout settings can be saved for later use by other users.

### **Export layout**

Generates an XML file with the extension ".PrestoLayout", which contains the definition of the layout in use. The file name is formed with the main window, the subordinate window, and the layout names.

The file name can be changed, as the information needed to link the window and the layout is kept internally.

### **File: Export: Default layouts**





















Generates a layout definition file with all the layouts in all Presto windows.

### **File: Import: Layout definition**

Importing a file with a layout definition replaces the layout. To act as a default layout from now on, use "Save default layout" option from this window.

## Information fields

This set of fields show the information types associated with the elements of the different tables.

FIELD	ICON	ASSOCIATED INFORMATION
la		Files
lb		Revit model or family, IFC file
ld		Vector drawings, such as DWG or DXF
le		Price
lg		Appears as supplier in some document
lg		Documents
lh		Variables
li		Images
lj		It is a supply in some document
ll		Link
lm		Take-off lines
lp		Specifications
lq		Quality assurance records
lr		It has lower-level concepts
lr		Resources
ls		It has more than one high level concept
lt		Text
lu		Phases
lv		Payments
		Both lower and higher-level concepts

Some icons have three background colors:

- White, when the information belongs to the concept itself

- Gray, when the information is in its lower-level concepts
- White and grey when both situations happen

---

*The "Info" field shows a combination of the most used info icons in every table.*

---

### Using the variable

The variable of information fields is formed, as the rest of Presto variables, with the names of the table and the field, and the prefix "%" so that it appears formatted.

In the result, the lowercase letter indicates that the information is associated with the concept and the uppercase letter to the lower ones.

For example, the variable showing whether there are associated files in a concept is:

[%Concepts.la](#)

If both the concept and the lower ones have associated files, the result is:

"aA"

---

## Text windows

They allow to view and edit the texts associated with the different types of elements.

The "Gallery" window has the same behavior described here when it contains text.

The most common formatting attributes can be added. Other attributes are also supported, such as tables, numbering, bullets, and images, if the text comes already formatted from other programs.

In this window, the "Undo" option is specific for the changes to the text.

The text is internally stored as RTF file. For using the text in expressions or reports, remove the format attributes of the variable with the "rtftxt()" function:

[rtftxt \(Concepts.Text\)](#)

---

*The format of non-Latin Unicode characters can be altered by some Presto text-related tools.*

---

### Translate

Translate the text into another language as indicated below.

### *Export | Import*

Export or import text in RTF or TXT format.

### *Line adjustment*

Displays each paragraph on a single line of unlimited length.

### *Check spelling (only in 32 bits bversion)*

Check the words in a dictionary, available for Spanish and Catalan, according to the language indicated in "View: Project: Setting: Miscellaneous".

### *Create table*

Creates a table within the text, with an optional header containing specific columns for quality testing and maintenance checks.

### *Move to associated file*

Converts the text into a file associated with the concept, with the "TEX" facet.

### **Format or delete**

It allows to perform mass operations with the texts, such as unifying the format or eliminating them.

The selected texts can be converted to the same font and color, between uppercase and lowercase or the same justification. Converting texts to the same font preserves only the background color of the original format.

When executed, even if none of the available options have been checked or selected, texts copied or imported from other programs are converted to the RTF format used by Presto.

### **Translation**

This option in the "Tools" menu translates the descriptions and texts project into the selected language.

---

*The user must get and provide a Google Translation API key.*

---

The translation of the description field is saved in the "Concepts.Description2" field and the original remain in the "Concepts.Description" field.

The formatting of the text, including paragraph formats and text in tables, will be maintained in most cases.

### *User Dictionary*

If this option is checked, a dictionary saves each fragment of text and its translation. Texts are checked in the dictionary before sending them to Google, saving cost and time, and:

- Specific terms or expressions can have a predefined translation.
- The translations provided by Google can be modified for the future.

The dictionary is initially saved in the Presto configuration directory with the name "Dict.rtf", but its name and location can be modified.

---

### **Expression builder**

Consult the technical note "Building expressions".

# Project stage

This chapter describes the processes commonly performed to create an estimate, a quote, or a price database.

- The structure of chapters and subchapters.
- The work units, the basic concepts, and the breakdowns.
- Take-off lines.
- The calculation of prices and adjustments.
- Integration with CAD and BIM programs.

It also describes the complementary documentation of the project, such as the building agents and the associated files.

*In this manual the terms "estimate" and "project" are equivalent.*

## Estimate WBS

An estimate is a tree that breaks down into increasingly small elements, from chapters to materials and resources, into a hierarchical structure known as *Work Breakdown Structure*, WBS.

	Code	NatC	Description	QtyEst	Unit	Est	AmntEst
1	0		HIGHWAY TO HEAVEN	1		4 308,05	4 308,05
2	0102		EARTHWORKS	1		4 308,05	4 308,05
3	010201		Clearing and Grubbing	1,00		4 308,05	4 308,05
4	E00101		Clear site of all trees less than 300mm	54 968,10	m3	0,07	4 095,49
5	5040022a		Backhoe	1,000000	h	7,23	0,01
6	504604		Tipper (18 m3)	3,000000	h	10,00	0,03
7	504302		Rental Bulldozer D6	1,000000	h	15,00	0,02
8	2000301		Foreman	0,602203	h	4,00	0
9	2000701		Dozer/Showel/Excavator operator	3,011037	h	1,35	0
10	2001001		Skilled Category	3,613240	h	0,63	0
11	E00101fbc1		Clear site of all trees bigger than 300mm	2 356,00	m3	0,07	175,54
12	S00106		Removal of reinforced concrete	50,00	m3	0,47	25,85

Estimate WBS



The estimate is created in the "Tree" or "Estimate" windows, which in the manual are generally called *the estimate windows*.

## Concepts

Each element of the estimate structure is a *concept*, whatever its level.

The "Concepts" window displays all price-type concepts.

---

*Concepts that are not price-type, such as building agents and quality systems, are described later.*

---

A concept can have *lower-level concepts*, which form its *breakdown*. In turn, a concept can be part of one or more *top-level* concepts.

## Concepts.Code

To create a concept, you must enter a code in one of the estimate windows.

When writing a code:

- If it does not exist in the project, a new concept is created.
- If it already appears in the project, it is also inserted under the new top-level concept.
- If a derived of a parametric concept exists in the project fulfills the code, the derived concept is inserted.

The maximum length of the code is 24 characters.

## .Description

Brief descriptive text.

---

*As in all Presto fields, test the possibilities of the suggest box and those offered by the context menu, such as changing status.*

---

## .Unit

Unit of take-off to which the unit price refers.

## .Est

Unit price of the concept according to the estimate purpose, cost, bid or contracted price. For comparing cost and sale there are other prices, such as the estimated cost or target, which are described in other sections.

---

*The unit price may be types here, but if the concept has a breakdown, the unit price is calculated automatically based upon quantities and adjustment factors.*








---

### .Text

Technical text or specifications describing the concept without limitation of size and free formatting. It is entered in the subordinate window "Text".

### .NatC

Icon representing the nature of the concept.

N	TYPE	NATC	PRICE-TYPE CONCEPTS
0	Root		Root, unique concept higher to all of them.
4	Chapter		Node for grouping other concepts. Chapters under other chapters are "subchapters."
5	Work unit		Also called "work items", they are the fundamental elements of the estimate, which can be quantified and billed.
6	Labor		Also called "natures" or "basic concepts".
7	Material		If they have a breakdown they are called "auxiliaries", but they
8	Machinery		keep their specific nature.
9	Other		

New concepts automatically receive the nature based on the code according to the masks defined in the "Miscellaneous" tab of project settings, but it can be changed later with the context menu on the field.

The background color of the code identifies the type of concept as described in the option "File: Working Environment: Appearance".

If you change the type of a concept that already contains information, Presto does not delete the associated data, even if it does not make sense in the new situation, unless it is incompatible with the data structure.

---

*For example, a work unit that becomes a chapter will not lose its take-off lines even though they are not used in the calculation*

---

## .Nat

This field, which can be added to any layout, also represents the nature of the concept:

- Used in a table column appears as text, for example, "Work unit".
- Used in expressions or filters, each nature has the numerical value indicated in the table and in the tip of the assignment option.

For example, the filter for work units is:

`Concepts.Nat == 5`

## .Date

Date of creation or last modification of the price. If it has a breakdown, it is the older date of the lower-level concepts.

## Color and condition

You can assign a colour to each concept in the "Color" field, as described in the "Colours" section. The colours are used for colouring the BIM models or for any other user purpose.

[ox] [Black state](#) | [Green state](#) | [Red State](#) | [Grey state](#)

The context menu on the "Description" field allows to select one of four states, which is applied to the field, independently of the "Color" value.

The meaning of the four states, although in quality management they normally have the meaning displayed in the table below.

COLOR	STATUS	QUALITY
Black	0	Not realized
Green	1	Approved
Red	2	Non-compliant
Grey	3	Corrected

The status is saved in the "Status" field with the values shown in the table

[.BlackDate](#) | [.GreenDate](#) | [.RedDate](#) | [.GreyDate](#)

Changing any of the states updates the respective date of the concept. The dates can be seen in the Gantt chart.

### ***Other fields of concepts***

The list with all the fields of the concepts appears in the expression builder or in the window "Start: Reports: Design", in the option "View: List of fields".

Some fields are used especially in the root concept of the project, as indicated in "Project information". Other fields are free to use or have specific behaviors for some program options.

#### [.Class](#)

Type to which the concept belongs:

0: Prices 1: Quality 2: Entities 3: Other -1: No class.

#### [.Code2](#)

Alternative or secondary code of the concept.

#### [.CodeCreation](#)

The original code with which the concept was created, which does not change even if the main code is modified.

#### [.Origin](#)

For new concepts is the root code of the project, so it can be traced when copied to other projects.

#### [.Description2](#)

Complementary or alternative text to the description.

#### [.UsrNum\[n\]](#)

Numeric fields for user free content.

#### [.UsrDate\[n\]](#)

Date fields for user free content.

## Estimate structure

### .EDT

Decimal code with the hierarchical position of the concept, such as "12.2.7", only for concepts with a single higher-level concept.

### .Level

Depth of the concept in the WBS, the level of the root concept being zero.

### .NumInf | .NumSup

Number of higher-level or lower-level concepts of the concept.

## Relations

The hierarchical structure of the project is completely defined by the breakdown of each concept into lower-level concepts. Each pair of top and low-level concepts forms a unique relationship, that is, a concept cannot have the same lower-level concept twice.

---

*The structure of the relationships is easily seen in the "Tree" window. In the "Estimate" window the top concept appears in the header and its different lower-level concepts appear in the table below.*

---

As most concepts can belong to more than one higher-level concept, the specific properties for each of them are properties of the pair or the relation between them. All the fields below are properties of the relation, not of the concepts by themselves.

### Relations.Relation

Code of the relationship between two concepts, padding the first with blanks to the maximum length.

For example:

E05AAT010 [(24-9) spaces] O01OB140

### .CodSup

Code of the higher-level concept of the relationship.

### .CodInf

Code of the lower-level concept of the relationship.

### .QtyEst

Quantity of the concept per unit of the higher-level concept. As in pricing, this is the main quantity in the estimate. Other quantities are described in chapters for other stages of the project.

---

*The quantity of a work unit can be typed directly into this field or broken down by take-off lines, as described later.*

---

### .AmntEst

Product of the unit price of the concept times the quantity in each higher-level concept.

### .Note

Short text of a concept, specific for every higher-level concept. Normally for internal use, it displays as the tip when posing the mouse over the concept fields and it doesn't appear in predefined reports.

### .UsrNum

A numeric field of free content associated with the relationship.

## Parametric concepts

Parametric concepts are defined by rules, rather than fixed breakdowns. They are differentiated by the "\$" character in the seventh code character and they have a pink background.

---

*This section describes the use of parametric concepts. To create parametric prices and use development aids, see the technical note "Creating Parametric Concepts".*

---

To use a parametric concept, you must choose the desired values of its variables or parameters in the window "View: Estimate: Parametric", which opens when you double-click on the concept.

With each combination of answers, the related derived concept is generated, with breakdown, price, description, and text. Inadmissible combinations cannot be selected.

---

*To use some parametric price references, such as the ITeC, it is necessary to previously select the values of a global parametric concept associated with the root concept.*

---

To insert the derived concept, simply activate the copy icon, access the desired place of the destination, and paste on the code field. The concept derived is also generated by typing its code in the estimate, provided that the price table is open as a reference.

When generating the derived concept, the concepts of its breakdown that do not appear in the destination project are imported from the reference. The final price may be different from the original since the prices of these concepts have priority and the result depends on the project settings.

#### **Parametric: Regenerate all**

This option in the "Tools" menu regenerates all the estimate concepts derived from parametric concepts that appear in the project itself or in the reference after importing a group of them or if the generation rules have changed.

---

*Importing a BC3 file executes this option if there are parametric concepts that contain other parametric concepts unless they are compiled.*

---

#### **Price and quantity**

The unit price of a concept is the sum of the quantities of the lower-level concepts multiplied by their unit price.

The detailed description of the price calculation is in the technical note "Possibilities of price calculation", including the operation of:

- Quantities and unit prices
- Colors and type of calculation of prices and quantities
- Rounding
- Percentage-type concepts
- Performance factor, difficulty, and production
- Inflation

The particularities of the calculation of prices for public projects are described in the technical note "Estimates for the administration", including indirect costs, the generation of the base estimate, billing, and price indexing.

Currencies are described in the technical note "Use of currencies".

---

*Remember that if a price or a calculated quantity is modified, the data on which this calculation depends is deleted. For example, deleting or modifying a price suppresses the quantities of the lower-level concepts.*

---

The total quantity and the total amount of a concept in the estimate are listed in the "QtyTotEst" and "TotEst" fields.

Refer to the "Start: Calculate" section of the manual for calculation options for these variables, automatic recalculation, and other possibilities.

### **Operate**

This option of the menu "Tools: Prices" changes all the prices of the basic concepts, or those lower to a chosen concept, applying a different factor to each nature.

### **Adjust**

This option in the menu "Tools: Prices" modifies the quantities or prices of the concepts to reach a fixed value of the project or of a chosen concept, given directly or as a percentage of the former one.

The locked or percentage type prices are not altered, nor the null (grey) prices or quantities.

The message window displays the applied changes, which can be more than one. Due to rounding, an exact figure not always can be reached. The maximum possible adjustment is obtained by selecting rounding only for display in the project settings.

### **Do not alter concepts that intervene in other breakdowns**

This option alters only the concepts that affect the concept being adjusted, thus maintaining the price of the rest of the concepts.



### Lock the estimate

The option "File: Working environment: General: Block estimate alteration" avoids any user operation that affect any of the values of the estimate. It is useful when working in planning or billing.

---

## Managing the estimate

To take advantage of Presto's resources it is convenient to keep an ordered WBS:

- The concepts of chapter type must have a single higher-level concept, the quantity being always one unit.
- A chapter should not have as lower-level concepts a mix of chapters and other types.
- Predefined reports, subchapter colors, and other program resources support up to six-chapter levels.

In general, the different types of concepts must be placed in the natural order: chapters, work units, basic natures.

### Codification

It is recommended to use a consistent and uniform coding system in all projects, for example, using predefined templates for new projects.

There is more information on estimate structure, the use of templates, and classification system in different technical notes.

---

*If there is no better suggestion, use codes whose three or four characters are consistent with the preferred price database.*

---

These codes can be avoided when printing or replaced by decimal codes before sending the estimate to third parties.

### Project and reference

An estimate should be composed mostly by copying information already existing in other estimates or price databases.

Up to five projects can be open at the same moment. The *project* is the active one and the rest are *references*, ordered by opening order, as appearing in the header.

### *Copying concepts from other projects*

To insert a concept from a reference, drag the concept or copy and paste the code to the project. The concept is copied to the project with all the information associated with it in the reference, which is no longer needed. Links in the Gantt chart are also copied to the project if the relationships are compatible.

---

*You can copy and paste information between any window of the open projects.  
If the information is not matching, a confirmation question is asked.*

---

### **Reorganization of the estimate**

#### ***Restructure by work items***

This option in the menu "Tools: Tree" moves the work units to a new chapter structure, based on the content of any field or alphanumeric variable.

New chapters are created, if needed. Chapters that end up empty are not deleted, so they can be reused later, allowing to change the description.

If new chapters need to be created, the code is the value of the select field for the new structure.

---

*If the new code length is longer than the length allowed for codes a correlative coding is created and this chapters get a "Grey" status. In the case of restructuring afterwards by another field, their description will be removed and populated with the value of the new restructuring field.*

---

No new chapters are created when using the option to search in a template and no valid value is found in it or in the project itself.

This restructuring can be applied successively, with different classifications since no information is lost and the estimate is not altered. Provided there is template suitable for the initial state, it can be recovered in any time.

For example, we can start from an estimate classified by Revit or IFC categories, transform it into chapters of the preferred price database for assigning the prices, reorder it again with OmniClass codes for the customer, and return to the initial classification.

### *Restructuring tree*

Displays dynamically the new resultant structure.

### *Search for chapters in:*

Selects a predefined template to search for the needed chapters based on the chosen field or variable. This template can be any supplied with Presto or a project created ad-hoc.

### *Search codes by initial characters*

It looks for the restructuring field values in the template chapters codes by removing characters one by one from the end.

"E010AB54ac" will match "E01", or "E010A" if found earlier.

It is not applied for dates, colors, formulas, or other similar fields.

### *Restructure by take-off lines*

This option in the menu "Tools: Tree" reorganizes the structure of chapters of the project, but, unlike the restructuring by items, it allows to divide a work unit into several ones, assigned to different chapters.

For example, it allows you to create a chapter structure based on the "Floor" field, then reclassify by families and types, and then return to the original structure by units of project.

The "[Relations.DurTot](#)" field of the new chapter-work unit relationships is populated with the value '5'.

---

*Work units whose modification would lead to estimate modifications are not reclassified, such as those that have direct quantities in some price structure, are used as a source in take-off references, have links in the Gantt chart, or variables with different values in each take-off line.*

---

### *Restructuring values*

When accessing the option, or changing fields, the list of chapters that will be created if the action is executed is displayed, with the number of take-off lines, the code, and the Description.

### *Search for chapters in:*

Its functionality is the same as in "Restructure by items", except that it does not generate the complete structure of chapters and subchapters of the template.

### *Save the existing chapter structure as original*

This option saves in the "[CodSupCreation](#)" field of the take-off the code of the new chapter, for the case in which it is preferred to keep this new structure as the original, for the future.

---

*This option can be used if you export a project with Cost-It with Revit categories and reclassify it with traditional chapters, so that you can return to these chapters after restructuring the project by any other criteria.*

---

### *Move links and holes together with their take-off lines*

With this option enabled, the holes or linked take-off lines, usually coming from Cost-It, move along with the main take-off line.

### *Reduce levels*

This option from the "Tools: Tree" menu removes tree concepts by levels or types, simplifying the estimate.

---

*Presto tries not to alter the amounts, if possible. However, if among the concepts to consolidate there are concepts of percentage type, the result may vary, due to its special way of calculation.*

---

You must select the concepts to which you want to apply the option, not their higher-level concepts.

### *Chapters*

Removes the first level of chapters. If there are no subchapters, the items become dependent on the root concept and their take-off lines are lost. The amount is maintained, but a different rounding may be applied.

### *Subchapters*

Deletes all levels of subchapters and the work units become dependent on the chapters. If there are repeated items in the same chapter, they are grouped into one,

including their take-off lines, provided that the information is homogeneous. If it is not, as in the case of an item with direct quantities in one chapter and take-off lines in another, totals will be obtained, losing the breakdown into lines.

---

*In this case, in order not to lose the take-off lines, first convert the direct quantities into take-off lines using "Tools: Take-off lines: Restructure".*

---

### Work units

The work units with breakdown are deleted and their lower concepts become dependent on the chapters, grouping them if they are repeated.

Work items with links in the Gantt chart are not deleted.

### Auxiliary

The lower concepts of the auxiliary concepts are transferred to the related higher-level concepts.

### Merge

This option in the "Tools: Items" menu consolidates several items into one, simplifying the estimate.

The items to be merged must be within the same chapter, with the same price and unit of measure. In addition, they must have the same value for the fields "Concepts.RedParc", "Concepts.Difficulty", "Concepts.Production" and "Relations.Factor". In this way, the amount of the estimate will never be altered.

To these mandatory fields you can add another field and a variable, which must be the same for the work unit that merge with each other.

If items with take-off lines are merged with others that do not have them, the totals will be valid, but the take-off lines are lost.

---

*As when reducing levels, in order not to lose the take-off lines, previously convert the direct quantities into take-off lines using "Tools: Take-off lines: Restructure".*

---

The first work unit is used as a basis, moving to it the take-off lines of the others, with their associated variables, plus the variables and files associated with the work unit, without duplicating those that are equal. All other items are deleted.

The items that are the origin of take-off references for other items, those that appear as supplies or cost centers are not merged, since the result of the calculation would be altered.

### *Split*

This option in the menu "Tools: Work unit" splits a work unit in several depending on the content of a take-off lines filed or the value of a variable associated with them.

Only are displayed the take-off fields and the parameters in which there are different values, with the number of lines that contain each one.

When executed, a new work unit is created for each different value of the chosen field:

- The code is the code of the original work unit plus the value of the field. If the length exceeds the maximum, the value is replaced by a numeric suffix.
- The original description and the value.
- The "Origin" field is "Presto".
- In the "Address" field, the name of the field or parameter used is saved.
- In the "BIMTypeValue" field, the value of the field or parameter used is saved.
- The rest of the fields of each concept, the breakdown, the text, and the associated files, are the same as the original work units.

The new item is inserted into the estimate after the original item and the related take-off lines are moved to it.

The items that appear as the origin in take-off references, that is, those involved in the calculation of the quantity of other items, are not split.

The duration of the new work unit is calculated as a ratio of the original duration, based on the quantity of its take-off lines and the total, and the original duration is also readjusted.

### *Move links and holes next to their main take-off lines*

With this option enabled, the holes or linked take-off lines, usually coming from Cost-It, move along with the main take-off line.

### **Restructure**

This option in the "Tools: Work unit" menu allows you to globally alter the breakdowns of a set of work units.

---

*To operate exclusively with the breakdowns of the cost target use the options of the "Processes" menu.*

---

### **Suppress breakdown**

It eliminates from the selected items breakdown the concepts of the selected natures, thus altering the price. However, the original price is maintained if all natures are eliminated.

### **Add to breakdown**

Insert in the items the concepts entered in the list, which must exist previously in the project. The proportions are recalculated to sum 100, if needed. The original price of the item is maintained, except for differences due to rounding or when percentage concepts are added.

### **Update**

This option in the menu "Tools: Concepts" replaces the data of the concepts by the data from another project:

- The price database selected in the project environment.
- The lower number open reference.
- Any other accessible project.

The properties updated are only the concept properties, not the properties of the relationship with higher level concepts, so that quantities and take-off lines are maintained.

When updating the price, the different between project and reference is considered, if needed.

---

*To update only the breakdown of the cost target use the related option from the "Processes" menu.*

---

### *Only work items and basic natures*

Default option, which avoids inadvertently updating the entire content of the chapters.

### *Only unprotected fields in the active window*

Allows you to selectively update only visible and unprotected fields, with a white background. You can protect fields with the "Protect column" option in the header.

### *Maintain concept identification data*

Keeps the BIM specific and other identification concept data. It applies to the fields "Guid", "BIMCategory", "BIMCode", "BIMFamily", "BIMType", "BIMTypeGuid", "BIMTypeValue", "Color", "Dimension", "Address", "Description2", "TextComment", "TextN", "TextLength", "TextWidth" and "TextHeight".

### *Only add (does not delete information)*

It does not alter fields that already had content.

### *Replace*

To replace a single concept with another from a different project, drag the new concept over the old one and press the [Shift] key while dragging, so the cursor takes the form of [x]. The concept is replaced by the new one, applying the default options of the "Update" option. If the replaced concept has no more appearances in the estimate, it is eliminated from the project.

---

*To add or remove a concept in the breakdowns of several concepts at the same time, add or remove these concepts in the "Superiors" window of the first.*

---

### *Global replacement*

The option "Tools: Concepts: Replace" replaces one concept with another in the breakdowns in which it appears.

The "Replace with list" option allows you to perform block substitutions of concepts, as well as splitting and deleting codes, from a list of original and substitution codes, separated by a tab, in a plain TXT file.

The replacement instructions are executed in the order of the list. Masks can be used.



ACTION	CODE1	CODE2	RESULT
Replace	AB454	PC3465	AB454 is replaced by PC3465
	1234*	O*	1234HTJ is replaced by OHTJ
	PQ?5	PTH?5	PQB5 is replaced by PTHB5
Split	AB45	BH23	AB45 splits into BH23, BH37 and BH42
		BH37	
		BH42	
Eliminate	TY56		TY56 disappears from breakdown

Percentage concepts are not duplicated. For example, if concepts A1 and A2 result to appear in the same breakdown:

CODE1	CODE2	RESULT
A1	T1	T1
	%C	T2
A2	T2	%C
	%C	

If the concepts that replace the originals do not exist in the project they must be filled in or updated later.

### Compare projects

It detects differences and coincidences between the active project and another.

Only the concepts of the project that are in the reference are compared. To detect the concepts of the reference that are not in the project, perform the reverse comparison.

Text comparison does not consider the blanks and carriage return entered at the end of the texts.

### *Price-type concepts*

This option compares only the information of the concepts, regardless of the structure of the estimate. It is useful to find differences, for example, between the prices of the project and a reference price database.

The other options also consider the structure of the estimate, i.e., the relationships between concepts.

### *Pre-mark all concepts in black*

Previously removes all colors from concepts, so that new results can be seen.

### *Make a difference in red*

Marks in the project the concepts where there are differences.

### *Mark matches in green*

Marks in the project the concepts that coincide. It allows to verify the origin of the concepts with respect to one or more price tables, cumulatively, so that at the end of the process all the concepts with a known origin have been identified.

### *Export to Excel*

If one concept appears in the breakdown of another concept, but in a different position, the code in the project appears in red, when differences are marked, or in black, when coincidences are marked.

The texts are exported:

- The first 256 characters, if the concept does not exist in the reference.
- The text, until the first difference between them, plus 10 characters.
- The first nine characters if texts match.

## **Categories**

Each concept can be assigned a category, taken from predefined lists.

CONCEPTS	CATEGORY	MAIN USE	FIELD
Root	Type of building	Calculate the project duration	Category
Chapter	CTE Systems	Estimates by subsystems	CatSyst
Work unit	Functional units	Surface checking	CatFunc
Material	Type of tests	Quality control plan	CatMat
	LER code	Waste management	

In general, only the category in the table is significant for each type of concepts, which is the category shown in the "Category" field of the concept. The other fields can be added to view separately, if needed

The root concept category can also be chosen in the "Data" tab of the project properties.

### *Area checking*

In an estimate, the areas of the items that represent surface elements are usually related to each other and to the dimensions of the building. For example, the slab surface is related to the constructed surface and the sum of pavements with the useful surface.

The list of functional categories has the surface elements that can make up a building. Each element, such as the floor or façade, has up to four layers.

For example, for the façade:

LAYER	FACADE
1: Principal	Walls
2: Auxiliary	Insulation, waterproofing
3: Coating	Plastered, cladding
4: Finish	Painting

### *Analysis of surfaces by categories*

This report of the group "01 Estimates and take-off lines" shows together the similar categories, with their surfaces, so that discrepancies can be easily recognized, and errors detected.

### **Reports of the group "01 Estimate and take-off lines"**

The documents needed to present the estimate are obtained through reports and templates, which can be printed on paper or PDF, or exported in RTF format for later edition with Word.

### *Estimate and take-off lines*

Document with all the necessary information for the printing of the estimate, with or without texts, take-off lines or prices.

### *Estimate Summary*

Printed report or Excel workbook with the list of chapters, overheads, and signatures.

---

*Obtaining the summary sheet requires that the identification data of the project and the entities "Promoter" and "Designer" are registered, as described in "Information of the project".*

---

### *Price table 1 and 2*

Document for the administration, with the texts of the work unit and their unit prices in letter (price table number 1) or their breakdown by nature (price table number 2).

### *Price table 1 and 2 by chapter*

Like the previous one, showing the units of project grouped in their related chapter.

### *Table of breakdowns*

Prints the work unit, selectively choosing the properties and the desired format of the breakdown.

### *Table of breakdowns by chapters*

Like the previous one, showing the work unit grouped in their related chapter.

### *Table of prices broken down by nature*

Price table in which each work units is broken down by the natures that form it, showing the performance and price of each one.

If there is an auxiliary item, it is considered material.

### *Total quantities required per work units*

It shows the work units and its breakdowns. For each of them, it shows the amount of breakdown needed to perform the take-off of the batch.

### *Auxiliary concepts*

List of basic concepts that have breakdown.

### *Basics*

Relationship of concepts by basic natures, which generates the reports of materials, labour, and machinery.

It can include total quantities and prices.

### *Partial estimate*

Partial estimates are considered the work unit that have as inferior concepts items with take-off lines.

### *Work units*

List of items ordered by different criteria.

Two separators indicate 20% and 80% of the amount of the project, which allows you to quickly identify the items with the most impact on the estimate.

### *Estimate with breakdowns and take-off lines*

Like the estimate and take-off lines report, adds the breakdown of the item and changes the format of the header of the take-off lines.

### *Texts, sheets, and graphics*

It shows the graphic information and texts of the project.

---

## Quantities and take-off lines

The quantity or measurement of the items can be entered directly into the work units, but many of Presto's possibilities require that this amount be broken down into take-off lines, even if it is only one.

### Create and modify take-off lines

In general, take-off lines can only be introduced in relationships where the upper concept is a chapter, and the lower concept is a work unit.

---

*In other types of relationships take-off lines can be entered to break down a quantity, but these lines cannot be used for planning or valuations.*

---

Since the quantity of the work units is a property of the relation to its higher concept, the same work unit can appear in different chapters, with different quantities and sets of take-off lines.

The fields described below are especially important because they determine the overall behavior of the line.

#### TakeoffLines.Space

Allocation to a space is necessary for the line to be considered in the estimate. You can create spaces on the fly, from the drop-down list, and then fill up their values in the "Spaces" window.

#### .Est

This field indicates whether the quantity of the take-off line adds to the estimate. It allows to enter amounts that are not part of the estimate but that are needed for planning, execution, or valuation, as well as temporary lines. In disabled lines the field "QtyEst" appears with a gray background.

---

*Lines that are not part of the estimate only appear in the layouts with the filter indicator "[\*]".*

---

#### .StateEst

Take-off lines are associated by default with the initial estimate.

This field allows to associate the lines to other states, as described in "Presto in project management: Cost tracking: Estimate by approval states".

[.StagePlan](#) | [.StageReal](#) | [.StageCert](#)

These fields determine whether the line is planned, executed, or certified, and are described in the related chapters.

### *Insert take-off lines*

When entering a new take-off line, it will get the values above mentioned of the previously entered line, as well as the area, the level, and the orientation. These default values appear in the header of every field.

### *Delete take-off lines*

Deleting a take-off line only unchecks the contents of the "Est", "StagePlan", "StageReal" and "StageCert" fields that are visible in the active layout. It will disappear of the project only if all these non-visible fields are empty.

---

*To be sure of seeing and removing all take-off lines, do it in layouts with the filter "[\*]"*

---

### *Editing take-off lines*

All the possibilities of Presto for table editing, range copying, etc., can be used.

Remember especially:

- Copy the above field [F9]
- Copy the field to the left [Shift + F9]
- The suggest button in cells without specific content displays all the values used in the above rows.

### *Order of lines*

You can sort the lines by any field, temporarily or permanently, and move them using the up and down commands.

The "Mark" field is a good choice to enter a fixed order to the lines, to which you can return after sorting in any other way. The suggest button fills "Mark" with a correlative number.

## Dimension fields

[.N](#) | [.Length](#) | [.Width](#) | [.Height](#)

Dimensions can be entered by filling in any of the four dimensions fields, in any combination, even within the same work unit.

---

*Values in these fields are multiplied to obtain the quantity of the line except they are disabled or there is a formula or expression.*

---

The values of the three main dimensions and the quantity line are rounded to the decimal places set in the specific "Concepts.RedParc" field of the work unit, by default two. However, the rounding of the work unit total quantity, defined in the project settings "Rounding", is the same for the entire estimate.

The "N" column is not rounded or formatted.

[\[ox\] Enable](#) | [Disable](#)

The value of a disabled dimension is not considered in the calculation of the quantity, appearing with a gray background.

These values can be entered for information purposes, such as the thickness of a wall, or used for changing the measurement criteria.

---

*Disabled values are considered when calculating take-off references.*

---

[.NulN](#) | [.NulLength](#) | [.NulWidth](#) | [.NulHeight](#)

These fields have a value of 1 if the related dimension is disabled.

[.Quantity](#)

If it has magenta color, it is the result of the four columns of dimensions as mentioned.

If the quantity is written directly, it appears in black and the dimension fields with values are disabled.

## Subtotals and sums

[.QtyEst](#)

This field, if it is marked as subtotal, shows the sum of the quantities accumulated in the lines from the previous subtotal.

Any take-off line can act as a subtotal, whether it has other values or not.



There is a subtotal for every price structure since the value can be different.

The gray background indicates if the line is not included in the estimate.

### **Automatic subtotals**

The "Calculation" tab of the project settings, as well as the option "Tools: Take-off lines: Restructure: Create automatic subtotals", define the fields in which a new value creates a new subtotal.

For example, subtotals can be obtained by levels, and within them, by approval status.

---

*A subtotal line is not seen if it does not appear in the active layout, for example, if it is an out-of-estimate line in a layout that does not display them.*

---

For the subtotals to be ordered correctly, the take-off lines must be ordered by the same fields that generate the subtotals.

### **Manual subtotals**

If automatic subtotals are not enabled, you can manually select the subtotal lines.

[ox] Subtotal

Converts line into a subtotal line.

[ox] Normal

Converts a subtotal line to a normal take-off line.

.Type

This field is valid for 1 if the take-off line is a subtotal, whether it is manual or automatic.

### **Subtotals to origin**

.OrQtyEst

This field, and its equivalents in the other price structures, contains the sum of all the lines, from the first one. You can add it to the layout or report of your choice.

### **Identification of take-off lines**

These fields allow the unique identification of each take-off line when it is necessary to compare it between projects, versions of the same project or BIM models.

### [.GuidElem](#)

Identifier generated at random for new lines. When the take-off line comes from a BIM model this field takes the value of the GUID element.

### [.GuidAux](#)

Identifies different take-off lines with the same "GuidElem", such as the holes in a wall, lines split from an original one or BIM elements assigned to more than one work unit.

### [.Guid](#)

Unique identifier of the line, sum of the fields "GuidElem" and "GuidAux".

### [.RelType](#)

Type of the take-off line.

RELTYPE	EXAMPLE
<a href="#">Principal</a>	Basic elements of the estimate, like a wall
<a href="#">Opening</a>	Hole
<a href="#">Link</a>	Line that adds information to another line, such as carpentry in a hole
<a href="#">Material</a>	Assignments to materials coming from BIM models

### [\[ox\] Split](#)

This option breaks down a take-off line into two, for example, to partially certify a line.

- If the line has no dimension or has all dimensions disabled, the original line is duplicated.
- In another case, Presto asks the amount to split from the first dimension that has a value, that must be positive and less than the original amount. If the amount to be split is zero, the original line is duplicated with the dimensions disabled.

The split line has the same "GuidElem" value as the original, but different "GuidAux".

---

*If the split line has dimensions and they are not all disabled, the values of the variables associated with the original line are copied.*

---

## Information fields

### .Comment

Descriptive information of the take-off line.

Specific fields, like "Floor" or "Orientation", provide more possibilities for analyzing the estimate.

If needed, the comment can be operated and filled with an expression:

`TakeoffLines.Floor + " " + TakeoffLines.Orientation + " " + TakeoffLines.Zone`

### .Note

Text associated with the take-off line that will appear as a tip over the comment and is not printed in the reports supplied with Presto.

### .UsrNum

A free field for a numeric value associated with the take-off line.

### .Mark

It identifies different objects of the same type and can be used as a sort field.

It is populated with different values for all lines:

- When creating a take-off line.
- With the "Suggest" button applied to the entire column.
- When splitting take-off lines.
- With content coming from a BIM model.

### .Color

RGB value, useful for the display of BIM models.

### .Transparency

Transparency of the item, between 0 and 100, used in the display of BIM models.

### .División

Any subdivision that is useful for breaking down and sorting the lines.

### .Origen

Origin of the take-off line.

- Presto (user-created lines)

- DWG drawing
- Wizards
- IFC
- Revit
- BC3 Files
- Primavera

---

*The numeric value can be seen in the help tip and in the expression builder.*

---

#### [.Date](#)

The date and time when the work session with the estimate started.

#### [.Relation](#) | [.CodSup](#) | [.CodInf](#)

High- and low-level concepts to which the take-off line belongs.

#### [.DescriptionSup](#)

Description of the higher-level concept of the take-off line, usually the chapter.

#### [.CodSupCreation](#)

The high-level code of the relationship to which the take-off line belonged when it was created. It is useful when the line is moved to other chapters, for example, in reclassification operations, and you want to return to the original structure.

#### [.Task](#)

The Gantt chart task in which the line is planned. If it is empty, it is planned in the work unit.

### **BIM Fields**

Fields that can be filled manually but normally come from the BIM model. They are described in the Cost-It manual.

#### [.Archive](#) | [.Layer](#) | [.Subproject](#)

#### [.Area](#)

#### [.BIMCode](#) | [.BIMType](#) | [.BIMFamily](#) | [.BIMFamily Type](#) | [.BIMFamilySup](#) |

#### [.BIMFamilySupType](#)

#### [.Element](#) | [.ElementSup](#)

.StageCreation | .StageDemolition  
 .GridX | .GridY  
 .Group  
 .Option  
 .Level | .Floor  
 .Orientation  
 .BIMLen | .BIMSur | .BIMVol | .BIMWeight  
 .BIMType | .BIMSupType  
 .X | .Y | .Z  
 .Zone | .FromZone | .ZoneElem

### Take-off formulas and expressions

When the elements to be measured are not rectangles or orthogonal prisms, it is more convenient to introduce other geometric dimensions into the take-off lines. For example, measuring steel bars is easier if the diameter is introduced in millimeters instead of the cross section in square meters.

There are several possibilities.

