



Quablo™

USER MANUAL – Version 2.0



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INTRODUCTION

ABOUT QUABLO™

- It is a powerful and effective tool for the extraction of data and tables from PDF documents;
- It is able to elaborate in a totally automatic way both bordered tables and non bordered tables having a regular structure;
- It provides an easy and intuitive GUI allowing to extract data also from tables with very irregular structure and without grid;
- It allows to define selection and extraction filters to increase results precision;
- It allows to export tables and data from PDF to other editable formats (XLS, CSV and XML).

MAIN FEATURES

- Availability of both interactive and automatic tables extraction mechanisms;
- Ability to suggest non bordered tables structure;
- User friendly graphical interface;
- Management of templates for the extraction of data from tables, according to a format defined by the user;
- Real time preview of recognized tables and of their content;
- Conversion to several output formats;
- Wide choice of how to export extracted data.

INSTALLING QUABLO

SOFTWARE REQUIREMENTS

Quablo can be installed on Windows 8 (32-bit and 64-bit), Windows 7 (32-bit and 64-bit), Windows Vista (32-bit and 64-bit) or Windows XP (32-bit and 64-bit) platforms.

	Quablo™
Software Requirements	
OS	Windows 8 (32-bit and 64-bit), Windows 7 (32-bit and 64-bit), Windows Vista (32-bit and 64-bit), Windows XP (32-bit and 64-bit)

HARDWARE REQUIREMENTS

Minimum hardware requirements for Quablo installation are summarized in the following table:

	Quablo™
Hardware Requirements	
RAM	2GB
CPU	Dual Core (Intel Core 2 Duo or equivalent)
Installer	230MB
Occupied space on disk after installation	248MB

INSTALLATION PROCESS STARTUP

To start Quablo installation process, double click the installer icon (Figure 1) and then, click [Next](#) in the Welcome window that will be displayed (Figure 2).



FIGURE 1. QUABLO INSTALLER ICON

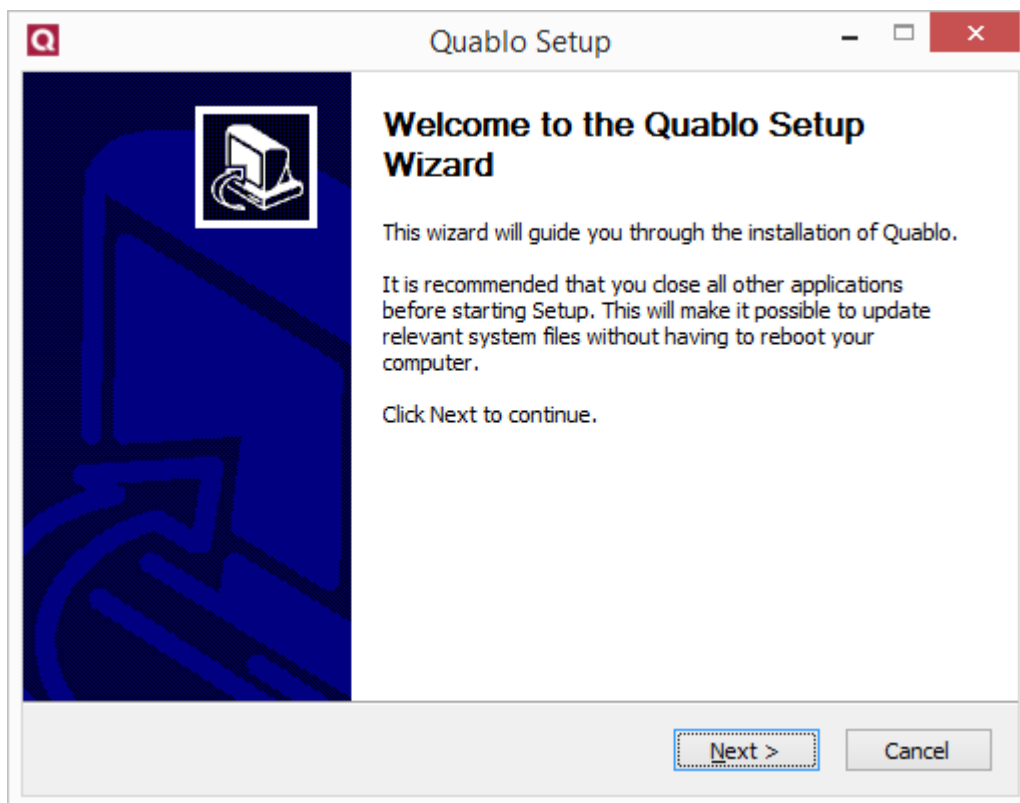


FIGURE 2. INSTALLATION STARTUP

LICENSE TERMS ACCEPTANCE

The following two windows contain the terms of the license to use the software (Figure 3 and Figure 4). Please read carefully the terms of this agreement and select the option **I accept the terms of the license agreement** only if you agree on all points. If you don't accept the license agreement, click **Cancel** to terminate.

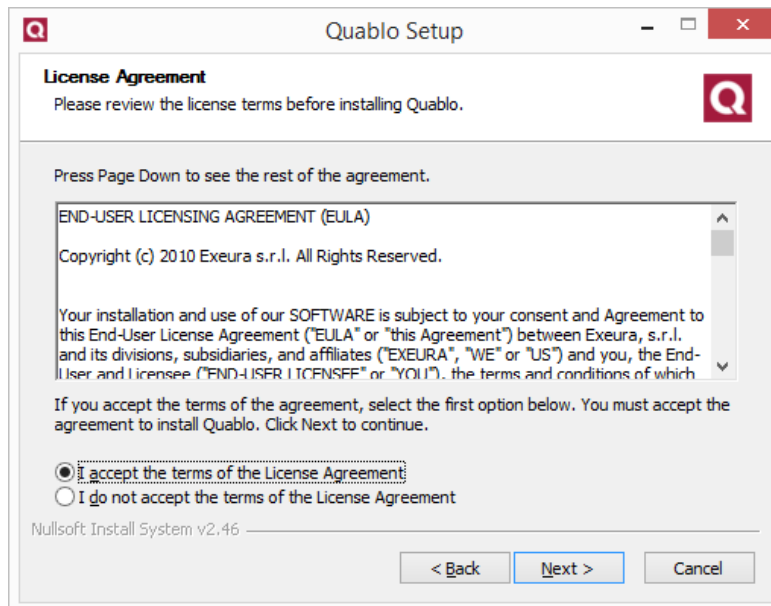


FIGURE 3. SOFTWARE LICENSE AGREEMENT – 1

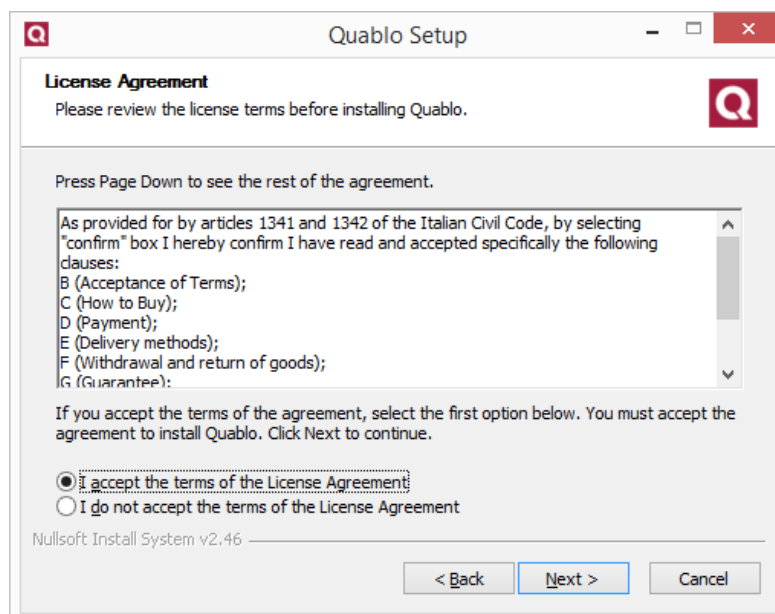


FIGURA 4. SOFTWARE LICENSE AGREEMENT - 2

INSTALLATION DIRECTORY SELECTION

Clicking [Next](#) will open a further dialog box dedicated to the choice of the components of Quablo to install (Figure 5). The use of the version that includes the OCR requires a specific license. Please read the manual section dedicated to licenses for more details.