FORMULATYPE	MEANING	FORMULA
0	Product of dimensions	
1	Take-off formula	(B+C) / 2
2	Take-off reference	=E18/E18IEB010.QtyPres
3	Presto's expression	\$(TakeoffLines.BIMVol * 1000)\$

### Take-off formulas

A take-off formula can contain:

- The letters "A", "B", "C" and "D", uppercase or lowercase, to refer respectively to the "N", "Length", "Width" and "Height" columns.
- Numbers, using the period to separate the decimal part.
- The four arithmetic operators and the exponentiation "^".

- The letter "P", as the equivalent of  $\pi$ .

Columns that do not appear explicitly in the expression act normally, multiplying the result. To ignore them, insert the quotient in the formula:

$$(B+C)/2 * D/D$$

The following features are also supported:

FUNCTION	RESULT
ABS (x)	Absolute value
SQRT (x)	Square root
SIN (°) · COS (°) · TAN (°)	Trigonometric function of the angle, in sexagesimal degrees
IPE (C) · IPN (C) · UPN (C)	Cross area in square centimeters of the profile of each series
HEA (C) · HEB (C) · HEM (C)	in Arcelor's tables, with the height in mm in C column
L (C, D)	Ditto, equal wings profile, depending on wing and thickness
REBAR (C)	Weight of a steel bar, with the diameter in mm in C column

In the example of steel bars, the alternate expression for entering the diameter in millimeters in the "C" column is:

$$(C^2/100) / 4 * P * 0.785$$

In the "Formula" field arithmetic expressions can be entered, instead of using dimension fields, such as:

$$(70 * 12.5) - 3 * 10 * 10$$

Examples of take-off formulas:

COMMENT	N	LENGTH B	WIDTH C	HEIGHT D	FORMULA
Triangle	N	Base	Height	Thickness	0.5
Trapeze	N	Base 1	Base 2		$(B+C)/2$
Circle	N	∅			$B^2 \cdot P/4$
Circumference	N	∅			P
Earthworks d!=20 m	N	Area 1	Area 2	Distance	$(B+C)/2$
Trench between sections of 20 m	Slope	Base	Dimension 1	Dimension 2	$(B \cdot (C+D) + (C^2+D^2)/A) \cdot 10$
Rebar	N	Length	∅ mm		REBAR(C)
Steel profile	N	Length	Area cm2		0.785

Examples of take-off line results with formulas:

N	LENGTH B	WIDTH C	HEIGHT D	FORMULA	QUANTITY
1	5,00	2,00	3,00	$A \cdot (B / C) \cdot D$	7,50
1	5,00	2,00	3,00	$(B / C)$	7,50
1	5,00	2,00	3,00	4	120,00
1	5,00	2,00	3,00	5-3	60,00
1				$3 + (5 + 4.5 + 0.5) \cdot 2$	23,00
1	5,00	240,00		IPE (C)	195,50

### [ox] Take-off formula

Applies to the selected lines the predefined formulas in "File: Working Environment: Formulas".

*Predefined formulas are saved and retrieved as part of the user profile.*

### **Presto's Expressions**

The "Formula" field also allows you to write any Presto expression that is calculable for the take-off line, delimited as follows:

`$(expression)$`

For example, to contain the quantity of item "01.01" in chapter "01":

`$(Relations[Relationship==relation("01","01.01")].QtyEst)$`

To get the value of a user variable:

`$(TakeoffLines.BIMVol * TakeoffLines.$("DENSITY"). Value)$`

The expression is saved internally in the "TakeoffLines.FormulaPrestoExp" field.

---

*Values of dimensions not disabled act normally, multiplying the result.*

---

### **[ox] Expression**

This option opens the expression builder to assign a Presto expression to the formulas on the selected lines.

### **Headers, formulas, and expressions associated with the concept**

#### **Concepts.Formula**

This field allows you to associate a default formula or expression to the concept, which will be applied to the new take-off lines. A formula or expression is also automatically associated to the concept if it is manually associated with all its take-off lines.

In any case, the formula applied is the one on the take-off line, which may be different from the overall formula of the concept.

### **[ox] Remove formula**

This option removes the defect formula associated with the concept.

`.TextComment | .TextN | .TextLength | .TextWidth | .TextHeight`

The headers of these take-off columns can be customized for each concept by filling in these fields.

Headers provide guidance for populating fields when they have associated formulas and are printed in reports.



### ***Take-off lines transfers***

The transfer of take-off lines speeds up this task by reusing the take-off lines of some work unit in others.

The technical note "Transfer of take-off lines" describes all the possibilities of this powerful Presto resource.

#### ***[ox] Take-off reference***

Allows you to select the source work unit.

#### ***[ox] Go to reference***

Access to the source work unit.

#### ***[ox] Replace reference with take-off lines***

It replaces the reference to the take-off of another item with its detailed take-off lines.

### **Global operations with take-off lines**

The window "View: Lists: Take-off lines" shows all the take-off lines of the project and allows to perform any possible operation with all or a part of the take-off lines.

All the take-off lines can also be removed in the "Tables" tab of the project settings.

#### ***[ox] Locate***

This option in the main window "Take-off lines" and the take-off subordinates of the "Concepts" and "Spaces" windows places the item as the active concept.

#### ***[ox] Go to the work unit***

This option in the "Temporary take-off lines" window places as an active concept the item to which the take-off line belongs, facilitating its location in the estimate windows.

A double click on a take-off line causes the same effect.

### **Restructure**

This option in the "Tools: Take-off lines" menu allows you to perform automatic operations to create, copy and merge take-off lines.

#### ***Replace references with equivalent take-off lines***

Consult the technical note "Transfer of take-off lines".

### *Convert direct or phased quantities into take-off lines*

It creates the take-off lines of the selected work units needed to reflect the quantities entered directly into the work unit or in phases, which then become calculated, in magenta color.

Allows you to apply options that require take-off lines when the project was started with global quantities.

### *Order*

Sorts the take-off lines based on up to three fields, which can be selected from the drop-down lists below.

### *Create automatic subtotals*

Generates automatic subtotals considering the same fields selected for the sorting of take-off lines.

### *Consolidate take-off lines*

Several options allow you to merge equal or similar take-off lines. If no work units are selected, it applies to all.

In consolidation, the disabled dimensions become enabled, with zero value.

---

*Fields that are generally different in every line and do not provide relevant information, such as unique identifiers and BIM data, are ignored when comparing.*

---

### *Equal in all fields except "N"*

Merges identical lines except in the "N" field into one take-off line. The resulting "N" field is the sum of "N".

If the line contains a formula that applies to the "N" field an operation without the distributive property, the result of the consolidation will be incorrect. For example:

	N	LONGITUDE	WIDTH	HEIGHT	FORMULA	QUANTITY
Line 1	2	3,00	4,00	5,00	(A+B)*(C+D)	45,00
Line 2	3	3,00	4,00	5,00	(A+B)*(C+D)	54,00
Result	5	3,00	4,00	5,00	(A+B)*(C+D)	72,00

The correct result is 99,00.

---

*To avoid these cases, check the total quantity before and after consolidation.*

---

### *With a different dimension, in addition to "N"*

In this case, the resulting line has "1" in the field "N" and the field with the different dimension contains the sum of the products of the field "N" by the different dimension of the affected lines.

---

*Lines that have formulas are not consolidated, because the same problem as the former option can arise in any of the columns.*

---

### *The same, in different phases*

It groups similar take-off lines belonging to different price structures. For example, it merges two equal lines, one in the estimate and the other in a planning phase.

### **Import of take-off lines**

The integration of take-off lines allows to insert in a project take-off lines that come from another, for example:

- Take-off lines of a new version of a Revit model.
- Modifications to the estimate or planning made in a copy of the project.
- Valuations, entered in a copy of the project.
- BC3 files or any other source to add to a project, previously imported and checked in a new project.

The import allows to review the received information before integrating it, as well as to detect changes, additions, and possible deletions with respect to the current project.

The integration of take-off lines, which corresponds to the option "File: Import: Take-off lines", or the "Import" icon of the "View: Lists: Temporal take-off lines" window, is described in the technical note "Integration and comparison of take-off lines".

---

## **An information system**

In addition to the estimate data, the Presto project may include many other information:

- General project data.
- Building agents involved in the project.
- All types of files related to the project or its concepts.
- Specifications.
- Agenda with texts and files associated to dates, and period figures.
- Prices by geographical areas, suppliers, and other alternatives.
- QMASS integrated quality systems, such as health and safety, environmental management and quality control, described in "Quality management. QMASS".

A project can also act as a centralized access to view and consolidate information from a set of projects, as described in "Integrated Estimate Query."

## **General project data and properties**

Within the estimate, a set of general data and information is stored, which is used to generate other documents.

This information is organized into several groups:

- Data associated with the root concept and variables common to all projects, described below.
- Variables defined by the user or generated when using wizards and reports, and parameters of BIM models. Consult the technical note "Use of variables".

### ***Data associated with the root concept***

The root concept of the project has the same fields as the other concepts, with the same meaning and behavior, but applied to the whole of the project. These data can be seen in many layouts of the "Tree" and "Concepts" windows.

To use a root concept field in an expression, use the nature, as follows:

[Concepts\[Nat=0\].FIELD](#)

The most important root data for identifying the project have a specific meaning and they can also be entered in the "Data" tab of the project properties. Some of them appear when listing projects with "Archive: Projects".

[.Code](#)

The root code is copied into the "Origin" field of the new concepts.

[.Code2](#)

The first three characters are used as a prefix to differentiate automatically created documents and records.

[.Category](#)

Use of the building, considered to estimate the execution time.

---

*The list of uses is taken from cadastral value types, RD 1020/1993:*

[www.catastro.minhap.gob.es/documentos/normativa/rde\\_102093\\_2506.pdf](http://www.catastro.minhap.gob.es/documentos/normativa/rde_102093_2506.pdf)

---

[.Origin](#)

The suggest button displays the coding and prefixes of the basic natures, for informational purposes. The automatic assignment of natures for new concepts is defined in the "Miscellaneous" section, in the fields of masks for natures.

[.PostalCode](#) | [.City](#) | [.Province](#)

The three fields can be filled in with the suggest button from any one of them. The zip code is used in the search for suppliers by zones.

[.Country](#)

The suggest button proposes the list of countries where Presto has been sold.

[.SurfCons](#)

The built area of the project is used as default value of the alternate unit of the chapters.

## *Variables common to all projects*

### *Language*

The project language affects the spell checking and hyphening of texts (only for Spanish and Catalan languages and Presto 32 bits), translation of dates and conversion of numbers to letters.

In reports, it defines the language used in the translation function:

`tr("language1;language2;...; languageN")`

The texts are separated by semicolons, in the same order of this option list.

For new projects, the default language is the language for the interface, chosen in "File: Working environment: General".

### *NumFloors*

It is used in some wizards and for document generation.

### *ProjectCode*

Reference data for documents and reports.

### *Manpower | Equipment | Material | Other*

Masks to assign a nature for new concepts based on the codes. Supports wildcards "\*" and "?".

If the code does not meet any mask, it receives the nature "Work unit".

### *IRR*

Internal rate of return of the flow of collections and payments.

### *Rate*

Annual interest rate for the calculation of the Net Present Value.

### *NPV*

Net Present Value of cash flow.

The calculation of the IRR and the NPV is made from the cash flow generated by the payments.

### *Latitude | Longitude | Station | TimeZone | Location*

Data for geographic localization following the Revit format.

### **Planning**

See "Planning stage".

### **Calculation**

Calculation options and rounding are described in "Presto at the project stage" and the related technical notes.

### **Accounting**

#### **Name of the tax**

Allows you to replace "IVA" with other text in the reports.

#### **Percentage of VAT on professional fees**

General rate of tax.

#### **Percentage of VAT on construction projects**

Rate of tax applicable to the implementation estimate.

#### **VAT is calculated monthly**

Monthly calculation of VAT, instead of quarterly, when generating payments.

#### **Append IVA type to account coding**

Append IVA type to account coding.

### **Building agents**

Entities representing natural or legal persons involved in the project, entered in the "Entities" window for:

- Use the data in estimates and other documents.
- Assign responsible to quality controls.
- Participate in the project as suppliers or customers.

Other entities allow multiple prices to be assigned to concepts for comparisons, described in "Presto at the project stage: Multiple prices and comparison of bidders".

---

*Agents follow the definitions of the Spanish Ley de Ordenación de la Edificación, LOE. If there are several, the main one is the first in alphabetical order of codes.*

---

Fields for economic values are described in "Presto for the construction company".

Fields with a specific use in entity type concepts are as follows:

[Concepts.PostalCode](#) | [.City](#) | [.Province](#)

These fields can be filled in with the suggest button starting from any one of them.

[.Address](#) | [.Phone](#) | [.Phone2](#) | [.Mail](#)

Additional information. Mail is used in requests for bidders.

[.Country](#)

Country assigned to the entity.

[.Contact](#) | [.Title](#)

Data of professionals and agents.

[.Incoterm](#)

Value according to the international term of trade.

### Complementary files of the project

In addition to the information in Presto predefined fields, an estimate can include all types of files, for example:

- Drawings, construction details and BIM families.
- Texts for specifications.
- Technical data sheets and assembly diagrams in PDF.
- Pictures and videos for monitoring the execution.
- Scanned original documents.
- Spreadsheets.
- HTML links to web pages or documents.

The root concept has some special types of attachments:

- Customized column layouts.
- The settings used when exporting the estimate with Cost-It.
- The image to show as desktop icon for the project.

A file can be associated with one or more concepts, with a document or generically to the estimate, and they are always associated to a date.

- Files for concepts, documents, or dates, are viewed in the related "Thumbnails" subordinate window.



- The files of the whole project are seen in the "Files" window.

---

*Each file is saved in the original format and within the same file of the Presto project.*

---

### Associate files

In addition to the context menu options of the "Thumbnails" window, files can be dragged in multiple ways.

- From Windows File Explorer to the thumbnail window of a concept, document, or date. If they are dragged to the thumbnails in the file window, they are generically associated with the estimate.
- From the "Files" window to a thumbnail window.
- From a thumbnail window to another program.

To drag from one thumbnail window to another, press first the [Ctrl] key.

---

*Changes to open files cannot be saved again, except for text formats. If you want to modify them, save the file, and import it again.*

---

The files are viewed in the "Files" window and saved in the "Attachment" table.

### Attachment.Type

FILES	.TYPE	SUPPORTED
Any extension not mentioned	0 Undefined	
RTF, TXT Specification facet	1..11 See "Specifications"	Yes
RTF, TXT	19 TEX Text without facet	Yes
Parametric rules	20 PAR Parametric	
BMP, EPS, JPG, PCX, PNG, TIFF, GIF DWG, DXF, WMF	30 Drawing	Yes
RVT, RFA	31 Revit model or family	
IFC	32 IFC File	

Clicking on supported files opens the "Gallery" window. All other formats will launch the program associated in the operating system if it is the case.

#### [.Name | .Extension](#)

After importing the file, it is the file or text facet name. It can be modified without losing the link with the original file, since it appears in the "Path" field.

#### [.Extension](#)

The extension of the associated file.

#### [.Date](#)

It can be modified, but it will not affect the original file.

#### [.Hour](#)

Time of the imported file.

#### [.Bytes](#)

Size of the associated file.

#### [.ThumbnailBytes](#)

Size of the thumbnail.

#### [.Path](#)

The gray color indicates that the file is no longer accessible and the red color that the date of the original file is later than the "Date" field.

#### [.Guid](#)

Unique identifier created by Presto.

### [\*Operate with files\*](#)

This option in the "Tools: Associated files" panel allows to merge, update, and export the files.

The files can be previously selected in the "View: Files" window and the number of affected files is indicated in the option header.

#### [\*Update\*](#)

Using the path and file in the "Path" field, updates the files and the thumbnails whose date is later than the "Date" field.

### *Export*

Saves the files to the chosen directory.

### *Merge*

Suppress duplicated files, thus reducing the size of the project.

### **Operate with graphics**

Menu option in the "Tools: Associated files" panel that allows to change the format of the selected images in "Files" window or create images from vector drawings.

In the conversion to JPG, the compression factor can be specified. The quality must be verified by trial.

JPG COMPRESSION INDEX	0	10	30	50	100
Approximate final size (%)	100	21	11	8	6

### *Thumbnails*

This window, active in "Files" and many other windows, displays an image for each file associated with the concept, document, or date.

Thumbnails are created for the file types supported by Presto and for the other files whose extensions are associated with installed programs capable of creating them, such as PDF. The rest of the files display a generic thumbnail.

### *[ox] Import*

Imports a file to associate with the current element.

### *[ox] Export*

Exports the selected files, forming the name of the exported file with the numeric identifier and name. In the case of specification texts, the facet is also added.

### *[ox] Associate thumbnail*

It allows to associate an image as a thumbnail or to modify the existing one.

### *[ox] Transfer file to text*

Converts any text file to the main text of the element.

*[ox] Create text file*

Creates an empty associated file of RTF type.

---

**Integrated estimate consultation**

Although a project by Presto usually refers to a single project, it is possible to consult in an integrated way the information of a set of estimates, including all the economic variables, the building agents, and the planning.

This system also allows to create and maintain price databases with historical values and references for new projects.

This process is described in the technical note "Integrated consultation of estimates".

---

*The integration of projects to perform a centralized invoicing is based on the same process and is described in the "Centralized billing" section of this manual.*

---

---

**Multiple prices and comparison of offers**

Presto has two types of entities to assign multiple prices to each concept, with two different goals:

ENTITY	ASSOCIATE PRICES WITH...	USEFUL FOR
Price	Basic natures	Maintain several prices for each concept, by geographical areas, suppliers, or currencies, and obtain the cost of each variant
Bidder	Work units	Request, receive, compare, and award bids

---

*The use of alternative prices to maintain an estimate in several currencies is described in the technical note "Use of currencies".*

---

Price allocation entities are created in the "Entities" window and prices are entered into the "Comparison | PRICES" and "comparison | OFFERS"

Presto recalculates the prices of the higher-level concepts using the entered the values, with different criteria:

- In alternative prices Presto tries to obtain a complete estimate, using default prices and conditions, if needed.
- In the comparison of bids Presto uses strictly the received data.

PROPERTIES	PRICES	BIDDERS
Applies inflation	Yes	No
Applies indirect costs	Yes	No
Applies factor, difficulty, and production	Yes	No
Use default price	Yes	No
Value if no price is assigned	Default	"NA"

### Introduction of prices

Prices can be entered manually, creating the entity of the appropriate type, and assigning the prices in the comparison layout that corresponds to each type.

In the "Entities" window, the layout "[Prices] General Data" shows the fields that affect some comparisons, such as dates, and in the layout "[\*] General Data" identification data of the entities is displayed.

Entities whose status is "Grey State" do not appear in comparison layouts or intervene in calculations. To incorporate an entity into comparisons, you must assign it any status other than "Gray State".

### File: Import: prices | Offers

These options import quotes that contain prices of either type, creating the entities if necessary.

### Offer and price comparison layouts

In the estimate windows are the "Comparison | PRICES" and "comparison | OFFERS", which show the prices assigned to each concept by each of the related entities. To the right of the layouts are multiple fields, up to 60 entities of each type. If a multiple field is hidden, they are all hidden, and re-displayed by restoring the layout.

### *[ox] Remove from comparison*

Assigns the status "Grey" to the entity indicated in the header. It does not appear in the comparison or intervene in the calculations.

### *General layouts*

In the subordinate window "Prices", layout "In price allocation entities", you can consult the prices given to the concept by the entity.

### *Price Annotation*

When an entity does not have a price associated with the concept, there is no related relationship in the "Prices" table and the price appears as "NA", unlike null. The [Delete] key converts a price to "NA".

To replace the estimate prices with those of one of the entities, use the copy and paste by ranges, or "Suggest" options.

### *Vertical calculations (entities)*

Presto calculates the amount of the higher concepts from the prices given by each entity to the lower ones, using the estimate amounts and the same color and rounding criteria, plus the specific adjustments for each type of entity described above.

### *Horizontal calculations (concepts)*

Presto shows the average of the prices assigned to each concept by all entities and their standard deviation, considering null prices, but not those marked in gray or listed as "NA".

Because of these possibilities, the average of the higher concepts may not match the sum of the averages of the lower concepts.

### *Concepts.AvgPrice | .AvgBid*

Average price of each concept in price allocation entities.

### *.SigmaPrice | .SigmaBid*

Standard deviation normalized, that is, divided by the average.

### *AmntAvgPrice | .AmntAvgBid*

Average amount for pricing entities.

### *Multiple pricing fields*

The prices assigned to each concept by the different entities are stored in the "Prices" table, which also contains the prices of the contracts and the amounts of linked estimates. Therefore, this table includes all fields of concepts with economic significance.

The table also contains the totals assigned during the calculation process to concepts higher than those that have received them directly.

The fields visible in the comparison layouts are as follows.

#### *Prices.Entity*

The code of the entity that assigns the price.

#### *.Code*

The code of the concept to which an entity assigns the price.

#### *.Relation*

Code formed by the sum of the entity and code fields.

#### *.Code2*

Alternative code.

#### *.Est*

Price assigned by the entity to the concept, except for contracts.

#### *.Price*

Prices given by suppliers to the supplies of each contract.

#### *.UsrNum*

A numeric user value associated with a relationship between a concept and a pricing entity.

#### *.Description*

Original description of the concept in the entity.

#### *.Note*

Alternative short text.

#### *.TypePrice*

It is worth 1 if it is a calculated price.

#### [.Status](#)

The price status of a concept for a price allocation entity.

Black State / Green State / Red State: Considered.

Gray status: Not considered.

#### [.Contact](#)

Contact person of the suppliers of the supplies of a contract.

#### [.Mail](#)

Mail from suppliers of the supplies of a contract.

#### [.WithldngWarrDef](#)

Retention of defect guarantee of the supplies of a contract for each supplier.

#### [Relations.Amount](#)

Product of the price of the entity by the amount of estimate.

---

## **Specifications**

Presto generates two types of specifications, a specification of administrative clauses and a technical specification of the project.

### **Specification of administrative clauses**

#### *REPORTS: 02 Other project documents: Specification of administrative clauses*

This Word template generates a list of administrative clauses valid for conventional building projects executed with the traditional contracting and payment system, considering the following variables:

- Warranty period.
- Deadline for the removal of machinery.
- Contractor's bail bond system.
- Compensation delay end of works.
- Interest on late payment.



## Technical specifications

The texts of the specification are formed from text files associated with each concept and a specific facet.

VALUE	CODE	FACET	BC3
1	ESP	Specs	UNO · ESP · DES
2	TEC	Technical features	MAT · UNI · CMP · COM · PRO
3	PRE	Preconditions	PRE
4	EJE	Execution	EJE
5	MED	Take-off	MED · VAL
6	CON	Quality control	CON · VER
7	SEG	Health & Safety	SEG · SRI
8	GMA	Environmental management	
9	NOR	Regulations	NOR
10	MAN	Maintenance	MAN
11	VAR	Other facets	VAR
19	TEX	Generic text	

---

*The column "BC3" indicates the facet of Presto to which the texts of the specifications that come from the different price tables are associated. These facets not listed are assigned to the "Specifications" facet.*

---

To create such text, from the thumbnail window:

- Use "Create Text File" or import a file in text format.[ox]
- Assign the desired facet with the context menu.
- Double-click if you need to edit it.

Each concept can have a single file per facet.

To generate the spreads there are two possibilities, which are described below.

### *Texts associated with concepts*

When the concepts taken from the price tables have all the necessary texts associated with them, the specifications can be generated directly from the information of the project through a report.

*REPORTS: 02 Other project documents: Specifications for particular technical conditions*

### *Texts associated with higher concepts*

In some price tables, some of the necessary texts are contained in chapters or concepts higher than those transferred to the estimate. In this case, it is necessary that the table used is accessible at the time of generation to search for the texts based on the concepts of the estimate.

### **Specifications**

This option of the "Tools" menu generates a sheet with the texts that have in the box both the concepts of the estimate and all their superiors, in the order in which they appear in the box.

---

*The specifications are not generated for price tables in which the higher concept of each concept cannot be directly deduced, as is the case in some compiled parametric price tables.*

---

The location of the price table is indicated in "File: Working Environment: Tables: Specifications".

Exporting to Word assigns chapters and subchapters title styles, and facets are styled "Header". In this way you can create an index or modify the form easily.

## Planning stage

This chapter describes Presto's processes that are usually carried out in the *pre-contract* phase, after the drafting of the project and before starting the execution of the work:

- Economic planning.
- Financial planning.
- Temporary planning.

---

### Economic planning

Economic planning describes the model of revenues and costs foreseen in the project and is based on two processes:

- Calculate the cost estimate, or *target* estimate, which represents the estimated *cost* of project execution from the point of view of the construction company and which serves as the basis for the presentation of the offer, as opposed to the project estimate, which represents the *sale* or *income*.
- Periodize the amounts of the estimate and the objective in phases, usually months, to obtain a temporary breakdown of the cost, have pension certifications, control the execution deadlines, and analyze the financing.

---

*From the point of view of the project writer, the promoter or the project manager, there is only one estimate, the sales estimate. Therefore, in this case the planning will be carried out on a cost objective that will be identical to the estimate.*

---

### Cost target

The cost target is an estimate parallel to the revenue estimate, which is introduced in the "Cost target" layout of the estimate windows.

The two estimates can have:

- Different cost and sale prices, which can be introduced directly for each concept or generated by applying a margin or coefficient of passage by natures.

- Different amounts, if the construction company reviews the project and obtains values different from those of the project.

The two estimates should have a relatively similar structure, but there may be items or even entire chapters involved in only one of the two estimates.

---

*Concepts that are only in one of the two estimates are removed from the other by nullifying the quantity or price, as is more comfortable.*

---

The advantage of having the two sales and cost estimates integrated is that you can analyze the margins by items, by chapters and for the entire project, analyzing the indirect costs and other expenses that are not individualized in the project estimate. The estimate is maintained as necessary for relations with the promoter and for certifications, allowing the cost objective to be more oriented to the way of execution. If you have the estimate of the project, you can realize the cost objective using it as a base. If the cost objective was first realized, using the sales estimate structure, it can be copied to the target, as indicated below, and generate the sales quote later.

#### Target amounts

[.QtyObj](#) | [.Obj.](#) | [ImpObj](#)

The quantities, prices, and amounts of the cost target use the same variables as the estimate, with the suffix "Obj".

The difference between the selling price and the cost price represents the margin or profit obtained in each concept, in the absence of indirect costs and other percentages that do not intervene directly in each item.

#### [.ImpObjEst](#)

Total expected production of each concept, calculated as the quantity of the target valued at the estimate price. It represents the expected income when the target amount is different from that of the estimate.

#### [Indirect costs and overhead](#)

Unlike the estimate, Presto does not increase the target cost with the percentage of indirect costs, if defined.

Indirect costs, like any other expenditure not directly certifiable, should be explicitly added in one or more chapters to the cost target, at the desired level of breakdown.

---

*Chapters of non-certifiable costs should be given the category "Indirect costs" so that they are properly identified, for example, so as not to be copied when the estimate is generated from the objective.*

---

If the percentages of general expenses and the benefit have been defined or, or the auction award or cancellation estimate is known, the variables of the amounts included in these values, as described in the technical note "Estimates for the administration", must be used so that income and expenses can be correctly compared at the level of each concept.

The user expression "MarginObj" calculates the net difference between any amount of the sales estimate, adjusted for the percentages mentioned, and the estimated cost.

### Options for organizing the target

In the menu "Processes: Objective" there are numerous options to automate, update and reorganize the structure of the object.

#### Generate

It allows to generate the cost objective from the estimate or vice versa, selectively modifying the prices of each nature.

It can be applied to the whole project or only to the lower concepts of the chosen concept. Displays the current reference value, from which price changes are made.

The yields from the breakdowns are copied from the price structure of origin to destination.

In the quantities of items, you can choose not to do so.

- When generating the objective, the planning phase "1" is assigned to the approved take-off lines of the estimate that are not already planned.
- When generating the estimate, the "Est" field of the take-off lines that have the planning phase is marked and the status "Initial estimate" is assigned to the take-off lines with the status "Pending change".

In this way, the estimate and target amounts coincide. Subsequently, adjustments can be made manually if there are differences.

Chapters with the category "Indirect costs" are not copied.

### **Merge items**

It merges several items into one exclusively for the cost objective, without altering the structure or prices of the original items. Nor acts in contracts already awarded.

Take-off lines are not consolidated, as they may correspond to different units of take-off and prices. The resulting item may have in its breakdown the recast work units, with their previous take-off and target price, or all the concepts of the original breakdowns, grouped.

The recast items are cancelled out of the objective and planning.

### **Split work units**

This option allows you to separate a work unit in two, separating a part of the breakdown, so that you can plan, contract, or execute separately.

The second item is a copy of the original item with an objective breakdown that has the difference in returns between the estimate and the objective of each lower concept and does not appear in the estimate.

---

*For example, if in an item the amount of concrete is cancelled out in the breakdown of the cost, and only 40% of the labor is left, a new item will be created with all the concrete and 60% of the labor.*

---

In this way, two complementary work unit of the original unit result, maintaining the estimate and objective amounts.

### **Update breakdown**

It allows to maintain and use as a reference a table of cost prices to quickly make estimates and offers, replacing the costs or cost breakdowns of the selected concepts with those existing in the reference, without altering the estimate.

If there are concepts with breakdown in the project, but not in the reference, the new target price is written down in black and the target quantities of the concepts of its breakdown are canceled.

### **Restructure breakdown**

It allows to adjust the breakdowns received, usually taken from price tables to the real conditions of the contracting and execution, without altering the estimate.

---

*This case occurs when the objective has been generated by copying the project estimate.*

---

To do this, it eliminates or recasts by nature the concepts of the breakdown of the objective of the selected items.

You can group all the concepts of the chosen natures, into one or one for each nature, for example, to globally hire labor or materials.

The new concept has the amount of the nature and legacy, and the recast concepts are removed from the objective, so that the target cost is not altered.

### **Target planning**

#### **Target and planning amounts**

The target quantities can be entered globally for the work units, in the "QtyTgt" field. Economic planning is the breakdown of this target amount by phases or certification periods, usually months.

---

*The creation and general operation of the phases is described in the chapter "Certifications".*

---

In the same way as for certifications, this breakdown can be entered in detail:

- By entering the estimated amount for each phase in the "QtyPlan" field, which can be activated in the multiple fields to the right of all layouts, from "Planning" onwards.
- Using existing take-off lines or created for this purpose, associating in the field "PhasePlan" the phase related to its estimated execution.

---

*If global quantities are introduced directly or in phases, all the take-off lines of the affected work units and phase are removed from the planning.*

---

The target quantity is the sum of the planned quantities for all phases.

*Planning* is the sum of the amounts planned up to the approved or current phase. In this way, the planning always is parallel and comparable to the certification or the actual execution.

The amounts of the phased planning are seen in the "Dates" window, "Planning" layout.

#### [Agenda.Plan](#)

Amount of the planning of each phase.

#### [.PlanEst](#)

Planning of each phase valued at the price of the sales estimate or expected production.

#### [.OrPlan](#)

Amount of the planning accumulated up to the phase.

#### [.OrPlanEst](#)

Production expected at origin in the phase.

### ***Complete the economic planning***

This option allows you to distribute the target quantities of the items in phases by applying several automatic procedures:

- According to Gantt chart planning
- By means of a distribution by weights or curves "S"
- Depending on the planned tasks of the construction unit

The target quantity is distributed among the existing take-off lines if the amount obtained is less than or equal to that needed in each phase. The remaining amount is included in a new take-off line.

When the target quantity is distributed from the planning of the tasks, if there is a take-off line with the exact amount that corresponds to a phase, it is assigned that value. In another case, a line is created with the necessary amount in each phase.

Take-off lines of type "Hollow" or "Link" that do not contribute quantity are not used in the distribution of the target quantity.

The existing schedule is deleted. The new lines are assigned to the defect space and the comment is the description of the work units.



The target amount is distributed only in the current and subsequent phases, discounting the amount planned in the previous phases.

---

*If by the rounding there are mismatches in the intermediate quantities, they are regularized in the last phase to square with the original total amount. If the rounding settings are changed, the distribution may be slightly different.*

---

### [Applying the data from the Gantt chart](#)

Distribute the target amount of each work units into as many take-off lines as phases span the ASAP start and end dates of the Gantt chart, in proportion to the working days of each phase.

### [Applying the planning weights of each certification](#)

Distribute the target quantity among the existing phases, starting from a coefficient or weight per phase.

The window "Dates", layout "[Phases] Planification", contains the fields required for this distribution.

### [Agenda.PesoPlan](#)

Fraction or weight of the cost objective that is estimated to be realized in the phase. If they do not add up to 100, a prorated distribution will be made.

The suggest button presents several alternatives:

- Weight distributed linearly.
- Weight pending distribution, until reaching 100.
- Estimated weight to form a Gauss's campana.

With Presto an Excel sheet is supplied with several models of cost distribution "S" curves. In each model a column of weights is generated that can be copied and pasted directly into this field.

---

*The total number of phases that have been defined is used; add or remove phases until you have the desired number.*

---

### [.OrPesoPlan](#)

Weight accumulated up to the phase.

#### *.PlanTeor*

Amount of the planning according to the assigned weight.

#### *.OrTeor Plan*

Planning according to the weight, accumulated until the phase.

#### *Applying task planning to work unit*

It applies to work unit that have the objective in take-off lines assigned to tasks.

Distribute the amount of target that corresponds to the ASAP or ALAP dates of these tasks by creating the take-off lines s for each task and each planning phase that are necessary.

See "Planning stage: Temporal planning: Relationship between economic and temporal planning".

### **Reports of the group "03 Economic Planning":**

#### *Estimate and objective*

Comparison of revenues and costs. It considers indirect costs, overheads, industrial profit, and auction reduction.

#### *Objective Summary*

Same as the previous one, by chapters.

#### *Revenue and cost planning*

Planned items of the project grouped by phases or months, comparing the expected revenues and costs in each phase.

#### *Chapters and work unit with phases*

Chapters and items with the phases of certification, execution, and planning.

#### *Amounts or amounts per month*

Chapters and work units with the amounts or amounts per month.

---

## Financial planning

Financial planning consists of determining the cash flow of income and collections considering the actual payment conditions of customers and suppliers.

The process is based on the crediting of proforma invoices for revenue and costs:

- Income, calculated from planning or certifications.
- Expenses calculated based on planning or contracts.

In each invoice the collections and payments related to the form of payment of the suppliers and the promoter are generated, plus withholdings and taxes.

---

*In the initial stages of the project, fictitious suppliers can be used, creating only those that correspond to the foreseeable forms of payment, for example, by nature.*

---

The sequence of income and collections gives rise to the daily cash flow.

Several technical notes develop this process with different starting conditions:

- "An example of financing with Presto", based on planning.
- "Fast cash flow planning with 'S' curves."
- "Cash flow from a planned estimate".

### Invoices: Create (all phases)

This option from the "Processes" menu creates proforma invoices. In financial planning we will use only the invoice creation options for all phases.

The entities necessary to associate the invoices and their payment terms must be previously created.

---

*In the options that associate the invoice with the developer or the builder, the first one is taken in order of code if there is more than one.*

---

Income and expenditure can be based on the various data available.

### *Income (from planning at estimate price)*

They are calculated by valuing the amounts of economic planning at the price of the estimate. Indirect costs, structure costs and auction cancellation are included, if defined.

Invoices are assigned to the promoter.

#### *Income (from certifications)*

They are calculated by directly taking the certified quantities, which act in this case as social security certificates.

Invoices are assigned to the promotor, except if in the "Supplier" field of the item there is another entity of type "Promotor" or "User".

#### *Expenses (from planning)*

They are calculated based on the amounts of economic planning, calculating the concepts necessary for execution by each phase and each supplier, depending on the breakdowns, if they exist, and the concepts marked as supplies.

Invoices are assigned to the builder, except if the "Supplier" field of the concept contains a particular one.

#### *Expenses (from contracts)*

In awarded contracts, they are calculated and associated according to the conditions of the contract.

In not awarded contracts, they are calculated at the target price and associated with the builder.

#### *Results*

Proforma invoices are generated for all phases that have quantities, with all their collections and payments. Existing proforma invoices and pension collections and payments are previously eliminated, in a red state, so that the process can be repeated successively.

---

*If you want to create invoices or expirations that are not deleted when generating, assign the black status.*

---

The "Document" field is formed by adding the "AccountSuppliers" field of the entity associated with the invoice.

The results of the generation of invoices and collections and payments can be seen at:

WINDOW	LAYOUTS
Bills	Suppliers, Customers
Collections and payments	All
Dates	[Months] Invoicing, [Months] Collections and payments
Agenda	Invoicing, Collections, and payments

### *Financial cost*

Predefined expression that calculates the accrued interest from the cash flow and the % of interest or applicable rate, which must be entered in "View: Project: Settings: Miscellaneous".

This expression can be included in a user column of the "Dates" window, layout "[Months] Collections and expenses".

---

## **Time planning**

Presto's time planning system allows you to generate a Gantt chart using numerous construction-specific resources.

The hierarchical structure of the Gantt chart is the same as the estimate, although there may be differences between the concepts that appear in one and the other.

### *Backward compatibility*

In the versions prior to Presto 2017, the activity-type concepts fulfilled two different functions:

- Its use to obtain prices transversally to the tree of work unit, which is maintained by replacing the name "Activity" with "Space". The activities defined in the previous projects and that have at least one assigned take-off line become spaces.

- Its use as activities themselves, which are the current tasks. Opening previous projects converts activities with assigned take-off lines and inserted into the estimate tree into tasks.

---

*If an activity meets both conditions, it will give rise to two concepts, a space, and a task.*

---

When opening projects of Presto 2017 and later with versions prior to Presto 2017 the task information is lost, since those concepts did not exist.

## Data entry

### General dates

The dates that affect the Gantt chart are listed in the "Times" tab of the properties of the project.

### DateEstimate

Used in the "Date" field of new concepts and as the date for indexing prices from other references.

### DateContract

Award date, reference for the start of the contract price updating.

### DateLicense

Date of the building permit.

### DateWorkStart

Beginning of activities without predecessors and display of the Gantt chart.

### DateWorkEnd

End of the Gantt chart display and date for starting the collateral retention payments.

### DateDay

Date in which the progress of the execution is controlled based on the bar chart.

### Summary activities

Chapters are summary-type activities by default and work units can also be summary-type. There can be several levels of summary activities.

Their start and end dates encompass the dates of their lower concepts and therefore require at least one lower activity that has calculated dates.

The work units of summary type are represented in the windows "Gantt chart" and "Tree" with gray background, to differentiate them from those that have assigned another type of activity.

*Other types of activities*

Under the summary type activities, you can insert several types of activities.

- The work unit of the estimate and the contracts that you want to plan directly.
- Tasks, other concepts that are planned, but are not part of the estimate. They are described in the technical notes "Using Tasks" and "Plan-It: Converting estimate into planning".
- The operations and controls of the quality system.

Under an activity no other activities can be inserted and the total number of activities that can be calculated is limited to ten thousand.

Activities can have two distinct behaviors.

TYPE	BEHAVIOUR
Calculated dates	They have their own duration, and their dates depend on their relationships with other activities.
Dates of the higher-level concept	Also called "hammocks", they adapt to the dates and duration of its summary task. They serve to define processes that extend to an entire chapter, such as quality and safety controls.

Planning is based on properties of the relationships between concepts and their superiors. Therefore, an activity can appear more than once in the Gantt chart, with different durations and dates.

*Basic natures are not planned. Their consumption is deduced from the planning of the other concepts.*

### ***Chapters and units of unplanned project***

When you mark an estimate concept as not scheduled in the context menu it disappears from the diagram.

This action is equivalent to overriding the "Relations.DurTot" field, which will appear grayed out, or assigning the value "1" to the "Relations.NullDurTot" field.

Unplanned concepts can be added to the diagram again by modifying those fields or by using the context menu from the layouts of the "Gantt Chart" and "Gantt List" windows, which also show these concepts.

### ***Duration of activities***

The estimated duration of the activity in days is entered manually in the "Relations.DurTot" field or by moving the far right of the bar.

This duration is never altered by Presto, unless the activity is of the type "Dates of the superior", in which case it appears in magenta color and the field "TypeDurTot" takes the value 3.

---

*Presto provides several systems to estimate the total duration of the project and the durations of the activities based on the yields or costs, described in the technical note "Automatic estimation of durations and equipment".*

---

### ***Relationships between activities***

Links determine the sequence of execution of activities.

The links are created graphically, dragging the predecessor activity on the successor, or using the options described below, and are modified in the subordinate window "Link".

A maximum of 4400 links can be calculated.

The following link types are supported:



LINK AND COLOR	MEANING	DRAG
End-Start	The successor can begin if the predecessor ends	End on start
Start-Start	The successor cannot be started before the predecessor	Start on start
End-End	The successor cannot finish before the predecessor	End on end
Start-Start End-End	Double link, combining the two previous links	Start on end

---

*The link types are the classic ones in Gantt charts, except for the Start-End type, whose use is discouraged by good practices.*

*The double link allows you to link simultaneous activities by establishing an overlap or distance between both ends.*

---

In the graphical part of the diagram, the [Tab] key moves successively between the different links.

To clear a link graphically, check the link and press [Delete].

After calculation, critical links appear in red and those that cannot be met due to restrictions are marked in black.

If an activity of type "Calculated Dates" is assigned the type "Summary Type Activity" or "Superior Dates", its links are removed.

### *Links to hammock-type activities*

The links of activities calculated with hammock activities allow to link an activity at once to the group of activities that includes the hammock, with some restrictions:

- The two activities must belong to a different higher concept.
- The link is established from the hammock activity to the calculated one.
- In special cases, ALAP dates and slacks are not applicable.

### *Link window*

The subordinate link window displays existing links and allows you to edit properties that cannot be entered on the diagram.

[.CodAntecesor](#) | [.CodSucesor](#)

Codes of the predecessor and successor concepts, respectively.

[.ResAntecesor](#) | [.ResSucesor](#)

Summary of the predecessor and successor concepts, respectively.

[.Solape](#)

[.SolapeTras](#)

Overlaps indicate the number of working days on which the start or end of the successor activity should be separated from the beginning or end of the predecessor.

Depending on the type of link, the overlap can be front, rear, or double.

The part of a link that corresponds to the overlap is represented with a thicker thickness than the rest.

[.Crítico](#)

The criticality type of the link after calculation, as described below.

[\[ox\] Create link](#)

Create one or more "End-Start" links.

[Between selected with calculated dates](#)

- Linking all selected activities.
- On a single activity, choosing predecessor, successor, or both.

As a condition, the dates of the predecessor and successor must be of calculated type.

[Enter selected by spaces](#)

Chain activities linking those that correspond to each space. Consult the technical note "Use of spaces".

**Calculation of dates and slacks**

If automatic calculation is enabled, the start and end dates of activities are calculated whenever there is a change affecting them. If it is not enabled, enable "Start: Calculate: Calculate: Time" or press [F5] to update the dates.

**Date lock**

You can force the estimated start date "DateIPlan" of an activity by blocking this field with the context menu or by moving the far left of the bar.

*The end date can only be altered by modifying the duration until it is the desired one, either by moving the end or by modifying the "DurTot" field.*

The start date can be unlocked on that same field or by changing the behavior of the activity.

**Relations.TypeDateIPlan**

It is worth 1 if the date is blocked.

**Calculated dates**

For each activity, four dates are calculated.

BEGINNING	END	MEANING
DateIPlan	DateFPlan	First possible dates: ASAP
DayIPlan	DayFPlan	Correlative number of working days from the beginning of the project, applied to ASAP dates
DateIUTotal	DateFUTotal	Last possible dates without affecting the end of the project: ALAP
DayIUTotal	DayFUTotal	Correlative number of working days from the beginning of the project, applied to ALAP dates
DateIReal	DateFReal	Actual dates, entered by the user

All dates, like the other fields in the schedule, are from the relationship table.

*The calculated end date of each activity is the day after its completion. In this way, the difference between two dates is exactly the duration. Therefore, an activity of zero duration has the same start and end date.*

The four dates are presented by two bars:

- The ASAP bar, thicker, with the first possible dates.
- The ALAP bar, thinner, with the latest possible dates.

The start date of the activities without predecessors is the start of the project.

*Advances*

Two variables allow you to calculate the executed part of each activity.

PERCENTAGE	MEANING
PerDatePlan	Percentage elapsed over the planned duration
PerDateRealPlan	Actual execution percentage elapsed over the actual duration

*Slacks*

The slacks are the days that can be delayed or advanced activities while still complying with the established restrictions.

PLAY	FIELD	WEFT	MEANING
Total	SlackTotal	\\\\\\\\\\\\\\\\	Days that can delay the activity or increase its duration without affecting the end of the project.
Free	SlackFree	////////	Days that can delay the activity or increase its duration without affecting other activities. It is depicted superimposed on the total slack.
Duration			It is a special case of free slack. Days that can increase the duration of the activity without affecting other activities.
Internal	SlackInt	\\\\\\\\\\\\\\\\	Days that can interrupt the activity or increase its duration when the difference between the end date and the start date is greater than the desired duration. It is displayed by a thin Gantt bar drawn from the start of the ASAP bar.

- In total and free slacks, only the part exceeding the internal slack is represented.
- In the duration slack, only the part exceeding the total slack is represented.

Internal slack can appear when there is a final-final bond or a double bond where the successor is shorter than the predecessor. It is considered in this case that the second activity can really begin as soon as the first one has begun, if it is visible that there is plenty of time.

---

*This avoids the problem of inverse criticality, where the lengthening of an activity produces the shortening of the project, and vice versa.*

---

### Criticality

Tradition defines the critical path as the succession of critical activities, these being those that do not admit any delay in any of their dates, either because their total slack is null, or they have duration slack, and their successor is critical.

However, there are some remarks on this idea.

### Criticality of links

Links are properly critical, rather than activities, and can be critical in different ways, which are contained in the "Critical" field.

CRITICAL	MEANING	COLOR
0	Not critical	The type of link
1	In front	Red
2	From behind	Red
3	Both	Red
4	Error	Black

The error indicates a link that cannot be satisfied due to restrictions, for example, one activity that should start after another, but starts earlier due to a locked date.

### Criticality of activities

Instead of radically separating critical from non-critical activities, Presto visualizes all intermediate degrees of criticality by showing in a darker tone the overlapping part of the ASAP and ALAP bars.

---

*The duration of this overlap is known as interference slack and is the difference between free slack and total slack.*

---

In this way, the degree of criticality is clearly visualized, from the classic critical activities, whose two bars are totally overlapped, to those that do not overlap at all.

## Interface

### *Gantt chart and Gantt listing*

The two windows share the same basic functionality.

- In the diagram the activities are viewed hierarchically and has four filters, summaries, sub-summaries, planned activities and all activities, including unplanned ones.
- In the list of bars, the activities are seen in the form of a list, each layout applies its own filters and can also be filtered by masks on the code.

Each one has the necessary layouts to visualize dates of all kinds, durations, and slacks. Double-clicking on an activity in the Gantt list positions the diagram in that same activity.

A tip above each Gantt bar shows the main properties.

---

*Summary-type activities are represented as growing lines, to emphasize the idea that activities are generated over time and to visually indicate which part of the diagram is being visualized in long-term projects.*

---

The color of the summary activities is the same as the certifiable chapters and items, while the color of the activities of a "Work unit" or "Task" nature is that assigned to the concept, except when they are not assigned a color, in which case orange is applied for the items and blue for the tasks.

The bars of the activities that take the date from the top include a green line at the beginning and end of the bar.

### *Icons and options*

#### *[ox] Center Bar*

Position the Gantt chart above the Gantt of the activity in which it is activated.

### *Link (Gantt chart only)*

Shows or hides the subordinate window of the same name, where you see the link type and overlaps.

### *Take-off lines (only in the list of bars)*

Displays information obtained from the take-off lines associated with tasks.

### *Show Gantt diagram*

Shows or hides the graphic part to the right of the window.

### *Animate the model (Gantt chart only)*

Run the "Animate the model" option of "Processes: Gantt Chart" with the previously selected options in the option dialog box.

### *Zoom*

Modify the timeline to display details by days, weeks, months, years, or phases.

The time scale is also modified by operating the mouse wheel with the [Ctrl] key pressed on the graphic area of the diagram.

### *Estimated dates*

Enables or disables the display of ASAP bars.

### *Slacks*

Turn the display of slacks on or off.

### *BASE*

Enables or disables the display of ALAP bars. The overlap area of the ASAP and ALAP activity bars is drawn in a darker color.

### *Actual dates*

Enables or disables the display of actual date bars.

### *Links*

Enables or disables the display of link arrows between activities.

States

Enables or disables the display of the status dates "BlackDate", "RedDate", "GreyDate" and "GreenDate".

By spaces

Segment each Gantt into colors based on the take-off lines assigned to each space. Consult the technical note "Use of spaces".

Colors and lines

Background colors and vertical lines are used to indicate the most significant dates.

COLOR	DATES
Yellow background	From the start date of the project to the current certification phase
White background	Between the current certification and the last defined phase or the end date of the project
Grey background	Earlier and later dates. It can be set in "Working environment: Appearance", option "Disabled   Not applicable   Auxiliary"
Red vertical line	Right edge of the holiday
Black vertical line	End date of each approved certification phase
Green vertical line	End date of the current certification phase
Grey vertical line	End date of the phases after the current phase

Phase lines are displayed only if any of the overlapping fields based on phases are displayed.

*Depending on the scale, dotted lines for days and weeks can be seen.*

Visible fields over the graphic area

Two types of fields can be displayed superimposed on the bars of each activity, chosen from two drop-down lists.



- The first list allows you to choose a field for each Gantt bar from those that are visible in the diagram on the left. It includes the user fields, so you can view any Presto expression applicable to the activity.
- The second drop-down allows you to display a field for each phase. You can select any field from the "Phases" table or one of the user fields defined in the subordinate window "Phases", layout "Certification".

## Results and reports

### *Calculation of resources*

The dates obtained from the Gantt chart can be used to calculate the resources needed to execute the project.

### *Amounts by concept*

The option "Planning and certification: Fill in agenda" assigns to each phase the planned, executed, and certified amounts of each concept, including the amounts of higher concepts. You can see in the different layouts of the windows "Agenda" and "Dates", subordinate window "Concepts".

### *Resource needs*

The option "Hiring: Calculate resources: By dates" calculates resource needs and assigns them to agenda dates. They are seen in the "Agenda" window, subordinate window "Resources: Resources by dates" and in the layouts "[Date]" of the main window "Resources".

### *Reports*

Alphanumeric information from the Gantt chart, Gantt list, and link windows can be exported to Excel or generated in a preview.

Specific reports are contained in the group "04 Temporal planning".

### *Gantt diagram*

The result considers the elements visible in the Gantt chart window when running it, including the timeline, activity bars, slacks, vertical date and phase lines, status dates, and columns chosen in the left area.

---

*It is recommended to generate the complete diagram, from the start date, and export it to PDF with the option "Paper size: The entire document", from where printing on any paper size is easily managed.*

*In this format you can also print the links between activities.*

---

### [Link](#)

List of activities with their predecessors and successors.

### [Activities and resources](#)

Activity tree with its breakdown of resources.

### [Plan-It: Turn estimate into planning](#)

The goal of this process is to turn a cost estimate into a planning.

Refer to the technical note "Plan-It: Turning estimate into planning".

### [Create tasks](#)

Create tasks by breaking down or merging work units.

### [Relationship between economic and temporal planning](#)

Gantt chart planning can be used as a basis for generating economic planning, as indicated when talking about target planning.

The percentage of each activity belonging to each phase is also obtained, both for the ASAP and ALAP dates, considering the working days between the start and end day.

---

*These percentages can be applied to any global data of the activity, such as the quantity, to obtain the impact for each phase.*

---

Presto calculates the segmentation by phases of the amounts of the cost estimate and the cost target of each concept. The amounts of the chapters and the project are calculated as the sum of the related amounts of the lower concepts.

FIELD	MEANING
PorASAP PorALAP	Percentage of the activity that corresponds to the phase according to the early dates "DateIPlan" and "DateFPlan" and according to the late dates "DateIUTotal" and "DateFUTotal", respectively.
OrPorASAP OrPorALAP	Percentages above, accumulated to origin.
EstASAP EstALAP	Amount of the estimate of each phase that corresponds to the activity with ASAP and ALAP dates, respectively
ObjASAP ObjALAP	Amount of the cost target of each phase that corresponds to the activity with ASAP and ALAP dates, respectively
ObjEstASAP ObjEstALAP	Amount of expected production of each phase related to the activity with ASAP and ALAP dates, respectively

All fields are from the "Phases" table and can be viewed in the phase windows or on the diagram itself, activating the drop-down list of phased fields.

*For the amount fields to be calculated, the automatic calculation of prices, times and documents must be activated.*

## Link with Primavera and Project

Presto has several connection options with these programs.

- Import a Primavera project in XER format to Presto.
- Import a Microsoft Project file into Presto in XML format.
- Export an estimate directly from Presto to Microsoft Project.
- Export a Presto quote to Microsoft Project/Primavera in XML format.

## Import: Primavera

This "File " option inserts a XER file generated by Primavera into a Presto project.

The contents of the XER file are added to the estimates. In general, it is convenient to start from an empty estimate. If there is information from multiple projects in the XER file, you can choose the node to import.

At the end of the import, the prices and times are recalculated if the automatic calculation is activated.

### *Data equivalence*

Chapters and subchapters are taken from the components of WBS.

Activities become concepts of type "Work unit" or "Task", depending on the option chosen.

The resources are associated with their work unit, classified as "Labor" (Labor), "Machinery" (Nonlabor) and "Materials" (Materials). Costs (Expenses) are assigned to nature "Other".

The code of the concepts is formed with an identifier that guarantees the exact correspondence between the estimate and the planning. Codes visible in Primavera are saved in "Code2".

The type of activity is saved in the "Group" field and is identified by colors:

- **Red:** Start milestone.
- **Green:** End milestone.
- **Grey:** Summary type activities.

Financial periods become phases. The approved phase is assigned to the "Data date" of Primavera.

If there is an advance by percentage, it is saved in the field "Relations.PerAdvance" with the content of the Primavera field "phys\_complete\_pct".

It also reads the start date of the project, the price of the hours of labor and the working hours of the day.

### *Import options*

#### *Import only activities that have a cost*

This option only imports non-zero priced activities.

### *Import as Task-type concepts*

Allows you to import Primavera activities as "Work units" or "Task" concepts.

### *Time planning*

When you import the schedule, you overwrite the data for the chosen option:

- If there are equal links they are erased, and the new ones are created.
- If there are start, end, and duration dates, they are updated.
- If you check the start and end dates, or target dates, options, the actual start, and end dates are updated.

### *Durations and links*

Import the original data, which can be modified and recalculated with Presto. Differences may appear, as Primavera and Presto have different options and criteria.

---

*The "Start - End" links are not imported, but the "Start-Start/End-End" double links are.*

---

### *Start and end dates*

Primavera ASAP and ALAP start and end dates are taken and left locked so they can be used safely. Primavera does not provide these dates from today ("Data date"), so in a project already started the target dates must be used.

### *Target dates*

Original estimates(*target*)of the start and end dates, provided by Primavera even if the project has been started.

### **Export: Microsoft Project**

This option of "Files" requires that the target program be installed and a file in that format, with the following data:

- Structure of chapters, subchapters and activities of a work units or task type.
- Durations and links.
- Calculated start and end dates.
- Resources of each activity, classified in materials and labor.

- Total hours of labor-type resources.
- Estimate amounts.
- Percentage made with respect to certification.

Some fields are exported to text and number fields of Microsoft Project tasks:

"CONCEPTS" FIELD	PROJECT FIELD
Code	Texto1
CodeBIM	Texto2
CategoryBIM	Texto3
FamilyBIM	Texto4
TypeBIM	Texto5
Code2	Texto6
Description2	Texto7
TypeBIMValue	Texto8
Unit	Texto9
"RELATIONS" FIELD	PROJECT FIELD
QtyEst	Número1
QtyCert	Número2
QtyReal	Número3
QtyObj	Número4
QtyPlan	Número5

### Export: Microsoft Project / Primavera XML

This "File" option creates a file in XML format, with UTF-8 encoding without BOM (Unicode), which contains the chapter and work units' structure, resources, tasks, time planning, and the same text type fields and number of the direct export.

---

## Resource management

The option "Processes: Contracting: Calculating resources" provides the quantities of materials and equipment necessary to execute the project, for the purpose of submitting bids, performing a financial analysis, or contracting the execution.

The different types of breakdowns are described below in the "Calculate resources" section. All of them require identifying the concepts that are acquired and the concepts that are executed on site, as indicated in the following section.

Group separation to create contracts also requires associating concepts with purchasing groups, as described below.

There are some possibilities that are not based on the calculation of resources described in this section:

- To associate directly under the estimate chapters the resources necessary to execute them, use the "Reduce levels" option.
- The planned, executed, and certified amounts of the concepts of each phase are associated with the dates of the agenda through the "Fill agenda" option and are seen in the subordinate window of concepts of the agenda.

## Supplies and destinations

Initially, it is considered that the concepts of the lower level must be acquired or subcontracted to all, whatever their nature.

This criterion can be modified by assigning one of the following types to each concept using the context menu in the fields "Code o", "NatC", "Nat" or "Cost Type".

### *Supplies*

They are the concepts of any kind that are going to be bought or outsourced, with the orange background icon.

- Its inferior concepts, if they exist, are not considered.
- Its actual cost is obtained from the purchase documents.

### *Destinations*

Also called cost centers, they are the concepts that are executed on site or that group other destinations, with the blue background icon.

Its actual costs are calculated from the execution information and are described in "Presto for the construction company: Analysis of expenses and costs".

### Contracts

They are chapters that group similar supplies to ask suppliers for offers.

### Indefinite

Concepts without assigned type and white background. Some program processes assign the type. For example, a concept becomes a supply when it appears in a purchase document.

---

*Since concepts below supplies are not considered in the calculations, it may be necessary to use different criteria temporarily, depending on the desired result.*

*For example, subcontracted work unit should not be marked as supplies if it is necessary to calculate the number of operators present simultaneously on the site or the amounts broken down by lower-level natures.*

---

### Purchasing groups

If you do not need to separate the resources by purchase groups, you can go directly to the "Calculate resources" section.

The purchasing group, lot or family is a classification that groups similar supplies, provided by the same type of suppliers, to create suitable contracts to request offers. It is also used in other Presto options, for example, to merge similar work unit in planning.

The group of each supply can be filled in manually. However, the creation of a project with predefined purchasing groups and, optionally, with real suppliers, assigned to them, allows to fully automate the generation of purchase contracts.

### Concepts.Group

Classification, lot, or purchase family assigned to a concept.

This field can be seen, for example, in:

- Estimate windows, "Resources and Purchase Groups" layout.
- Concepts, layout "[Supplies] To contract".



The group may or may not correspond to an existing concept.

The "Suggest" button displays the groups listed in the group box described below. If there is no group box assigned, it displays the chapters of the project itself.

---

*The option "Processes: Contracting: Filling in groups" automatically fills in the purchase groups of the concepts based on different criteria.*

---

Concepts without a group are assigned to the group of the first superior who has it, so that groups can be assigned to chapters or subchapters, and it is only necessary to assign specific groups to the lower concepts that require it. For example, if the chapter of structures is assigned to one group, but the central concrete is assigned to another, the necessary resources for the execution of the structure will be obtained in one contract and in another the supply of the prepared concrete.

If it is necessary to buy the same concept from more than one supplier, you can:

- Break down the contract after generating it.
- Duplicate the concept with other code and assign them to different groups.

### **Table of groups and suppliers**

The table of purchasing groups and suppliers is a project of Presto with a predefined content, which allows:

- Facilitate the selection of the right group for each concept
- Use the same classification in all projects.
- Automatically associate the appropriate group with each supply.
- Associate a predefined text with each contract.
- Find the most suitable suppliers for each contract.

The group box must consist of chapter-type concepts, which represent the available purchase groups.

Optionally, it can contain two types of concepts, associated as lower concepts to the groups:

- Basic items or natures, representing the group's supplies.
- Vendor-type entities, which provide the group's products and are described below, when associating contracts with vendors.

The search for the right group foreach supply is carried out by means of two alternative systems.

### *By the supply code*

When the groups box contains only chapters, supplies and groups are paired by codes, looking for the chapter code that shares more initials with the supply code.

For example, for the supply "P17AB01" the chapters "P17AB01", "P17AB0", "P17AB", "P17A", "P17", "P1" and "P" are searched, in that order, until one is found.

### *By association of groups and supplies*

If there are basic work units or natures in the group table, supplies are paired with supplies, looking for the code of the consignment or nature that has more common initials with the supply code, and taking the group to which it belongs.

As in the previous case, you only must enter the strictly necessary references. For example, if the codes of all ceramic bricks begin with "P10ML" the group box only needs a material, "P10ML: Ceramic brick", which will be located under the chapter indicating the group.

---

*If the groups box must contain supplies whose code matches that of a chapter that represents a group, add a "\_" underscore after the code for the concept that represents a supply; Presto will not consider this in the search.*

---

Unlike searching by supply code, search by association does not require a certain coding of supplies, resulting in a more flexible system. For example, you can use supplies with codes from the Guadalajara Center box with a structure of groups and contracts specific to the company.

### *Fill in groups*

This option in the menu "Processes: Contracting" fills in the "Group" field of the concepts based on several criteria.

### *Group table*

Assign the group code in the way described in the previous section. The group box is taken from the one selected in "File: Working environment: Tables: Groups", or you can choose here by pressing the "Suggest" button.

### Initial

Creates a group code from the initials of the supply code.

### Natures

Assign groups based on the nature of the concept. Si the group is an existing concept in the project its summary is shown.

---

*This system allows a quick classification, especially useful for cash flow planning when the payment terms are similar for suppliers of each nature.*

---

### Calculate resources

This option in the menu "Processes: Contracting" calculates the resources that must be acquired or contracted to execute the project.

Resources are considered all concepts marked as supplies, plus those that do not have any higher concept that is supply, so that the sum of amounts of the resources of a concept or the project coincides with the total amount of the same.

You can filter the concepts from which you want to calculate the resources, from the entire project to a chapter or a set of items.

The results of the breakdown criteria described below are retained in different fields and can therefore be obtained, consulted, and used simultaneously or independently.

#### By spaces

Resources needed to execute each space, based on all price structures, and based on the associated take-off lines.

The results can be seen in:

- The "Resources" window, "[Spaces]" layout.
- The "Spaces" window, subordinated window "Resources".

#### Phased

Resources needed for each phase or certification period. Quantities are taken from the quantity planned, executed, or certified at each stage.

The results can be seen in:

- The "Resources" window, "[Phases]" layout.

- The "Concepts" window, layout "[Labor || Machinery] Equipment", choosing "QtyPlan", "QtyReal", "QtyCert", "Plan", "Real" or "Cert" from the drop-down list of multiple fields.
- The "Dates" window, subordinated "Resources", selecting phase layouts in both.

### *Calculate resources QtyEquipment*

This option calculates the number of operators and machines required in each phase by dividing the total number of hours required in it by the number of working days and by the values of the options "Working days of the month" and "Duration of the working day in hours" of the "Times" tab of the properties of the project.

- The results are seen in choosing the multiple field "QtyEquipment" from the "Concepts" window, layout "[Labor || Machinery] Equipment".

The number of computers is editable, but manually entered values are deleted if the option is run again.

### *By activities*

Resources needed to execute each time planning activity, whether items or tasks.

The results are seen in the "Resources" window, "[Activities] layout".

### *[ox] Show resources*

In the "Gantt Chart" and "Gantt List" windows, if you can see the activities of type "Calculated dates" or "Dates of the top", it allows you to view the resources associated with each activity, opening the main window "Resources" by the layout "[Activities]" and applying its code as a mask.

If the "Resources" window is already open, it does not change the layout or order selected in the window. To display only resources whose "Resources.Group" field is the code for the activity, update the mask if "Group Order" is selected, and if not, apply a filter per expression.

### *By dates*

It calculates the daily resources needed based on the data in the Gantt chart, distributing the quantities of all the price structures linearly on the working days of each activity, except in the case of activities with zero duration (milestones), that are calculated even if they are located on holidays.

The results can be seen in:

- The "Resources" window, layout "[Dates]".
- The "Concepts" window, subordinated window "Resources".
- The "Agenda" window, subordinated window "Resources", with the layout relative to days or months. The values are also obtained by months and by years.

### *Separate by activities*

Allows you to separate by activities the resources associated with each date.

### *By phases, grouped by*

It calculates resources broken down by phases, based on economic planning, and separated also so that contracts can be easily generated.

Concepts that remain without grouping criteria are assigned to the root concept.

### *First higher-level concept of destination type*

Resources are obtained separated by each destination and each phase. If the contrary has not been indicated, the first superior of the target type is the chapter.

### *Concepts.Group*

Concepts are grouped by the "Group" field. If a concept without a defined group has several higher concepts belonging to different groups, it is broken down into the necessary groups.

### *Concepts.Supplier*

Resources are grouped by the "Provider" field of each concept, allowing for very detailed grouping.

### *Results*

The results of this resource calculation option are seen in "View: Purchases: Resources", "[Group]" layouts.

Layouts contain the necessary resources and the group to which they belong, with their quantities or amounts broken down by phases.

---

*Creating contracts using "Processes: Contracting: Creating Contracts" is based on the outcome of this option.*

---

In addition to the fields that identify the resource, the group, and the phase to which it belongs, all the data necessary to carry out the contract are shown, either from the beginning or in intermediate moments of the project:

[.QtyStock](#)

Quantity of the concept purchased and not consumed on the date.

[.QtyEquipment](#)

Amount of equipment needed in the phase.

[.QtyPteCont](#)

Amount pending contracting.

[.ContPte](#)

Amount pending contracting.

The quantities and amounts of the five price structures of the concept are also shown.

**[Restrictions](#)**

The calculations of resources by activities, by dates separated by activity and by phases grouped by any criterion are exclusive, so they cannot be selected simultaneously.

When you calculate the resources for one of these options, the resources previously generated by any of them, if they exist, are deleted.

**[Resource analysis by months](#)**

This Excel template from the "03: Economic Planning" directory generates a detailed load histogram of the necessary resources, based on the calculation of resources.

---

*The technical note "Calculation of resources for submission of tenders" describes the use of all these options in a complete process.*

---

# Project management

This chapter describes the processes that are carried out during execution from the point of view of the project manager, who can also be the owner itself or the professional in charge of the cost control:

- Bids for tender to main contractors.
- Certification, valuation, or invoice to owner.
- Cost tracking.

---

*The use of the Earned Value Method from the point of view of the construction company is described in "Earned value for the construction manager".*

---

---

## Tenders for complete project tenders

This process makes it possible to compare the bids received on a base estimate by applying the prices received for its work unit.

The use is described in a general way in "Presto at the project stage: Multiple prices and comparison of offers".

The entire bid comparison process consists of several steps.

### Request offers

There are several possibilities to request price from bidders:

- Send the project without prices, directly in Presto format.
- Export the project without prices to BC3 or Excel format, in the latter case choosing the level of "Chapters and work units" in the export options.
- Generate the report "Estimates and take-off lines" in PDF, without prices.

### Receive offers

Bidders fill in the prices and return the offer, which is incorporated into Presto according to the format received:

- If it is a project of Presto, through "File: Import: Offers".

- If it is an offer in BC3 or Excel, it must first be imported onto an empty project using "File: Import: BC3" or "File: Importing: Excel" and then make the previous point on the original project.
- If it is on paper, you need to perform the manual process of creating an entity of type "Bidder" and write down the prices in the bid comparison layout of the quote window.

---

*In the importation of offers, no change is introduced that the bidder may have made in the information received, except for prices.*

---

### *Compare offers*

You can review them in the bid comparison layout or in the reports of the "05 Project Management" group.

### *Horizontal offer comparison*

### *Vertical offer comparison*

These reports show the structure of the estimate and the prices offered by each of the suppliers, with the necessary information to make decisions.

### *Update the prices of the estimate with those of the awarded bid*

The prices of the offers can be copied and pasted into the price that is suitable for your interpretation, either the estimate or the objective.

---

## **Certification or valuation**

Certification is the process by which the take-off of each item in each period is quantified and approved for payment to the builder.

Only items that are under a chapter are certifiable.

The amount of the certification is calculated by applying the unit price of certification, which for the work unit is equal to the estimate, to the quantity certified at the origin of the work units.

$\text{Relations.QtyCert} \times \text{Concepts.Cert [or Est]} = \text{Relations.ImpCert}$



Both the quantity and the amount are from the "Relations" table since they are different if the work units appear in more than one chapter.  
The above certification is discounted globally when preparing the summary sheet.

### Certification phases

The phases are the periods of time in which the executed part of the project is divided to carry out the certification or invoice.

---

*Certification periods are the same as those used to introduce economic planning and execution or production, so that they are comparable, and the processes described below are also similar in all three cases.*

---

Creating and modifying phases is described below.

#### Ways to certify

Certified quantities can be entered with three levels of breakdown.

#### A. Enter the quantity certified to origin

For each work unit in the estimate windows, "Certification" layout, is entered in the "QtyCert" field.

---

*The direct introduction of the total amount prevents knowing the past evolution of the project and limits many of the possibilities of Presto.*

---

#### B. Breakdown of quantities by phase

It is entered in the estimate windows, in the layouts of the execution stage that show data by phases, when the icon "Multiple fields" appears activated.

The amount is entered in the "Phases.QtyCert" field and the amount is obtained in the "Cert" field, both belonging to the "Phases" table.

---

*The phased introduction is more useful than the entry of the total data, but it does not allow the detailed monitoring of each of the elements of the project.*

---

### C. Breakdowns by take-off lines

To certify a line, the phase number that corresponds to it is entered in the "PhaseCert" field of the "Take-off lines" table, visible in the estimate windows, subordinate window "TakeoffLines", layout "[Est || Cert] Certification."

---

*Certification by take-off lines requires more orderly project but allows all the possibilities of Presto tracking to be applied.*

---

If the amount to be certified does not exactly correspond to an existing estimate take-off line, you can:

- Break down a line in two and certify one. The "GuidElem" field is the same for the two lines, so the relationship between the two is kept.
- Create an exclusive line for certification, unchecking the "Est" field so that it does not add to the estimate.

### Create dates

A phase is defined by the date of its last day, which must be registered in the agenda and marked as "Certification" or "Current Certification".

---

*The first phase begins on the date of start of the project and the others the day after the previous phase.*

---

This option in the menu "Processes: Planning and Certification" allows you to create phases based on months, as well as add to the agenda the days that elapse between two dates.

- The default date is that of the month after the last existing phase. If there is none, it will be the first month after the date of initiation or of the project, which appears in "View: Project: Settings: Planning".
- The "30" and "31" days automatically adapt to the last day of the month shortest.
- To create the intermediate days, but not the phases, enter "0" in "Certification day".

The option does not delete or alter existing certification dates.

A months-based phase is also created by assigning a take-off line to the next free phase number.

You can see the complete information in the "Agenda" window, displayed by days. Note that the phase is not associated with the s records of months, but of days.

---

*To create phases based on weeks or any other period, insert the dates into the agenda and manually mark the final days.*

---

### **Phase window**

The phases are seen in the "Dates" window, in the layouts identified as [Phases].

The take-off lines and other data periodized by phases are associated with the phase number that corresponds to it in this window, not the date. If the dates of the phases change, the association to the order number is maintained.

### **[ox] Certification**

Converts an existing date in the agenda to the end date of a phase. If a "Certification" date is entered between existing dates, the data associated with the subsequent phases is moved one phase, filling in the one that has just been inserted and leaving the last one without data.

### **[ox] Non-certification**

If a date ceases to be certification, the data associated with that phase and all subsequent dates are moved to the next phase.

---

*To delete a day of certification with data there must be at least one phase at the end that has no data.*

---

To modify a certification date, therefore, first mark the new date you want as a certification and then uncheck the one you want to delete.

To create isolated certifications or with other periods it is necessary to use the date creation option and then mark these dates as "Certification".

### **Phases.Certification**

### **Phases.Closes | Agenda.DateDMA**

Date of certification of the phase windows and dates, respectively.

### Delete phases

In the "Dates" and "Agenda" windows, you can delete the phases by deleting the related rows, if they do not have associated data.

In the estimate windows they are deleted by the [ox] "Delete phase" option above the header in one of the multiple fields.

In both cases, the subsequent phases are automatically renumbered.

### Eliminate certified quantities in phases

In the window "Spaces and phases" layout "[Certifications]Certification", you can select in the column "QtyCert" the certifications to be deleted:

- All, by selecting the entire column in the header.
- A group of cells, selecting a range of fields.
- A certification number, filtering by content on the certification number to be deleted and selecting the filtered column.




Delete the selected information by clicking [Delete].

### Months, phases and years

The calendar months are always defined, like the years, and may or may not coincide with the phases. The months accumulate the amounts assigned to dates, such as purchases or invoices, and are added by annuities, while the certifications are accumulated for the total of the project.

### Current certification

The phase marked as current certification indicates the last of the approved phases.

PHASE OR CERTIFICATION		STATE	MEANING
Approved		0	Phases prior to the current one
Current certification		3	Last phase approved or current certification
Future		2	Later phases, not approved

The status is a field in the "Agenda" table.

---

*All periodized values, such as planning, execution, and certification, are added only up the current phase, so that they can be compared homogeneously.*

---

### [\[ox\] Current certification](#)

The approved phase is activated with the context menu

- Date window, "Phases" layouts
- Phase window, subordinate to estimate windows
- Estimate windows, in the header of multi-phase fields

The quantities and amounts of the various price structures can be obtained by breakdown by these statements, with the suffixes "Ant" and "Act".

For example:

[QtyCertAnt | ImpCertAnt](#)

Quantity certified in the phases prior to the current one.

[QtyCertAct | ImpCertAct](#)

Quantity certified in the current phase or certification.

### [Blocking previous certifications](#)

Implementation and certification data are generally entered at the current stage, although they can also be entered in advance, at later stages.

---

*To prevent the data of the phases prior to the current one from being modified, activate the option "File: Working environment: General: Block the modification of approved certifications".*

---

### [Official certifications](#)

In official project, the total amount obtained for the project, which already includes indirect costs, is applied the same percentages that convert the PEM into the award estimate. This total amount at origin is deducted from the equivalent amount of the previous certification.

The details of the calculation of official certifications and the price revision are described in the technical note "Estimates for the administration".

## Reports of the group "05 Project Management"

### *Certification with take-off lines*

Typical certification model with multiple alternatives to see or not the take-off lines, texts, prices, data of the current certification, and a summary for each item and chapter.

### *Certification Summary*

Chapters that include expenses, profit, auction cancellation and taxes.

### *Quantities and amounts of a certification*

List of certified consignments in a phase, month, or certification.

### *Current certification and origin*

List of certified items, breaking down the values that correspond to the current or approved certification, those prior to the current one, and the totals until the current one.

### *Summary of current certification and origin*

Chapters broken down by the current or approved certification, those prior to the current one, and the totals until the current one.

### *Comparison between quantities up to the current phase*

Compare different pricing structures and other combinations.

### *New price chart*

Items that do not have an amount in the initial estimate are considered, but they are executed and collected, that is, they are certified.

### *Certification invoice*

Invoice model that represents the current certification.

### *Certification Settlement*

Liquidation model used by many public administrations.

### *Valued relationship*

Certification model used by many public administrations.

---

## Cost tracking

Certification is a relatively passive process by which it is proven that a part of the project is executed and must be paid.

Project management has two more ambitious goals:

- Control the changes that arise throughout the project.
- Estimate the real progress and foreseeable final cost.

This section describes cost control from the point of view of construction management or project manager, which is based exclusively on the information contained in the estimate and on the certifications.

When the certified quantity of an item is entered globally, in phases or even with specific take-off lines, but independent of the estimate, only two values are known: the total estimate and the current certification. The comparison between them is only significant if the project being executed is exactly what is described in the project.

Certification using estimate take-off lines and approval statuses allows for more advanced tracking of changes.

---

*Monitoring using the Earned Value method also uses approval statements and is described in the technical note "Earned Value for the Construction Manager".*

---

## Estimate by approval states

Take-off lines can belong to three approval states.

STATEEST	SUFFIX	EST	APPROVAL STATUS
Initial estimate	Ini	Yes	Initial project estimate
Approved change	Mod	Yes	Modified, reformed or approved changes
Pending change	Pte	No	Estimate pending approval

The text in the "Comment" field of the take-off lines with green status is shown in green and in red that of the take-off lines with red status.

For a take-off line to add to the estimate, it must:

- Belong to the black or green states.

- Be associated with an enabled space
- Have the "Est" box checked.

The background of the "Comment" field of take-off lines that do not add up to the estimate is displayed in gray.