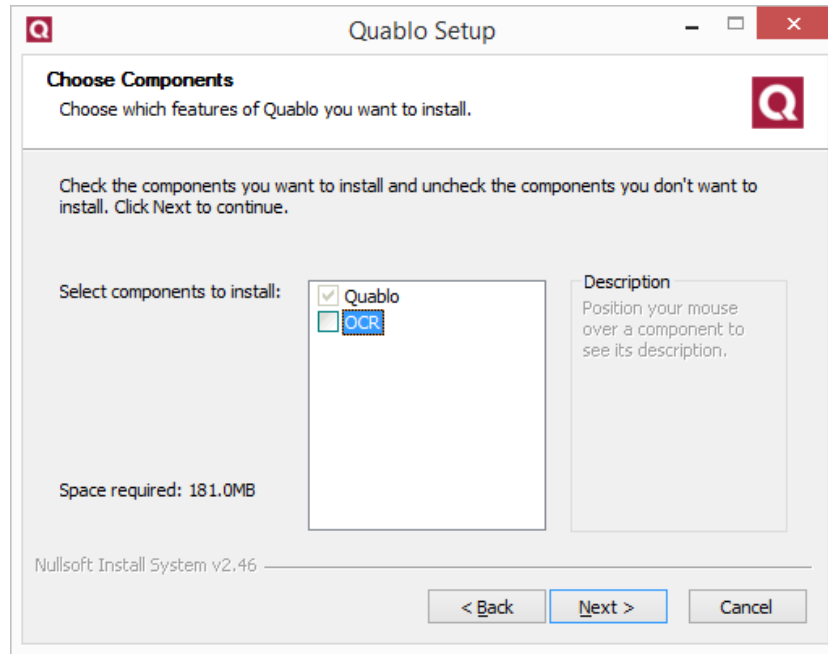


FIGURA 5. CHOICE OF QUABLO'S COMPONENTS

Once you have clicked [Next](#), you will be prompted to choose Quablo installation directory (Figure 66).

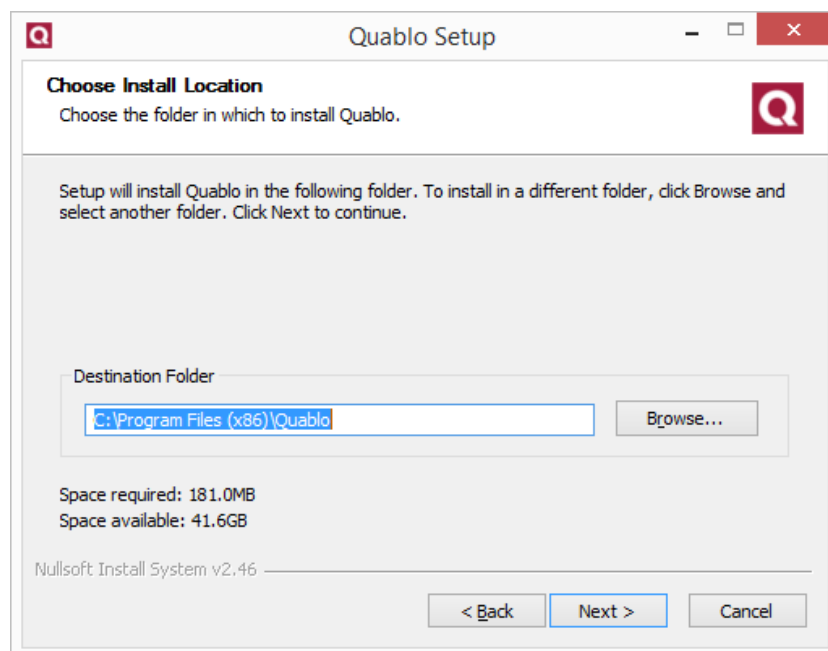


FIGURE 6. INSTALLATION DIRECTORY

If you prefer to install Quablo into a directory different from the proposed one (for example C:\Program Files\Quablo), click [Browse](#) or directly type the new path name.

After you click [Next](#), an additional dialog box allow you to choose the Start Menu folder in which you will create the program's shortcuts. You can leave the default option inserted, or choose a different path (Figure 7).

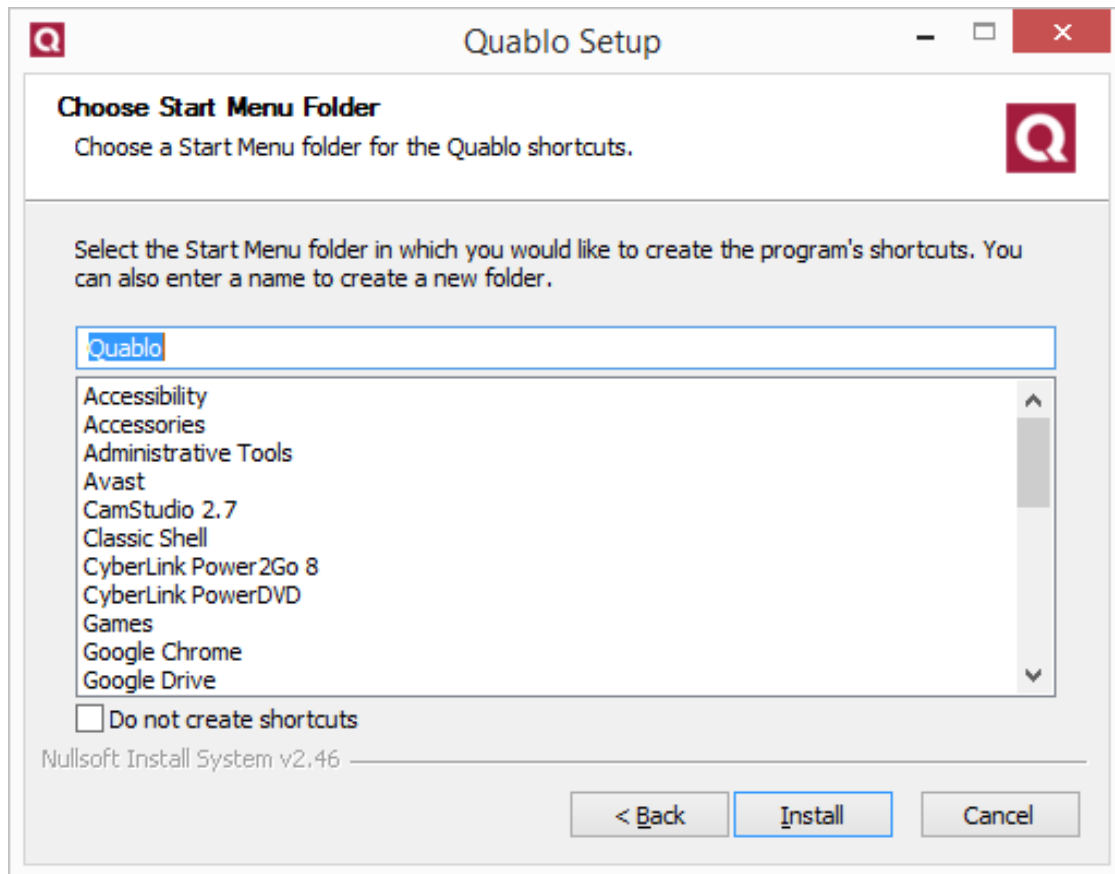


FIGURA 7. PATH OF THE START MENU

Click [Install](#) to complete the installation process.

INSTALLATION PROCESS ENDING

After you have clicked [Install](#), you'll see the installation progress bar (Figure 8).

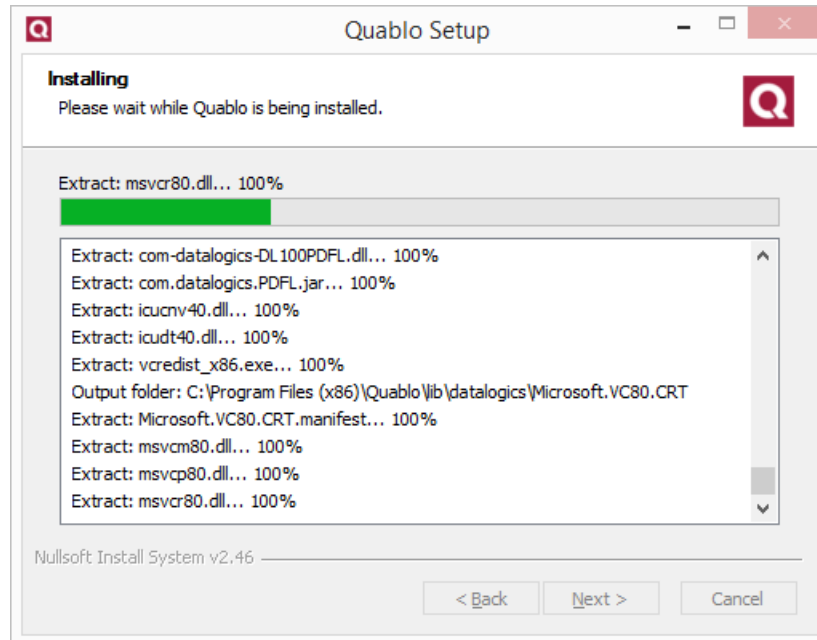


FIGURE 8. INSTALLATION PROGRESS

Only when the installation will be completed, [Next](#) will be enabled and you could progress to the next dialog box where to confirm to run automatically Quablo at the end of installation process (Figure 9)



FIGURE 9. RUN QUABLO AT THE END OF INSTALLATION PROCESS

Click [Finish](#) to close the installer.

RUNNING QUABLO

After having successfully installed Quablo, a shortcut to run Quablo will appear on your desktop (Figure 10). Double click Quablo icon on your desktop to run the software.



FIGURA 10. QUABLO SHORTCUT

As an alternative, you can run Quablo directly from the installation directory or from the Windows menu, following the path [Start](#) → [Programs](#) → [Quablo](#) → [Quablo](#).

At the first run of Quablo the windows shown in Figure 11 will appear.



FIGURE 11. QUABLO FIRST RUN

If you still don't have a Quablo license and you want to activate the evaluation version of the software, click [Start 7 Days Evaluation](#). In this period, the start-up dialog box will display how many days remain until the evaluation period finishes.

Once the evaluation period has expired the same dialog box will allow to choose between the remaining two options [Buy now Quablo](#) or [Load a License](#) (Figure 12).



FIGURE 12. EVALUATION PERIOD EXPIRED

To buy a commercial license of Quablo, click [Buy now Quablo](#) and follow the online purchase procedure available on the website www.quablo.eu.

At the end of the purchase procedure, check if you have received an e-mail with subject "[Getting Started with Quablo - License Key](#)" from licensing@exeura.eu. Quablo license is the .lic file attached to the e-mail that you could save wherever you prefer in your file system.

Click [Load a License](#) and insert the license path in the dialog box that will appear (Figure 13).

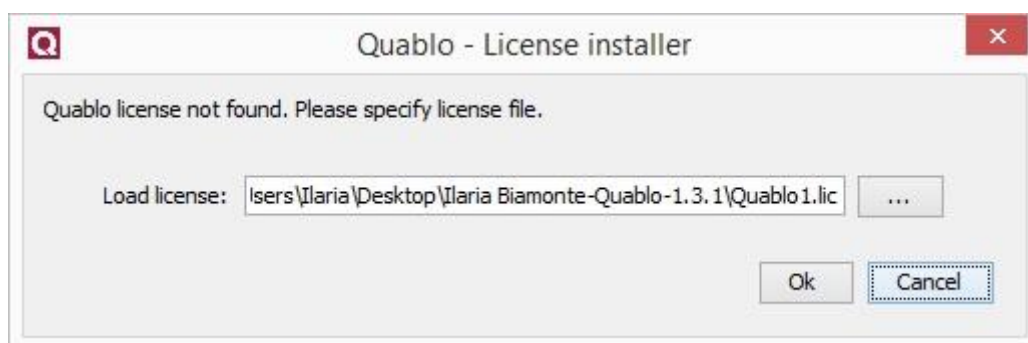


FIGURE 13. LICENSE SPECIFICATION

Then, click [Ok](#) to open the dialog box for Quablo license activation (Figure 14).



FIGURE 14. LICENSE ACTIVATION

ON-LINE ACTIVATION

Ensure to be connected to the Internet and click [OK](#) to proceed with the on-line license activation.

You will be advised of the successful activation with the message shown in Figure 15.

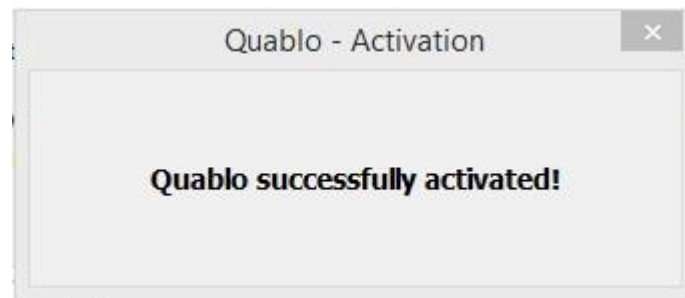
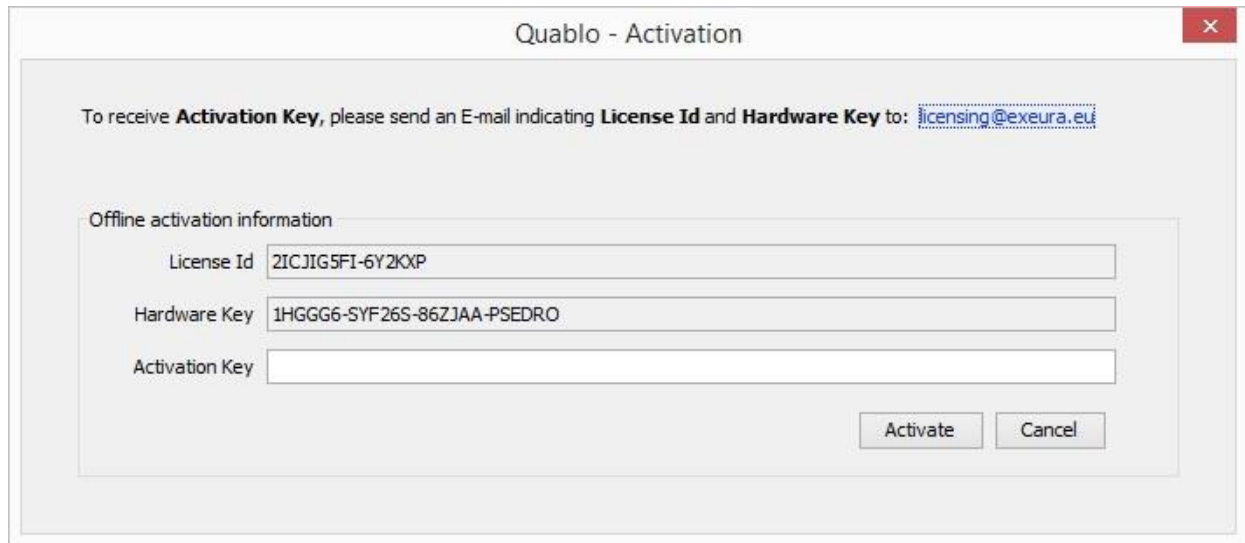


FIGURE 15. SUCCESSFUL ACTIVATION

Soon after Quablo will be automatically launched and it will be ready to be used.

OFF-LINE ACTIVATION

If an Internet connection is not available, you can activate the license selecting the [Off-Line Activation](#) option and follow the displayed instructions (Figure 16).



The image shows a Windows-style dialog box titled "Quablo - Activation". Inside the dialog, there is a message: "To receive **Activation Key**, please send an E-mail indicating **License Id** and **Hardware Key** to: licensing@exeura.eu". Below this message is a section titled "Offline activation information" which contains three text input fields. The first field is labeled "License Id" and contains the text "2ICJIG5F1-6Y2KXP". The second field is labeled "Hardware Key" and contains the text "1HGGG6-SYF26S-86ZJAA-PSEDRO". The third field is labeled "Activation Key" and is currently empty. At the bottom right of the dialog, there are two buttons: "Activate" and "Cancel".

FIGURE 16. OFF-LINE ACTIVATION

At this point, send to the address licensing@exeura.eu the license id and the hardware key shown in the dialog box that will appear. You'll receive the activation key to insert in the related text field.

We suggest to use [Ctrl+c](#) e [Ctrl+v](#) keys combinations to copy and paste the above data in order to avoid transcription errors.

Once inserted the activation key in the proper text field, click [Activate](#) to complete the license activation procedure.

UNINSTALLING QUABLO

To uninstall Quablo you can click the [Uninstall.exe](#) program included in Quablo installation directory.

Click [Disinstalla](#) to confirm that you want to remove Quablo (Figure 17). At the end of the uninstall process (Figure 18), in the last window, click [Fine](#) (Figure 19).