The amounts associated with each state are added separately and all the amounts of the estimate and the project are obtained broken down in this way, as indicated by the following variables.

---

*The variables are from the "Concepts" table, when they are prices, from the "Relations" table, when they are quantities or amounts, and from the "Phases" table, when they are periodized.*

---

#### [.Est](#)

The estimate is the sum of the lines allocated to the initial estimate and to the modified ones approved, called the current estimate in the projects for the administration.

#### [.EstIni](#)

Part of the estimate that corresponds to the initial estimate.

#### [.EstMod](#)

Part of the estimate that corresponds to approved estimate changes.

#### [.EstPte](#)

Amount of estimate changes pending approval.

#### [.ImpEstIni](#) | [.ImpEstMod](#) | [.ImpEstPte](#)

Amount that corresponds to the take-off lines assigned to each state.

#### [.ImpEstPossible](#)

*Possible estimate*, consisting of the current estimate plus the estimate pending approval.

### **Valuation on estimate take-off lines**

Traditionally, estimate take-off lines could be very detailed and accurate, but they were not usually reused in valuations.



The diffusion of BIM, which generates complete and well-structured take-off lines of the project, and the new sensitivity towards cost management, suggest that the certification be carried out on the same take-off lines of the estimate, using specific mechanisms for the management of the inevitable changes.

---

*Certification is the as built of the estimate.*

---

To certify an estimate take-off line, you only must add the related phase. If it is part of the approved phases, it will be considered in the amount of the certification, whatever the state of the estimate.

To certify an amount not foreseen in the estimate, create or duplicate a take-off line, leaving the "Est" field unchecked so as not to alter the value of the estimate.

- If you choose the green or red approval status, the certification amount will also be broken down by status, allowing for more accurate tracking.
- If the line exists, but only a part is to be certified, it is split, and the necessary quantity is certified. The other line remains unchanged.
- If a portion of the estimate is no longer to be executed, enter the change using a line with the same amount and negative sign, in the appropriate state.

The part of the certification that corresponds to each approval state is seen in the "Certification by states" layout, which appears in the estimate and space windows, and in the subordinated "Phases".

[.CertIni](#) | [.CertMod](#) | [.CertPte](#)

Price of certified take-off lines in each state.

[.QtyCertIni](#) | [.QtyCertMod](#) | [.QtyCertPte](#)

Valuation quantities in each state.

[.ImpCertIni](#) | [.ImpCertMod](#) | [.ImpCertPte](#)

Valuation imports in each state.

### *Comparisons between estimate and certification by state*

The use of states provides very useful comparisons to make the situation of the project. For example, they can be compared:

- The certification of the initial estimate with this estimate.

- The approved certification and the normal or current estimate.
- The total certification and the possible estimate.

Each comparison provides different information, depending on the reference or *baseline* chosen.

### Other values broken down by state

This same breakdown is obtained for all price structures, provided that the quantities are based on take-off lines.

For example, you can get the amount of the cost target that corresponds to each estimate statement, the planned amount or the amount executed.

The values that are calculated by states are as follows.

VARIABLE	N	VALUE
Est	[1]	Estimate
True	[2]	Valuation
Real	[3]	Execution
Obj	[4]	Objective
Plan	[5]	Planning
RealObj		Earned value
RealNoCert		Amount executed without certification
ObjEst		Expected production
PlanEst		Planned production

The names of the fields are formed by composing:

- The table to which they belong, "Relations", "Concepts" or "Phases".
- Prefix "Qty" for quantities, "Imp" for amounts".
- The name of the variable, according to the table above.
- The state "Ini", "Mod" or "Pte".

Predefined variables are listed in the field selection box and can be added directly to the desired layouts.  
For example, the amount of the certification of a concept that corresponds to the initial estimate is:

[Relations.ImpCertIni](#)

If the desired variable is not predefined, the name is composed in the same way, replacing the price structure with the N index at the end, in square brackets.  
For example, the certified quantity of each work units listed in the initial estimate is:

[Relations.QtyIni \[2\]](#)

The following table contains some examples.

FIELD	DESCRIPTION
<a href="#">Relations.QtyIni [1]</a>	Quantity of the concept in the initial estimate.
<a href="#">Relations.QtyMod [3]</a>	Installed quantity of the concept in approved changes.
<a href="#">Relations.ImpEstIni</a> <a href="#">Relations.Implni[1]</a>	Amount of the concept in the initial estimate.
<a href="#">Relations.ImpPlanMod</a> <a href="#">Relations.ImpMod[5]</a>	Amount of the planning that corresponds exclusively to approved modifications.
<a href="#">Relations.ImpEstpte</a> <a href="#">Relations.ImpPte[1]</a>	Amount of estimate changes pending of approval.
<a href="#">Relations.limpRealpte</a> <a href="#">Relations.ImpPte[3]</a>	Amount of the executed part of the project pending approval.

### Historical evolution of the estimate and the objective

The amount of all the variables of the project that are not periodized are saved with the value they have each time a phase is approved.  
This creates a historical record of the evolution of the estimate and all other global values.

VARIABLE	VALUE
Est	Estimate
Obj	Objective
RealObj	Earned value
RealNoCert	Amount executed without certification
ObjEst	Expected production
PlanEst	Planned production

The values are seen in the estimate windows, and by lying the desired variable in the multiple fields of the certification layouts, or in the "Estimate evolution or objective" layout of the subordinate "Phases" and the main "Spaces and phases".

To differentiate these variables from those that are periodized, they are preceded by the value '[H]' in the multi-field selection s drop-down lists of the estimate windows.

For example, the value of the initial estimate when approving each phase is:

[Phases.EstIni](#)

The blue color corresponds to certifications prior to the approved one and the magenta color to the approved one. This distinguishes the fields that are of a historical type from the period ones.

---

*To avoid creating unnecessary records, historical values are only saved if there is any content for that concept at the stage being approved, whether in certification, planning or execution. In addition, the record is not created, nor the value is displayed, when it has the same value than the previous phase.*

---

## Blocking changes

Two options in the menu "File: Working environment: General" prevent you from making changes that affect the previous state of the project.

### *Block estimate disruption*

Prevents data that affects the estimate, such as quantities and prices, from being altered, and blocks changes in the approval status of take-off lines to or from the pending state (red).

### *Block the modification of approved certifications*

Prevents data from take-off lines and phases assigned to approved certifications from being altered. It does not avoid other modifications that affect the overall result, such as altering prices or eliminating concepts.

---

*Remember that these locks affect all processes performed with Presto, whether automatic or manual, such as operating, duplicating, importing, or updating.*

---

## **Reports of the group "05 Project Management"**

### *Take-off lines by state*

Chapters and items with breakdown of take-off lines by approval status.

### *Comparative summary of modified*

Chapters with breakdown of amounts by approval statements.

## Presto for the construction company

This chapter describes the processes of monitoring the cost from the construction company point of view:

- Contracting and purchasing.
- Production control.
- Orders, deliveries, invoices, and collections and payments.
- Analysis of real costs.

The Management of The Earned Value for the construction company (EVM) and the Economic Information System (SIE) are described in specific consultations and technical notes.

### *Double-click fields related to documents*

The double click can open other windows relative to the field on which it is activated, filtering the information that is displayed.

- Under "View: Management: Entities" opens the document window that justifies an amount.
- In the subordinates of "Supplies" open the document.
- Under "View: Historical: Collections and payments" open the invoice to which the expiration corresponds.

---

## Contracting and purchasing

A contract is a group of similar work units or products, provided by the same family of suppliers or subcontractors.

Contracts are used for bids, compare results, and choose the most suitable successful bidder, and serve as the basis for managing the execution of the project.

Contracts are chapter-type concepts that have as inferior the necessary concepts or supplies. Contracts can be created:

- Manually, in the "Contracts" window.
- Marking as a contract existing chapter of the estimate in the estimate windows if none of its lower concepts are of the destination type.

- Automatically, using the process described below.

Contracts share many properties with concepts, such as the ability to have texts, associated files, and user variables. Son always cost centers or destinations and can be part of the Gantt chart. At the same time, their behavior is like that of other documents, such as orders, deliveries, and invoices, which are described below.

### *Estimate integration*

Contracts may or may not belong to the estimate tree structure.

- In this case, in addition to the amounts of the document, the same economic values are obtained as for the other concepts.
- If the units of project contracted coincide with the certifiable ones, their income can be directly compared with their costs and all the amounts necessary for economic monitoring.

---

*If the contracts are part of the structure, but you do not want them to be added to the estimate or the objective, the related amount or price must be canceled.*

---

### **Create contracts**

This option of the menu "Processes: Contracting" requires previously performing the calculation of resources, reviewing, and adjusting its result in the window "Resources".

A contract is generated for each group selected in this window, with different options.

- A single contract, with the amount broken down by phases.
- A separate contract for each phase.
- A single contract, with the amount pending contract.

The contract code is the same as the purchase group, adding the prefix "\_" if the concept already exists. The description and text of the contract are taken from the group box, if it is defined and the group exists. Contracts are inserted in a chapter of the estimate with the code "CON\_" and the amount cancelled.

Contracts are generated in a provisional state, with their red status. To calculate the amounts and amounts contracted, the state must be reduced to "Black State" or "Green State".

When contracts are generated, existing provisional contracts for the same groups are eliminated, except if the option of pendent quantities is chosen.

### Contract properties

Contracts and their supplies are seen in the "Contracts" window and their subordinates. Between contracts and their supplies, which are concepts, and their respective suppliers, which are entities, relationships are created in the "Prices" table where prices and all other specific data of each supplier for each contract and each supply are listed. These relationships and their associated information are viewed in the subordinate "Vendors" window.

These relationships can also see:

- In the estimate windows, the subordinate window "Prices", layout "In contracts", shows the contracts suppliers and each supply.
- In the entity window, the subordinate window "Prices of a project", "All" layout.

---

*You can add to either of the two windows fields from the "Prices" table, such as "Price", "Date "or "Contact", or user variables, which will have values specific to that supplier for the contract or supply.*

---

### Quantities and prices

The quantity that is contracted from each supply is the target quantity.

This quantity can be segmented into phases when this option is chosen when generating it or if it is entered in the subordinate window "Supplies", layout "Quantities by phases".

The target contract amount is calculated with the target price of each supply. Once awarded, the contract takes the price and amount of the chosen supplier, which can optionally also replace the original target prices.

Each phase contains the following fields:

#### Phases.QtyPlan

Quantity to contract in the phase, introduced directly or calculated based on the take-off lines assigned to this planning phase.



#### **.Plan**

Amount related to the previous quantity, at target price.

#### **.PlanEst**

Quantity contracted, at estimate price.

### **[ox] Find partner vendors**

Suppliers can be associated with a contract manually, dragging the supplier from the entity window to the contract or to its supplies, dragging or copying them from the subordinate window "Suppliers" of another project to the same window of the destination project, or copying them between the subordinate "Suppliers" of different contracts within the same project.

The option indicated in the "Contracts" window allows you to select the appropriate suppliers to it, presenting:

- The existing suppliers on site, in light yellow.
- The providers of the group table that correspond to the content of the "Group" field of the contract or its lower concepts, as described in "Group Table".

Suppliers can be filtered by the postal code of the project.

By clicking "Accept" the selected suppliers are associated with the contract and the fields are created to enter their offer prices.

#### **Concepts.NumPro**

Number of suppliers associated with the contract.

### **[ox] Delete offer**

Above the header of the supply window definitively removes a supplier from the comparison. To withdraw a supplier temporarily, without losing the offered prices, assign it the grey status in the entities window.

### **Request prices from suppliers**

Contracts can be sent to suppliers to request bids:

- In Presto or Excel format, with the option "File: Export: Price request".
- Using reports or Word templates.

### *Export price request*

This option generates a Presto project or Excel workbook for each vendor that is associated with unawarded contracts.

If it is a project, it will contain a chapter for each contract in which the supplier appears, with the quantity to be offered for each supply.

For an Excel workbook:

- A sheet or tab is created for each contract in which the supplier appears.
- Each sheet has the contract code, its name and text, the general data of the project and the data of the builder.
- It contains a concept for each supply, with the quantity offered and an empty column for the price.
- All fields are protected, no password, except price.

In both cases, the name of the generated files is that of the root code of the project plus the code of the supplier, separated by an admiration. In addition, an email is created for each provider whose "Mail" field is defined, with the related attachments.

The supplier must fill in the unit price it proposes, delete the concepts that it does not offer and return the same file.

### *Import price request*

Submitted requests can be imported with "File: Import: Price Request".

This option automatically fills in the price offered by the supplier for each supply.

Supplies that have been erased from the project or Excel workbook are listed with the price "NA".

The message window indicates possible incidents, such as contracts that do not exist or supplies not registered in the contract.

### *Enter the received data*

The offers received are entered automatically as indicated in "Price Request", or manually in the fields associated with the supplier in the supply window. The vendor code is listed in the field header and the full name appears on the help track.

### *Prices.Price*

Price offered by the supplier for this supply and this contract.

---

*A supplier may at any given time only offer the same unit price for each concept supplied. However, the price is saved with the contract when awarding it and the bid price may vary subsequently without affecting the contract price.*

---

The value "NA" (not available) indicates an unavailable supply; it can be entered with the [Del] key. The zero price indicates that the concept has no cost or is included in another.

The amount is the offered price applied to the target quantity.

[.Nota](#)

Specific comment for a supplier and a supply.

## **Award and use of contracts**

### **[Compare contracts](#)**

The comparison of contracts can be done directly in the contracts window, where the related totals that can be compared with each other and with the target amount of each contract are displayed.

You can also use the "Comparative Contracts" report or export the layout to Excel.

### **[Concepts.BaseMed](#)**

Amount of the contract considering in each supply the average price offered by the suppliers.

### **[.BaseMin](#)**

Theoretical minimum amount of the contract, taking in each supply the lowest of the prices offered.

### **[Compare contract supplies](#)**

They are seen in the subordinate window of contracts called "Supplies".

### **[.SigmaCont](#)**

Standard deviation (divided by the average price) of the different offers for each supply.

### **[.MedCont](#)**

Average unit price of supply offers.

#### [Relations.ImpMedCont](#)

Amount of supply at the average unit price.

#### [Concepts.MinCont](#)

Lowest unit price offered than the supply.

#### [Relations.ImpMinCont](#)

Amount of the supply with the lowest offered price.

#### [\*Awarding a contract\*](#)

The contract is awarded by choosing the supplier's code with the suggest button, in the contracts window, or with the "Award" option above the supplier's header, in the supply window.

When awarding a contract to a supplier:

- The price offered for each supply goes to the "Price" field of the relationship between the supply and the contract. If the supplier has not offered this supply (prices with value "NA") it is assigned price 0. This field remains fixed unless the contract is awarded again.
- The price is also copied to the "Cont" field of the concept, which contains the last price at which it has been contracted. This value will be replaced if the same supply is subsequently awarded at another price, by the same supplier or by another.

#### [Concepts.Supplier](#)

Code of the supplier chosen in the award of the contract.

#### [.Cont](#)

Total amount of the contract at the prices offered by the chosen supplier.

#### [Relations.ImpCont](#)

Amount of the contracted supply.

#### [\*\[ox\] Shift price from contract to target\*](#)

Option of the window "Contracts" that copies the price offered by the contractor of the contract to the field "Concepts.Obj" of the supply and the code of the supplier in the field "Concepts.Supplier".

## Contracting and purchasing results

If the contract is part of the estimate structure, the same results are available as for any other concept, such as estimated production, value earned or actual cost.

In this way, revenues, costs, certification, and other values of economic management can be directly compared.

From the contracts awarded, financial planning can be carried out. Consult "Processes: Invoices: Create", section of contracts.

### *[ox] Move to | request Move to | delivery Invoice*

Orders, deliveries, or invoices can be created based on contracts for all suppliers other than the "Supplier to origin" type.

In the generated document, the "OrgContract" field contains the code of the source contract. If the amount of the contract is not broken down by phases, the new document has the contracted quantity minus the one already ordered or delivered for each supply.

### *Reports of the group "07 Contracting"*

Some reports consider the status of contracts. For example, to print a firm contract, it is not enough to award the tender to a supplier; in addition, its status must be "Black" or "Green".

### *Price request*

Prepare a letter for each supplier with the requested quantities of the concepts to be offered; you just must fill in the prices.

### *Comparative contracts*

It compares the lots offered by different suppliers and shows in green the cheapest offers, the amount of the ideal offer, the average, and the deviation from the expected estimate.

### *Firm contracts*

Prepare a document with the main characteristics of the successful tender.

### *Contracts and supplies*

Contracts broken down by supplies.

### *Contracted concepts and orders*

Control of deviations of quantities: planned, contracted, and ordered.

### *Items from a supplier*

Displays the items associated with each vendor.

### *Recourses*

List of resources grouped by group, previously calculated with the options of the "Calculate resources" process.

### *Firm orders*

Documents of orders to suppliers.

---

## **Economic model and pricing structures**

Up to this point we have used concepts with the usual meaning in construction: revenue and cost estimates, certification, and contracts.

However, to order all the variables that appear throughout all the stages of the project and their interrelations, a structured model is necessary, which is described in the technical note "Economic model of construction".

N	Precio Cantidad	Presupuesto Pres Precio contratado	Objetivo Obj Coste estimado	Real Real Coste real
1	<b>Presupuesto</b> Pres Según el redactor del proyecto	Pres Presupuesto, oferta, venta, contrato <i>BoQ</i>		
2	<b>Certificación</b> Cert Aprobada por el gestor del proyecto	Cert Certificación <i>Certification</i>		
3	<b>Ejecución</b> Real Cantidad realmente ejecutada	RealPres Producción <i>Production</i>	RealObj Valor ganado <b>EV   BCWP</b> <i>Earned Value</i>	Real Coste real <b>AC</b> <i>Actual Cost</i>
4	<b>Objetivo</b> Obj Medición revisada por el constructor	ObjPres Producción total esperada <i>Target production</i>	Obj Objetivo <b>BAC</b> <i>Budget At Completion</i>	ObjReal Previsión <b>EAC</b> <i>Estimate At Completion</i>
5	<b>Planificación</b> Plan Objetivo hasta el momento actual	PlanPres Producción planificada <i>Planned production</i>	Plan Valor planificado <b>PV   BCWS</b> <i>Planned Value</i>	

This model considers the three stages of the project, design, planning and execution, and the views of the developer, or the agents representing him, and the builder.

It is also described:

- How the names of the various Presto variables are formed for quantities, prices, and amounts.
- The correspondence between Presto variables and variables of the Earned Value Method.

- The general meaning of the phases of periodized structures, such as planning, execution, and certification, and of global values, such as estimate and objective.
- The estimate approval statements.

It also describes the variables that can be compared directly between rows and columns of the table and other comparisons and deviations calculated by Presto.

---

## Production

Production is the executed project that has real hopes of collection, valued at estimate prices, and is the basis for the calculation of real costs.

Production may be different from certification, when part of the executed project is not recognized for certification, and the opposite may also occur.

The quantity executed is entered in a similar way to the certified, either as the global quantity of the work units, by phases or by associating take-off lines, using the fields "QtyReal" and "StageReal". The production values that can be obtained for the follow-up depend on the level of breakdown chosen.

## Copy quantities

If the actual execution coincides with the certification, the "QtyCert" fields can be copied over "QtyReal", whether global or in phases, and if they have been entered using take-off lines, the phase number "StageCert" can be copied over "StageReal".

---

*This last option can be done at once for the entire project in the "View: Lists: Take-off lines" window.*

---

You can also use the option "Processes: Planning and certification: Copy quantities" that copies these quantities of one price structure into another, either in take-off lines, in phases or as direct quantities, previously eliminating the existing information.

It's a quick and easy way to get:

- The production, copying the certification.
- The pension certification, copying the planning.

Later you can modify those that are different.



---

*If the destination is planning, the amounts raised are not copied, as they would alter the objective.*

---

### Fields of production

The different amounts related to production are calculated by taking the quantities of the target or actual execution and the prices of the estimate.

FIELD	ESTIMATED PRODUCTION AT THE START OF EXECUTION
PlanEst	Production taking the planned amount to the current phase
ObjEst	Total production estimated based on the target quantity
ObjEstIni	Total production related to take-off lines of the initial estimate
ObjEstMod	Total production shown on approved change take-off lines
ObjEstPte	Total production shown in change take-off lines pending approval

FIELD	ACTUAL PRODUCTION
RealEst	Actual production up to the current phase
RealCertEst	Firm production, in take-off lines executed and certified
RealNoCertEst	Production in process, in take-off lines executed, but not certified
RealNoCertEstIni	Production in process in the initial estimate take-off lines
RealNoCertEstMod	Production in process in change approved take-off lines
RealNoCertEstPte	Production in process in pending of approval take-off lines

These amounts are based on the detailed information provided by the take-off lines and would not be correct if they were obtained by directly comparing the overall quantities. For example, the difference between the actual quantity and the certified quantity of a consignment may obscure uncertified production if there is also certification that is not listed in the estimate.

Comparing values yields more results.

EXPRESSION	MARGIN OR PROFIT
<a href="#">RealEst - Real</a>	Difference in income and cost at the present time
<a href="#">PlanEst - Plan</a>	Difference in planned income and actual cost, so far
<a href="#">ObjEst - Obj</a>	Difference between expected total production and estimated cost

Production values are obtained for all facets:

- For quantities, prices, and amounts
- For the work unit and for their basic concepts
- For the spaces, phases, and dates of the agenda

The layouts of each window related to production present the most used values. The rest can be consulted by adding the field to the appropriate table.

For example, the production that corresponds to changes pending approval and not certified, by days, months, and years, is:

[Agenda.RealNoCertEstPte](#)

Presto also calculates the most significant percentages.

FIELD	MEANING	CHAPTERS	OTHER CONCEPTS
<a href="#">PorProdEst</a>	Production on estimate	<a href="#">(RealEst*100) / Est</a>	<a href="#">(QtyReal*100) / QtyEst</a>
<a href="#">PorProd</a>	Progress on total production	<a href="#">(RealEst*100) / ObjEst</a>	<a href="#">(QtyReal* 00) / QtyObj</a>

Other percentages, deviations, and comparisons can be obtained using user fields, predefined expressions, or reports.

[Relations.ImpObjEst - Relations.ImpRealEst](#)

Portfolio, project pending execution regarding the total objective.

[Relations.impEstpossible - Relations.ImpRealEst](#)

Project pending with respect to the total possible estimate.

---

## Billing

The economic control system has two goals.

- The administrative monitoring of invoicing, entering, according to the desired level of control, orders, deliveries, invoices, and collections and payments.
- The analysis of real costs.

Presto adapts to many different control procedures; it is advisable to know the different possibilities before implementing it.

## Documents

Economic control can be carried out completely using only invoices. The introduction of orders and deliveries is optional.

This section describes the options common to the three documents, which are entered in the "Orders", "Deliveries" and "Invoices" windows.

The introduction of imputations or consumptions to destinations in the "Parts of project" window shares the basic functionality of the previous windows. The differences are described in "Cost and Cost Analysis".

Documents are broken down into supplies and can carry associated text and files. Invoices may also be due.

---

*The basis of Presto's operation is that each supply line can be associated simultaneously with an order, a delivery document, and an invoice, thus obtaining a very integrated information. Details and alternatives to this system are described below.*

---

## Required fields

To create a document, you must enter at least the following fields.

### .Documento

The combination of document code and entity must be unique for each year.

---

*If you are exporting the documents to an accounting program, consider their specific conditions.*

---

### [.Entity](#)

Code of the agent who issues or receives the document, except in the project parts. On the right is the "Description" field of the entity. You can modify the entity if no document supply is associated with another document.

### [.Date](#)

If it is grayed out it is not considered in the calculation, as described below when talking about states.

### *Other common fields*

#### [.Info](#)

Indicates whether the document has supplies, text, or associated files, as described in "User Interface: Information Fields: Info".

#### [.BasePed](#) | [.BaseEnt](#) | [.BaseFac](#) | [.BaseDest](#)

Sum of the amounts of the supplies of the document that are associated with the documents of the other three types. It allows to easily detect the situation of order, delivery, billing, and consumption of each supply.

#### [.Nota](#)

Description of the document.

#### [.DestinoDef](#)

Destination or default cost center of document supplies.

#### [.DefDescription](#)

Description of the defect target.

#### [.OrgContrato](#)

Contract of origin of the document if it has been generated automatically.

#### [.Lugar](#)

Location where the delivery of the supply or service is made.

#### [.Pay](#)

Days of term for payment.

#### [.Deposit](#)

Percentage of deposit.

[.UsrDate](#) | [.UsrDate1](#) | [.UsrDate2](#)

Dates of free use.

[.UsrNum](#)

Free numeric value.

[.Issued](#)

The type of the document. 0: Received from suppliers, 1: Issued to customers.

[.AccountSuppliers](#)

Counterpart account of the document.

[.Project](#)

When information of linked projects is integrated, project of origin of the invoice when all the supplies are of the same.

### [Status of documents](#)

Documents in grey and red are considered provisional or pending approval and are not considered in the calculations, except for balance and cash flow.

The status of the document is chosen by modifying the color with the context menu over the "Document" and "Note" fields.

[.State](#)

Document approval status.

---

*Provisional documents are deleted by some program options, such as automatic contract and invoice generation.*

---

### [Options common to documents](#)

The following options are also available in the subordinate supply window of each document.

[\[ox\] Move to | delivery Invoice](#)

Creates a document of the type indicated from the source document.

It can be activated on a document, a supply, or a selection of them. If it is activated on multiple documents at once, a single document is generated for each vendor involved.

You can also create documents:

- Dragging a document of one type to the window of another.
- Annotating a document code, which may or may not previously exist, in one of the document fields of a supply.

### *[ox] Revise*

It consolidates all supplies of the same concept from each of the selected documents, with the total quantity and the weighted average price.

### *[ox] Copy previous document*

Copy the supplies from the previous document from the same supplier. It is useful for creating invoices to source.

### *Import: Documents*

This option of the menu "File" imports from another project all the documents of the same type that do not previously exist with the same code, entity, and date.

It also matters the suppliers and concepts present in these documents and that are not previously in the project.

## **Supplies**

The documents are broken down into supplies, with the concepts ordered, delivered, or invoiced.

This section describes all the options of the documents, except those that correspond to the cost analysis, such as the allocations to destinations and projects.

Unless it is specifically marked, the calculation of documents converts into supply any indefinite concept contained in a contract, order, delivery, or invoice received.

Supplies may be concepts that already exist on the project or created on the fly.

You can add supplies to a document:

- Typing its code, or entering it with the suggest button, which shows supplies from the same supplier and of the same nature
- Copying and pasting the concept or dragging it from the estimate and concept windows.
- Typing new codes that do not exist in the estimate.

The description and unit of take-off are taken from those of the concept.

#### [Supplies.Code](#)

To rename the code of a supply you must rename the code of the concept in the estimate or concept windows.

#### [.Quantity](#)

The suggest button displays useful values to fill in the field, such as estimate and target amounts, hires, orders, deliveries, and invoices, both for the document provider and the totals.

---

*If the quantity is null, the unit price is taken as an amount; this allows entering cost of a supply that do not imply an increase in the quantity.*

---

#### [.Factor](#)

Coefficient affecting the quantity of supply.

#### [.QtyNeta](#)

Net quantity, product of quantity and factor.

#### [.PorDto](#)

Percentage of discount that affects the price of the supply.

#### [.Price](#)

Unit price of the supply. The default price is the contracted price or the target price, in this order. The suggest button displays useful values to fill in the field, such as estimate, target and actual, last, minimum, and maximum prices contracted.

---

*Although the price is displayed with the rounding setting for basic nature concepts, if more decimal places are entered it is saved and operated without rounding.*

---

#### [.PrNeto](#)

Net price, result of applying the discount to the unit price.

#### [.Import](#)

Product of the net profit by the net amount.

#### [.IVA](#)

Percentage of the contribution applicable to the supply. By default, it applies the VAT associated with the customer or supplier.

#### [.Note](#)

Specific text for a supply.

#### [.DatePrev](#) | [.DateFinal](#)

Expected delivery dates and completion of delivery of the supply.

#### [.DatePurchase](#)

Date of purchase of the supply, which appears on the date of delivery or on the invoice, in that order.

#### [.PurchaseOK](#)

It has value 1 when the purchase document is firm, and the date of purchase belongs to the approved phases.

### **Relationship between documents**

The same supply line can appear simultaneously in an order, in a delivery and in an invoice, if they are from the same supplier.

In this way, in each supply the other documents to which it belongs are directly checked.

#### [.Order](#) | [.Delivery](#) | [.Invoice](#)

These fields display documents of the other types in which the document supply is listed.

Double-clicking on these fields opens the related window, filtered for that document.

- If you write a document code, the supply is added to it, creating it if it does not exist.
- If the code is modified, the supply changes to the new document.
- If the code is cleared, the provision is removed from that document.
- Deleting the entire line of a supply in a document window only disappears from the document, not from the other documents in which it appears.



### [ox] Split

Split a supply to facilitate deliveries, invoices, or fractional imputations.

### Examples

A complete order is received, which has been invoiced:

CONCEPT	QUANTITY	ORDER	DELIVERY	INVOICE
Bricks	10.000	P-008	A005	08/2004

The same split order is received, and only a part is invoiced. It is necessary to unfold the order as it is received or invoiced.

CONCEPT	QUANTITY	ORDER	DELIVERY	INVOICE
Bricks	3.000	P-008	A005	07/2004
Bricks	5.000	P-008	A006	
Bricks	2.000	P-008		

### Separate supplies

The integration of the supply in the three documents is optional.

Supplies from an order can be delivered and invoiced in other documents.

CONCEPT	QUANTITY	ORDER	DELIVERY	INVOICE
Bricks	10.000	008		
Bricks	5.000		A005	08/2004
Bricks	5.000		A008	10/2004

To register a supply on site you can create a delivery or an invoice. Therefore, a supply shown separately in a delivery and an invoice is assumed to have been purchased twice.

CONCEPT	QUANTITY	ORDER	DELIVERY	INVOICE
Bricks	10.000		A005	
Bricks	10.000			08/2004

In this case, 20,000 units have been purchased. The delivered part is not invoiced, and the invoiced part is not received.

## Bills

The invoice is the most complete document to perform administrative control and cost analysis.

The type of invoice depends on the type of the associated entity:

INVOICE	ENTITY	COLOR	UTILIZATION
Received	Any	White	Payment of purchases and expenses
Received	Supplier to origin	Orange	Payment of invoices to origin
Issued	Promoter	Blue	Collection of certifications
Issued	User	Blue	Collections for sale of homes

Red invoices are proforma invoices. They are not accounted for directly, but their collections and payments are considered to calculate cash flow.

The entity can change type between normal provider and source if it is only associated with an invoice.

In customer invoices, the issuer is the entity defined by the type "Construct".

The values of the associated entity indicated in the following table are taken by default, which are entered in the "Entities" window, layout "Billing data".

FIELD	USE	AFFECTS
RetGarDef	Warranty Retention	Bills
RetFisDef	Withholding tax	Bills
PorIVA	VAT percentage	Invoice supplies

FIELD	USE	AFFECTS
DayPay1	First day of payment	Collections and payments
DayPay2	Second payday	Collections and payments
FormPay	Payment terms	Collections and payments

#### [.RetGar](#)

Percentage of retention that is applied to the supplier as collateral. There are two ways to apply it, described in the section "Collections and payments: Withholdings".

#### [.RetFis](#)

Percentage that is withheld from the supplier on account of their taxes and that will be paid to the tax authority.

#### [.ImpRetGar](#)

Amount of the guaranteed retention, which is accumulated in the fields of the agenda and entities:

- "RetGar", for invoices received.
- "RetGarCli", for invoices issued to customers.

The supplier's "RetGar" field accumulates only unpaid warranties.

#### [.ImpRetFis](#)

Amount of the tax withholding.

#### [.IVA](#)

Share of Value Added Tax or equivalent tax, calculated on the rates applied to each supply of the invoice.

#### [.Import](#)

Total amount of the invoice, i.e., base plus VAT minus withholdings.

The red color indicates that there is a mismatch between the invoice and the collections and payments:

- The collections and payments of withholdings do not match the result of applying the percentages indicated for the invoice.

- The sum of collections and payments does not match the total amount.

#### **.Exp**

It is marked when exporting invoices to accounting programs. To re-export it, uncheck it beforehand.

#### **Suppliers to origin**

In suppliers to origin, only their last invoice is considered. Orders and deliveries are not accepted.

- Each invoice must include all the contents of the preceding ones.
- Each certification phase can only include one invoice for each supplier at source.

---

*To create a new invoice, you can use the context menu option "Copy previous document".*

---

#### **.BaseFacOrg**

This field contains the base amount of the suppliers' invoices is to origin. It has a gray background on all invoices except the most recent of each.

#### **Invoices: Create (current phase)**

This option in the "Processes" menu generates the invoices for the current certification.

#### **Certification for the promoter**

Create an invoice to the developer with the items of the current certification at the estimate price and their percentages of indirect costs and overheads, if any.

#### **Associated suppliers, at contract price**

Invoices to each subcontractor that appears in the "Supplier" field of the items, with the certified or actual quantity of the current phase, at the contracted price.

The table indicates the amount that is transferred to the invoice depending on the type of supplier and whether there is a breakdown of quantities into phases or take-off lines.

SUPPLIER	BREAKDOWN	AMOUNT TRANSFERRED TO THE INVOICE
Normal	Yes	Quantity of the approved phase
Normal	No	Total quantity less the formerly invoiced quantities of the supplier
To origin	Yes	Sum of quantities up to current certification
To origin	No	Total quantity

## Collections and payments

Each invoice issued or received may be associated with a limited number of collections or payments.

The context menu above the invoice or duet windows allows you to automatically create the most common types of expirations, with the breakdown related to the billing data of the associated entity. The default due date is that of the associated entity's payment method.

---

*The processes that automatically create invoices also create the defect collections and payments, so by previously defining the payment terms of each entity, the calendar of collections and payments of the project is obtained together with the invoices.*

---

If the amount of the due dates does not correspond to its invoice, the "Amount" field of the invoice appears in red.

Expirations can also be entered manually, choosing the expiration period from the textual menu.

## Status of collections and payments

Collections and payments can be defined as paid or unpaid using the color or status indicated with the context menu over any field in the expiration:

- Paid: Black or green state.
- Slope: Red or gray state.

These colors or statuses are displayed in the "Note" field of the expiration.

### *Retention under guarantee*

It is an unpaid maturity that serves as collateral for the performance of a job or delivery of a material. In automatic collections and payments, the warranty hold is returned one year after the invoice date received.

Retention can be applied in two ways.

#### *[ox] Withholding tax after VAT*

The withholding tax is calculated on the basis and VAT is paid in full on the date on which it is settled.

#### *[ox] Withholding tax before VAT*

The withholding is calculated on the basis, but the VAT payment is deferred with an additional maturity when the withholding is returned.

The "RetGar" field of the invoice appears with a gray background.

### *Fields in expirations*

#### *Expirations.Date*

The date for each supplier expiration can be set to a certain day or two of the month. It is indicated in the "Entities" window, "Billing data" layout, in the fields "Payday1" and "PayDay2":

- On invoices received: entity defined as "Builder".
- In invoices issued: entity associated with the invoice.

#### *.Tipo*

It can correspond to the base amount of the invoice, withholdings, or taxes.

#### *.Import*

The red color indicates that it is a payment and the black of a charge.

#### *.Note*

The suggest button shows the most common payment instruments.

#### *.Bank*

Financial institution associated with the means of payment.

#### *.PorVenc*

Percentage of the maturity with respect to the total amount of the invoice.

### [.CashFlow](#)

Difference between collections and payments of the period.

### [.OrCashFlow](#)

Cash flow accumulated from the beginning of the project to date, with its sign, which represents the treasury statement.

The TIR internal rate of return of this cash flow is listed in the option "Properties: Miscellaneous".

### [Totaled fields in invoices](#)

#### [Invoices.VencPag](#)

Sum of collections and payments paid (black or green status).

#### [.VencPte](#)

Sum of outstanding collections and payments (red or gray status).

## **Invoicing results**

The option "Start: Calculate: Documents" totals the amounts by concepts, suppliers, and dates to be part of the invoice data.

The amounts can be seen in the windows related to each type of element and are in the fields indicated or in the following tables.

FIELD	BASE AMOUNT IN CONCEPTS, SUPPLIES, SUPPLIERS AND DATES
<a href="#">Contracts</a>	Hired
<a href="#">ContPte</a>	In contracts without an assigned supplier
<a href="#">Requests</a>	On orders
<a href="#">Deliveries</a>	In delivery documents
<a href="#">Bills</a>	On invoices
<a href="#">Shopping</a>	In deliveries or invoices
<a href="#">FacCli</a>	In invoices to customers

FIELD	QUANTITIES OF EACH CONCEPT
QtyContracts	Total amount in contracts
QtyOrders	Total quantity in orders
QtyDeliveries	Total quantity in deliveries
QtyInvoices	Total amount in invoices
QtyPurchases	Total amount in deliveries or invoices

FIELD	TAXES, WITHHOLDINGS AND GUARANTEES ON SUPPLIERS AND DATES
VAT	Input VAT
IVACli	Output VAT
RetFis	Tax withholding tax made by the supplier
RetFisCli	Tax withholding tax on the client
RetGar	Retention of guarantee practiced by the supplier
RetGarCli	Retention of guarantee practiced to the client

FIELD	SUPPLIER MATURITY AMOUNTS AND DATES
Collection	Dues collected from customer invoices
CobroPte	Outstanding collections and payments of customer invoices
Payment	Collections and payments paid to the supplier
PayPte	Supplier's outstanding collections and payments

## Reports of the group "08 Facturation"

### *Supply deviations by suppliers*

Differences between supplies of the documents chosen. It serves, for example, to detect if any supply has been ordered, but not delivered.



### *Supply deviations*

Same as the previous one but ordered by supplies.

### *Deliveries by dates*

Deliveries totaled by month and filtered by dates and suppliers.

### *Deliveries by suppliers*

Deliveries totaled by supplier and filtered by dates and suppliers.

### *Subcontractor invoices with take-off lines*

Invoices received, pro forma or pending approval, whose supplies are items.

### *Invoices issued to customers*

Invoices issued, proforma or pending approval, whose supplies are items, with or without take-off lines.

### *Invoices by suppliers*

Invoices grouped by supplier, filtered, and broken down by several criteria.

### *Invoices and collections and payments*

Invoices received or issued totaled by month and filtered by dates, suppliers, or approval statements.