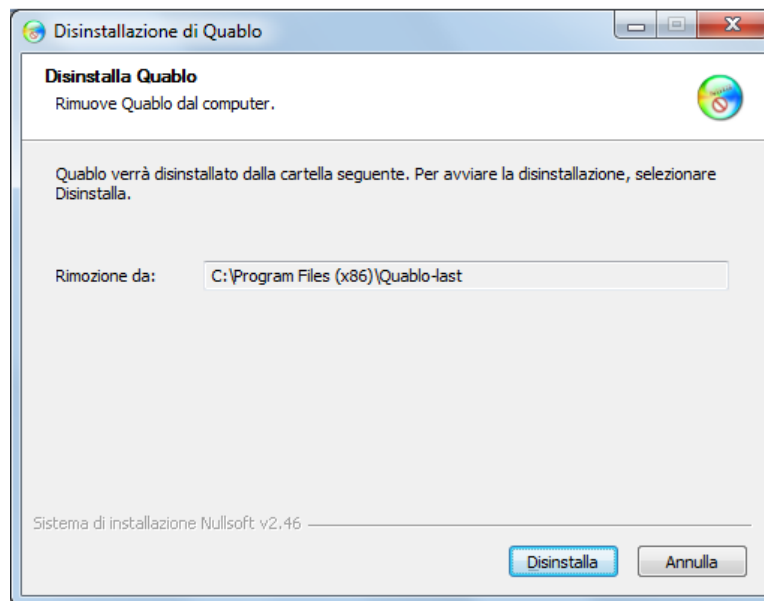


FIGURE 17. CONFIRM QUABLO UNINSTALLATION

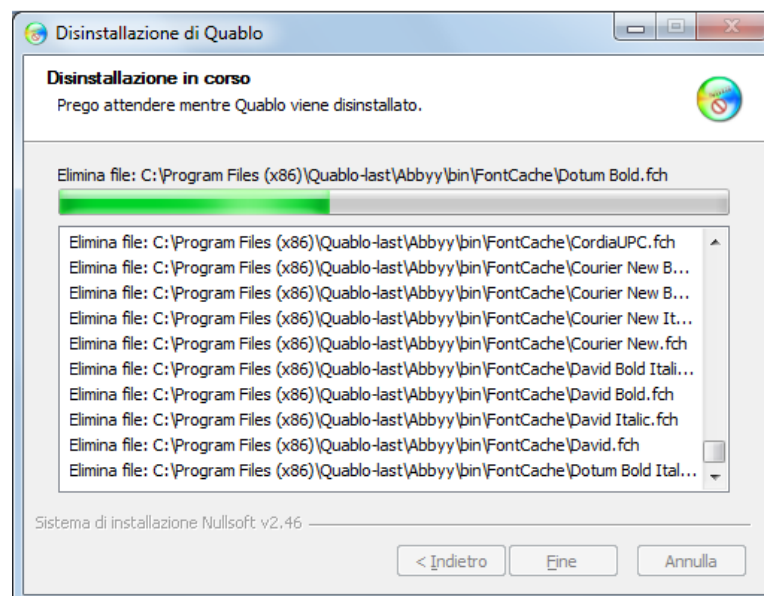


FIGURE 18. UNINSTALLATION IN PROGRESS

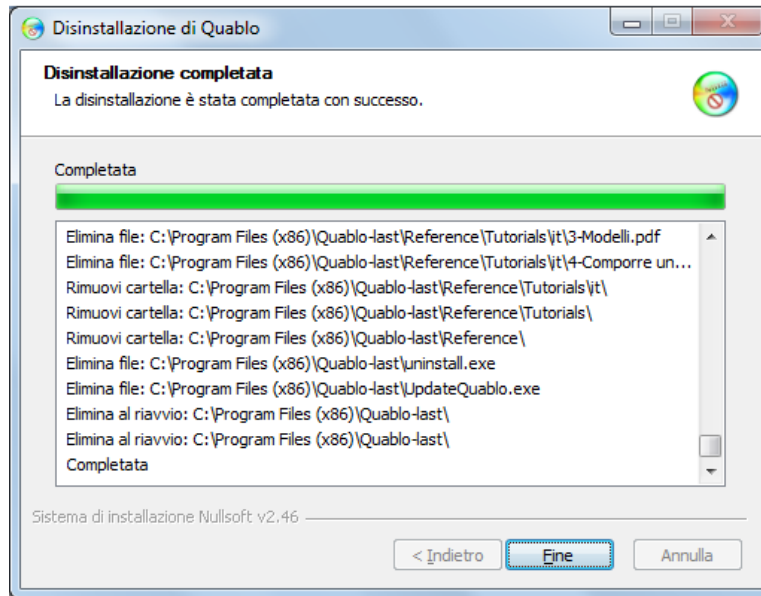


FIGURE 19. SUCCESSFUL UNINSTALLATION OF QUABLO

USER INSTRUCTIONS

Quablo can be easily used both by new and experienced users thanks to a graphical interface that is simple and intuitive to use and at the same time rich of suitable tools to support all the operational needs that can occur during the PDF table extraction process (Figure 21).

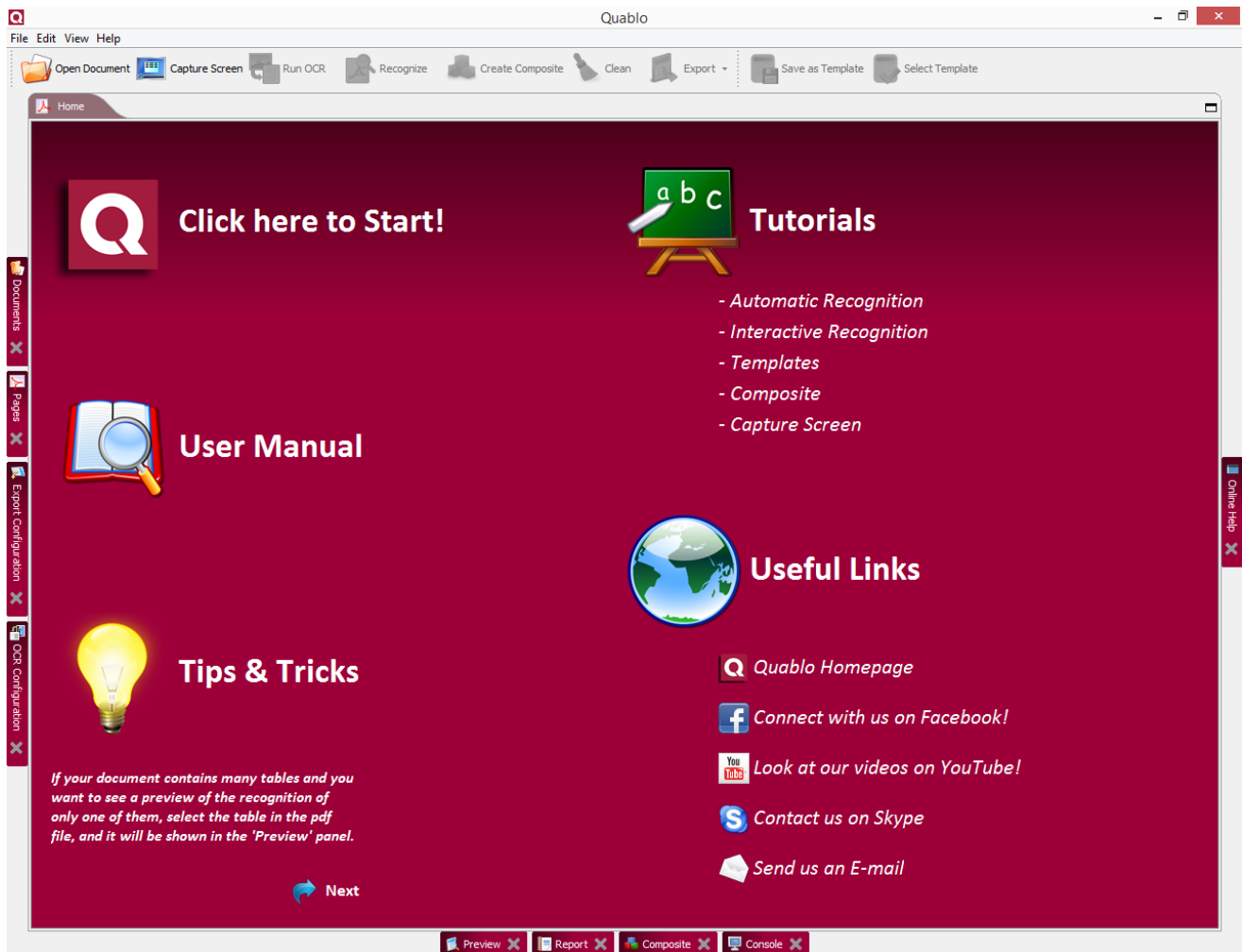


FIGURE 20. QUABLO GRAPHICAL INTERFACE

At Quablo start-up, a welcome screen allows a simply and quickly access to the main resources needed to support users in the system use. In fact, this windows make available a link to the user manual, to the tutorials and to other resources as Quablo web site and Facebook page.

The welcome screen contains also the option [Click here to Start!](#) that enables the user to a direct exploitation of the core tools to start to work with Quablo (Figure 21).