### *Supplies by dates*

Allows you to see the supplies between a certain period of dates, the previous period and the subsequent one.

### *Supplies totalled by suppliers*

Supplies provided by each supplier in each period of dates.

### *Expirations by dates*

Study of collections and payments by date and approval statements.

### **Export invoices**

Exports to other accounting software can be made using the "File: Export: ContaPlus" option and the invoice export plugin.

Exports to accounting software use supplier and customer codes as accounting sub-accounts.

CONCEPT	STARTING THE PROVIDER CODE
Materials and machinery of others	40
Own labor	46
Subcontractors	41
Suppliers that do not want to be counted	A letter
Certifications (invoices issued)	43

You can set the counterpart accounts by concepts in "View: Project: Settings: Accounting".

*When exporting add the two digits of VAT to the sub-account code*

This option creates a sub-account for each VAT rate.

Counterpart accounts for supplies, invoices or suppliers can also be established, using the "AccountSuppliers" field of the concept or document.

*Subcontractors*

When exporting invoices to origin, their amount must be manually corrected, since the accumulated total is exported.

*Machinery and own personnel*

If it is invoiced with a transfer cost, it will be transferred to the accounting as one more purchase, as an expense and a debt in favor of the machinery park or the personnel.

If you do not want to reflect it in the accounting, assign a vendor whose code is not passed.

*Certifications*

They are recorded as issued invoices, which are passed on as income against a customer sub-account.

### *Transfer of data to accounting*

Most accounting software import systems only register sub-accounts that do not previously exist, so they do not alter or zero existing sub-accounts, to which you only want to add more notes.

The "Exp" field of invoices is marked so as not to export them in duplicate.

For each supplier or customer, the following are transferred:

- Code of the accounting sub-account, according to the P.G.C., registering it in the accounting, if necessary.
- Name of the sub-account, NIF, address, town, province, postal code, phone, fax.

For each invoice, the following are transferred:

- Document number.
- Name of the supplier or customer.
- Accounting sub-accounts that are affected by the invoice.
- Notes in the supplier or client sub-accounts, counterpart, discounts, and VAT.

This export breaks down the notes of each entry, so that in the subaccount of the supplier or customer the total of the invoice appears, in the counterpart subaccount (purchases or sales) the gross amount (before discounts and VAT), in the discount's subaccount its amount and in the VAT subaccount the amount of the same. Invoices issued and received are distinguished, to allow a correct imputation to the debt or credit of each account, also distinguishing between input vat and output.

The warranty retention sub-account is the same as the supplier, with the value "8" in the fourth position.

### *ContaPlus*

Check that the dates of the ContaPlus files are suitable for the project to be exported, that the number of digits of the subaccounts matches those specified in Presto and that all the sub-accounts exist in ContaPlus.

The XSUBCTA sub-account file is generated. TXT, the XDIARIO notes. TXT and the expiration of Venci.DBF.

To export each VAT rate to a separate sub-account, enable the option "Properties: Accounting: When exporting add the two digits of VAT to the sub-account code". If it is less than 10, add a zero to the left.

Document codes cannot exceed ten characters. Documents with the most characters are exported with the first eight plus a "#" pad and a letter that differentiates them.

*Export invoices*

This Presto plugin generates a text file with the data of all firm invoices whose "Exp" field is not marked. When executed, mark the field.

- Supplies from suppliers to origin are not exported.
- Invoices are distributed considering the counterparts of the project, supplier, invoice, or concept supplied.
- The VAT % of the document only appears if all the supplies on the invoice have the same; in another case it is 0 but the quota is filled.

The data is separated by tabs. Highlighted fields are exported only with the "Winconta" option enabled.

DOCUMENT	KEY	FIELDS
Bills	G	Invoice number · Provider · Date · Type E: Issued R: Received · Base · %VAT · %Withholding tax · %Retention guarantee · VAT fee · Tax quota · Guarantee fee · Amount · Currency · Type of warranty retention 0: After 1: Before · Projects · Pending payment · Paid · Note · DestinationDef · AccountSuppliers
Supplies	J	Code · Unit · Description · QtyNet · PriceNet · Amount · Invoice · Provider · Destination · Projects · Date of imputation · % VAT · Note · <b>Price</b> · <b>%Dis</b> · AccountSuppliers
Collections and payments	I	Date · Amount · Status P: Paid E: Pending · Type N: Normal RG: RF guarantee withholding tax withholding · Note · Invoice · Provider
Suppliers	S	Code · Name · NIF · Address · Phone · Title · Contact · Note · City · Province · Postal Code · Mail · Fax · AccountSuppliers

---

## Centralized invoicing

Consult the technical note "Centralized invoicing".

---

## Analysis of expenses and costs

For the calculation of real costs, the correct classification of concepts into supplies and cost centers is essential.

- The costs of supplies come from purchase documents, deliveries, or invoices, as described above.
- The costs of the cost centers are obtained from the allocations or consumption of supplies or other cost centers used in their execution, defined in the purchase documents or in the project parts, which are described in this section.

---

*The actual unit cost from each cost center is the total cost divided by the production.*

---

### Cost centers or destinations

The cost centers, also called destinations, are the concepts that are executed on site and the concepts superior to these, unlike the supplies, which are acquired abroad.

- It can be cost centers, chapters, contracts, work unit or ad hoc concepts.
- One destination can be part of another destination.
- The root concept is always a cost center.

In addition to those that have been defined manually, Presto marks as destinations the indefinite concepts that receive imputations.

---

*Note that the difficulty of making a correct allocation of costs increases geometrically with the number of cost centers.*

---

## Expense and cost

Expense and cost are two related, but distinct aspects.

- The expense is an accounting concept, which is imputed on the date of the document in which the supply is acquired, or accrual date.
- Cost is an analytical concept, which is charged on the date of actual use or consumption of the supply.

The accounting of the expense is not adequate to know the real situation of the project since there are many situations in which they do not represent a faithful image of it.

For example:

- The materials in storage represent an expense, but not a cost, because they have not been used.
- Indirect costs, such as temporary installations, are expenses, but can only be charged as the cost of direct cost elements, or certifiable.

The cost is the counterpart of the production or project executed, not of the certification, which is also an accounting concept. If there is no production, there may be expense, but no cost.

With Presto you can calculate both the expense and the cost.

---

*Understanding the differences or gaps between expenditure and cost is essential to always know the situation of the project, as described in the technical consultation "SIE Economic Information System".*

---

## Consumption by objective

There are two ways to calculate the consumption of a material or resource that is used to execute each cost center: by objective and by imputation.

---

*The type of consumption calculation is associated in the estimate and concepts windows and saved in the "Consumption Type" field.*

---

In materials and other resources whose quantity per unit of the concept in which they are used is relatively fixed, as is the case with the bricks necessary to execute a square

meter of wall, the consumption can be calculated quite approximately depending on the one that appears in the breakdown of the objective.

In addition, if supply stocks are quantified at the end of each phase and entered in Presto, theoretical consumption can be adjusted globally to match the difference between total purchases and stocks, although possible differences in consumption between the different cost centers cannot be detected.

---

*The concepts of consumption by objective do not require imputations in purchase documents or parts of project and therefore the related fields are blocked.*

---

The calculation of real costs automatically generates parts of project for consumption by objective with the imputations that would correspond to them if they had been made manually, so that the rest of the calculation is the same as for consumption by imputation.

The data and results are seen in the concept window, layout "[Consumption by objective] Stocks".

#### [Concepts.QtyTotReal](#)

The total actual consumption of a concept is the sum of all purchases up to the phase, minus the stocks of the phase.

#### [Resources.QtyExistencias](#)

Field to enter the stocks of the concepts of consumption by objective at the end of each phase if you want to take them into account.

---

*In the concepts of consumption by imputation, the stocks at the end of each phase are calculated by Presto as the difference of the purchases minus the imputations.*

---

#### [Concepts.QtyTotTeor](#)

The total theoretical consumption of a concept is calculated by multiplying the yields of the breakdown of the target by the actual production up to the phase, for all the concepts in which it is used.

### *Adjustment of theoretical to real consumption*

The ratio between the actual total consumption and the theoretical total consumption of a supply, calculated in the above fields, can optionally be applied when calculating consumption, so that the imputed amount is equal to the amount of the purchases.

This quotient is calculated and filled in the "CoefConsTeor" field using the suggest button. The default value is 1.

- If a zero coefficient is introduced, it is considered that there are no purchases and therefore there is no consumption.

The coefficient is applied when calculating the theoretical and actual amounts but does not affect the theoretical amounts or those of the project part.

---

*If a concept of consumption by objective acts simultaneously as a certifiable item and as a component of other cost centers, the adjustment coefficient is only obtained and applied to the quantities related to the latter.*

---

### **Consumption by imputation**

In resources whose amount consumed per unit of concept can have large oscillations, such as machinery and labor, the calculation of consumption requires making detailed imputations, which can be made in different ways.

#### *In deliveries and invoices*

When a supply of a delivery or invoice is consumed at one time and at the same destination, the consumption is charged without further than entering the destination and the date of consumption in the same document.

#### **Supplies.Destination**

Code of the cost center where the supply is used, which must exist previously. The suggest button displays possible destinations.

#### **.DateInput**

Date on which the supply is consumed or used.

#### **.Project**

Project associated with the supply when there are linked projects.



### *In parts of project*

The project report is a document that allows you to enter consumption of supplies of the same date in their related destinations regardless of the delivery documents, for example, to impute partial quantities.

They have no issuing entity.

The fields with a specific behavior are as follows.

#### *Supplies.Quantity*

The suggest button displays the amount of the production to easily enter consumption proportional to it by adding the percentage in the following field.

#### *.Price*

It shows for information only the actual unit cost of the supply which is known at that time.

---

*The actual cost used is the weighted average price of purchases, which avoids the need to value each of the supplies consumed and ensures that the same cost is used in all destinations, regardless of fluctuations in different deliveries.*

---

### *Calculation of consumption by imputation*

The unit consumption of a concept that is calculated by imputation in each of its higher concepts is the sum of the imputed quantities from the first to the second, divided by the total consumption of the superior.

Only the quantities listed in firm documents and parts of project are considered, with dates belonging to approved phases.

---

*Unlike consumption per target, the deviations from consumptions per imputation may be different in each of the cost centers in which it is used.*

---

#### *Relaciones.QtyInput*

It contains the total amount of imputations from one concept to another.

In the subcontracted items this quantity is the billing of the subcontractor, if it has them defined as destination, so that it can be compared with the production and with the certification of the consignment.

### Concepts.QtyTotReal

Sum of amounts consumed or imputed of the concept throughout the project.

### Concepts.QtyExistences

The stocks of the concepts by imputation are presented in this field, obtained by difference of the total purchases minus the imputed amount.

### Resources.QtyExistencias

It also contains stocks, in the last approved phase.

### Calculation of unit consumption

#### Relations.QtyReal

The consumption of certifiable items is equal to their production, regardless of the type of consumption allocated. This production is the basis for calculating the consumption of lower cost centers, such as ancillary concepts.

---

*The type of consumption of certifiable consignments intervenes only if the consignment also appears in the breakdown of another.*

---

The rest of the unit consumptions are obtained by dividing the total quantity by the consumption of the superior.

### Imputations in documents

These variables of the tables of concepts and phases contain the sum of valid imputations of each supply in the three types of documents, applying the amount and the destination that appears in it, that is, from the point of view of accounting expenditure.

FIELD	MEANING
Requests	Imputations in orders
Deliveries	Imputations in deliveries
Bills	Imputations on invoices
Purchases	Imputations on deliveries and invoices

### Table "Phases"

- For supplies, these fields are calculated as the sum of the amounts of supplies that appear in orders, deliveries, and invoices and that are imputed to destinations or consumed by objective.
- For destinations and their superiors, only "Phases.Purchases" is calculated as the sum of the purchases of imputed supplies.
- For the root concept, only "Phases.Purchases" is calculated as the sum of the purchases of supplies of the entire project, regardless of whether they are imputed.

### Table "Concepts"

- For supplies, these fields are calculated from the amounts of the order supplies, deliveries, and invoices.
- For destinations, they are calculated from the amounts of order supplies, deliveries and invoices imputed to the destination.
- For the root concept, they are calculated from the amounts of the supplies of orders, deliveries, and invoices.

---

*The real cost of the cost centers with the specific purchase prices of each imputed supply can be obtained through these results, adding the cost allocations.*

*If a destination has more than one superior, the amount of the imputed purchases will be considered in the calculation of those superior to these as many times as appearances have in the structure of the project.*

---

### Actual cost

Concepts.Real

Relations.ImpReal

These fields contain the actual costs, calculated as follows.

---

*The calculation of actual costs is done only if there is a document or contract.*

---

## Cost of supplies

The actual cost of supplies can have different origins:

COLOR	METHOD OF CALCULATION
Orange	Weighted average purchase price for the period considered
Grey	If there are no purchases, contract, or target price
Red	Fixed price, which comes from importing another program

When calculating the average price, if the quantity of a supply is zero, the amount is added without increasing the quantity.

## Actual cost of the other concepts

The actual cost of composite concepts that are not supplies is calculated from bottom to top based on the quantity consumed and the actual price of their inferiors.

COLOR	TYPE
Blue	Destination or cost center
Magenta	Undefined

When there is no data on real quantities there are no imputations, the real defect price for items without production is taken from their breakdown.

---

*The use of defect values when not all the necessary data is available allows to obtain useful information in any intermediate situation of the project.*

---

## Other cost calculations

### Estimated final price

Concepts.ObjReal

Relations.ImpObjReal

Presto estimates the final cost of the project at any given time as the product of the target quantities by the actual prices and yields for which there is already data, using the defect values described above for supplies and cost centers.

- The concepts of consumption by target are adjusted with the coefficient of adjustment of purchases if it has been introduced.
- Cost centers are calculated based on their lower concepts if they have no production or consumption. From that moment on, they are calculated based on their actual imputations.

In this way, the probable cost at the beginning of the project, when there is no data, is exactly the objective, and the value is approaching until it coincides with the real cost at the end of the project. If all the available information is entered as it is known, the final cost will be known well in advance, without sudden last-minute alterations.

---

*For this, it is especially important that the consumption by imputation is entered on the actual date of consumption, different from the date of expenditure of the purchase document, as described in the technical consultation "SIE Economic Information System".*

---

The earned value method, described in the technical note "Earned Value Method", provides standardized estimates of the estimated final cost; the probable cost provided by Presto is a value more adjusted to the available data, like that described in the method as "expert judgment".

### **Theoretical amount**

#### **Relations.ImpTeorReal**

The theoretical amount of the concepts that are consumed by imputation is what they would have if they were consumption by objective, that is, using target consumption, but real prices. It indicates the cost deviation due exclusively to price changes, without considering the differences in yields with respect to the initial estimates.

### **Summary of cost variables**

FIELD	MEANING	TABLES
QtyReal	Actual unit consumption or production	Relations
QtyTotReal	Total amount consumed	Concepts
QtyTotTeor	Theoretical quantity based on target and production	Concepts
Real	Actual unit cost	Concepts, dates

FIELD	MEANING	TABLES
ImpReal	Amount consumed from one concept to another	Relations
TotReal	Total amount consumed	Concepts, dates
ObjReal	Most likely final unit cost of the concept	Concepts
ImpObjReal	Most likely final cost of the relationship	Relations
Input	Imputed total of one concept in another at one stage	Phases
QtyInput	Total amount charged from one concept to another	Relations, phases

## Reports of the group "09 Cost analysis"

### *Allocations to cost centers*

List of destinations and imputations received by each one.

### *Imputations of consumption*

List of supplies consumed, with the destinations where they are imputed.

### *Planning, execution and certification by work unit*

For each phase or month, it shows the planned, certified, and produced quantities of each consignment, totaling the amounts by phases.

### *Planning, execution and certification by chapters*

Summary of planning-certification-production to date.

### *Production with take-off lines*

Quantity executed at estimate price.

### *Stock valuation*

List of concepts with the quantities not imputed or existing in the warehouse, valued at the real price.

# Main menus and options

This chapter describes in a general way the different options of the menus. Many are detailed in the section of the manual related to the process in which they are used.

---

## File

### Projects

Catalogs, manages, and administers projects.

---

*Specific options for Presto Server related to construction management are listed in the "Installation Guide".*

---

The options of the context menu act on [ox] the directories, in the left frame or on the selected projects, in the right frame.

### Directories

[Create](#) | [Directory Delete](#) | [Rename the directory](#) | [Update directory](#)







Options equivalent to those of the operating system.

### Working directories

Allows you to select these directories as an alternative to the equivalent options of "File: Working Environment: Directories".

### Projects

The "Projects" window displays the following types:

ICON	EXTENSION	PRESTO VERSION	STATE
	Presto	2018 and following	Closed
	Presto	2018 and following	Open in exclusive mode
	Presto	2018 and following	Open in shared mode
	PrestoObra	10 to 2017	Closed
	PrestoObra	10 to 2017	Open in exclusive mode
	PrestoObra	10 to 2017	Open in shared mode

The projects in reading-only appear with yellow background color.

[Cut](#) | [Copy](#) | [Paste](#) | [Delete](#) | [Open](#) | [Open as read-only](#) | [Close](#) | [Rename](#)

These options, some of which are also accessible by icons, realize the operations indicated with the projects.

Opening as read-only is much faster, so it is recommended in large projects that will only be used to extract or consult information.

[Check integrity](#)

Checks the relational integrity of the tables, adjusts the content of projects from previous versions, regenerates the content of the "Info" field, and recalculates the project.

In the windows that show relationships, the physical order of the records is modified, not the one assigned by the user, so the order of the records shown in the "List of bars" window can be altered, since the physical order is used to show the records.

[Convert to .PrestoObra](#) | [Convert to .Presto](#)

Converts projects from current ".Presto" extension to ".PrestoObra" extension prior to Presto 2018.

[Read-only](#) | [Read and write](#)

Assigns read or read and write attributes to a project. It is equivalent to the operating system options.

[Search in subdirectories](#)

Search for projects in all subdirectories of the chosen directory. It is automatically disabled to avoid long waiting times.

## **New**

Create a Presto project, a file with the extension ".Presto" or ".po18", on the indicated path.

The suggested name for the new project is user's name plus the system date and time.



## Template

You can choose any project by Presto as a template; the new project will be an exact copy.

Templates are taken from the template directory, which is displayed and modified in: "File: Working environment: Directories".

You can create predefined templates for different types of projects, with general properties, a chapter structure, or a set of user variables.

---

*Presto provides several templates with standardized chapter structures, valid for different languages and cultural environments.*

---

## Open

Open a project, report, or CAD file, depending on the window from which it is run. The projects can also be opened from "Archive: Projects" and from "References".

When running Presto as administrator on a computer, the extension ". Presto" is associated with Presto, so that you can also open a project with double click from the file explorer.

---

*If you have multiple versions of Presto installed, the projects are associated with the last one you ran as an administrator.*

---

Up to five projects can be opened simultaneously. Each one shows in the header of the window the order of opening in square brackets.

Presto's projects can be opened:

- Directly, for reading and writing by a single user.
- Directly, in read-only mode by multiple users.
- If the project is located on an http or https server on the Internet, it opens in read-only mode and by describing or pasting the link into the "Open" dialog box.
- Through Presto Server, to be edited by several users at the same time.
- You can also open a project by dragging it to a Presto icon or window.
- If you open a project in ".PrestoObra" format that is not in "read-only" mode, is automatically converted to ".Presto" format

- If the project is protected with a password, Presto will request it beforehand.

---

*Some protected projects can only be opened from a specific Presto license.*

---

### Open as a read-only file

This option of the "Open" dialog box opens the projects to be used only in reading mode, to avoid their unintentional modification. In addition, they open much faster. In the header of the window the message "(read only)" appears and all the columns have the same background.

A project is automatically opened in read-only mode:

- When the project is opened by another user in read-only mode.
- If the file, directory, or media does not have permission to write.

Projects in read-only mode are identified with specific icons in the list of recent projects at the beginning of the "File" menu. From this menu the projects are opened in the same read and write mode in which they were opened the last time. To open them in another mode, do it from the dialog box.

### Close and save

Opening a project in write mode creates a file with the extension ".PrestoRecover" to which information is continuously added with the modifications that are introduced in the project.

---

*If the project closes successfully this file is deleted. If Presto's execution has been interrupted for any reason without closing the project, when you reopen the project Presto recovers its last state from the information in that file.*

---

The process performed when saving a project is:

- The project is copied to a temporary archive ".PrestoTemp".
- If the copy finishes successfully, the project file is renamed as ".PrestoBackup" and ".PrestoTemp" is renamed as ".Presto."
- If the ".PrestoTemp" file is not generated, the archives ".Presto" and ".PrestoRecover" still exist, so Presto can recover the lost information.

---

*To retrieve the previous state of a project, change the file extension ".PrestoBackup" to ".Presto" before opening the project again.*

---

### Close

Closes the project, report, or CAD file. A project also closes when you close the last open window.

### Save

Saves the changes made to the project.

### Save As

In single-user mode, save the project under another name or in another directory.

## Working environment

It defines the state of a user's project habits, common to all their projects, which is part of the user profile.

### User Profile

The user profile includes:

- The status of all "File: Working Environment" options.
- Filters, expressions, and user fields, which can be saved and edited in the "Expression Builder".
- Other customizable properties that are maintained between project sessions.
- The activations of presto modules.

The user profile is saved in a file in XML format with the name:

**PrestoNNN.PrestoPerfilXml**

NNN being the digits of the version.

This file is saved the moment the user exits Presto in the configuration directory, which is seen under "File: Working Environment: Directories".

For example:

**C: \Users\MyUser\AppData\Roaming\Presto**

---

*The "AppData" directory is usually hidden; To view it, the Windows File Explorer option that displays hidden files and directories must be enabled. you can also locate this directory by using the %appdata% command*

---

When Presto is installed as a workstation or a user runs Presto without a user profile, Presto creates a default profile, with a standard configuration.

### *Reuse the user profile*

The user profile can be exported and imported from other users, facilitating implementation and standardization when multiple users must share the same way of working.

- To restore the default user profile, delete the profile file from the configuration directory.
- To exchange layout settings, see "User Interface: Layouts: Customizing Layouts".

### *File: Export: User Profile*

Allows you to save the profile or any of its components, such as user fields. So, you can choose from multiple profiles, retrieve them from another computer, or transfer profile components to another computer.

### *File: Import: User Profile*

Replace the active profile in whole or in part with another. If imports detect expressions with the same name, the new ones are renamed. To fully load the profile, close Presto and reopen it.

### *Configuration loading sequence*

When starting Presto, the default configuration is taken and a sequential search of configuration files is performed in the order indicated below, until one is found.

### *User file, in the configuration directory*

The first time a user runs Presto this file does not exist; is created when you close Presto. On the following occasions this profile is loaded, if found.

### *Administrator file, in the application directory*

Presto.PrestoPerfilXml

If it exists, load the full profile.

### *Location file, in the "Data" directory of each location*

Presto.PrestoPerfilXml

If it exists, it loads only the settings for windows, expressions, filters, and custom suggestions.

## **General**

### *Automatic column width adjustment*

Adjusts the width of table columns to their contents. It is equivalent to the "Tables: Adjust Width" icon. It is disabled each time a width is manually modified.

### *Automatic calculation of prices, times and documents*

See "Home: Calculate".

### *Accept lowercase codes*

If disabled, entering concept codes, entities, and documents are converted to uppercase. Those previously introduced are not altered or affect the masks.

### *Managing pre-Presto 21 table windows*

If enabled, all table windows are managed and displayed as in previous versions of Presto.

### *View header concept data in subordinate windows*

See "User interface: Navigation and visualization".

### *Use the extension ".po18" instead of ". Presto" when creating files*

Select one or the other extension.

### *Block estimate disruption*

### *Block the modification of approved certifications*

See "Presto in project management: Cost tracking: Blocking changes".

### *Use Field and Variable Names in English*

Adapt the interface to the English language. See "Interface language".

### *Localization*

Adapts the files used in Presto to the selected location, including sample projects, references, templates, reports, and add-ins.

These files are stored within separate subdirectories for each location, located within the subdirectories of the Presto installation directory that contain the sample projects, references, and other files.

For each location, only the specific files of the same are installed. If you want to use a file that is included in a location other than the one selected, you can copy it to it from Windows File Explorer.

### *Interface language*

It affects the fields, options and menus of the user interface and the language in which the multi-language reports are printed, but it is independent of the localization and language of the projects.

The value of the active language is listed in the general variable "\_Language".

To translate the interface into another language, see "File: Translate interface".

### *Google key for translation*

See "User Interface: Text Windows: Translate".

### *Appearance*

Modify the colors and types of text used by Presto.

---

*The font types and sizes of the interface, including menus and options, window titles, drop-down lists, and pop-up messages depend on the Windows setting customization.*

---

### *Topics*

It allows you to choose between several styles and colors for the windows, except that of Presto itself, which uses the theme of the screen settings of the operating system.

## Font

Font for text in table windows and default value in text windows.

The font size also changes moving the mouse wheel with the [Ctrl] key pressed.

---

*In windows adapted to the new management after Presto 2021, the change of font size is only applied to the active window.*

---

## Background color or letter

Colors assigned to each field type and value. In empty fields the background takes the color chosen for the text.

## Directories

It shows the directories used by Presto, which can be modified directly, except those that appear in yellow, which must be edited from the operating system. Some can also be defined in the "File: Projects" window.

DIRECTORY	NAME	CONTAINS
Configuration	Presto	User's profile and license activation files. It is assigned by the operating system and independently for each user of the computer.
Temporal	Temp	Directory assigned by the operating system where intermediate files for internal use are generated.
User		Documents without specific options, for example, destination directory and origin of exports and imports.
Projects	Project	Most used projects, which you want to appear in the menu "Projects: Projects". After the installation contains sample projects.
Export to Excel	Excel	Templates used in exporting tables to Excel.
Present	Wizard	Cost estimation assistants, quick estimate wizards, QMASS, etc.
Attendees [User]	Wizard	User-specific wizards

DIRECTORY	NAME	CONTAINS
References	Reference	Price tables, catalogues, and other usual aids for the development of the estimate, which are accessed from the menu "References: References".
Accessories	Plugin	Accessible programs or add-ons, which appear in the "Add-ons" menu.
Add-ons [User]	Plugin	User-specific add-ons.
Reports and templates	Report	Reports and templates accessible from the "Reports" menu.
Reports and templates [User]	Report	Destination of automatically generated reports. The user can include in this directory the subdirectories and reports he wants, which will appear in the "Reports" menu.
Templates of projects and reports	Template	Directory for projects and report templates, Cost-It export configuration files, and files with equivalences of concepts to use with the "Replace" option. When you create a new project, the projects in this directory appear to choose one of them as a model. Creating a new report creates a copy of the report named "Template" or "Template" in this directory.

You can remove, add, or modify any of the files installed with Presto to adjust it to your usual uses.

### *Installation*

Presto is installed in the directory chosen by the user, called "Installation Directory" in the sections of the manual.

The user and temporary directories defined in the operating system are used.



FILE	CONTENT
. EXE	Executable programs
. DLL	Program Libraries
Presto.DBE	Restrictions
. CFG	Configuration files
. LOG	Usage audit file

DIRECTORY	CONTAINS
win32/x64	Files required to run Presto and the supporting directories
wcca40soft	Archives of the spell checker in Catalan.

Other directories generated in the installation or used, not configurable from Presto, are as follows.

DIRECTORY	NUMBER	CONTAINS
Help	Help	Records. CHM help.
Tutorial	Tutorial	Projects for tutorials.
Data	Data	LNG files of the different interface languages, postal codes, spreadsheets, and other useful files.

### **Databases**

Location of the projects used by some Presto options.

PROJECT	UTILIZATION
Price databases	Projects used a reference for updating information and other options.
Groups	Project with purchasing groups and suppliers
Specifications	Consult "Specifications".

### Formulas

The take-off formulas used are saved with each line; changes to this table does not affect them.

### Margins

Margins used in printing reports.

### Restrictions

There are several types of Restrictions on Using Presto:

- Customizing the interface, which is described in this section.
- Restrictions affecting a user for all his or her projects, described below in "User Restrictions".
- Restrictions on access to a specific project, which are described in "Properties: Security".
- Access to projects and user permissions. See the "Installation Guide" for specific "Presto Server" options.

### Menu customization

The list of active menus allows you to limit the menus and visible options of Presto to simplify the use or restrict the possibilities of a user. For example, to prevent a user from changing the Presto modules that they can use, remove access to the option "Files: Activation".

---

*If you remove access to the configuration options, configure them beforehand as desired, as you will not be able to return to them.*

---

For the user not to be able to change their menu customization, the restrictions system must be activated. See below "User Restrictions".

### [ox] Mark only authorized module options

This option allows you to disable the visibility of icons and options assigned to unavailable or disabled modules.

### *Access to reports, wizards, and add-ins*

To filter the wizards, reports, and add-ins that appear in their respective menus, delete the related files from their directories.

Note that the user can access the wizards, reports, and add-ins located in their user directory. If you turn off the "Reports: Design" option, the user will be able to use the reports, but not modify them.

---

*You can protect a report from use, but not modified, even if you have access to the layout option.*

---

### *Access to layouts*

To prevent access to a layout, delete all but one of the fields. See "User Interface: Layouts: Customizing Layouts".

### *User Restrictions*

A secure system requires an administrator and prior security on the network itself, in addition to preparing the configuration of each user and the necessary maintenance to adapt the restrictions to the changes required over time.

Presto's restriction system affects all users on the network and is activated by the "Restrictions enabled" option in the drop-down list of "File: Working Environment: Restrictions". If the options in the list are turned off, it is because there are not enough permissions. The administrator must have write permission to the Presto installation directory, where a "Presto.DBE" file is created. Therefore, to maintain security, no user, except the administrator, must have write permission to that directory.

- The administrator can prepare the user profile he wants and copy the file "Presto.PrestoPerfilXml" to Presto directory.
- For the system to go live, you must select "Restrictions enabled" and enter a password.

On workstations

- The "Use restrictions on this computer" option is enabled on a computer-by-computer. This prevents the user from modifying the customization of layouts

and menus contained in their project profile. The profile can be imported from previously configured profile files or use the one defined by the administrator.

- This option can be checked at any time; however, it cannot be unchecked if the Presto restriction system is activated, unless the related password is entered.

### *Suggest*

Custom user values for the "Suggest" option. See "User interface: "Suggest field values".

### *Presto Server*

Configuration options for multi-user environments.

Consult the related section in the "Installation Guide".

### *SQL Server*

Definition of accessible SQL servers for import and export options.

### *Translate interface*

Presto's interface will be translated manually or using Google's translation services.

The process has the following steps:

- Generate an RTF file with the messages.
- Translate the RTF file.
- Incorporate it into Presto as an LNG file.

### *Generate RTF*

Generates an RTF file that serves as the basis for translating Presto into your chosen language.

You can apply Google Translate to the file if you have the appropriate key. See "User Interface: Text Windows: Translate".

The check column contains the translation into the original language of the translated text, which allows you to detect erroneous messages, even if the target language is unknown.

### *Source language*

The language from which the translation is to be carried out.

### Language name

If the target language is "<New>", you must fill in the cell with the name of the language to be translated into.

### Embed LNG file

Include the "MSG\_LNG\_FILE" column in the RTF file with the messages from the indicated language file.

### Convert RTF to LNG

From the translated messages of the RTF file, it generates an LNG language file, which must be copied to the "Data" subdirectory of the installation directory.

If the message file does not contain the translation of a message, Presto searches for the translation among the available languages in this order:

FILE	DESIRED LANGUAGE	ALTERNATIVE LANGUAGE
	Portuguese (BRA)	Portuguese
<a href="#">Presto5.lng</a>	Portuguese	Galician
<a href="#">Presto4.lng</a>	Galician	Spanish
<a href="#">Presto1.lng</a>	Catalan	
<a href="#">Presto17.lng</a>	Basque	
<a href="#">Presto6.lng</a>	German	English
<a href="#">Presto3.lng</a>	French	
<a href="#">Presto2.lng</a>	English	Spanish

In this way, partial or progressive translations can be carried out.

### Import

#### BC3

Consult the technical note "Export and import of the BC3 format".

#### Excel

Consult the technical note "Interoperability between Excel and Presto".

---

*"Excel2Presto" is an add-in for Excel that allows you to convert an Excel sheet in any format into a Presto quote. It is installed by running the "setup.exe" file located in the "Excel2Presto" subdirectory of the Presto installation directory, where its manual is also located.*

---

## Access

Imports information from a project in the Access format.

The imported information must appear in tables and fields with the same names as the related Presto elements, as they are exported with "File: Export: Access". Tables and fields not recognized by Presto are ignored.

Records in single-key tables, such as "Concepts," replace equivalent records in Presto's project if they already exist. Those in the remaining tables are added.

After importing, the option "File: Projects: Check integrity" is executed.

## SQL Server

Imports a project from a SQL server defined in "File: Working Environment: SQL Server".

You can import all the tables that make up the project or select the tables to import.

As in the Access import, tables and fields not recognized by Presto are ignored.

Similarly, if imported on an existing project, the records of the single-key tables replace the equivalent records of Presto's project, if they already exist, and those of the remaining tables are added.

After importing, the option "File: Projects: Check integrity" is executed.

## Offers | Prices

See "Project stage: Multiple prices and comparison of offers".

## Take-off lines

See "Presto at the project stage: Take-off lines: Importing take-off lines".

## Price request

See "Presto for the construction company: Contracting and purchases".

## Documents

See "Presto para la empresa constructora: Facturación: Documentos".

### *Primavera*

See "Planning stage: Liaison with Primavera and Project".

### *User Profile*

See "File: Working Environment".

### *Layout definition*

See "User Interface: Layouts".

## **Export**

### *BC3*

Consult the technical note "Export and import of the BC3 format".

### *Excel*

Consult the technical note "Interoperability between Excel and Presto".

### *Access*

Create an Access database with all the information of the project and with its same structure of tables and columns. It does not contain the calculated columns, which are usually gray.

The exported database can be modified with Access, being the responsibility of the user to respect its consistency and relational integrity. If you import it back into Presto, you get the original project, with the changes introduced.

The "Description" field of the Access table layout contains the help tracks for each Presto field.

### *SQL Server*

Exports the project to a SQL server defined in "File: Working Environment: SQL Server".

Within the server you can choose an existing database or a new one. Each database can contain any number of projects. The "Projects" table contains the projects of the base and the ID of each one. The other tables are identical to those in the Presto files, plus a field in each record that contains the ID of the project to which it belongs.

You can export all the tables in Presto's project or a selection of them and choose whether to export the calculated fields.

The user can add tables, records, and fields to the tables with custom information, which will be ignored when importing again. If you want to import new records, you must enter the project ID in the related field.

The option to overwrite allows you to update an existing project, removing all previous information. If existing fields are added or fields are altered, this information will be removed when overwriting the project.

### *SQL Server Delete*

Deletes a project from a database in SQL Server format.

### *Revit Catalogue*

See the "Cost-It" manual.

### *Microsoft Project*

### *Microsoft Project / Primavera XML*

See "Planning stage: Liaison with Primavera and Project".

### *Price request*

See "Presto for the construction company: Contracting and purchases".

### *ContaPlus*

See "Presto for the construction company: Invoicing: Exporting invoices".

### *User Profile*

See "File: Working Environment".

## **Activation**

Option of the "File" menu that shows the license and the authorization system detected by Presto.

You can also access the activation window by clicking on the "Authorized Modules" icon, located at the top right of the main window of Presto and which shows in its track the code of the Presto license that is being used.



The list of modules has a "Use" column that allows you to activate / deactivate the available modules, allowing their use or being free for other users of the network. Information regarding the installation and activation processes is available in the "Installation Guide" of [www.rib-software.es](http://www.rib-software.es).

### *Activate*

Perform the process of activating the modules through an Internet connection.

If you do not have this connection or it is restricted, one activation can be performed per file, except with the Internet activation system.

See the section "Activation by file" in the "Installation Guide".

### *User data*

If you have your access data to the customer area of [www.rib-software.es](http://www.rib-software.es), enter your email and password. The licenses assigned to you will be displayed for you to select one of them. If the selected license is a multi-user license with Internet activation, Presto will be activated automatically. If the selected license has another type of activation, a window will be displayed with the specific information to perform the activation.

If you do not have your access data to the customer area, check the option "I do not have email in the Customer Area" and click "Next" to access the activation options of the different supported authorization systems.

### *Internet / Baseplate*

Choose this option if you have an individual license for any of these authorization systems.

### *Internet Activation*

This authorization system is activated in each session by checking the Presto server, which is renewed periodically. It can be used on any computer, but not simultaneously. The license is saved in the file "Presto.LicInternet".

### *Motherboard activation*

This authorization system is linked to the computer's motherboard. Virtual machines are not supported. Only the Internet connection is required during the initial authorization.

The license is saved in the "Presto.LicMotherboard" file.

### *Physical device*

Choose this option if you have an individual license for this authorization system.

Connect the device to the appropriate port on your computer and continue with the activation process. If necessary, the installation of the control software of this device will start.

The license is saved in "Presto.LicUsb".

### *Connect to the Network License Server (PrestoNetActivation)*

Choose this option if you have a multiple license, accessing a multi-user license authorization system.

Requests the IP address and port where the "PrestoNetActivation.cfg" configuration file is located, which is where this data is stored.

### *User access control*

If you have a per-user module control, each user's email and activation code are requested. If the identification is positive, the modules assigned to the user are automatically activated.

The process of user access control is performed in the client area of [www.rib-software.es](http://www.rib-software.es) and is described in the "Installation Guide".

## Directories of activation files

PROGRAM	DIRECTORY	EXAMPLE
Presto	Configuration	\Users\xxx\AppData\Roaming\Presto
PrestoNetActivation PrestoServer	Installation of Presto	\Program Files\Presto 2022

## Other options

### Set up printer

Allows you to select the printer, size, and orientation of the paper.

### Preview

It shows on the screen the result that would be obtained by using the "Print" option on the activation window. Margins are listed under "Project Environment: Margins".

---

*The zoom level can be modified by pressing the mouse buttons or by pressing the mouse wheel with the [Ctrl] key pressed.*

---

### Print

Prints the contents of the active window.

---

*The "Preview" and "Print" options are not available in windows adapted to Presto 2021's new window management system.*

---

### Icon size

Switch between three sizes of icons and other features that make it easier to project on touch devices and on different screen sizes. It requires exiting and entering Presto.

### Get out

Close the project and Presto.

---

## Start

### Edit

Editing operations use the usual Windows conventions and are described in detail in the "User Interface" chapter.