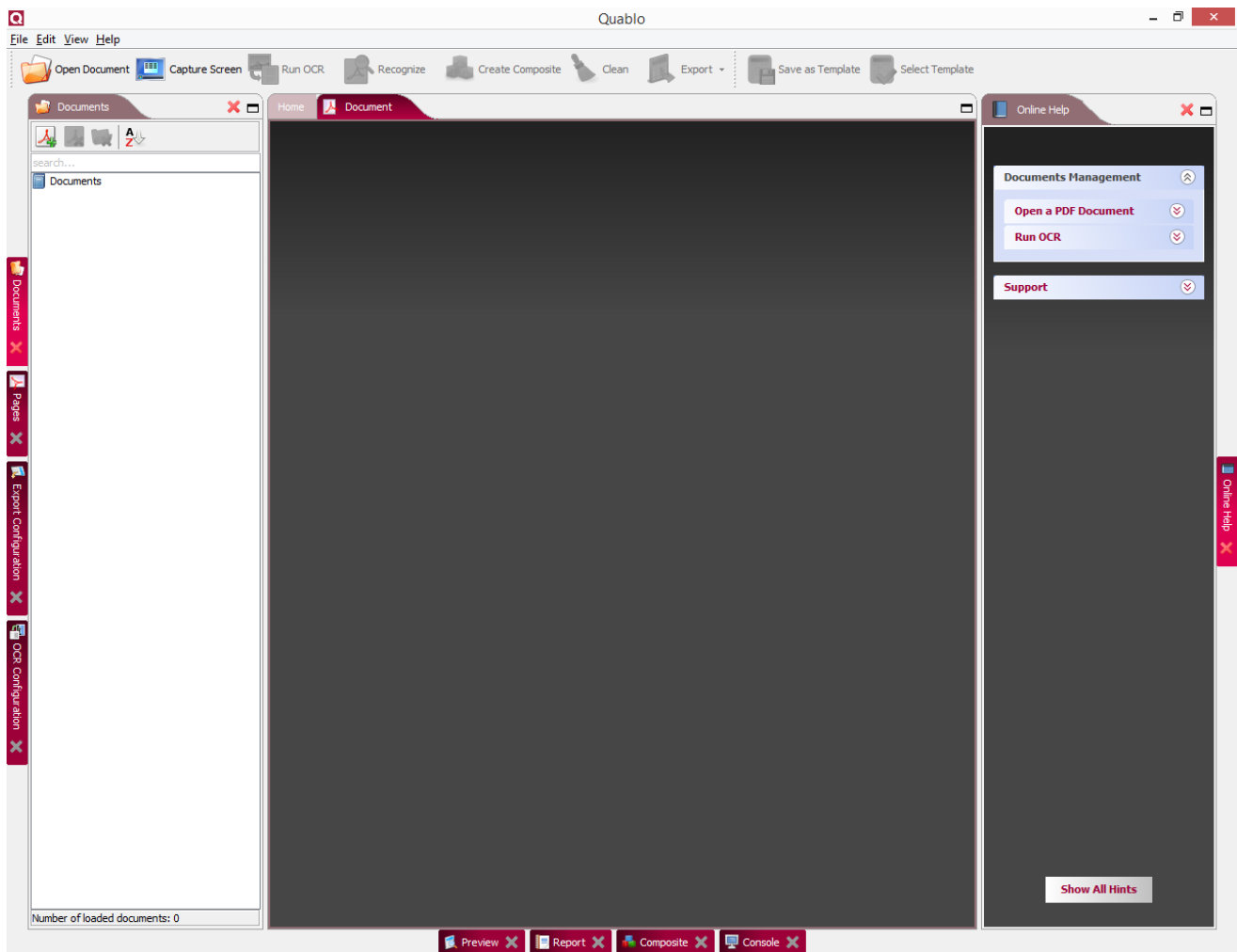


FIGURE 21. CORE TOOLS TO START USING QUABLO

The online guide, appearing in the right panel of the main window is particularly useful for Quablo new users. This guide suggests which are the functionalities available for the user contextually to a given system use phase.

To access to all the arguments of the guide, regardless of a particular system use context, it is sufficient to click on the button [Show all Hints](#).

GENERAL DESCRIPTION OF THE USER INTERFACE

The main window of the user interface contains a menu bar providing access to the main functions of interaction with the system. Just under the menu bar it is placed a toolbar containing the icons to access to the functions most frequently used by the user.

In the central region of the main window, the user can find a panel for documents visualization. This panel has its own toolbar providing access to all the functions that can be applied to the file currently visualized.

In the left and the lower borders of the main window some floating panels are available for the visualization and management of information associated to a particular phase of interaction with the system.

Some buttons are available on the main window borders. Each one of them allow the opening of a panel intended to the display and management of the information related to a particular phase of interaction with the system.

Each user interface component will be more extensively described in the next sections.

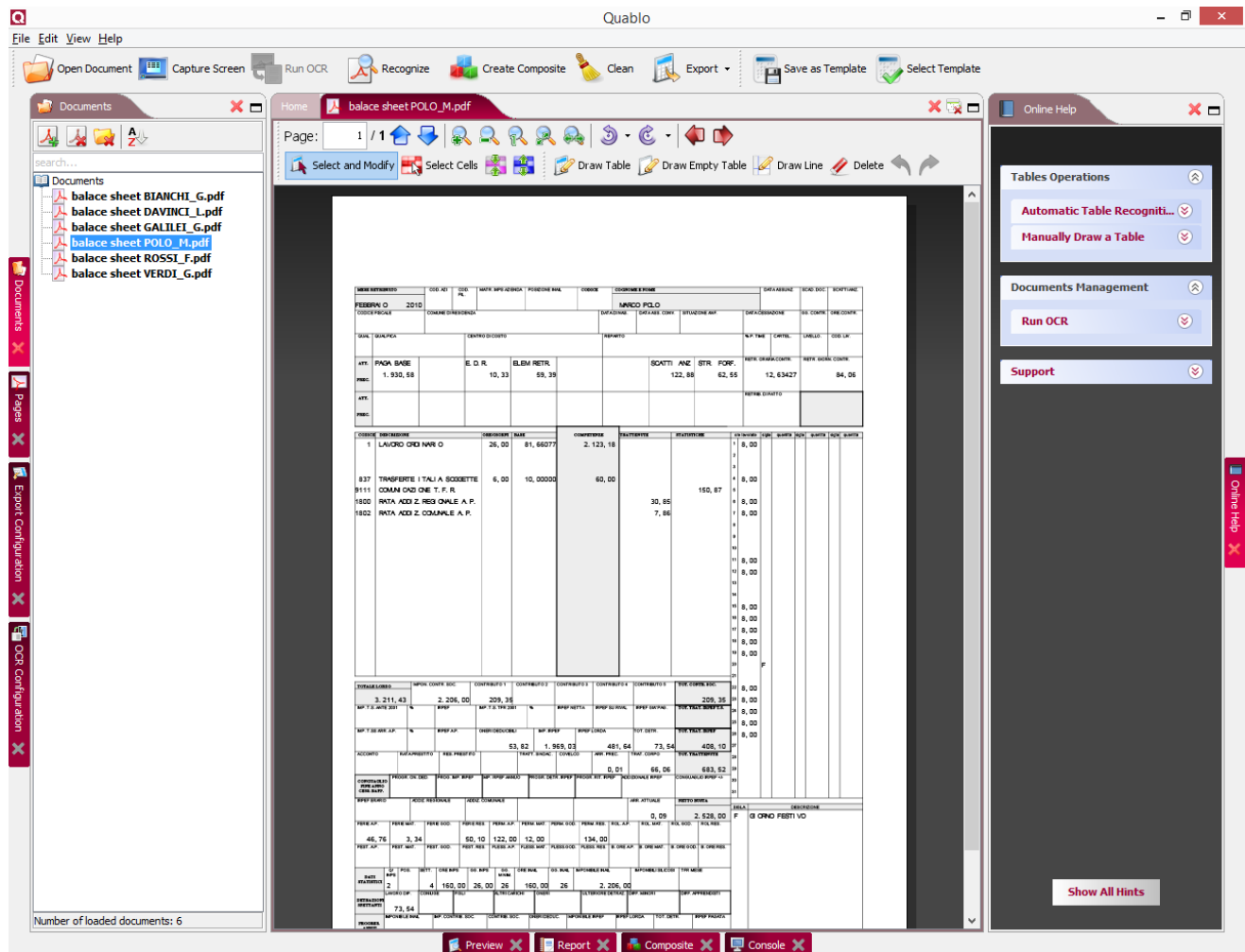


FIGURE 22. QUABLO GRAPHICAL INTERFACE

MENU BAR

Quablo menu bar (Figure 23) provides access to **File**, **Edit**, **View** and **Help** menu.

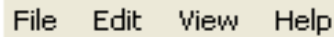


FIGURE 23. MENU BAR

File menu, shown in Figure 24,

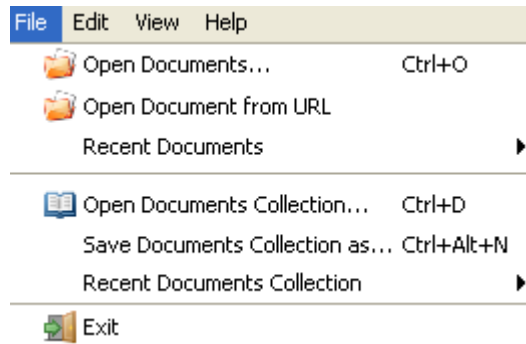


FIGURE 24. FILE MENU

is divided in two sections: the first section is dedicated to files management, the second section to documents collections management.

The functions included in the first section are:

- ➔ **Open Documents ...**: Opens a dialog box to select the file to load in Quablo. To select more files at the same time, click on the files while pressing the **Ctrl** key (Figure 25).

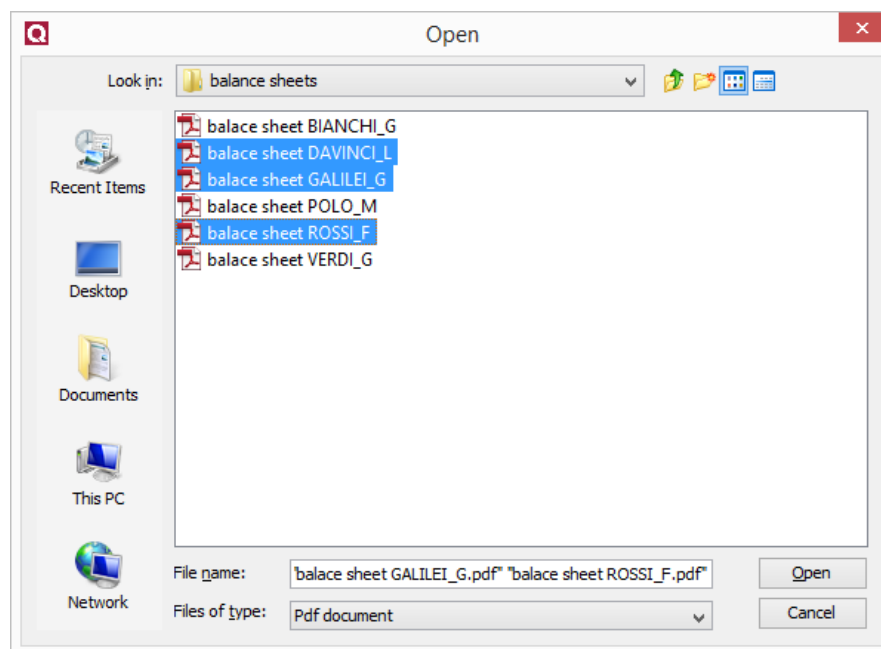


FIGURE 25. MULTIPLE SELECTION OF FILES

- **Open document from URL:** Open a window for the specification of the remote file URL (Figure 26). An option shown in this window allows to decide whether to eliminate the document after its closure or to keep it in the directory in which it has been temporarily saved.