[Cut](#) | [Copy](#) | [Catch](#) | [Delete](#) | [Move](#)

See "User interface: Edit items".

### Undo

[Undo](#) | [Redo](#)

See "User interface: Edit items: Undo | Redo".

### Audit

The audit is also activated from the new project creation dialog box.

This presto functionality allows:

- Record the actions performed by each user on the project.
- Return to any previous state of the project.

---

*To enable or disable auditing, or restore a state, on projects accessible through Presto Server, open the project directly, accessing it through the directory where it is saved.*

---

Activating it creates in the directory where the project is saved a file with the same name and extension ".PrestoAudit" which contains all the information recorded while the option is active.

By selecting the line related to an action and pressing the "Restore" button, a new project is generated with the state in which the source project was when the selected action was performed.

To remember a specific state, an identification tag can be created at any time.

In the "Audit" dialog box, the actions carried out on the project are shown, with the following information:

- Date and time of the action

- User who has made it
- Name of the operation
- Estimate price of the project

The username is the login to Windows or, if we access the project through Presto Server, the one that is defined in "Working environment: Presto Server".

## Sail

[First element](#) | [Previous](#) | [Next](#) | [Last element](#)

See "User interface: Windows".

## Tables

[Export to Excel](#)

See "User Interface: Tables: Export Table to Excel".

[Restore Layout](#)

[Adjust width](#)

See "User interface: Columns".

[Analyze](#)

See "User interface: Edit items".

## Filter

[Undo](#) | [By](#) | [expression](#) [By](#) | [words](#) [By](#) [selection](#)

See "User interface: Filter elements".

## Locate

[Search](#) | [Replace](#)

See "User interface: Edit items".

[Select all](#) | [Invest](#) | [selection](#) [Deselect](#)

See "User interface: Edit items".

### Calculate

When data that affects them changes, Presto automatically calculates the following values.

- Estimate prices.
- The dates on the Gantt chart.
- The amounts of the active document.

---

*Consult "Project stage: Estimate: Calculation of prices and quantities".*

---

### Recalculate

Performs all calculations, including those that are not part of the automatic calculation. Run this option before considering a project as final for printing or delivery.

---

*This option is accessible by an icon in the quick access bar.*

---

### Automatic

You can disable automatic calculation to speed up project on very large construction sites or price tables, using the option "Automatic calculation of prices, times and documents", accessible in "File: Working environment: General".

The following fields, which are particularly slow to calculate, are not calculated when this option is disabled and appear with a gray background.

FIELDS	PROPERTY
QtyTot*	Total quantities in each price structure
Up to*	Total amounts in each price structure
QtyContracts   QtyOrders QtyDeliveries   QtyInvoices	Total amounts in each document type
NumInf   NumSup	Number of top and bottom concepts
Level	Hierarchical level
EstASAP   EstALAP ObjASAP   ObjALAP ObjEstASAP   ObjEstALAP	Estimate, objective, and total expected production periodized in phases

### *Calculate: Take-off lines*

Recalculates all results that depend on changes in take-off lines, certification phases and spaces. Changes in amounts that affect the estimate are part of the automatic calculation.

---

*Consult "Project stage: Take-off lines".*

---

### *Calculate: Prices*

Use this option to recalculate all prices when recalculation is disabled or after performing operations that affect the entire project, such as updates, file import, and so on.

### *Calculate: Time planning*

Recalculates all results that depend on changes in the Gantt chart. It also runs with the refresh key [F5] in the diagram window.

---

*See "Planning stage: Temporal planning".*

---

### *Calculate: Documents*

Recalculates all results that depend on changes in the content of documents.

---

*See "Presto for the construction company: Billing: Documents".*

---

### *Calculate: Actual costs*

Recalculates all results that depend on cost and cost allocations. Prices and quantities must be calculated in advance.

---

*See "Presto for the construction company: Analysis of expenses and costs".*

---

## **Reports**

---

*Consult the "Reports" section.*

---

## CAD

---

*Consult on our website the document "Catalog of Reading cad plans".*

---

### **View**

This menu gives access to all the windows that contain the information of the project.

#### **Project: Properties**

Data common to the entire project, described in "Project stage: An information system" and other specific sections.

The variables are seen in the window "Variables", layout "Common to all projects".

#### *Data*

Fields associated with the root concept of the project that exist for all concepts.

#### *Several*

Fields not classified into other categories.

#### *Foreign exchange*

Consult the technical note "Use of currencies".

#### *Rounds*

The number of decimal places to which values are rounded in calculations and options that affect them.

#### *Calculation*

Calculation options and percentages applied to the project.

#### *Planning*

Most important dates of the project and other data involved in the calculation of durations. See "Planning stage: Temporal planning".

#### *Accounting*

Data relating to indirect taxes and export to accounting programs, written in "Export to accounting".



## Safety

They allow you to protect access to the project with a password.

PASSWORD	OPERATION
With	The password is valid from the moment the project is saved.
Without	Removes the password from the project, if any.

## Change password of the project

Allows you to enter or change the password of the current project.

## License

To protect a project so that only the user of a given license can open it, write here the license number of this user, which you can read in "Help: Activation" of your program.

## Read-only password for the previous license

It allows access to this project exclusively by the user of the indicated license, and in read-only mode.

## Tables

Tables defined in the project, with the number of records.

You can delete an entire table by selecting it and pressing the delete key. Tables in gray cannot be deleted because they have necessary data in other tables. For example, documents cannot be deleted while supplies exist.

## Estimate: Tree

This window and the "Estimate" window, generally known as "estimate windows", are the usual working windows.

This window is hierarchical, so to the behavior of the table windows adds the special features described in "User interface: Navigation and visualization: Hierarchical windows".

The process of creating the estimate is described in "Presto at the project stage: Estimate".

The layouts appear in the approximate order of the development of the estimate, from the project to the execution of the project.

To the right of the fields of each layout appear the multiple fields that are indicated in each group of layouts.

### *Estimate and space layouts*

In these layouts, where the "Multiple Fields" icon is disabled, the values chosen in the drop-down lists appear on the right broken down by spaces for each concept. The user fields are taken from the subordinate window "Spaces" of the "Estimate" layout.

### *Description*

Code and description of the concept, with icons indicating the types of associated information.

### *Take-off*

Useful information during the TakeoffLines.

It shows the results of the different take-off criteria of the item, which can be used in the take-off lines of other items. Consult the technical note "Take-off transfers".

### *Estimate*

Basic information needed to write the estimate.

### *Other prices*

Fields related to the price, complementary to the basic data, such as the date and origin of the concept, the CPI, the currency, and the price of the alternative unit.

### *Estimate by nature*

Amount of the estimate of each concept broken down by nature. To see the breakdown of other pricing structures, add the desired columns.

### *Hourly estimate*

It shows the hours of labor and machinery contained in each concept according to the estimate and other values related to these resources.

### *Cost target*

Sales estimate and cost estimation, which is described in "Presto at the planning stage: Economic planning: Cost target".

### *Durations and production*

Information needed to project on time planning.

### *Variable layouts*

They allow you to add and edit user variables. Consult the technical note "Use of variables".

### *BIM | Data VARIABLES*

Information from BIM models.

### *| Values VARIABLES*

### *Multiple pricing layouts*

They contain information from the table of alternative prices of each concept.

### *Foreign exchange estimate | PRICES*

Consult the technical note "Use of currencies".

### *Comparison | PRICES*

### *Comparison | OFFERS*

Consult the technical note "Project stage: Multiple prices and comparison of offers".

### *Certification layouts and phases*

In these layouts, where the "Multiple Fields" icon is activated, the values chosen in the drop-down lists appear on the right broken down by phases. The user fields are taken from the subordinate window "Phases", layout "Certification".

### *Planning*

Phased distribution or certifications of the cost objective.

### *Resources and buying groups*

Concepts with the data related to hiring.

### *Estimate by state*

Amount of the estimate broken down by the approval statements of the take-off lines.

### *Certification*

Data of the current certification and to origin, compare two with the estimate, as described in "Presto in the management of the project: Certification".

### *Certification by states*

Displays the certified portion of each estimate statement. Total certification is the sum of all states.

---

*You can add the predefined user field "PerCertEstPossible" which indicates the certified percentage on the possible estimate.*

---

### *EVM Valor ganado DO*

Application of the earned value method from the point of view of the promoter, described in specific technical notes.

### *Expected income and expenditure*

Pension certification is an income and planning an expense. They can be viewed globally or for months.

### *Production*

All fields are valued at the estimate price, so they can be compared directly with each other.

### *Cost control*

Data about real costs and their deviations, described in "Presto para la empresa constructora: Análisis de costes y gastos".

### *SIE Production and cost*

It allows the economic monitoring of the project, showing the amounts and the gaps between certification and production, expense, and cost.

The detailed process is described in the technical consultation "SIE: Economic Information System".

### *EVM Value earned*

Application of the earned value method from the point of view of the builder. Consult the technical note "EVM Management of the value gained for the construction company".

### *Integration of projects*

It allows you to manage estimates and works in an integrated way. Consult "Project stage: An information system: Integrated consultation of estimates".

### *Subordinate windows*

#### *Text*

Main text of the concept, which is printed on the estimate. You can associate other text files from the thumbnail window. See "User Interface: Text Windows".

#### *Spaces*

Quantities and amounts broken down by space. Consult the technical note "Use of spaces".

#### *Phases*

Amounts and amounts of the active concept, broken down by phases.

To facilitate visualization and data entry, these layouts present the lines of all defined phases, even if they have no content.

If quantities are directly introduced, the associations of take-off lines to that phase are eliminated and those quantities can never be broken down by phases, spaces, or approval statuses.

Layouts:

#### *Evolution of estimate and objective*

Historical values of the estimate and objective calculated for each approved certification. In this way you can see the evolution of the estimate throughout the execution. The fields are calculated if there is any content for the approved certification. Those of blue color correspond to certifications prior to the approved one, and those of magenta color to the approved one.

### Planning by states

Breakdown of planning by certifications and approval statuses.

### Planning and certification

Breakdown by certification of planning, estimated production and certification.

### Certification

Quantities and amounts of each certification.

### Certification by states

Data of each certification, which correspond to the different states of approval of the estimate.

### Certifications by quantities

Comparison between the quantities of the planning, certification and actual execution of each certification and accumulated to origin.

### Production

Planning, production, certified and non-certified production, all valued at estimate price.

### Cost control

Quantities and amounts of the certifications related to the planning, the actual execution, and the imputations in cost centers.

### EVM Earned Value

Application of the earned value method from the builder's point of view, described in specific technical notes.

### Take-off

Take-off lines associated with the relationship between the concept and its superior. See "View: Lists: Take-off lines".

### Thumbnails

Files associated with the concept. See "Presto at the project stage: An information system: Complementary project files" and "View: Archives".

### *Lower*

List of lower concepts.

### *Values in concepts*

A list of values assigned to variables in the concept.

### *Values in take-off lines*

A list of values assigned to variables on the take-off line.

### *Agenda*

Amounts of the concept in phases, such as certification, execution, and planning, and to specific dates, such as the amounts of documents and collections and payments.

See "Processes: Planning and Certification: Filling Out Agenda".

### *Prices of a project*

It is specially designed for use in a central integration of projects, since it shows for each linked project, the data indicated in the different diagrams of the window.

Consult "View: Prices" and the technical note "Integrated consultation of estimates".

Layouts:

#### *All*

All concepts.

#### *Quantities and prices*

Concepts with their total quantities, prices, and amounts.

#### *Contracts*

Global data of the contracts awarded on the site.

#### *In documents*

Amounts and amounts of the concepts in the documents of economic management.

#### *Entities and suppliers*

Amounts resulting from economic management.

#### *QMASS*

List of operations and controls of management systems.

## Check

Compare the description of the concepts of the central project with those of the linked projects, showing those that are different.

## Prices

It shows for each concept the data that relates it to the price allocation entities, suppliers in the contracts, or to the linked projects.

See "View: Prices" and the technical note "Integrated consultation of estimates".

Layouts:

### In price allocation entities

List of entities of the bidding or price type, and the values associated by each of them to the concept.

### In contracts

List of suppliers who have offered the concept in contracts.

### Prices in other projects

Data of quantities and prices of the concept related to the estimate in the different linked projects.

### Documents in other projects

Amount of the concept in the different documents of economic management in the linked projects.

## Estimate: Estimate

The layouts, subordinate windows and use are the same as the "Tree" window, except for hierarchical windows.

### Sync with tree

The icon, located at the top left, makes the active concept in this window automatically adapt to the one chosen in the "Tree" window, which can be open simultaneously.

Consult "File: Working environment: Generates: View data of the header concept in the subordinate windows".



## Estimate: Parametric

Allows you to use and create parametric concepts.

- For use, see "Parametric Concepts" in this manual.
- For creation, refer to the technical note "Creating Parametric Concepts".

## Estimate: Concepts

List of concepts of type price of the project. The "Spaces", "Entities" and "Quality" windows show other types of concepts.

### *Layouts*

#### [\*] Description

Description, color, and transparency of the concept.

#### [\*] Prices

Basic data of the concept and its price.

#### [\*] Additional data

It shows the category, the number of top/bottom concepts and BIM data.

#### [\*] | Values VARIABLES

Allows you to display variables as multiple fields and write down their values.

#### [Chapters]

Chapter-type concepts, with their category and price.

#### [Items] Take-off lines

Most useful values of the items during the preparation of the estimate.

#### [Basic Natures]

Concepts of material nature, labor, machinery, and others, with total amounts and amounts, both in their currency and in the main currency of the project.

#### [| Materials Otros] Estimate

Concepts of material nature and others, with their category and total quantity.

#### [Manpower] Estimate

Concepts of nature labor, with its total quantity.

#### [\[Maquinaria\] Estimate](#)

Concepts of a machinery nature, with their total quantity.

#### [\[|| Machinery\] Equipment](#)

Concepts of nature labor and machinery with their total amounts in the estimate and in the objective and that, therefore, can be used in the planning and adjustment of resources. View the subordinate "Resources" window.

#### [\[Items\] Estimate and objective](#)

Items, with the comparison between estimate and objective.

#### [\[Tasks\]](#)

Task-type concepts. The "Take-off lines" subordinate window displays the take-off lines associated with each task.

#### [\[Supplies\] To hire](#)

Concepts that can be contracted, with their estimated amount according to the objective.

#### [\[Supplies\] Contreated or ordered](#)

Concepts of type supply with the necessary data to make purchases and contracting or control their deviations.

#### [\[Supplies\]](#)

Supply-type concepts with the data obtained during the execution of the project.

#### [\[Supplies\] Materials](#)

Supplies of material type with the total quantities necessary to carry out the monitoring of the project.

#### [\[Supplies\] Shopping](#)

Supplies purchased with the amounts necessary to carry out the follow-up during the execution of the project.

#### [\[Consumption by imputation\] Stock](#)

Concepts of type supply that are consumed by imputation, with the stocks calculated by Presto.

### [Consumption by target] Stock

Concepts of type supply that are consumed by objective, with the stocks noted by the user.

You can also modify the theoretical consumption coefficient and detect if the production of any concept is missing.

### [Destinations]

Destination type concepts with their quantities and real prices.

### [Not included in the estimate]

Concepts that are not part of the breakdown of another concept.

### **Subordinate windows**

---

*Only windows that are not listed in the estimate windows are described.*

---

### **Resources**

Amount in which each resource of the project is necessary and its amounts, calculate the option "Processes: Contracting: Calculate resources".

To facilitate the consultation of the resources by dates, the intermediate dates are also displayed, even if the resource is not needed in them.

### **Layouts**

#### **Destinations**

Resources whose code matches the code of the concept.

#### **Consumption**

Resources whose "Resources.Group" field matches the concept code.

#### **Upper**

Concepts that in their breakdown contain the active concept.

It allows to easily check the performance and amount in its superiors.

If concepts are added in this subordinate window, the active concept is inserted into the breakdown of each added concept with the indicated quantity.

## Supplies

Appearances of the concept as a supply in the different documents. It is especially useful in layouts that filter by supplies. See "View: Supplies".

## Charges

Occurrences of the concept as a destination of imputations, manual or created during the calculation for the concepts consumed by objective.

It is especially useful in the layout that filters the destinations. See "View: Suppliers".

## Estimate: Spaces

Concepts of nature "Space", which are assigned in the takeoff lines, and their different properties and amounts.

The "Space-Time" subordinate window allows you to view the space-time diagram, which shows the Lines of Balance LOBs obtained from the Gantt chart data. In the subordinate window "Balance lines", accessible when the previous one is open, you can consult information associated with these lines.

Consult the technical notes "Use of spaces" and "Diagrams of space time".

## Management: Entities

Concepts that correspond to building agents, suppliers, and price allocation communities.

The general operation, fields and subordinate windows are identical to those described for the "Concepts" window.

## Layouts

### [\*] General data

All entities, with their identification data.

### [Agents] General data

Suppliers and other building agents, with their identification data.

### [Agents] Billing data

Payment method data, tax and withholding percentages, and expense counterpart accounting accounts.

### [Suppliers] Amounts

Economic data of suppliers.

### [Clients] Amounts

Economic data of client-type entities.

### [Prices] General data

Entities of bidding type and price, which allow to assign prices to the concepts as indicated in "Project stage: Multiple prices and comparison of offers".

Entities with gray status are not added to comparison layouts.

### Management: Quality

Concepts related to QMASS management systems.








See "Quality management. QMASS: Common Process: Windows and Quality Layouts".

### Planning: Agenda

Hierarchical window by years, months, and days, which shows the information of the project that can be associated with dates:

- Amounts of the period price structures, planification, certification and execution, which are calculated with "Calculate: Take-off lines".
- Economic data of the project, which are calculated with "Calculate: Documents".
- Necessary resources by dates, which are calculated with "Processes: Contracting: Calculate resources".
- Concepts and files associated with a date.

Nature of agenda items:

N	TYPE	NATC	USE
1	XXI		Sum of all years
2	Year		Sum of all months.
3	Month		Sum of all days.
4	Day		Day that does not correspond to a certification phase.
5	Certification		Day of an approved certification phase.
5	Certification		Day of the last phase of approved certification.
5	Certification		Day of a past certification phase.

*The "N" field indicates the numeric value of the "Agenda.Type" field.*

The icons in the "Info" field are described in "User interface: Layouts: Columns of Information Codes".

When there is information associated with a date, it also appears associated or totaled at the higher levels, such as month and year.

Double-clicking on an amount that comes from documents opens the related window, filtered by that date.

#### *[ox] Festive*

Public holidays are not considered in the time planning. The background of the icon is red.

#### *[ox] Working*

Day like weekday, with gray background.

#### *[ox] Certification*

Day that corresponds to a phase or certification.

#### *[ox] Non-certification*

Day that does not correspond to a phase or certification.

### *[ox] Current certification*

The values of the later phases do not intervene in the calculations.

### *Layouts*

They are like the "Dates" window, except that "Agenda" does not show diagrams relating to periods or phases.

### *Summary*

Planning, execution, and certification amounts, along with the color and transparency associated with each phase.

### *Planning*

Useful layout to create economic planning by manually noting the percentage or weight of expenditure in each certification, or by using one of the alternatives proposed by the suggest button in the "WeightPlan" field.

See "Planning Stage: Economic Planning: Filling In economic planning".

### *Planning by state*

Planning and production foreseen by approval states.

### *Planning and certification*

Cost and revenue forecasting, and certification.

### *Breakdown by nature*

Forecast of costs and revenues by natures.

### *Certification by states*

Monitoring of certifications by the construction management:

- Amounts of certifications broken down by estimate approval statements.
- Quantity planned in each period, valued at the estimate price for comparison.

### *Production*

Production and certification amounts, at estimate price.

### *EVM Valor ganado*

Application of the earned value method from the point of view of the builder, described in specific technical notes.

## Documents

Administrative follow-up, by document types.

## Billing

Control of invoicing, with withholdings, taxes, payments, and collections.

## Collections and payments

Collections and payments by state, with the balance of the period and cash flow.

## *Subordinate windows*

The information in the agenda is associated exclusively with days. When placed in months, years or in the root concept, Presto shows the set of information associated with all the days that covers that period.

The exception is the text, which is unique and can be associated with any date.

## Text

Text associated with the date.

## Thumbnails

Files associated with the day or period that contains it.

If files are dragged over this window or imported, they are associated with the date of today.

If they are dragged from other windows, they are associated with the date of the file, except for invoices, which is associated with the date of issuance of the document.

## Collections and payments

Expiration of the date or period.

## Concepts by date

Concepts whose "Date" field matches the chosen period.

In this window you can choose layouts to view:

- Price-type concepts.
- Concepts of management systems.
- Records for monitoring management systems.



## Resources

It shows the necessary quantities of each concept to execute the project in the period indicated in the selected layout (phases or dates). They are calculated with the option "By dates" of "Processes: Contracting: Calculate resources".

## Concepts

Concepts that have amounts in phases, calculated with "Processes: Planning and certification: Fill in the agenda" and, in general, that have information in documents or any other associated with dates.

In this window you can choose layouts to view:

- Planning
- Certification
- Production
- Supplies
- Destinations
- Supplier amounts
- Customer amounts

These layouts show the type of information already mentioned in other similar ones, with the difference that here they are concepts associated with periods.

## Planning: Dates

Calendar in the form of a list with operation like that of the "Agenda" window. It can be filtered by any field, allowing you to see only calendar days, months, certifications, or years.

## Layouts

Layouts with the name equivalent to that of the "Agenda" window have the same content, except that they also show the fields accumulated to source.

## [Phases] Summary

Planning, execution, and certification amounts, along with the color and transparency associated with each phase.

#### [\[Phases\] Planning](#)

See "Planning Stage: Economic Planning: Filling In economic planning".

#### [\[Phases\] Planning by state](#)

Planning and production foreseen by approval states.

#### [\[Phases\] Planning and certification](#)

Cost and revenue forecasting, and certification.

#### [\[Phases\] Breakdown by nature](#)

Forecast of costs and revenues by natures.

#### [\[Phases\] Certifications by state](#)

Certification by states and planned certification.

#### [\[Phases\] Price review](#)

Amounts necessary to submit a certification according to the regulations. See "Presto in project management: Certification: Official Certifications".

#### [\[Phases\] Production](#)

Production and certification amounts, all valued at the estimate price.

#### [\[Phases\] EVM Valor cattle](#)

Application of the earned value method from the point of view of the builder, described in specific technical notes.

#### [\[Months\] CPI](#)

Every month on the agenda. Allows you to define the inflation index.

#### [\[Months\] Documents](#)

Administrative follow-up, by document types.

#### [\[Months\] Billing](#)

Control of invoicing, with withholdings, taxes, payments, and collections.

#### [\[Months\] Collections and payments](#)

Collections and payments by state, with the balance of the period and cash flow.

#### [\[Days\]](#)

Every day of the agenda.

### *Subordinate windows*

They are the same as in the "Agenda" window, except for the following:

#### *Work units*

It shows the work unit with information associated with a phase, so in the date window, you must have one of the phase layouts activated. If you want to display the columns related to the amounts of any of the economic documents, they must be included manually, until leaving the desired column layout.

### **Planning: Gantt chart**

Temporal planning is described in "Planning Stage: Temporal Planning".

The following layouts can be combined with the activity filter options:

#### *Summary*

Basic data of the activity.

#### *Durations*

Data for the calculation of durations by time and cost.

#### *Estimated dates*

Total duration estimated dates and gaps resulting from the calculation.

#### *Amounts*

Amount of the activity.

#### *Business dates*

Estimated dates calculated as correlative lab days.

#### *Actual dates and amounts*

Actual dates, amounts and percentages executed.

#### *States*

Dates for each of the states.

### *Subordinate windows*

#### *Take-off*

Take-off lines associated with the relationship between the concept and its superior.

See "Main menus and options: View: Lists: Take-off lines".

## [Link](#)

Links between activities. See "Planning stage: Temporal planning: Data entry: Window of link".

## **Planning: List of bars**

This window shows the activities in the form of a list, filtered, and sorted by different criteria, unrelated to the structure of the estimate.

The behavior is practically identical to that of "Gantt Chart", as well as its layouts:

### [\[Abstracts\] Dates and amounts](#)

Estimated dates and duration of summary activities.

### [\[Abstracts\] Actual dates](#)

Estimated dates and actual dates of summary activities.

### [\[Activities\] Durations](#)

Quantities and durations of planned activities.

### [\[Activities\] Dates and slacks](#)

Dates and slacks of planned activities.

### [\[Activities\] Working days](#)

Estimated dates calculated as correlative working days, and amounts.

### [\[Activities\] Actual dates and amounts](#)

Actual dates and percentages of execution.

### [\[Activities\] Status dates](#)

Dates by approval statuses of each activity.

### [\[Critical Activities\] Dates and slacks](#)

Critical path activities, without slack.

### [\[Hammocks\] Dates](#)

Estimated dates of floating activities.

### [\[Tasks\] Dates and amounts](#)

Concepts with a "Task" nature included in the estimate structure.

#### [\[Planned\] Dates and amounts](#)

All scheduled activities currently included in the Gantt chart.

#### [\[Unplanned\]](#)

Scheduled activities not currently included in the Gantt chart.

#### [\[\\*\] Dates and amounts](#)

All plannable activities.

### ***Subordinate windows***

#### ***Take-off***

For concepts of nature "Task", it displays the take-off lines whose field "TakeoffLines.Task" matches the code of the task.

### **Purchasing: Resources**

Displays previously calculated resources using "Processes: Contracting: Calculating Resources".

They can be obtained periodized by phases and in the multiple fields on the right the quantities or amounts are shown, depending on the layout.

The fields in this table cannot be edited, but entire lines can be deleted.

#### ***Layouts***

##### [\[Spaces\]](#)

Resources broken down by spaces, with their overall quantities and amounts.

##### [\[Phases\]](#)

Resources broken down by phase, with their overall quantities and amounts.

##### [\[Activities\]](#)

Resources broken down by time planning activities, with their overall amounts and amounts.

##### [\[Date\] Days](#)

Resources broken down by days, with their overall amounts and amounts.

##### [\[Date\] Months](#)

Resources broken down by month, with their overall amounts and amounts.

#### [\[Date\] Years](#)

Resources broken down by year, with their overall amounts and amounts.

#### [\[Date\] XXI Century](#)

Resources broken down for the twenty-first century, with their overall amounts and amounts.

#### [\[Group\] Phased amounts](#)

Resources broken down by group, with their amounts by phases.

#### [\[Group && Code\] Quantities by phases](#)

Resources broken down by group and code, with their quantities by phases.

#### [\[Group && Code\] Phased amounts](#)

Resources broken down by group and code, with their amounts in phases.

#### [\[Group && Phase\]](#)

Resources broken down by group and phase.

#### [\[Group && Code\] Phases](#)

Resources broken down by group, code, and phase.

#### [\[Group and pending contracts\] Phased amounts](#)

Resources broken down by group, with their amounts by phases pending contracting.

### **Purchases: Contracts**

This window and its subordinate windows allow contracts and their supplies to be entered, to request bids from suppliers, compare them and choose the successful bidder.

See "Presto para la empresa constructora: Contratación y compras".

Each layout of the subordinate supply window corresponds to the layout of the same name of the main window.

Supplies can be dragged from the subordinate window of one contract to another, for example, to split or consolidate contracts.

## **Layouts**

### **[\*] Suppliers and amounts**

All contracts.

### **[\*] | Values Variables**

Allows you to add variables to contracts and edit their values.

### **[No suppliers]**

Contracts without associated suppliers.

### **[Unadessed]**

It allows you to associate suppliers, request prices, compare them and award contracts.

### **[Awarded]**

Contracts with awarded supplier, with their planning and contracting amounts.

### **[Awarded] Cost control**

Amounts of planning, awarding, certification and execution of contracts.

## **Documents: Requests**

Orders are purchase orders sent to suppliers.

The general explanation of the cost control process and the documents can be given in "Presto for the construction company: Invoicing: Documents".

## **Documents: Deliveries**

Documents accompanying supplies when received onsite.

The general explanation of the cost control process and the documents can be given in "Presto for the construction company: Invoicing: Documents".

A supply is considered to have been purchased if it appears on a delivery document or invoice.

## **Documents: Parts of project**

Documents that allow to introduce imputations of concepts in destinations and do not represent purchases.

Internally, the project parts are delivery documents without a supplier and their code appears in the "Delivery" field.

The general explanation of the cost control process can be given in "Cost and Cost Analysis".

Parts of project are automatically generated when calculating costs, in concepts of consumption by objective.

### **Documents: Invoices**

The general explanation is in "Presto for the construction company: Invoicing: Documents".

#### *Ventanas subordinates*

They are the same as all documents, except the following:

#### *Collections and payments*

Dates, amounts, and agreed form of payment for an invoice.

### **Historical: Supplies**

List of supply-type concepts that appear in economic management documents. It includes the imputations that are in parts of project (deliveries without supplier), but not the supplies of contracts.

Non-editable fields that are not considered appear in gray, such as the destination of the consumption supplies by objective or the rest of the documents in supplies of project parts.

Double-clicking on any field opens the "Concepts" window filtered by the supply and, above the field of a document, also opens the related window filtered by that document. This behavior is the same in the subordinate supply windows of the different document types.

In this window you can delete entire supplies, as well as create, delete, or rename directly the documents associated with each supply that are editable, with the same effect as if you worked in the specific window. If the last of the documents containing the supply is deleted, it will disappear completely.



The context menu allows you to unfold supplies or change the type of consumption.

### **Layouts**

[\*]

Supplies that are on orders, deliveries, or invoices.

[Order]

Supplies that are on order.

[Delivery || Invoice] Purchases

Supplies that are in deliveries or approved invoices.

[Delivery || Invoice] Pending approval

Supplies that are in not approved deliveries and invoices, or orders.

[Customer Invoice] Sales

Supplies that are on invoices to customer.

[Destination && "DateInput" valid] Consumption

Valid imputations of supplies.

[No destination || "DateInput" invalid] Consumption

Uneaten supplies.

### **Historical: Collections and payments**

All the collections and payments of the project. Double-clicking on the "Invoice" field opens the filtered invoice window for that document. See "Presto for the construction company: Invoicing".

### **Lists: Variables**

It contains a wide variety of data specific to the project.

They are described in "Project stage: An information system: Data and general properties of the project" and in the technical note "Use of variables".

### **Generate terms**

Consult the technical note "Use of variables".

### **Lists: Values**

Values of the variables associated with concepts and take-off lines. Consult the technical note "Use of variables".

### **Lists: Archives**

List of all files associated with the project.

See "Presto at the Project Stage: An Information System: Complementary Project Files".

### **Layouts**

[\*]

Each file appears only once.

[Graphics]

Graphic files. Each file appears only once.

[Unsa associated]

Files that have not been associated with concepts or documents.

[Associates] Concepts

Each file appears as many times as it is associated with concepts.

[Associates] Specifications in concepts

Text-type files associated with concepts. Each file appears as many times as it is associated with a concept.

[Associates] | Contracts Orders | Deliveries and parts of project | Bills

Text-type files associated with each document type. Each file appears as many times as it is associated with the document.

*Subordinate window "Miniatures"*

Displays the thumbnails of the associated files.

### **Lists: Gallery**

It is accessed by double-clicking on an associated file in the "Thumbnails" window or in the "Files" window.

If the file is text, its behavior is as indicated for text windows.

When it contains a chart, the following actions are available:

ACTION	RESULT
Double-click with the mouse wheel	In drawings, zoom by extension In images, zoom by extension and 1:1, alternatively
Mouse wheel	Zoom in and out
Click and drag	Zoom by window
Drag with the mouse wheel	Displacement

### Lists: Relationships

List with all the relationships between higher and lower concepts. Allows you to perform global queries and operations on the fields of the relationships.

By removing a concept in windows that show relationships, such as this one and that of estimates, only its relationship with the higher concept disappears. The concept only disappears from the project if it is removed from the last relation unless it appears as a supply or cost center in a document.

#### *Layouts*

##### [\[Chapters and work units\]](#)

Relationships that support take-off and certification.

##### [\[Work units and subheadings\]](#)

Relations between two items.

##### [\[Work units and auxiliaries with lower\]](#)

Relations where the higher concept is split or auxiliary.

##### [\[Concepts and QMASS\]](#)

Relations where the lower concept is of type QMASS.

##### [\[Contracts\]](#)

Relations between contracts and supplies.

## **Lists: Spaces and phases**

Regarding spaces, consult the technical note "Use of spaces".

This window shows the set of spaces and certifications or phases of the entire project, and its layouts refer to those specific to the subordinate windows that are described below in the certifications or phases, except the following:

### **[Certifications] Chapters**

Displays the data in the phases by certification table and serves to delete calculated values that cannot be deleted otherwise.

## **Lists: Take-off lines**

This window shows the take-off lines associated with the relationship between the concept and its superior. The general process is described in "Presto at the project stage: Take-off".

This information is seen in two types of windows, with the following characteristics:

### **Main menu window "VIEW"**

It contains all the take-off lines of the estimate, to facilitate checks and global operations.

### **Subordinate window of the "Estimate" window**

Contains the take-off lines of the active item.

## ***Layouts shared by the two window types***

### **[\*] Summary**

All take-off lines with the basic fields of TakeoffLines.

### **[Est] Dimensions**

Lines that belong to any state of the estimate, except the canceled one, with the basic fields of the TakeoffLines.

### **[Plan] Dimensions**

Take-off lines associated with a planning phase.

### **[True] Sizes**

Take-off lines associated with a certification phase.

[\[True || Real\] Sizes](#)

Take-off lines associated with a certification or execution phase.

[\[\\*\] Dimensions and phases](#)

All take-off lines.

### ***Unique layouts of the main window "Take-off lines"***

[\[Est\] Identification data](#)

Estimate lines with fields that come especially from BIM models.

[\[Est || Plan\] Dimensions](#)

Take-off lines that belong to the estimate or are associated with a planning phase.

[\[Est || True\] Sizes](#)

Take-off lines that belong to the estimate or are associated with a certification phase.

[\[Origin\] Revit](#)

The content of this diagram conforms to the information contained in Presto from which it comes, filtered by the content of the "TakeoffLines.Origin" field.

[\[StateEst\] Approved and pending](#)

Filters the take-off lines whose status is as indicated by the layout.

[\[Cert\] Identification data](#)

Take-off lines associated with a certification phase, with fields that come especially from BIM models.

[\[References\] Linked take-off lines](#)

Consult the technical note "Take-off transfers".

[\[\\*\] Identification data](#)

All the take-off lines with the subtotals for all phases, with the fields that come especially from BIM models.

### ***Unique layouts of the subordinate window "Take-off lines"***

[\[\\*\] BIM Localization](#)

All take-off lines with their location data in the BIM model.

#### [\*] BIM Identification

All take-off lines with their identification data in the BIM model.

#### [\*] Linked elements

All take-off lines with their dimensions and location and identification data in the BIM model.

#### [Est || || Plan Task] Planning

Take-off lines that belong to the estimate or are associated with a planning phase or a task.

#### [Est || True] Certification

Estimated or certified take-off lines with their dimensions.

#### [Est || True] BIM Certification

Estimated or certified take-off lines with their location data in the BIM model.

#### [Plan || Cert] Planning and certification

Planned or certified take-off lines with their dimensions.

#### [Cert] BIM Identification

Take-off lines associated with a certification phase, with their identification data in the BIM model.

#### [\*] BIM identification and phases

All the take-off lines with the subtotals for all phases and with the identification data in the BIM model.

### **Lists: Temporary take-off lines**

See "Presto at the project stage: Take-off lines: Importing take-off lines".

#### ***Layouts***

##### [Different estimate]

##### [Different planning]

##### [Different certification]

Take-off lines in which there is a difference in estimate, planning and certification, respectively between the reference and project.

#### [New Items]

Take-off lines of the reference that belong to items to be added to the project.

#### [Insert or Update]

Take-off lines that will be transferred to the project.

#### [Deletion]

Take-off lines that do not appear in the reference, but in the project. They may represent an excerpt from the reference, or they may have been deliberately removed. The user must decide the action to be carried out according to the objective pursued. If they are not eliminated, when transferring the take-off lines on the site will be eliminated.

#### [\*] Dimensions and phases

All temporal take-off lines.

#### READING CAD

Take-off lines of a drawing generated from the "CAD" window.

#### Lists: Prices

The main window "Prices" shows the complete list of alternative prices and other data associated with a concept, which is stored in the "Prices" table.

The use is described in:

- Prices for references and bidders that are described in "Project stage: Multiple prices and comparison of offers".
- Supplier prices for contracts, described in "Presto for the construction company: Contracting and purchasing".
- Amounts in other estimates and linked projects, described in "Presto at the project stage: An information system: Integrated consultation of estimates".

The subordinate window "Prices", shows this information of all entities for the active concept.

The subordinate window "Prices of a project" displays the information of all the concepts associated with a linked entity or project.

In the header track you can check if a field in the window is the single value of the "Concepts" table or the multiple value with the same name of the "Prices" table.

### **Layouts**

#### **[Prices]**

Relations between price and concepts.

#### **[Bidders]**

Relationships between bidders and concepts.

#### **[Projects] Concepts**

Relationships between projects and concepts of type price and QMASS.

#### **[Projects] Entities**

Relations between projects and entities, such as suppliers and building agents.

#### **[Suppliers]**

Relationships between suppliers who have contracts and concepts.

#### **[\*]**

All relationships between entities and concepts.

### **Messages: Messages**

Text window with messages, warnings (blue) and errors (red) issued.

If an option generates repetitive messages, only the first ones are issued.

---

### **Tools**

Operations that affect the estimate globally, including all pricing structures. Each is described where it is used.

#### **Tree**

Restructure by items

Restructure by take-off lines

Reduce levels

See "Project stage: Estimate organization: Estimate reorganization".



## Work units

Merge

Expand

Restructure

See "Project stage: Estimate organization: Estimate reorganization".

## Concepts

Update

Replace

See "Project stage: Estimate organization: Estimate reorganization".

## Prices

Operate

Consult "Project stage: Estimate: Calculation of prices and quantities".

Adjust

Consult "Project stage: Estimate: Calculation of prices and quantities".

## Take-off

Restructure

See "Project stage: Take-off lines: Restructure".

## Texts

Format the delete

Translate

See "User interface: Text windows".

Generate terms

Consult the technical note "Use of variables".

## Associated files

[Trading charts](#)

[Trading files](#)

See "Complementary files to the project".

[Specifications](#)

Consult "Project stage: An information system: Specifications".

## Parametric

Consult "Regenerate all" in the section "Project stage: Estimate: Parametric concepts".