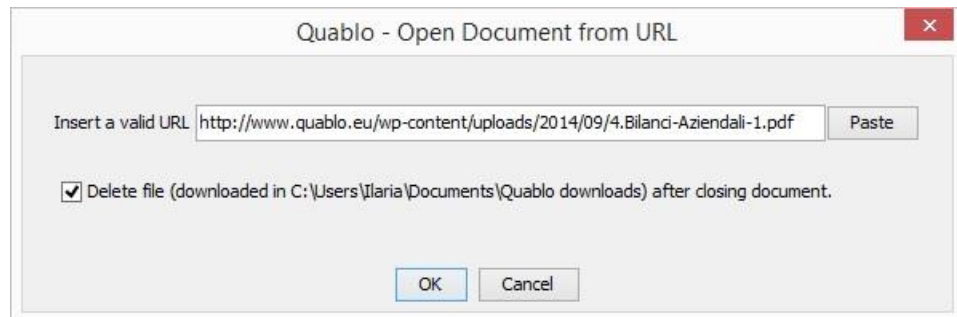


FIGURE 26. REMOTE FILE OPENING

- **Recent Documents:** Keeps track of the last files opened in Quablo and shows their list to provide a fast access.

Functions included in the second section of File menu are:

- **Open Documents Collection...:** Opens a window to load a document collection previously saved (Figure 27). Note that you can recognize a document collection by means of the extension .cps.

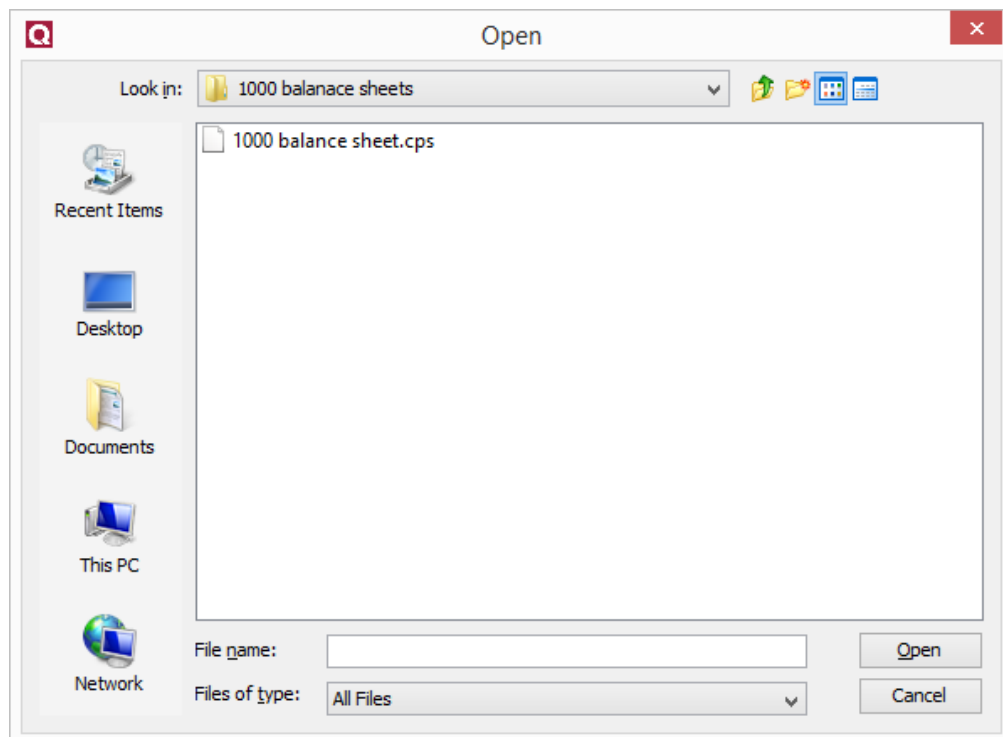


FIGURE 27. DOCUMENT COLLECTION OPENING

- **Save Documents Collection as...:** Opens a window to choose the name and the path in which to save a document collection (Figure 28).

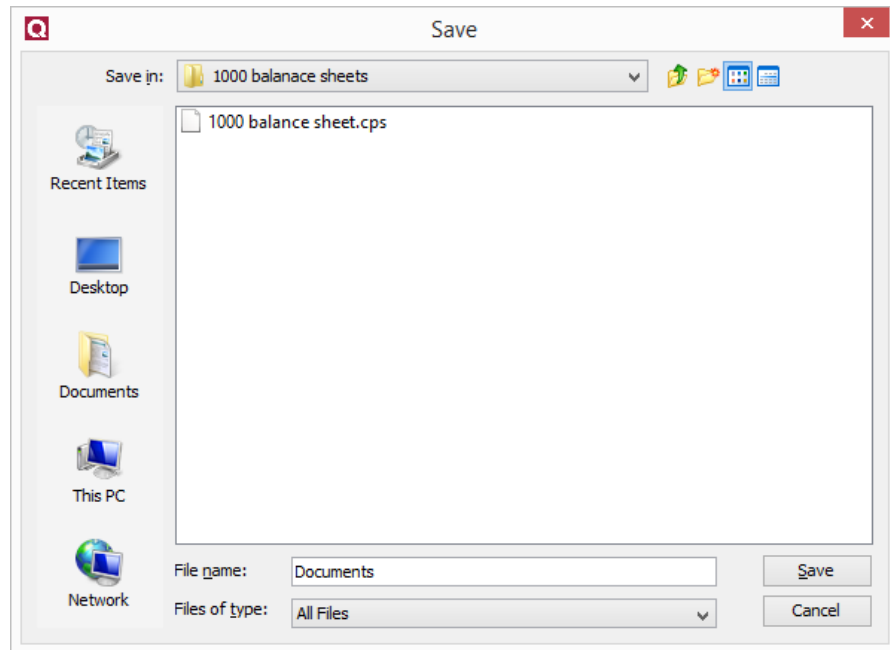


FIGURE 28. DOCUMENTS COLLECTION SAVING

- **Recent Documents Collection:** Lists the most recently opened document collections.

The last function of the **File** menu is:

- **Exit:** Closes Quablo.

Edit menu, shown in Figure 29,

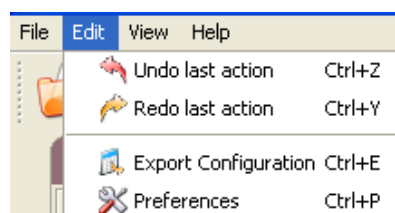


FIGURE 29. EDIT MENU

contains the following functions:

- **Undo last action:** Restores last table or line update;
- **Redo last action:** Redoes last table or line update;
- **Export configuration:** Opens a window for the configuration of the export options for the recognized tables;

- **Preferences:** Opens a window for the tuning of table recognition parameters ([Recognition Parameters](#) in Figure 30) and for the modification of some other options ([Options](#) in Figure 31).

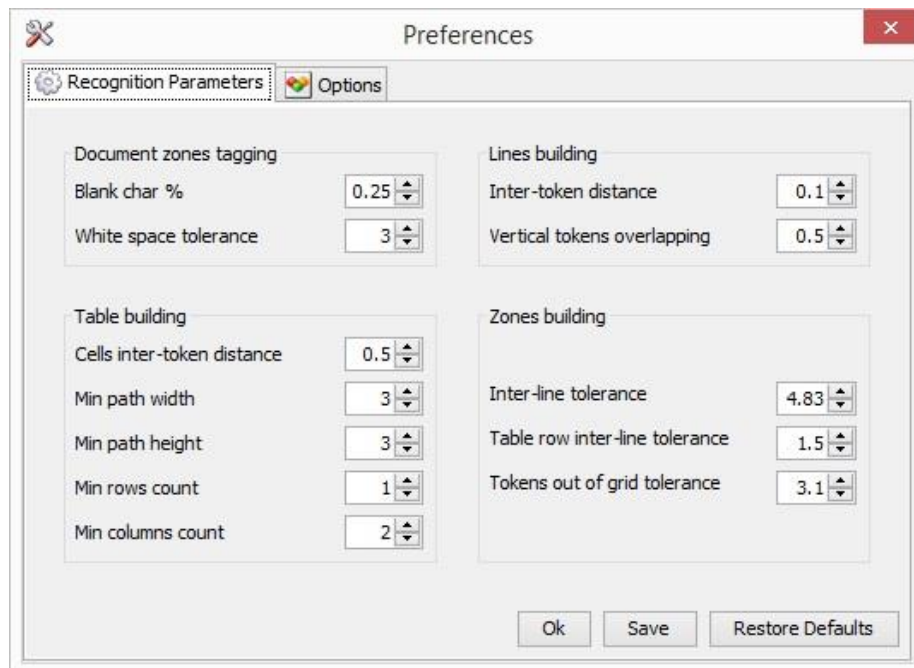


FIGURE 30. TABLE RECOGNITION PARAMETERS

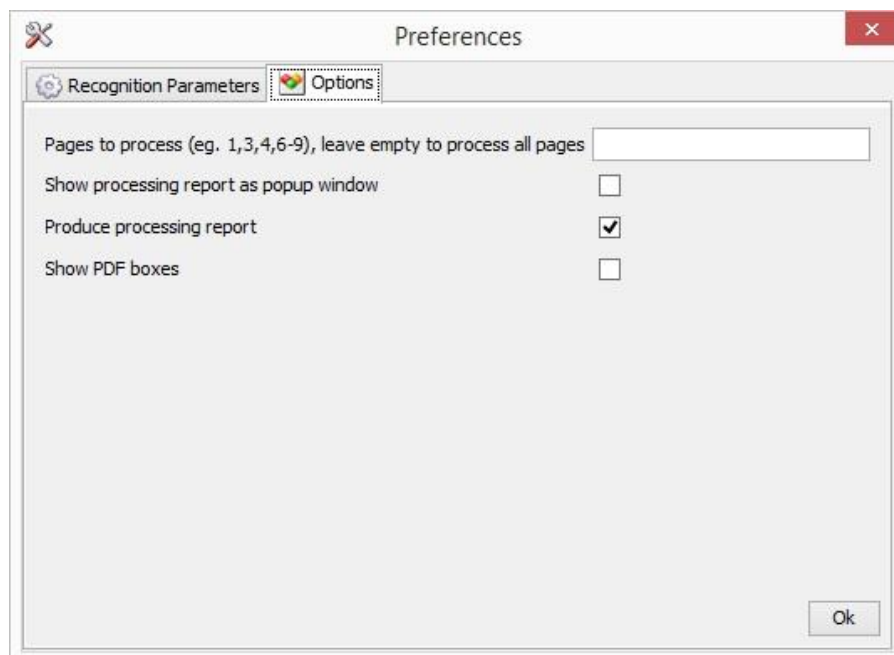


FIGURE 31. OPTIONS

A detailed explanation of the meaning of the parameters shown in the [Recognition Parameters](#) window is given below. We suggest not to modify default values if there is not a specific need to do so. Anyway, default values can be restored by clicking [Restore Defaults](#).

- **Blank char %:** estimated percentage of blank chars occurring in a text line. Between 0 and 1.
- **White space tolerance:** tolerance value used for the classification of a line as belonging to a non border table. The greater this value is, the greater it will be the number of blank chars occurring into a text row, needed to classify the row as belonging to a table.
- **Cells inter-token distance:** tolerance value used to guess the belonging of two tokens to the same cell of a non bordered table. The greater this value is, the greater it will be the likelihood of two tokens to belong to the same cell. Between 0 and 1.
- **Min path width:** minimum width of a line to consider it in the recognition of a border table. Expressed in points.
- **Min path height:** minimum height of a line to consider it in the recognition of a border table. Expressed in points.
- **Min rows count:** minimum number of rows for a table to be considered as table.
- **Min column count:** minimum number of columns for a table to be considered as table.
- **Inter-token distance:** minimum distance to consider two tokens as distinct tokens into a text line. Expressed in points.
- **Vertical tokens overlapping:** tolerance value used to evaluate the belonging of two tokens to the same line, considering their vertical overlapping degree. The greater this value is, the greater it will be the likelihood of two tokens to belong to the same line. Between 0 and 1.
- **Inter-line tolerance:** maximum distance to consider a line as belonging to a region of the document where presumably is placed a table. Expressed in points.
- **Table row interline tolerance:** tolerance value used to recognize two distinct lines into a table. The greater this value is, the greater it will be the likelihood of two rows to be separated. Expressed in points.
- **Tokens out of grid tolerance:** tolerance value used to evaluate the belonging of a token to a cell. The greater this value is, the greater it will be the likelihood of a token to belong to a cell. Expressed in points.

View menu, shown in Figure 32, includes some features concerning files visualization.

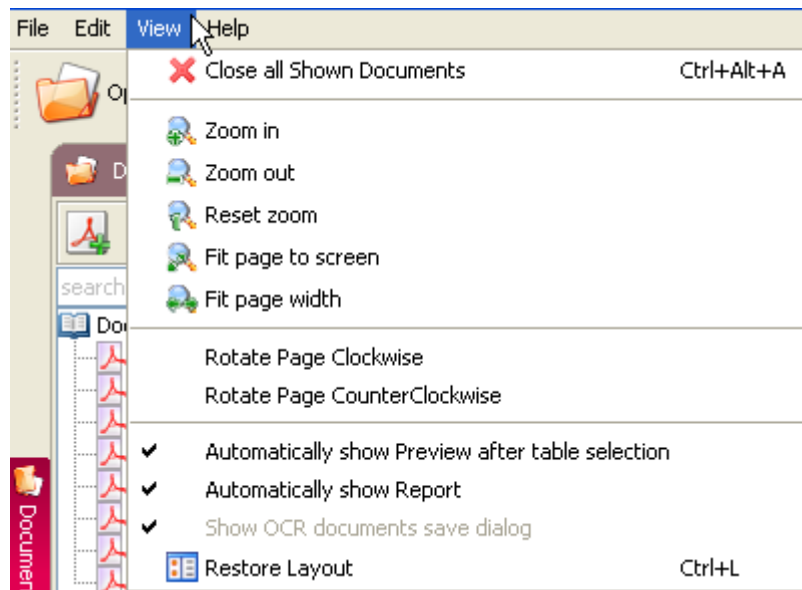


FIGURE 32. VIEW MENU

In this menu the following functions are available:

- **Close all shown Documents:** closes all documents opened in the visualization window.
- **Zoom in:** increases the page size of the document having the focus.
- **Zoom out:** reduces the page size of the document having the focus.
- **Reset zoom:** sets the original size of the pages of the document having the focus.
- **Fit page to screen:** adapts the page size of the document having the focus.
- **Fit page width:** adapts the page size of the document having the focus.
- **Rotate Page Clockwise:** Rotate clockwise the page currently opened in the visualization panel.
- **Rotate Page CounterClockwise:** Rotate counter clockwise the page currently opened in the visualization panel.
- **Automatically show Preview after table selection:** if the check symbol appears close to the menu command, this behavior is enabled. Otherwise, is disabled.
- **Automatically show Report:** if the check symbol appears close to the menu command, this behavior is enabled. Otherwise, is disabled.
- **Show OCR documents save dialog:** Show the window enabling the saving of documents generated with OCR. If the option is checked, this behavior is enabled. Otherwise is disabled. This option is available only in Quablo™ OCR.
- **Restore layout:** restores the default graphical layout.

[Help](#) menu, shown in Figure 33,

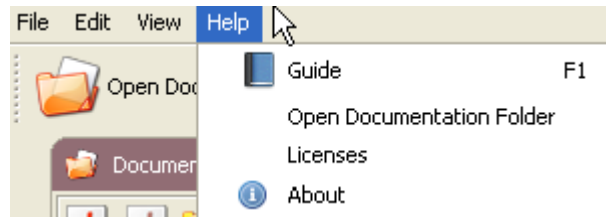


FIGURE 33. HELP MENU

contains the following functions:

- **Guide:** Opens Quablo user manual.
- **Open documentation folder:** Open the folder containing the documentation supplied together with Quablo.
- **Licenses:** Opens a window showing license information concerning Quablo (Figure 34);
- **About:** Opens a window showing some general information concerning Quablo (Figure 35).