Refer to "Generate by take-off lines" in the Cost-It manual.

The rest of the options are described in the technical note "Creating parametric concepts".

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## Processes

Operations that affect specific price structures, such as those relating to the target, and are described in the process where is used.

## Estimate

[BIM Types](#)

Consult the Cost-It Manual.

[Compare of projects](#)

See "Project stage: Organization of the estimate".

## Objective

Generate

Merge items

Desglosar partidas

Update breakdown

Restructure breakdown

See "Presto at the planning stage: Economic planification: Options for organizing the objective".

## Planning and certification

Crear fechas

Consult "Presto en la gestión del proyecto: Certificación".

Complete the economic planning

Consult "Planning stage: Economic planification".

Copy quantities

Consult "Presto for the construction company: Production".

Animate the model

Status in the model

Consult the Cost-It Manual.

Fill in agenda

Some functionalities related to the agenda and concepts need to perform this action.

## Gantt diagram

Create tasks

Consult the technical note "Plan-It: Turning estimate into planning".

Animate the model

Status in the model

Consult the Cost-It Manual.

## Contracting

Fill in groups

Calculate resources

See "Presto at the planning stage: Resource management".

Create contracts

See "Presto para la empresa constructora: Contratación y compras".

## Bills

Create

See "Planning stage: Financial planning" and "Presto for the construction company: Invoicing: Invoices".

## Multiobra

Link

Update

Update documents

Export documents

Consult "Project stage: A system of information: Integrated consultation of estimates" and "Presto for the construction company: Centralized invoicing".

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## Help

Presto Manual and other user aids.

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*You can also access the help topics and the various options in the Presto menus from the search box to the right of the "Help" menu on the ribbon.*

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## Options

Manual de Presto

Give access to this same manual.

Release Notes

Clarifications on the latest version.

### [Frequently asked questions](#)

Access a database with queries and suggestions for using Presto.

[www.rib-software.es](http://www.rib-software.es)

Corporate website.

### [License Agreement](#)

Displays the license agreement.

### [About Presto](#)

Version of Presto and corporate information.

## Dynamic menus

They are located to the right of the Presto window and in general have a content very adapted to the needs of the user, such as assistants, complements, most used projects, and reports.

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### Plug-ins

They are programs independent of Presto that perform specific tasks on the projects. The . EXE and . VBS listed in the directory listed in "File: Working Environment: Directories: Add-ins", and executables that are in the specific user directory.

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*To avoid unwanted interference, pre-close the projects that are open with other versions of Presto.*

---

### Develop add-ons

The complements can read and modify any data of the project. Users who want to write an add-in should know some programming language capable of interacting with the automation server available in Presto, such as VBScript.

The server has numerous functions to facilitate the reading and modification of these projects, such as their creation and opening, positioning in tables, reading and insertion of records and fields, etc.

To access the automation server, you need:

- Have run Presto as an administrator at least once on the computer on which it is to be programmed.
- Start the application by creating an object of the class "Presto. App.18".

In the case of add-ons that communicate with Presto through the Web API, the files "PrestoCloudJsonModel.dll", "PrestoCloudApiClient.dll" and "Newtonsoft.Json.dll" must be included in the same directory where these add-ons are located.

On the website [www.rib-software.es](http://www.rib-software.es), section "Plugins or complements", there are examples and documentation related to these functions.

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## References

This menu contains quick access to the user's projects and other help references for estimate writing.

### *Estimates, price databases and catalogs on the Internet*

The content is updated over the Internet, and the user has no control over its content.

### *Estimates defined in the user's project environment*

In this group are the Presto archives of:

- "Working environment: Directories: Projects".
- "Working Environment: Directories: References".
- "Working Environment: Frames".
- Directories accessible through Presto Server.

The menu content is updated each time Presto is started and is limited to 512 entries.

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## Reports

This chapter describes the options that allow:

- Generate on-screen or printed results by using predefined or custom reports.
- Generate documents from Word and Excel templates.
- Export reports to other formats such as PDF, RTF, and TXT.
- Create new reports or modify existing ones.

Reports are files with the extension ".PrestoReport". Each file contains a thumbnail of the first page, which is visible from Windows File Explorer after Presto has been installed on that computer. If the design of the report is modified, the thumbnail is generated again using the active project.

### *Choose reports*

The "Reports" menu in the main Presto window displays and allows to print the reports and templates in the reports and templates or the user directories, as seen in "File: Working Environment: Directories".

The menu content is updated each time Presto is started and is limited to 512 entries.

## Print reports and templates

The dialog box allows you to view the report, export it, or print it directly. Allows to choose reports or templates located in any directory, displaying the thumbnail if the appropriate option is chosen in the dialog box.

## Reports in other languages

To print reports in a language, there are the following alternatives:

- Print reports designed in a certain language, which are included by default in the directory related to each localization.
- Multi-language reports. In this case, the texts related to the language selected for the interface are printed.

To translate reports into another language, see "Design Report: File: Translate Report".

## Preview

Displays the final appearance of the report. Header options allow you to traverse the report at different scales and run the print, full or by pages.

If a report exceeds the width of a page, more pages are generated, unless the excess area is less than the width of the right margin.

The zoom level can be modified by pressing the left and right mouse buttons or by pressing the mouse wheel with the [Ctrl] key pressed.

## Tracking

Prints the control name instead of its content, making it easier to modify reports.

Each section appears with a different color, except if the section has its own color, to easily detect its limits, even if they do not have printable content. The colors of nested sections, such as "Element", are displayed in various gradations of the same basic tone.

## Excel and Word document templates

Consult the technical note "Interoperability between Excel and Presto".

## Automatic reports

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*Specific instructions for design are in the "Design Report" chapter of the manual.*

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*Design report*

This option or icon gives access to the report design window. When run from a table window, a report containing the visible columns and applied filters is automatically created, except for filters s by palabras, by text or background color, and by selection. In hierarchical mode, it considers the levels chosen from the drop-down list.

If a subordinate window is active, the report will also print the elements of the subordinate window related to each of the principle.

The result is a report with content like that displayed in Presto windows.

*Automate report customization*

You can reuse the properties of a report using it as a base, because many of its properties are automatically applied to new reports.

The base report should be in the template directory, and its name should be "Template" or "Template".

The properties of each section are copied to the following positions:

SECTION	MOVE TO THE SAME SECTION OF THE REPORT
Prologue	Before
Beginning	Before
Headboard	Before
Master page	Overlaid on content
Foot	Behind
Final	Behind
Epilogue	Behind

**Export**

Allows you to configure the characteristics of the file resulting from the export of the report. The "File: Export" option is available in the window for designing reports and has the same functionality.

## *Format*

### *PDF*

The "Entire Document" paper size generates a single page with the necessary dimensions to fit the entire report, a single header, and a single footer. It is especially suitable for printing large documents, such as the Gantt chart. If you choose the size "User" you can directly set the width and height.

### *RTF*

In this format, which allows you to retrieve the result of the report with Word, different styles are assigned to each section, which allows you to easily modify the generated document. Rectangles are not exported.

The paper sizes are the same as the PDF format.

For the numbering of the pages, the functionality of the RTF format is used, which implies that the variable "\_LastPage" is not compatible with export, always returning the value '0'. If the report contains a control that prints a text with the variables "\_Page" or "\_LastPage" interspersed, it will not be included in the export.

### *TXT*

Generates a plain text file to import into other programs. Reports should have an orderly structure of fields, with no overlaps.

Options specific to this format allow:

- Fill in blanks to create the distance between fields.
- If the previous option is enabled, you can also define the number of lines on each page and the number of characters or columns on each line. If there are too many characters on the right, they will overlap the initials of each line.
- If the above option is not active, you can choose a field separator. If you need fixed-length fields, format each field as desired.
- If there is a field separator chosen, no page breaks are generated.
- Export the header and footer on all pages of the report, only once or none.

The generated file can be added to the end of the file of the same name.

## Design reports

This section contains instructions for customizing existing reports or creating new reports.

Common options with Presto are explained in the chapters relating to Presto.

The "Design Report" window is accessible from "Home: Reports: Design".

### *Content of the reports*

Reports can incorporate any estimate information:

- Elements of any of the tables.
- General data, which are in "Properties".
- Any other value in the "Variables" window.

A report is a set of instructions for selecting, organizing, and formatting the information you want to print from the estimate, which are structured into *controls*.

Controls are rectangles and can contain fixed text, an estimate field, a calculated value, images, or lines. Controls are grouped into sections.

A section is a horizontal band that contains controls with information usually obtained from the same Presto table. The "Header" section, for example, indicates the content at the top of each page of the report, while the "Item" sections populate the central area of the page.

The information in each section is chained to the previous section establishing a relationship between the two.

### *Table binding*

To design a report, you must choose the table that contains the desired information and associate that table with a section. Using a single table, simple reports are obtained, such as bills of materials or supplies.

To report on data related to two tables, such as the list of concepts and the files associated with each table, you must open each table in successive "Item" sections. The table in one section must share some information with the table in the next section.

Presto prints each item in the chosen table in a section, and then all the items in the table in the next section whose key satisfies the mask entered when choosing this table.

In this way, the element in each section acts as the header or title of the elements in the next section.

In the example of the concepts and their associated files the sections are:

SECTION	BOARD	KEY	MASK
Element 1	Concepts	Concepts.Code	
Element 2	AssociatedConcept	AssociatedConcept.Code	Concepts.Code

Presto begins by printing an element from section 1; then prints all the elements in section 2 related to the element in section 1, until all the elements in each of the sections are finished.

A table can also be chained with itself; for example, the relationship table can be opened successive times to print hierarchical layouts.

### *Properties*

The properties of the report, sections, and controls are in "View: View: Properties". Expressions are written according to the rules that are in the "Expression builder".

### *[ox] Catch*

Inserts at the point in the report where the cursor is located the contents of the clipboard, which can be controls of the same or another report:

- If a control was selected before pasting, it does not delete or replace it.
- If a section is selected in the target report, all controls are pasted into the target report. In another case, each control is pasted into its original section. If there is no such thing, they are pasted in the last section in which something was pasted.

If any property of a control has a non-existent variable in the target report, it becomes blank, and a message appears indicating it.

---

## Files

### Save protected copy

It saves the active report so that it can be used normally, but without viewing or modifying its layout. A protected report cannot be checked out, so a copy of the original report must be saved.

### Translate report

Perform a process like that described in "Translate", translating the literals that are in the expressions of:

- The "Source" property of the text boxes.
- The "Question" column of the "Parameters" window.

Multi-language reports that use the `tr( )` function are translated leaving the literal that corresponds to the target language.

Text strings containing numbers are not translated.

It has its own dictionary in RTF format, which allows you to customize the translation using the terms that the user wants.

Once the translation is done, the user decides whether to save the report.

---

## View

### List of controls

Lists all controls in the report, or only those selected, with the section to which they belong and the contents of the "Source" field. Under each control appear all those who depend on it, with the field "Section" empty.

One or more controls can be activated by double-clicking the list, making it easy to locate the selected item.

### Field list

Table with all Presto fields and the table to which they belong. You can drag a field from this list to the report, creating a control that appears with the appropriate width for its contents.

### Decrease zoom

Decreases the display size of the report.

### Zoom 100%

Displays the design of the report in its natural size.

### Zoom in

Increases the display size of the report.

---

*You can also decrease and increase the zoom by pressing the mouse wheel with the [Ctrl] key pressed.*

---

## Properties

Define the characteristics of the report, sections, or controls. It also opens by double-clicking on the item. If multiple controls are selected, you can change all their common properties at once.

### Colors

Colors can be chosen in the dialog box or by directly entering the RGB color, which are the red, green, and blue components of an additive color system. Each index varies between 0 and 255 and the number is calculated by the expression:

$R + (G \times 256) + (B \times 256 \times 256)$

## Report Properties

To view them, click outside the report area.

### Width

Width of the printed area of the report in cm. You can also move the right edge of the report.

### Grid X and Y

Number of horizontal and vertical subdivisions of the grid, measuring 1 x 1 cm.

### Orientation

This orientation automatically changes the orientation of the printer when you print the report.

Paper size

The selected size automatically changes the size of the paper used by the printer when printing the report.

Columns

You can choose more than one column for reports that you want to print in large or country formats. The report layout must be appropriate to the resulting width of each column.

Repeat header and footer

In reports larger than one column, the header and footer can be printed only once per page or repeated for each column.

Common properties of sections

Height

Height in cm of the section. You can also move its bottom edge.

Background style

The contents of the master page are printed below all sections. If you want it not to be printed in a particular section, make its background visible, even if it is white.

Keep whole

It applies to the "Element", "Search", "Separator", "Separator End", "Element End" and "End" sections.

OPTION	BEHAVIOR AT THE BOTTOM OF THE PAGE
No	What does not fit goes to the next page.
The section	If the section doesn't fit on the page, move entirely to the next one.
With the lower ones	Only "Item" section. If the element and its bottoms don't fit on the page, move the entire set to the next page.

### [Jump before | Skip later](#)

It applies to the "Start", "Separator", "Element", "Separator End", "End Element" and "End" sections.

Specify a condition for generating a page break before or after you print the section.

### [Search n°](#)

All sections except "Master Page" and "Search".

Link to the section the contents of the "Search" section of the indicated number.

### [Adjustment](#)

Adjusts the content of the section to the upper or lower limit of the page. It affects all sections except master page, header, and footer.

## **Properties of the "Item" section**

### [Condition](#)

If it is fulfilled, it causes a jump to the "Element" section indicated in the "Element # property", leaving the intermediate lower ones, if they exist, unprinted.

### [Element No.](#)

"Element" section that is skipped if the expression noted in "Condition" is met.

### [Board](#)

Table of Presto's project that opens with the section.

### [Key](#)

The key field in the table by which the items in the section are sorted.

### [Mask](#)

Applies to the key field to filter the items that are printed. If it is alphanumeric, it must be entered and supports the wildcards "\*" and "?".

### [Selection](#)

Allows you to filter the elements to be printed using a Presto expression.

### [End element](#)

Prints at the end of the closing section to print totals or summaries.



| separator Separator end

It allows you to make headers and totals by group of elements of the section, creating a section "Separator" and another "End separator" respectively.

Characters separator

It is used to set the grouping criteria in the previous sections. This is the number of characters that the group shares, and they are counted in the key field if no other sort order is indicated.

The following special cases of separators can be used:

VALUE	KEY TYPE	SEPARATE THE DATES
1	Date	Days
-1	Date	Months
-2	Date	Years

VALUE	SEPARATE NATURES
-3	Act on concepts

Sort by

Sort order, which can be a table field, text box, or expression. The defect sort is by the key field and does not need to be recorded. Sorting by other criteria may result in slower execution of the report.

You cannot use fields or expressions that return a numeric value. This implies that, if, for example, you want to set a sort by the "Concepts.TotPres" field, you must use the expression "%Concepts.TotPres".

Common properties of controls

The controls move one grid unit for each press of the cursor keys.

## Number

The name of the new controls consists of the type of control and a number. It can be changed later; it must begin with a letter, and you can also use numbers and the characters "\$" and "\_".

Reserved names, such as project fields, function names, and language structures, cannot be used.

## Visible

Allows you to calculate auxiliary variables, which generate a necessary value in the report, but you do not want to print. Non-visible controls take up space in the printed report, unless the condition below is not met.

## Condition

If the condition is not met, the control does not print or take up space.

## Properties of the "Text Box" control

### Autoextensible

If the text to be included does not fit in the rectangle of the control and the "Yes" response is enabled, the width of the control is maintained, but the number of lines is increased as much as necessary.

### Origin

A Presto expression that indicates what you want to print on the control.

Numeric results are printed with all their decimal places, without separator for thousands. This result can be formatted by formatting this same field with the function '%', as described in the "Expression builder", or with the criterion of the "Format" field.

### Fountain

Allows you to choose the font and font size available on your computer.

### Numeric format

#### Decimals

The number of decimal places with which the variable will be printed.

#### + sign

Adds the "+" character when the value of the variable is positive.

### Thousands separator

Prints the thousands separator, depending on the locale of the operating system.

### In letter

Converts a number to its alphanumeric expression into a letter in the language indicated in "View: Project: Settings: Miscellaneous", or in Roman numerals.

### Gender

Male or female gender of the letter value of the variable.

### B

Displays the letter value of the variable in uppercase.

### Alphanumeric format

Alphanumeric expressions are printed inside the text box with:

- The maximum permissible width in all predefined variables, except for texts.
- The width related to the actual text in the texts.
- The width related to the value assigned for user-defined variables.

### Remove targets

Removes blank characters at the ends of the text.

### Mays | Mins

Prints the variable in uppercase, lowercase, or as is.

### Words

Automatic hyphenating of words.

### RTF format

Prints the text as formatted, unchanged, except that the status of the dash option is considered.

Multiple line spacing becomes single.

### Date format

A date-type variable is internally the number of Julian or correlative days elapsed since January 1, 1980. The date format option allows you to convert this number to a date as you want to print it.

Text

Allows you to choose a common date format that is listed.

If you want another format, you can write an alphanumeric expression, where the characters that appear in the following table have a special meaning:

FORMAT	DESCRIPTION
D, M, Y	Day, month, or year, in figures, omitting zeros on the left.
DD, MM, YY	Day, month, or year, in figures, with double digits.
DDD, MMM, YYY	Day, month, or year, in letter.
MMMM	If the language is Catalan, month in letter and preceded by "d' " when necessary.
Mn	Month in letter, with the initial n characters.
Dr, Mr, The	Day, month, or year in Roman numerals.
In	Year in figures and with a thousand separator.

Characters not included in the table are printed unchanged. For example, the expression:

DD de MMM de Y

Generates the impression:

23 de Marzo de 2022

Alternatively, you can use the date formatting feature:

'%(format)f'(numeric expression of date)

The expression "format" works like the "Text" box mentioned above. For example:

'%(D de MMM de Y)f'(today)

Prints:

5 March 2003

## Settings

### Justification

The "General" justification aligns numbers on the right and date-type variables and alphanumeric variables on the left.

The justification "None" respects the indentation applied to the text.

### Fill

A character that will fill the free space between the control box and its contents if it does not fully occupy it.

### Calculation

Allows you to define variables that perform a calculation on the expression of the "Origin" property of the text box.

### Operation

Calculates the sum, average, maximum, or minimum of the control indicated in the "Origin" property of the control. It is commonly used in "End Element" or "End" sections.

### Element No.

The number of the item on which you are performing the operation.

### When printing

When the "Source" option is chosen, it only performs the indicated operation if the element on which it is applied has been printed. It may happen that the item has been traversed by the report, but not printed yet, because it does not fit on the page. In this way the correct result of the operation is obtained in special sections, such as footer.

Choose the "No" option to perform the operation as soon as the item is toured by the report, whether printed or not.

### Restart End Item

Zeros the value of the variable by executing the indicated "Item End".

### Restart End Separator

It sets the value of the variable to zero by executing the indicated "Separator End".

### Restart Page Break

Sets the value of the variable to zero when a page break occurs.

### Search n°

"Search" section on which to perform the operation.

### Condition

The calculation is performed only on concepts that meet this condition.

## Properties of the "Line" control

### Inclination

The different possibilities "|", "", "/" and "\", force the orientation of the line.

### Page break

Enter a page break along with the line, with different options. You can include a condition in the related property.

## Properties of the "Rectangle" control

### Background style

You can choose a visible or invisible background.

## Properties of the "Chart" control

### Origin

Origin of the graph.

OPTIONS	DESCRIPTION
File	Image file in any supported graphic format.
Miniature	Thumbnail of the associated file.
Graph	Graphical representation of the associated file.
First image	First associated file of type image.
First drawing	First associated file of vector type.
Field	Represented by a graph, like natures.

## *File*

### Source = File

The name of the file with the graphic. The chart is stored in the report, so you don't need to keep the original file.

### Origin = Field

The name of the Presto field represented by the chart.

### Auto expandable

If enabled, the size of the control increases to the size of the chart, moving the following controls or sections, if necessary. It is useful for reports with images or drawings associated with the concepts of the project.

## **Properties of the "Gantt" control**

It considers several Gantt chart display conditions at that time in Presto. The following properties, except "Header", are common to the entire report.

### Headboard

Displays the timescale of the diagram.

### Start date

Date, in the format supported by Presto, from which the printing of the diagram begins.

### mm / unit of time

Millimeters of width assigned to each column of the unit of time.

## **Aids to adjust the position of the controls**

### Rule

Horizontal and vertical rules in the report layout. They allow multiple selections of elements.

### Grid

Displays a grid in the report layout that helps align controls. The properties of the "X Grid" and "Y Grid" report indicate the number of subdivisions per grid unit.

### Start: Edit: Force grid

Adjusts operations on controls and sections that affect their position or size to grid subdivisions, even if the grid is not visible.

### Parameters (questions)

A list of user-definable questions that are presented when you preview, print, or export the report.

PROPERTY	DESCRIPTION
Variable	<p>A variable that takes the value of the answer, with the same rules as the names of controls.</p> <p>The type of the variable depends on the content of "Response".</p>
Question	<p>Text of the question to be asked.</p> <p>Questions in the different languages can be included for Presto, and each of them must be separated by ";", and in the following order: Spanish; Catalan; English; French; &lt;internal&gt;; Portuguese; German; &lt;internal&gt;; Italian; Polish</p>
Length	<p>The maximum number of characters in the response.</p>
Mays	<p>Automatic shift to uppercase response.</p>
Answer	<p>A default value, which also affects the type of the variable.</p> <p>Alphanumeric responses should be in quotation lines; if you want an alphanumeric variable with no default value, enter "".</p> <p>If you want a drop-down list of alphanumeric responses, type the options separated by ";".</p>

If there is a text box named "Help", its contents are displayed when you run the report, along with the questions, and in the language of the project.

[Upload parameter](#) | [Download parameter](#)

They alter the order of the questions.



---

## Tools

Allows you to select a control to create or add content to the report layout. The coordinates of each control can be seen at the bottom of the window.

### Select

Select one or more controls.

### Text box

Creates a control to print a field, variable, expression, or fixed text.

### Line

Creates a control that prints a line.

### Rectangle

Creates a control that prints a rectangle.

### Graph

Creates a control to print the associated images or drawings, or a separate graphic file.

### Gantt

Creates a control to print a Gantt or header on a Gantt chart.

## Format of controls

### [ox] Copy formatting from the control

Converts the formatting properties of the chosen control to the default properties.

### [ox] Paste formatting to control

Applies the default properties to the chosen controls.

### [ox] Align

Aligns the selected controls.

### [ox] Adjust size

When choosing "Snap to Content", if the control is a text box, adjust the height to the font size; if it is a graphic that comes from a file, it fits its size.

### [ox] Bring to the front

Places the selected controls in front of other overlapping ones.

[\[ox\] Send to fund](#)

Locate the selected controls behind other overlays.

---

## Section

### Insert

Insert an "Item" or "Search" section in front of the chosen section.

### Master page

Print a common background or watermark on all pages of the report, except in the "Prologue" and "Epilogue" sections; the content of the other sections is printed on it.

### Prologue

It is printed at the beginning of the report, and then a page break is inserted.

### Headboard

Its content is printed at the top of each page, except on the pages of the "Prologue" and "Epilogue" sections.

### Beginning

It is printed exclusively under the header of the first page of the report.

### Element

Allows you to print a record from a Presto table. For example, a "Concepts.Code" control, without any conditions, prints a line for each concept in the table, with its code. The chaining of "Element" sections allows to print the nested information of the successive hierarchical levels of the concepts. After each top-level element, all its lower elements are printed, and so on. You can see an example at: "Design Report: Table Binding".

You can also concatenate "Element" sections associated with other tables, to print the concepts and their take-off lines, the suppliers and their supplies, the invoices, and their collections and payments, etc.

To each "Element" section you can add the sections "End element", "Separator" and "End separator".

See "Properties of the 'Item' section" for the various ways to select and sort items.

## Final

It is printed only once at the end of the report, to incorporate final comments, totals, or signatures.

## Foot

It is printed at the bottom of each page, except in the "Prologue" and "Epilogue" sections.

## Epilogue

It is printed at the end of the report, on a separate sheet, after the "Final" section.

## Search

It is associated with a Presto table and links to another section of the report. It is printed once per record in the selected table and works similarly to the "Item" section.

It serves to nest data more flexibly than in the "Item" sections. For example, to print invoices with their supplies you can use two "Item" sections; but if you want to print on each invoice the collections and payments after the supplies, an "Item" section is not useful, since it looks for the expirations of the supplies, which do not exist. To do this, add a "Search" section with the expiration data instead of the third "Item" section.

A "Search" section links to a section of any type except another "Search" section, by selecting its number from the "Search #" drop-down list of the properties of the section to which it links. The lines generated by the "Search" section are printed after each element of the section to which it is linked.

The "Search" section has the properties "Table", "Key", "Mask", "Selection" and "Adjustment", which project as in the "Element" section, and "Item Number", which indicates the desired record of the table; if it is null, it goes through all the records. You can open as many "Search" sections as you want, but you can only link one per section.

Operations on "Search" sections automatically reset their value each time it is linked to the "Search" section.

# Estimating tutorial

For starting this tutorial Presto settings must be the installation default. In case of doubt, close Presto and delete the user profile:

[PrestoNNN.PrestoPerfilXml](#)

The user profile is in the directory indicated in "File: Working environment: Directories: Configuration".

---

*The option "File: Working environment: General: View header concept data in subordinate windows" should be disabled, so the active concept is the concept where the cursor is in the central area of the table.*

---

---

## 1 Creation of concepts

We are going to make an estimate, with take-off lines and valuations.

### Create a new project

Let's create a new project called COURSE:

1. Choose "File: New".
2. Check the directory in which the project is to be saved and change it if needed.
3. Write "COURSE" in the "Name" box, choose <None> in "Template", and accept.

### Create the structure of chapters and work units

---

*To move to the field on the right you can use the [Enter] key on the numeric keypad or the [Tab] key.*

*To go to the next line, use the [Enter] key on the alphanumeric keypad.*

---

Let's create some chapters and a work unit.

In the "Estimate" window:

1. Write "01" in the "Code" field or press [F7].
2. Move to the "Description" field and type "EARTHMOVING".
3. Move to the bottom line and type "03" in the "Code" field.

4. Write "FOUNDATIONS" in the "Description" field.
5. Repeat the steps to create chapters "04 | STRUCTURES" and "05 | ENCLOSURE".
6. Double click any field in the first chapter to move down to its breakdown. The chapter appears now in the header line.
7. Add the work units:

CODE	DESCRIPTION	QTYEST	UNIT	EST
E02EM030	EXCAVATION IN TRENCHES	48,08	m3	13,00

The amount of the item is calculated as a product of the quantity by the price and has the yellow background, indicating that it is a non-editable field.

### Create subchapters

*The context menu is accessed with the right mouse button.[ox]*

Chapter "04 | STRUCTURES" will be divided into two subchapters, concrete and steel:

1. Move up with a double click on the header, double-click on this chapter, and add the following codes and descriptions:

CODE	DESCRIPTION	QTYEST	UNIT	EST
04	STRUCTURES			
04H	CONCRETE	1		
04A	STEEL	1		

2. The icon in the "NatC" field shows that these concepts have been created with the nature "Work unit". On this field of the concepts "04H" and "04A" change the nature to "Chapter".

### Decompose a work units

Let's create the breakdown of "E02EM030 | EXCAVATION IN TRENCHES".

1. Place that item in the header by double-clicking on it.

2. Complete the work units with the following information:

CODE	DESCRIPTION	QTYEST	UNIT EST	
E02EM030	EXCAVATION IN TRENCHES		m3	
O01OA070	Mason	0,125	h	12,00
M05EN030	Hydraulic excavator	0,250	h	42,00

3. Assign the appropriate nature to each concept.
4. Move up a level with double click on the header and notice that the price of the work unit is magenta, indicating that it is the result of a calculation.

### Add a text

Let's complete the description of this work unit by adding a text.

1. Click on the "Text" icon in the tool bar of the "Estimate" window.
2. In the "Text" window write:  
Excavation in trenches, on compact gorund, by mechanical means, without loading or transport to the landfill.
3. Select the text just added, click the "Text colour" icon in the tool bar of the text window, and mark a different colour.

### Duplicate a concept

Let's duplicate the previous work unit to create a similar one.

1. Choose "Duplicate" in the menu over the "Code" field of the "E02EM030" concept.
2. Change the proposed code to "E02PM030".
3. In the new item change the contents of the "Description" field to EXCAVATION IN WELLS.
4. In the "Text" window replace "trenches" with "wells".
5. Close the "Text" window.

### Modification of prices and quantities

The concept "O01OA070 | Mason" appears in the breakdown of the two items.

Type 13.09 in its "Est" field and watch as both amounts change.

To reflect the differences between trench and well digging, change the quantities of the new item.

CODE	DESCRIPTION	QTYEST	UNIT
E02PM030	EXCAVATION IN WELLS	6,93	m3
O01OA070	Mason	0,130	h
M05EN030	Hydraulic excavator	0,260	h

Each concept appears only once in each project. The changes in its data, such as price, description, or unit, affect the entire project.

However, the quantity of one concept in the breakdown of another is a property of the relationship between both. The same concept can be part of many relationships with other higher-level concepts, each with a different quantity.

### Percentage concepts

---

*The breakdown of a work unit may contain concepts calculated as a percentage over other concepts*

---

Let's add a percentage to the item "E02PM030".

1. Below the current breakdown of the work unit add a concept with the code "%AUX03" and nature "Other". Notice that "QtyEst" shows the current price of the work unit divided by 100, in magenta colour.
2. In the "Description" field type "Auxiliary equipment" and in "Unit" type "%".
3. To increase 3% of the price type "3" in "Est" column.

Percentage concepts act only on the concepts above. A concept type percentage can be used it in other breakdowns, with the same percentage value.

Indirect costs

If the COURSE project owner is a public administration, we can add the established percentage of indirect costs.

- 1. In "View: Project: Settings" choose the "Calculation" tab.
- 2. Write "5" under "Percentage of indirect estimate costs" and click "OK".

Notice how the "AmntEst" field in both work units reflects the change. The indirect cost affects all the work units when appearing under a chapter.

Open a reference

*A reference is any other open Presto file while working on a project.*

Open a price database.

- 1. Choose "File: Open".
- 2. Look for the "Tutorial\ESP" folder, located in the Presto installation directory.
- 3. On the project "Extracto del cuadro de precios Centro" choose "Open as read-only".

Copy a concept from a price database

A concept is selected by clicking the numbered box on the left.

- 1. In the reference, double-click successively:

CODE	DESCRIPTION
E	PRECIOS DESCOMPUESTOS
E02	ACONDICIONAMIENTO DEL TERRENO
E02A	LIMPIEZA Y DESBROCE

- 2. Select the concept "E02AM010 | DESBROCE Y LIMPIEZA DE TERRENO A MÁQUINA" and copy it with "Start: Edit: Copy".
- 3. Move to the "Estimate" window of the project COURSE and place in the header the chapter "01 | EARTHMOVING."
- 4. Move on an empty line and insert the concept with "Start: Edit: Paste".



5. Write "61.52" as the estimated quantity of this item.

The copied item has the price of magenta color, since it is calculated, and from now can be modified without affecting the original reference concept.

### Copy more concepts from the price database

Repeat the above process by taking the necessary items from the price table and placing them in the COURSE project until it has the following content:

		Código	NatC	le	Resumen	CanPres	Ud
1/0	-	0			<b>CURSO</b>	1	
2/1	- 1	01			<b>MOVIMIENTO DE TIERRAS</b>	1	
3/2	+ 1.1	E02EM030			EXCAVACIÓN EN ZANJAS	48,08	m3
4/2	+ 1.2	E02PM030			EXCAVACIÓN EN POZOS	6,93	m3
5/2	+ 1.3	E02AM010			DESBROCE Y LIMPIEZA DE TERRENO A MÁQUINA	61,52	m2
6/2	+ 1.4	E02TT040			TRANSPORTE VERTEDERO < 10 km CARGA MECÁNICA	49,50	m3
7/1	- 2	03			<b>CIMENTACIÓN</b>	1	
8/2	+ 2.1	E04CM040			HORMIGÓN LIMPIEZA HM-20/P/20/I V.MANUAL	1,24	m3
9/2	+ 2.2	E04CA060			HORMIGÓN ARMADO. HA-25/P/20/I V. GRÚA	5,99	m3
10/2	+ 2.3	E04SA020			SOLERA HA-25, 15CM.ARMA#15X15X6	108,00	m2
11/2	+ 2.4	E04SE020			ENCACHADO PIEDRA 40/80 E=20CM	108,00	m2
12/1	- 3	04			<b>ESTRUCTURAS</b>	1	
13/2	- 3.1	04H			HORMIGÓN	1,00	
14/3	+ 3.1.1	E05HSA010			HORMIGÓN ARMADO HA-25/P/20/I PILAR ENCOFRADO METÁLICO 30x30 cm	5,44	m3
15/3	+ 3.1.2	E05HVA030			HORMIGÓN ARMADO HA-25/P/20/I ENCOFRADO MADERA JÁCENAS DE CUELGUE	16,74	m3
16/3	+ 3.1.3	E05HVA075			HORMIGÓN ARMADO HA-25/P/20/I ENCOFRADO MADERA ZUNCHOS PLANOS	7,20	m3
17/3	+ 3.1.4	E05HFA060			FORJADO DOBLE VIGUETA AUTORRESISTENTE 22+5 cm B-80 cm BOVEDILLA CERÁMICA	240,00	m2
18/3	+ 3.1.5	E05HLA070			HORMIGÓN ARMADO HA-25/P/20/I ENCOFRADO MADERA LOSA INCLINADA (100 kg/m3)	0,90	m3
19/3	+ 3.1.6	E05HFS160			FORJADO DOBLE VIGUETA SEMIRRESISTENTE 17+5 cm B-80 BOVEDILLA CERÁMICA	124,23	m2
20/2	3.2	04A			ACERO	1,00	
21/1	- 4	05			<b>CERRAMIENTO</b>	1	
22/2	+ 4.1	E07LSB040			FÁBRICA LCV-5 1P MORTERO M-5	252,76	m2

### Copy concepts from another project

You can copy work units from any other project, or even entire chapters:

1. Open the "CursoControl" project in the "Tutorial\ESP" directory.
2. Copy the chapter "SANEAMIENTO"
3. Insert it in the project COURSE.

4. Close the references.

## Sort concepts

---

*To drag a concept, select it, left click anywhere on the line, and release the button on the desired target line.*

---

Let's change the order of the items in chapter "01".

1. In the "Estimate" window, place the chapter in the header.
2. Select item "E02AM010 | DESBROCE Y LIMPIEZA DE TERRENO A MÁQUINA"
3. Drag the line to the first position.

Repeat the process to sort the list of chapters.

## Auxiliary prices

Let's create an auxiliary price, adding a breakdown in the concept "P01MC040 | Grey cement mortar CEM-II/B-M 32,5 M-5", located in the only work unit of chapter "05 | ENCLOSURE".

1. Place the auxiliary in the header.
2. Complete the following data and note that when you type the code of concepts already existing in the project, its content is automatically filled.

CODE	DESCRIPTION	QTYEST	UNIT EST	
P01MC040	Grey cement mortar CEM-II/B-M 32,5 M-5		m3	
O01OA070	Mason	1,700	h	13,09
P01CC020	Cement	0,250	t	95,20
P01AA020	River sand	1,100	m3	15,70
P01DW050	Water	0,255	m3	0,71
M03HH020	Concrete mixer	0,400	h	2,00

3. Assign the proper nature to new concepts.
4. Move up with a double click on the header and check that the price of the auxiliary concept is now calculated, and the code has a grey background.

### Browsing the project

Learn to navigate the project until you understand its structure and become fluent with the different ways of moving with Presto.

1. Use "Start: Navigate: Next" and "Start: Navigate: Previous" to see the breakdown of all the work units in chapter "01".
2. Click on the path above the header of the "Estimate" window to access the higher-level concepts.

Access the "View: Tree" window and navigate through the project, using the tools to display levels.

---

## 2 Take-off lines

### Create take-off lines

Let's create the take-off lines of the items in chapter "01 | EARTHMOVING."

1. Click on the "Take-off lines" icon in the tool bar of the "Estimate" window.
2. Set as active concept "E02AM010 | DESBROCE Y LIMPIEZA DE TERRENO A MÁQUINA"
3. In the "Take-off lines" subordinate window, unfold the "Space" list and choose "Spc0010".
4. Introduce the following lines:

SPACE	COMMENT	N	LENGTH	WIDTH	HEIGHT
Spc0010	North Zone	1	3,00	3,50	
Spc0010	Ground level	1	8,00	3,00	
Spc0010	Access road	1	3,00	2,00	
Spc0010	Irregular area	1	7,02		
Spc0010	Garden area	1	2,00	7,00	

---

*You can use [F9] to copy the value in the field above and [F7] to get all the values above the field in the same column.*

---

### Allocation of spaces

The spaces are used to organize the take-off lines of one or more work unit in groups.

1. Place as the active concept "E02EM030 | EXCAVACIÓN EN ZANJAS".
2. Unfold the "Space" list and choose "+2" to create the "Spc0020" space.
3. Enter the take-off lines shown in the image below. Type the "Comment" field directly, as the last chosen space is automatically associated.
4. When you reach the lines associated with another space, repeat the process from step 2.
5. Repeat the process for the following items, reusing the spaces that already exist.

CÓDIGO	RESUMEN	UDS	LONGITUD	ANCHURA	ALTURA	CANTIDAD
<b>01</b>	<b>MOVIMIENTO DE TIERRAS</b>					
<b>E02AM010</b>	<b>m2 DESBROCE Y LIMPIEZA DE TERRENO A MÁQUINA</b>					
Spc0010	Zona norte	1	3,00	3,50		10,50
Spc0010	Planta	1	8,00	3,00		24,00
Spc0010	Vía de acceso	1	3,00	2,00		6,00
Spc0010	Zona irregular	1	7,02			7,02
Spc0010	Zona ajardinada	1	2,00	7,00		14,00
						61,52
<b>E02EM030</b>	<b>m3 EXCAVACIÓN EN ZANJAS</b>					
Spc0020	Explanación zona norte	1	10,00	1,30	0,50	6,50
Spc0020	Explanación planta	1	2,00	6,00	0,70	8,40
Spc0020	Explanación vía de acceso	1	1,00	6,00	0,60	3,60
Spc0020	Explanación zona ajardinada	1	4,00	1,50	0,50	3,00
Spc0020	Explanación zona irregular	1	7,02			7,02
Spc0030	Zapata 1 zona sur	1	2,00	0,34	0,90	0,61
Spc0030	Zapata 2 zona sur	1	3,00	0,34	0,90	0,92
Spc0030	Zapata 3 zona sur	1	2,50	0,34	0,90	0,77
Spc0030	Zapata 4 zona sur	1	3,50	0,34	0,90	1,07
Spc0030	Zapata 5 zona norte	1	2,00	0,55	0,90	0,99
Spc0030	Zapata 6 zona norte	1	3,00	0,55	0,90	1,49
Spc0030	Zapata 7 zona norte	1	3,50	0,55	0,90	1,73
						36,10
<b>E02PM030</b>	<b>m3 EXCAVACIÓN EN POZOS</b>					
Spc0030	Pozos / Arquetas	1	1,50	1,50	1,10	2,48
Spc0030	Pozos / Arquetas	1	1,00	1,00	2,00	2,00
Spc0030	Pozos / Arquetas	1	0,70	0,70	5,00	2,45
						6,93
<b>E02TT040</b>	<b>m3 TRANSPORTE VERTEDERO &lt;10 km CARGA MECÁNICA</b>					
Spc0030	Explanación	32				32,00
Spc0030	Zanjas	9				9,00
Spc0030	Pozos	8,5				8,50
						49,50

## Take-off lines by spaces

We want to know the amounts and amounts related to the different spaces.

1. Observe that automatic subtotals appear in take-off lines every time the space changes.
2. Access the "View: Estimate: Spaces" window and rename the spaces as follows:

CODE	DESCRIPTION
Spc0010	Previous operations
Spc0020	Dozing
Spc0030	Ditches and wells

3. Enable "Start: Calculate: Recalculate" and note the amount of each space, based on the lines assigned in all the work units.

Check the work unit that are related with each space opening the subordinate window "Work units".

---

## 3 Estimate completion

Refine the results obtained.

### Enter a price different from the result of calculation

Let's introduce a price that does not correspond to the breakdown.

1. Choose "Lock" in the "Est" field of the "E02AM010" item. Its colour shifts to red indicating that is fixed and it may not be the result of its breakdown.
2. Type "1" in the "Est" field.
3. Move down to check that the breakdown has not changed.

To recover the calculated price, choose "Unlock" over the price of the work unit. Don't do it for the moment.

### Undo the changes

You can undo any step at any time.

1. Choose "Start: Undo: Undo" twice consecutively.
2. Observe that the price of the previous item is re-calculated.

### Back up

We will make a backup of the current state of the project.

1. Press "File: Save" and "File: Close".
2. Choose "File: Projects" and locate the current project.
3. Choose "Copy" over the project.
4. Choose "Paste" and you will get the new project "Copy - COURSE".
5. To change the name, choose "Rename" over the project and type "CURSO01".
6. Continue with the original project, choosing "Open" over the COURSE file.

### Adjust the estimate to an amount

We are going to reduce the amount of the estimate by an overall percentage.

1. Choose "Tools: Prices: Adjust".
2. Type "95" in the "%" box. The new amount appears under "Adjust estimate price to...".
3. Check the labour and machinery quantity boxes and the materials price box. Uncheck any other boxes.
4. Press "Accept".

The estimate is adjusted to the percentage indicated, modifying the values selected, so that breakdowns keep valid.

### "Concepts" window

---

*Display layouts are chosen from the drop-down list to the left of each table header.*

---

Let's see the list of bricks used in the estimate.

1. Select the window "View: Estimate: Concepts", layout "[Materials || Others] Estimate." All the project concepts with these natures will appear.

2. Write "P03B\*" in the mask box and press [Enter]. Only concepts whose code begins with these initials appear.
3. To display all concepts again, type the "\*" mask.

### Add building agents

Open the window "View: Project: Settings" and in the "Data" option type the following values:

DESCRIPTION	HOUSE IN HUMANES
PostalCode	28970
City	HUMANES DE MADRID

We will enter the data of the developer, designer, construction manager and builder.

1. Open the window "View: Management: Entities", layout "[Agents] General data".
2. Type the following agents:

CODE	NAT	DESCRIPTION	TITLE
ENT0001	Promoter	Jose Cenzano	The property
ENT0002	Planner	Laura Lita	The architect
ENT0003	Constructor	Enrique Cimientto, S.A.	The construction company
ENT0004	Project manager	Jose Manuel Garcia	The building engineer

3. Select the nature of each entity using the context menu above its "Nat" field.
4. Close the "Entities" window.

## 4 Printing and connection with other programs

The COURSE estimate is finished, so we proceed to print it on paper and export it in different formats.

*Before printing, recalculate the project using the option "Start: Calculate: Recalculate".*

The reports to be used are in the menu "Reports: 01 Estimates and take-off lines", and you will also find Excel and Word templates, which are identified by their icons. You can modify the paper margins in "File: Working environment: Margins".

### Print take-off lines and estimate

1. Where indicated above, choose the "Estimate and Take-off lines" report. A box appears with some questions.
2. Answer "D" to the question about coding, so the codes of the concepts will be replaced by correlative numbers.
3. Press "Preview". The report appears on the screen.
4. Press ">" to view the following pages.

To modify the answers, press the "Back" button.

### Print the estimate summary

Repeat the previous procedure with the "Estimate summary" report.

To include the percentages of home overhead and risk and profit, in case it was for the public administration:

1. In "View: Project: Settings" choose the "Calculation" tab.
2. Enter the value "6" as % of profit and "13" as overhead.
3. Display the report again.

To modify the VAT % go to "View: Project: Settings", option "Accounting", and change the value of "Percentage of VAT or equivalent tax on execution".

You can preview or print the rest of the reports from the "Reports: 01 Estimates and Take-off lines" menu.

### Customize reports: Insert a logo into the header

To display a logo in the header of all pages:

1. Access to "Start: Reports: Design".
2. Press "File: Open".
3. Select the "Estimate summary" report located in the report's subdirectory "01 Estimates and Take-off lines" and press the "Open" button.



4. Enlarge 2 or 3 cm the "Header" section by moving down the bottom edge.
5. Select all controls in this section. To do this, hover over the left ruler at the height of the first control, and when the shape changes, left click and drag down to encompass all the controls. When you release the button, all of them should be selected.
6. Move them down to leave free room above, pressing several times the key "Down arrow".
7. With the option "Tools: Graph" create a square in the upper left corner of the section, and double click to open its properties.
8. Write "4" on the "Width" property and "2" on the "Height".
9. Press the suggest button in the "File" property and choose "Logotipo para informes.PNG" in the "Tutorial\ESP" subdirectory, or any other PNG file of your choice.
10. Check the result using "File: Preview".
11. Select "File: Save as", save the report with the name "Estimate summary with logo" and close the report design window.

### Export reports to PDF or RTF format

You can export reports to RTF format to open them with Word or other text editors and further customize the result.

To export:

1. Press "Export" instead of "Print".
2. In the "Export" dialog box, under "Format", choose the desired format in the drop-down list.
3. Check and modify if needed the rest of properties, like paper size, pages to print, location of the file to be exported, etc.

### Export/Import Excel Format

*To export your estimate to Excel:*

1. Choose "File: Export: Excel".

2. In "Levels" choose "Chapters and work units".
3. In "Structure" choose "Estimate".
4. Check "Export text" and "Export take-off lines", as you wish.
5. Press the "OK" button.

An Excel workbook will appear with the estimate. Save it as "[COURSE.xls](#)".

#### *To import an Excel file with Presto:*

Excel files that have been exported with the previous option can be imported again. You can modify first the description, price, quantity, or take-off lines in Excel, without altering the general layout.

1. Close the open projects and create a new project "[CopiaCursoExcel](#)".
2. Choose "File: Import: Excel" and double-click the previously exported COURSE.xls file.

Save and close the project with "File: Save" and "File: Close" respectively.

### **Export/Import BC3 Format**

#### *To export the CURSO project to this format:*

1. Open again the COURSE project.
2. Choose "File: Export: BC3" and save the file to the proposed directory.

#### *To import a project or price base in BC3 format:*

1. Close the open projects and create a new project "[CopiaCursoBC3](#)".
2. Choose "File: Import: BC3".
3. Select the previously exported Course.BC3 file. Press the "OK" button.

Close the project and save the changes.

---

## **5 Certifications or valuations**

We are going to introduce some valuations in the COURSE project. Valuation, certification, or financial periods are correlative numbers, assigned orderly to the dates marked as valuation day in the "Dates" window.

---

*Suppressing or inserting valuation days only changes the dates assigned to the numbers, without altering the quantities.*

---

## Date management

Let's create a certification calendar and delete a date.

### *Create a certification calendar*

1. In the "Estimate" window, select the "Certification" layout.
2. Active "Processes: Planning and certification: Create dates", by entering:  
Start day:           current date  
Certification day:   31  
Number of months:  12

In months with less than 31 days the last day is selected.

### *Delete a certification date*

Let's delete one of the created certification dates.

1. In the "View: Dates" window, choose the "No certification" option over the first certification date.

### *Indicate current certification*

1. Choose "Current certification" on any field of the third certification. Notice the change of colour.
2. With the same system, choose the first certification as the current one, to continue with the tutorial.

## Certify by certification lines

### *Create the first certification by reusing estimate lines*

We will certify the item "E02EM030" of chapter "01" from the existing estimate take-off lines.

1. In the "Estimate" window, place the item as the active concept.
2. In the "Take-off" subordinate window select the layout "[Est || Cert] Certification."

3. In the "PhaseCert" field of the first line select the value "1" to indicate that it was executed during the first certification period.
4. Repeat this process with all the take-off lines of the esplanade, selecting all the lines and displaying the list of phases only once.

### *Complete the first certification with lines not in the estimate*

Next, we will certify the item "E02AM010" of chapter "01" using new take-off lines, independent of the estimate.

1. In the "Estimate" window, place the item as active concept.
2. In the "Take-off lines" subordinate window, select the "[Cert] Dimensions" layout.
3. Enter the following take-off lines and select the value "1" in the "PhaseCert" field of all of them:

SPACE	COMMENT	N	LENGTH	WIDTH	HEIGHT
Previous operations	North Zone	1	2,50	3,60	
Previous operations	Ground level	1	7,50	2,90	
Previous operations	Access road	1	3,00	1,75	
Previous operations	Irregular area	1	7,02		
Previous operations	Garden area	1	2,00	6,00	

### *Print the certification*

1. Use "Start: Calculate: Recalculate" to make sure all amounts are up to date.
2. Choose the report "Reports: 05 Project management: Certification with measuring lines". Answer the questions and press "Preview".
3. Once the results are checked, choose "Print".

### *Create the second certification*

We are going to start the second certification of the item "E02EM030".

1. Certify as before all the take-off lines related to footings, indicating "2" in their "PhaseCert" field.

2. In the "Dates" window indicate that the current certification is the second one.

### Certify in phases

We will certify now by entering the total quantity certified in the month, with no relation to take-off lines.

1. Place the work unit "E02PM030" as the active concept.
2. Open the subordinate window "Phases", "Certification" layout.
3. Enter "2.50" in the "QtyCert" field of the first certification, "1.50" in the second and "2.90" in the third.
4. Recalculate the project and observe the results in the "Dates" window.

### Certification summary

Let's print the summary with a 5% discount on the tender:

1. Open "View: Project: Settings", option "Calculation".
2. Write "0.95" in the bidding discount and accept.
3. Print the report "05 Project Management: Certification Summary".

# Cost tutorial

This tutorial serves as a guide to estimate the cost of the project before bidding, the management of purchases and the calculation of the real costs. Each user wants to control different aspects and, consequently, must establish their own rules and procedures.

This tutorial assumes that you are familiar with Presto estimates.

If there is a single estimate, it can be the project estimate, representing the contract prices for the client, or the internal cost estimate.

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*In this case we will work with two parallel estimates, the "estimate" has the contract measurements and prices and the "cost target" or "objective" is the internal cost estimate of the construction company.*

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## 1 Cost estimate

Open the "CursoControl" project, which is in the "Tutorial\ESP" directory.

We will complete the data relating to the dates of the project.

1. Access the window "View: Project: Settings: Planning".
2. Set the start date of the project in the first working day of April of the current year and the end of the project in any day of November.
3. Choose "Processes: Planning and certification: Create dates", select the same start date of the project, type "8" in "Number of months" and click "OK".
4. Open the "Dates" window, layout "[Phases] Planning and certification".
5. Choose "No certification" over the first two certification dates.
6. Select the first one as the current certification, using "Current certification" on that date.
7. Open the "Entities" window, layout "[Agents] General Data" and check the existing agents.

### Create a cost objective (target)

As the project estimate for the client is already calculated, we will create a cost target as a proportion.

1. Open the "Estimate" window, "Cost objective" layout.
2. Choose "Processes: Objective: Generate".
3. Check that the root concept "CONTROL" is selected.
4. Type "70" as a percentage in the four basic natures and click "OK".

---

*Review that the estimate quantities have been copied to the cost target and that the prices of the basic components have the desired value.*

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### Different breakdown in estimate and objective

The breakdown of work unit "E03ALA010 | ARQUETA A PIE DE BAJANTE" of the estimate is not correct for the cost target, since we plan to subcontract the labor by providing the material ourselves.

Remove the target quantities indicated and add the last line, so that the breakdown matches the following:

Código	NatC	Resumen	CanPres	CanObj	Ud	Pres	Obj
E03ALA010	▣	Arqueta a pie de bajante	3,00	3,00	ud	69,04	49,50
O01OA030	👤	Oficial de primera	1,600		h.	15,14	10,60
O01OA060	👤	Peón especializado	0,800		h.	13,19	9,23
P01HM020	🧱	Hormigón en masa HM-20/P/40/I	0,039	0,039	m3	70,02	49,01
P01LT020	🧱	Ladrillo perforado	0,045	0,045	mud	60,10	42,07
P01MC040	🧱	Mortero de cemento M-40	0,020	0,020	m3	47,00	32,90
P01MC010	🧱	Mortero de cemento M-100	0,015	0,015	m3	53,00	37,10
P02CVC010	🧱	Codo PVC	1,000	1,000	ud	12,15	8,51
P02EAT020	🧱	Tapa cuadrada	1,000	1,000	ud	14,95	10,47
S01	▣	Ejecución arqueta de ladrillo		1,000	ud		25,50

Note the new target price of the item.

## Economic planning reports (objective)

Preview the following reports from the "01 Estimates and take-off lines" section, selecting the value "4" as an answer to the question "Price: ... | 4 Obj | ...":

- "Table of breakdowns by chapters".
- "Estimate and take-off lines".

Also use the "Estimate and objective" report in the section "03 Economic planning".

## Periodify the objective (planning)

We want to foresee the pace at which the costs of the project will be produced. We will use an approximate distribution in time using of a Gauss bell. We will fill in the "WeightPlan" field with the weight of each period on the total amount.

1. Open the window "View: Dates", layout "[Phases] Planning".
2. Select the "WeightPlan" column by clicking on the header.
3. Press the "Suggest" button in any of the selected fields and choose the value of the "Gauss Bell" option.
4. In "Processes: Planning and certification: Fill in the economic planning" check the option "Applying the planning weights of each period" and accept.
5. In the "Tree" window, access the "Planning" layout and select the work units' level from the drop-down at the top left.
6. In the multiple fields, the fields "QtyPlan" and "Plan" must appear, and "1" in the "Phase" drop-down.

Check the monthly distribution of the estimated cost of each chapter and item.

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*The "target" is the total of the planned phases. "Planning" is the sum of the target up to the current certification or approved phase.*

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## Economic planning reports

Preview the reports in the "03 Economic Planning" section:

- "Chapters and work unit with phases".
- "Amounts or amounts per month".
- "Revenue and cost planning".



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## 2 Purchases

Preparation of contracts.

### Group table

The group table allows to automate the assignment of supplies to contracts and to associate possible suppliers.

We are going to add a group for the labor to be outsourced.

1. Open the "Vendor database" project in the "Data" sub-directory.
2. Observe its structure; chapter are the lots or purchase families in which the project will be divided.
3. Create the new chapter "S | OUTSOURCED LABOR"

### Associate providers with groups

Let's create two labor suppliers and associate them with the previous chapter.

1. In the "Entities" window, layout "[Agents] General data", add:

CODE	DESCRIPTION	MAIL	CITY	CODPOSTAL
40000031	Sumano	<a href="mailto:sumano@tel.es">sumano@tel.es</a>	Villaviciosa	28670
40000032	Alvaro Bautista		Madrid	28001

2. In the "Estimate" window, insert the two suppliers as concepts under of the chapter created in the previous section.
3. Save the changes and close the groups box.

### Choose the concepts to buy

The concepts to be purchased or outsourced directly should be marked as supplies.

1. In the "Estimate" window of the "CursoControl" project, choose "Supply" over the code of the first item of the first chapter.
2. The icon indicating the type of concept gets an orange background.

3. Mark in the same way as supplies the rest of the items of the first, third and fourth chapters, and the breakdown concepts of the second and fifth chapters work units.

### Associate the purchase group with each concept

For automated searching suppliers for a contract, each supply must be associated with a purchasing group.

1. Open the "Concepts" window, outline "[Supplies] To contract".
2. Choose "Processes: Hiring: Filling in groups".
3. Check "Group box", and with the "Suggest" button on the right select the "Vendor database" box and accept.
4. Observe that the "Group" field of the different concepts has been filled.
5. To change the concept group "P01LT020 | Perforated brick", press the suggest button on its field "Group" and select "[E07] ENCLOSURES AND DIVISIONS".
6. Repeat the process with the concept "P01LV105 | Exposed face brick."
7. Assign the value "O01" to the "Group" field of all labour-type concepts, which are not in the supplier database.
8. Replace the groups "E02A", "E02E", "E02P" and "E02T" with "E02", so that the four concepts subsequently appear in a single contract.
9. In the same way, replace the groups "E04C" and "E04S" with "E04".

### Calculate the resources necessary to execute the project

This process serves as the basis for the creation of contracts.

1. Choose "Processes: Hiring: Calculate resources".
2. Leave only the options "Phased, grouped by" and "Concepts.Group" checked, and accept.

You can view the created resources in any of the "[Group & Code]" layouts in the "View: Resources" window.

## Create the contracts

We are going to create the contracts that group the supplies necessary to execute the project.

1. Select the "Contracts" window.
2. Choose "Processes: Contracting: Create contracts", uncheck "One contract per phase" and accept.
3. In the "Date" column of the contracts, indicate that they have been created two months before the start of the project. To do this, you can select the column and choose the day by pressing the "Suggest" button on one of the selected fields.
4. Add "LABOR" as description of the "O01" contract, which does not come from the supplier base.

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*Contracts appear in a red state, indicating that they are not already approved, so they are not considered in calculations and do not appear in some reports.*

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5. Change the status of contracts by choosing "Black State".

## Add bidders to a contract

We will indicate the bidders from whom we will request prices.

1. Choose "Find and associate suppliers" over any field in the contract "E07 | ENCLOSURES AND DIVISIONS".
2. The first suppliers, with darker background, come from the supplier base and the others are from the project itself. Check and uncheck the "Group" box to see the difference.
3. In the "Act" column, check the providers "40000003 | Aislantes Castilla", "40000004 | Cecasa Cerámicas" and "A82698762 | CERAMICA TECNICA DE HENARES, S.A.", and accept.
4. Observe in the subordinate window "Supplies" the new columns that appear for the added bidders.
5. Repeat all the steps by associating bidders with the indicated contracts.

CONTRACT	SUPPLIER	DESCRIPTION
E02	40000005	Desmontes Aguilera
	40000006	Excavaciones del Monte
E04	40001101	Hormigón para fachadas
	40000011	Valcinsa
	B80480304	ACERALIA PERFILES MADRID, S.L.
E05H	40001101	Hormigón para fachadas
	40000011	Valcinsa
	A28403772	HORMIGONES DEL JARAMA, S.A.

### Remove bidders from a contract

Let's remove a vendor from a contract.

1. Move to the subordinate window "Supplies" of the contract "E07 | ENCLOSURES AND DIVISIONS".
2. Choose "Delete offer" in the header of the "Price" column of the provider "A82698762".

Observe that the columns of this bidder have disappeared.

### Modify supplies

We are going to modify the amount of a supply that is going to be contracted.

1. Move to the contract "O01 | LABOR"
2. In the "QtyTgt" field type "14.09" for the supply "O01OA030 | First Officer" and "9.64" for "O01OA060 | Bricklayer"

### Add clauses to a contract

We will complete the contract specifications with a text.

1. Move to the "S | contract OUTSOURCED LABOR."
2. Open the "Text" subordinate window and type:

If the subcontractor fails to meet the deadlines, a penalty of 0.5% of the initial estimate will be applied for each day of delay.

### Request prices from bidders

We will prepare the price requests to send to the different bidders.

1. Select "File: Export: Price request".
2. On "Format" choose "Presto Project" and accept.

In the directory indicated as "Destination" as many Presto projects will be created as suppliers appear in the contracts. If a supplier is involved in more than one, his project will have one chapter for each contract.

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*If the bidder's email is listed in its "Mail" field, an email will also be generated with each offer, which must be closed or saved one by one.*

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### Import prices received from suppliers in Presto format

The company Valcinsa has sent prices for the two contracts in which it participates.

We will proceed to import them.

1. Select "File: Import: Price request".
2. Click on the project "Offer provider!40000011", in the "Tutorial" directory.

Observe that the contracts "E04" and "E05H" have added the prices offered by that supplier.

### Enter manually prices offered by suppliers

We assume that the rest of the suppliers sent their offers by other means.

1. Go to the contract "E07" and type the prices sent by each bidder for each supply.

DESCRIPTION	PRECIO40000003	PRECIO40000004
Brick face view	92,00	85,00
Perforated brick	35,00	40,00

2. Repeat this operation on contracts "E02", "E04" and "E05H", with the following prices.

DESCRIPTION	PRECIO40000005	PRECIO40000006
TRANSPORT TO LANDFILL	8,26	7,53
MACHINE WELL DIGGING	10,97	10,00
EXCAVATION EMPTIED BY MACHINE	10,55	9,62
LAND CLEARING AND CLEANING	0,38	0,35

DESCRIPTION	PRECIO40000011	PRECIO40001101	PRECIOB80480304
LIMESTONE	4,43	4,77	5,03
CONCRETE IN SLABS	11,32	12,19	11,60
CONCRETE IN FOOTINGS	92,70	99,83	92,37
CLEANING CONCRETE	61,86	66,62	67,11

DESCRIPTION	PRECIO40000011	PRECIO40001101	PRECIOA28403772
SLOPING DECK	19,67	22,78	22,71
CONCRETE IN INCLINED SLABS	222,21	257,29	240,57
DOUBLE DECK SLAB	30,62	35,45	34,80
REINFORCED CONCRETE	340,09	393,79	368,70
CONCRETE IN BEAMS	392,37	454,32	421,78
CONCRETE IN PILLARS	162,59	188,27	177,93

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*Remember to calculate everything to update the results.*

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### Awarding the contract to a supplier

To finalize the contracting process, it is necessary to decide the winner.

1. In the "Supplier" field of the "Contracts" window, click the "Suggest" button of the "E07" contract to view its bidders.
2. Select the provider "40000004" and accept.
3. Repeat the above steps by assigning the supplier "40000006" to the contract "E02" and the supplier "40000011" to the contracts "E04" and "E05H".

### Prepare the order

1. Choose "Move to Order" over the "E07" contract. Orders "P0001", "P0002", "P0003" and "P0004" are created for their supplier, with supplies at the offered price. An order is generated for each phase in which supplies are needed.
2. Open the "Orders" window and delete the orders "P0002", "P0003" and "P0004", which are not going to be placed now.
3. Press the suggest button on "Date" to indicate that the order is placed on March 12th.

### Procurement and purchasing reports

Preview the reports in the "07 Contracting" section:

- "Comparative contracts".
- "Firm contracts".
- "Contracted concepts and orders".
- "Firm orders."

---

## 3 Invoices

Economic management documents.

### Write down an invoice and its supplies

We receive the invoice "00342" related to the supplier "40000006 | Excavations of the Mount" and dated March 22.

Let's write it down including the detail:

1. Open the "Invoices" window and enter the main invoice data:

DOCUMENT	ENTITY	DESCRIPTION	DATE
00342	40000006	Excavaciones del Monte	22/03

2. In the "Supplies" window, type the invoice detail:

CODE	DESCRIPTION	QUANTITY	UNIT	PRICE	VAT
E02AM010	LAND CLEARING	61,5200	m2	0,35	21
E02EM030	EXCAVACIÓN	48,0800	m3	9,62	21
E02PM030	WELLS EXCAVATION	6,9300	m3	10,00	21
E02TT040	TRANSPORTE TO LANDFILL	143,0000	m3	7,53	21

The VAT rate of the invoice is calculated according to the type of each supply.

### Warranty retention

Complete the invoice adding the warranty withholding, typing "5" in the "RetGar" field. Notice the variation produced in the "Amount" field.

### Add expirations

The "Amount" field of the invoice is red, indicating that its amount does not match the sum of the payments. Let's create a new payment.

1. Choose "Due 60 days" over any field on the invoice.[ox]

Open the subordinate window "Payments". Verify that they are created:

- Amount to be paid 60 days after the date of the invoice.
- Retention in warranty dated 1 year after the invoice.
- VAT fee dated 20/04.

### Mark a payment as paid

Notice that the payment has the red status (pending payment).

1. Choose "Black Status" over the "Note" field of the "Due 60 days" (paid).



## Complete the sample

We proceed to write down more invoices to complete the example.

1. Enter the following invoices in the same way.

DOCUMENT	ENTITY	DESCRIPTION	DATE
G2456	40000011	Valcinsa	19/04
G4758	40000011	Valcinsa	28/04
00074	40000004	Cecasa Ceramics	11/05
M0027	46000001	Own labor	12/05
X00345	40000304	Fermax Hardware Store	14/05

2. Enter the supplies.

CODE	DESCRIPTION	QUANTITY	UNIT	PRICE
E04CM040	LIMESTONE	1,2400	m2	61,86
E04CA060	CONCRETE IN SLABS	5,9900	m3	92,70
E04SA020	CONCRETE IN FOOTINGS	108,0000	m3	11,32
E04SE020	CLEANING CONCRETE	108,0000	m3	4,43

CODE	DESCRIPTION	QUANTITY	UNIT	PRICE
E05HSA010	SLOPING DECK	5,4400	m3	162,59
E05HVA030	CONCRETE IN INCLINED SLABS	16,7400	m3	392,37
E05HVA075	DOUBLE DECK SLAB	7,2000	m3	340,09
E05HFA060	REINFORCED CONCRETE	240,0000	m2	30,62
E05HLA070	CONCRETE IN BEAMS	0,9000	m3	222,21
E05HFS160	CONCRETE IN PILLARS	124,2300	m2	19,67

CODE	DESCRIPTION	QUANTITY	UNIT	PRICE
P01LT020	Perforated brick	0,2000	mud	40,00
P01LV105	Brick face view	10,0000	mud	85,00

CODE	DESCRIPTION	QUANTITY	UNIT	PRICE
O01OB050	Bricklayer officer	200,0000	h.	10,47
O01OB060	Assistant bricklayer	100,0000	h.	9,82

CODE	DESCRIPTION	QUANTITY	UNIT	PRICE
PX003	Level	2,0000	ud	17,00
PX002	Acrylic silicone bottle	12,0000	ud	4,00
PX001	Steel nails	20,0000	kg	11,50

Note in this last invoice that non existing items can be directly enter and invoiced.

1. Create the payments of each invoice with the context menu and the type indicated in the table.

DOCUMENT	ENTITY	DESCRIPTION	EXPIRATION TYPE
G2456	40000011	Valcinsa	30 days
G4758	40000011	Valcinsa	30 days
00074	40000004	Cecasa Ceramics	60 days
M0027	46000001	Own labor	Cash
X00345	40000304	Fermax Hardware Store	Cash

### Invoices issued to customers

We will issue the customer the invoice for the first certification.

Observe in the "Entities" window, layout "[Agents] General Data" that the entity "43000015 | ESUCAP Promotions" type is "Promoter".

1. Access the "Invoices" window, "Customers" layout.
2. As we have seen above, create the invoice "0045" for the promoter "43000015 | ESUCAP Promotions", dated "30/4".
3. Enter the following supply:

CODE	DESCRIPTION	PRICE
CERT1	Certification nº 1	2.000,00

4. Complete the example with the following invoices:

DOCUMENT	ENTITY	DESCRIPTION	DATE
0065	43000015	ESUCAP Promotions	31/05
0074	43000015	ESUCAP Promotions	30/06

5. And the supplies.

CODE	DESCRIPTION	PRICE
CERT2	Certification nº 2	20.000,00
CERT3	Certification nº 3	8.000,00

6. Enter cash payments in all of them.

### Proforma invoices

Let's enter a provisional invoice.

1. Write the following invoice:

DOCUMENT	ENTITY	DESCRIPTION	DATE
PRO5	43000015	ESUCAP Promotions	31/07

2. With the supply:

CODE	DESCRIPTION	PRICE
CERT4	Certification nº 4	8.000,00

3. Choose "Status red" over the "Document" field of the invoice, to indicate that it is a proforma invoice.

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*Before analyzing the results or printing reports, calculate the project with the option "Start: Calculate: Recalculate".*

---

### Write down the payment of a group of payments

The "View: Historical: Payments" window shows all the payments of the project.

We will indicate that the payments before July 1st have been paid.

1. Open the "View: Historical: Payments" window and check that it is sorted by date.
2. Select all the payments dated before July 1st.
3. Choose "Status black" over the "Note" field of any of the selected lines.
4. Press "Start: Calculate: Recalculate".

### Analyze amounts by dates

In the "Agenda" window, "Billing" layout, you can observe the invoicing on each date, as well as make annotations.

1. In the "Description" field on March 12th, type:

*First firm orders*

2. Press the "Text" icon in the tool bar and type:

*Received contracts from different suppliers. They accept the required conditions. We passed the first orders.*

### Analyze the account status of suppliers

In the "Entities" window, the "[Suppliers] Amounts" and "[Customers] Amounts" layouts show the economic information of the suppliers or customers, as well as the amount invoiced, retained, paid and VAT.

By clicking on the "Supplies" icon in the tool bar of the window, you can see the detailed list of supplies.

### Analyze the purchases of a concept

The "Concepts" window, "Supplies" layout, shows the supply type concepts in the project.

By clicking on the "Supplies" icon in the tool bar of the window you can see the complete detailed list of supplies of the concept.

### Study the supplies of the project

The window "View: Historical: Supplies" shows the list of all supplies in documents, where they can be sorted and filtered by any criteria.

It also allows to directly modify data without opening the related document.

### Invoice and due date reports

Preview the reports in the "08 Billing" section:

- "Invoices and collections and payments".
- "Invoices by suppliers".
- "Expirations by dates".

---

## 4 Orders and deliveries

Presto can create order and delivery documents. Its use is optional, and its operation is like invoices, except for the part related to payments.

### Place orders

Let's create an order manually, independent of the contracts.

1. Open the "Orders" window.

2. In the first empty line, type "PX0103" in the "Document" field.
3. Press the suggest button above "Entity" and choose "40000001".
4. Now indicate that their issue "Date" is "24/02".
5. Open the subordinate window "Supplies", press the suggest button on "Code" of each supply, and choose successively:

CODE	UNIT	DESCRIPTION	QUANTITY	PRICE
A02A080	m3	MORTERO CEMENT	10,0000	44,80
P01HA020	m3	Reinforced concrete HA-25/P/40/I	0,1400	51,01

6. View the order you just prepared with "Reports: 07 Contracting: Firm Orders".

### Write down the full delivery of an order

Hormigones Horminasa delivers one week later all the supplies of the order accompanied by the delivery note:

1. Choose "Proceed to delivery" on the order "PX0103".[ox]
2. Write "EX0103" as the delivery code.
3. Open the "Deliveries" window and see how the delivery was created.
4. Modify the delivery date to "05/03".
5. Observe the source in the "Order" field of the "Supplies".

### Complete the sample

Several days later we send "40000001 | Concrete Horminasa" a new order in which we request the rest of the material we need.

6. Register the order "PX0104" for the previous entity, dated "08/03".
7. Enter the following supplies.

CODE	DESCRIPTION	QUANTITY	UNIT	PRICE
A02A080	CEMENT MORTAR	5,1700	m3	44,80
P01AA020	River sand	2,7300	m3	10,99
P01HM020	Mass concrete HM-20/P/40/I	0,1600	m3	49,01
P01MC010	Cement mortar M-100	0,1100	m3	37,10
P01MC040	Cement mortar M-40	0,2200	m3	32,90

### Enter the partial delivery of an order

Hormigones Horminasa sends two days later a truck with the sand. To enter the reception of this material:

1. Choose "Proceed to delivery" about the supply "P01AA020 | River sand" listed in the order "PX0104".
2. Write "EX0104" as the delivery code.
3. Open the "Deliveries" window and change the date to "10/03".

### Results

- Open the "Agenda" window, "Documents" layout and check the amounts by dates.
- Open the "Entities" window, layout "[Suppliers] Amounts" and check the ordered and delivered amounts.

### Delivery Reports

Preview the reports in the "08 Billing" section:

- "Deliveries by dates".
- "Deliveries by suppliers".

---

## 5 Calculation of real costs

The cost calculation is made from the supplies recorded in cost documents (deliveries and / or invoices), the designated destinations or cost centers and the production or installed quantity of the work unit.

### Destination

The first step is to define which units are going to be produced ("destinations" or "cost centers") with the supplies purchased.

Let's mark the first chapter as a destination:

1. Open the "Estimate" window.
2. Choose "Destination" over the concept code "01 | EARTHMOVING." The nature icon changes the background colour to green.
3. Repeat the step with all the chapters and the work units of the chapters "02 | SANITATION" and "05 | ENCLOSURE".

### Input or consumption of subcontracted items

We have subcontracted some items that we are going to impute to its chapter.

1. Open the invoice 00342, supplier "40000006 | Excavaciones del Monte".
2. Press the suggest button in the "Destination" field of the supply "E02AM010 | Clearing of land".
3. Select the destination "01 | EARTHMOVING" and write "03/04" as the input date.
4. In the "Estimate" window, "Cost Control" layout, open the breakdown of chapter 01.
5. Choose "Start: Calculate: Calculate: Actual Costs" and look at the quantity and amount in the "QtyInput" and "AmtInput" fields.
6. Assign to the supplies in invoices "00342", "G2456" and "G4758" the following destinations and input dates:



CODE	DESCRIPTION	DESTINY	DESCRIPTION	DATEIMP
E02AM010	TRANSPORT TO LANDFILL	01	EARTHMOVING	03/04
E02EM030	MACHINE WELL DIGGING	01	EARTHMOVING	05/04
E02PM030	EXCAVATION BY MACHINE	01	EARTHMOVING	05/04
E02TT040	LAND CLEARING AND CLEANING	01	EARTHMOVING	08/04
CODE	DESCRIPTION	DESTINY	DESCRIPTION	DATEIMP
E04CM040	LIMESTONE	03	FOUNDATIONS	21/04
E04CA060	CONCRETE IN SLABS	03	FOUNDATIONS	21/04
E04SA020	CONCRETE IN FOOTINGS	03	FOUNDATIONS	22/04
E04SE020	CLEANING CONCRETE	03	FOUNDATIONS	25/04
CODE	DESCRIPTION	DESTINY	DESCRIPTION	DATEIMP
E05HSA010	SLOPING DECK	04	STRUCTURES	28/04
E05HVA030	CONCRETE IN INCLINED SLABS	04	STRUCTURES	29/04
E05HVA075	DOUBLE DECK SLAB			
E05HFA060	REINFORCED CONCRETE	04	STRUCTURES	19/05
E05HLA070	CONCRETE IN BEAMS	04	STRUCTURES	19/05
E05HFS160	CONCRETE IN PILLARS	04	STRUCTURES	24/05

7. Recalculate and observe the amounts charged to each chapter.

### Cost calculation up to current certification

Observe that the work units imputed to Chapter "04 | STRUCTURES" during May have not been considered.

1. Open the "Dates" window, layout "Phases: Planning and certification".
2. Mark the second certification as "Current Certification"

Check that they are already added.

### Inputing part of a supply

The supply "E05HVA075 | Reinforced concrete in straps", which we have bought in the invoice G4758, has not yet been imputed. We want to reflect that 1 m3 has been placed at the end of April and the rest on May 10th.

1. Open invoice G4758 from the supplier "40000011 | Valcinsa".
2. Choose "Split" over the supply "E05HVA075".
3. Write "6.20" as the amount to be split. A new supply will appear with 6.20 m3 and the previous one will be reduced by the same quantity.
4. Select "04 | STRUCTURES" as the destination of both supplies and indicate that the first one with an amount of 1 m3 has been installed the "30/04" and the new one the "10/05".

Recalculate and verify that there is no difference between supplies consumed at once and this supply consumed in parts.

### Consumption of basic concepts

The process for the imputation of basic concepts is the same as for subcontracted items.

1. Open invoice M0027 from the supplier "46000001 | Own manpower"
2. Assign its supplies to the destination "E07LSB040 | PERFORATED BRICK AMBER" and the date "30/05".
3. In the "Estimate" window, "Cost control" layout, open the breakdown of the previous item, in chapter "05 | ENCLOSURE".

Recalculate and observe the amount of the imputed supplies.

### Analyze the inputs of a cost center

The "Concepts" window, "Destinations" layout, shows all the destination type concepts. Click on the "Imputations" icon in the tool bar to see the supplies imputed to each destination.

### Introduce the production of billable quantities

We assume that real production is the same as the valuation quantity.

1. Choose "Processes: Planning and Certification: Copy quantities".
2. Check that "With mask" has an "\*".
3. Select "Certification" as "Origin", "Execution" as "Destination" and accept, so that the "QtyReal" field of the work unit takes the value of "QtyCert".
4. Write "115.00" in the "QtyReal" field of item "E07LSB040 | FPERFORATED BRICKAMBER", which is not certified.

Recalculate and note that the actual unit quantities of the officer and the assistant appear, based in the purchases and the quantity produced of the cost center.

### Cost control reports

Preview the following reports in the "01 Estimates and take-off lines" section, selecting the value "3" as an answer to the question "Price: ... | 3 Real | ...":

- "Table of breakdowns by chapters".
- "Estimate and take-off lines".

Preview the reports in the "09 Cost analysis" section:

- "Imputations to cost centers". Review the variants in this report, which show total supplies filtered by imputation dates.

"Stock valuation".