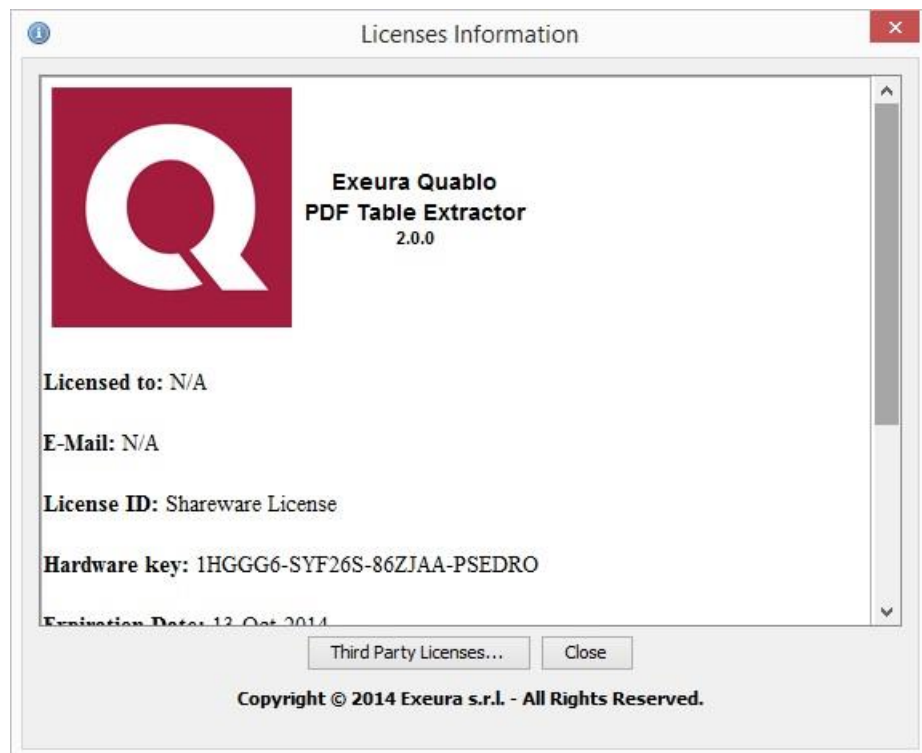


FIGURE 34. LICENSE INFORMATION WINDOW

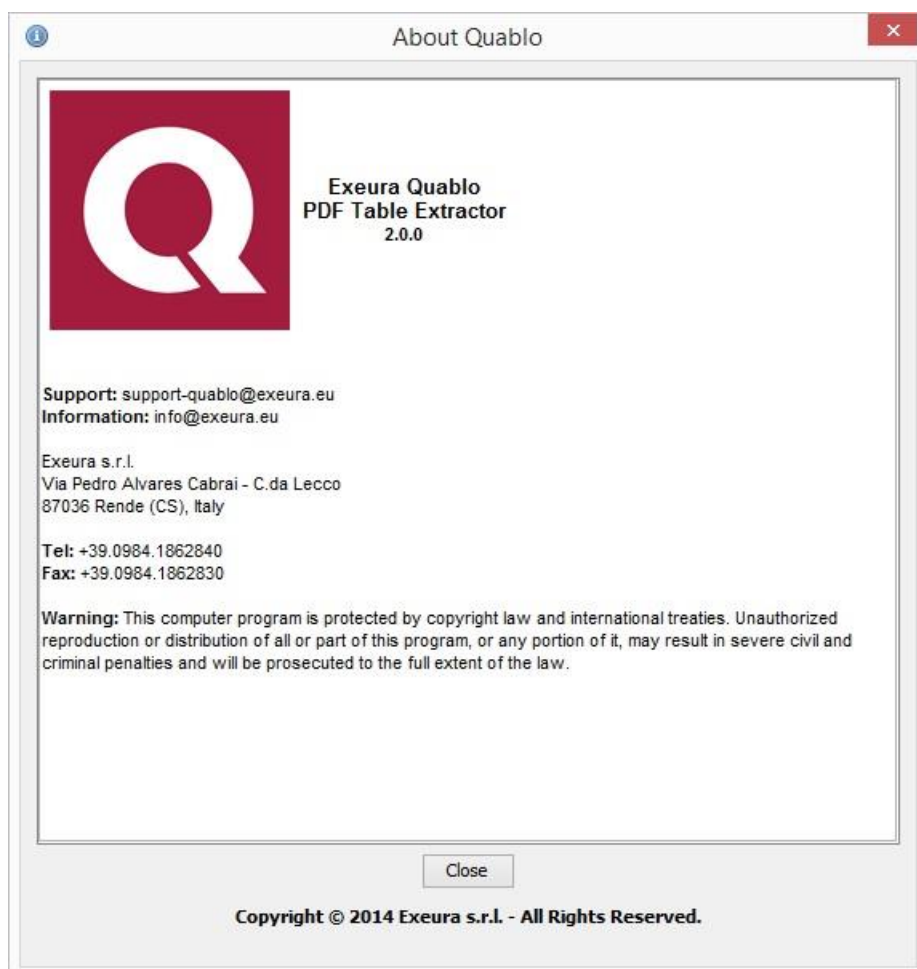


FIGURE 35. QUABLO ABOUT WINDOW

TOOLBAR

The toolbar, shown in Figure 36, allows a quick and intuitive access to the main features of Quablo. You need to click one of the icons included in the toolbar to immediately use the represented function or the arrow on the right of the icon, if present, to access the advanced options available for that function.

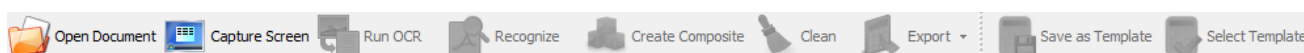


FIGURE 36. TOOLBAR

Features available in the toolbar are:

- **Open Document:** Opens a window to select files to be loaded in Quablo. To select more files at the same time click the files pressing the **Ctrl** key on the keyboard.
- **Capture Screen:** Capture a portion of the computer's video screen, freely selectable by the user, processable in an image format by the OCR functionality already present in Quablo (Screen Capture functionality is only available for Quablo OCR).

- **Run OCR:** Run OCR analysis on the document currently opened in the visualization panel. This feature is available only for Quablo™ OCR.
- **Recognize:** Starts the automatic recognition of the tables occurring in the document currently opened. Clicking on the arrow on the right of the icon, you can extend the recognition to all the documents currently loaded into the system, limit the tables recognition to the displayed page only or use a filter to recognize only some kind of tables (Figure 37).

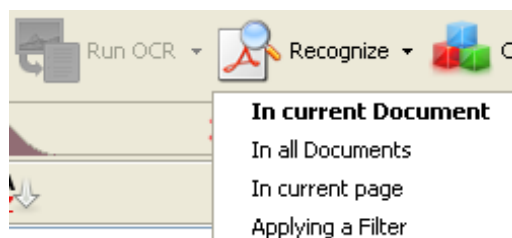


FIGURE 37. TABLES RECOGNITION OPTIONS

Note that recognized tables are marked by a green grid tracing the external border and the cells of the recognized tables.

Selecting the option **Applying a Filter** the window shown in Figure 39 will be displayed.

FIGURE 38. CONFIGURATION OF THE FILTER TO USE FOR TABLES RECOGNITION

This window allows to specify which are the characteristics of the table the user is interested on. In particular, it is possible to specify if tables recognition has to be performed only on the current document or on all the documents loaded in Quablo, which pages contain the

tables to recognize, how many are the columns and rows of these tables and, at the end, which values have to appear in some given cell.

The selection of the option **Return only tables that don't match filter constraints** allows to exclude from recognition process tables satisfying specified criteria and to include tables that, on the contrary, don't satisfy the given constraints.

After the proper configuration of the filter to apply for the tables recognition, it is sufficient to click **Ok** to obtain the automatic recognition just of the tables corresponding to the criteria specified by the user.

- **Create Composite:** Allows to structure as you like the table to export, dragging cells from the original tables to the table represented into the **Composite** panel. In this way, you can compose the output table choosing which cells of the original tables have to be part of the table to export and their placement in that table.
- **Clean:** Cleans the tables automatically or manually recognized in the document currently opened. It is possible to choose to clean all the documents loaded in the system, only the page currently displayed, all the not displayed pages of the current document or all the pages of the current document (Figure 39).

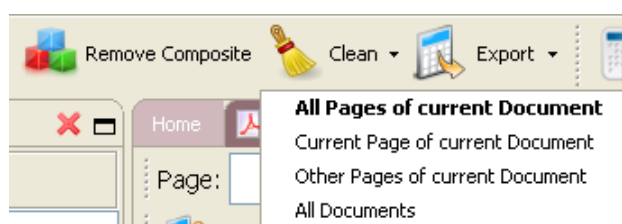


FIGURE 39. CLEAN OPTIONS

- **Export:** Exports the recognized tables accordingly to the export configuration selected in the panel **Export Configuration**. Clicking the arrow on the right of the icon, it is possible to export only the current document or all the documents loaded in the system. Moreover it is possible to export only tables corresponding to the characteristics specified by the user by means of a filter similar to the one used for the automatic recognition (Figure 38).

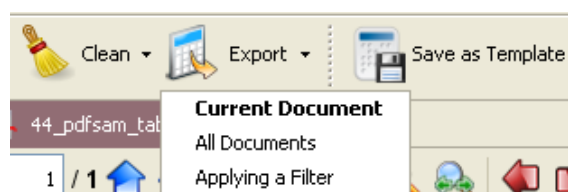


FIGURE 40. EXPORT OPTIONS

- **Save as Template:** Saves as template the recognition layout occurring in the document currently opened in order to apply it to other documents.
- **Select Template:** Selects and applies a template. Options available clicking the arrow on the right of the icon are (Figure 42):
 - Applies tables of current document as template to all documents, only to the current document or to all the pages of all the documents;

- Loads a template previously saved and apply it to all documents, only to the current document or to all the pages of all the documents.

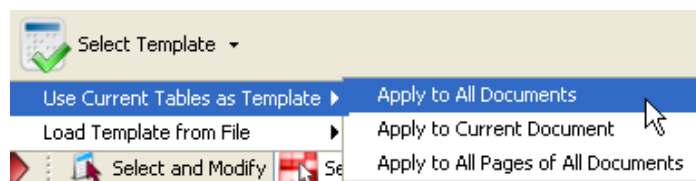


FIGURE 41. TEMPLATE OPTIONS

DOCUMENTS VISUALIZATION WINDOW

The central window of Quablo GUI includes all the tools for the visualization and the management of the documents loaded in the system (Figure 42).

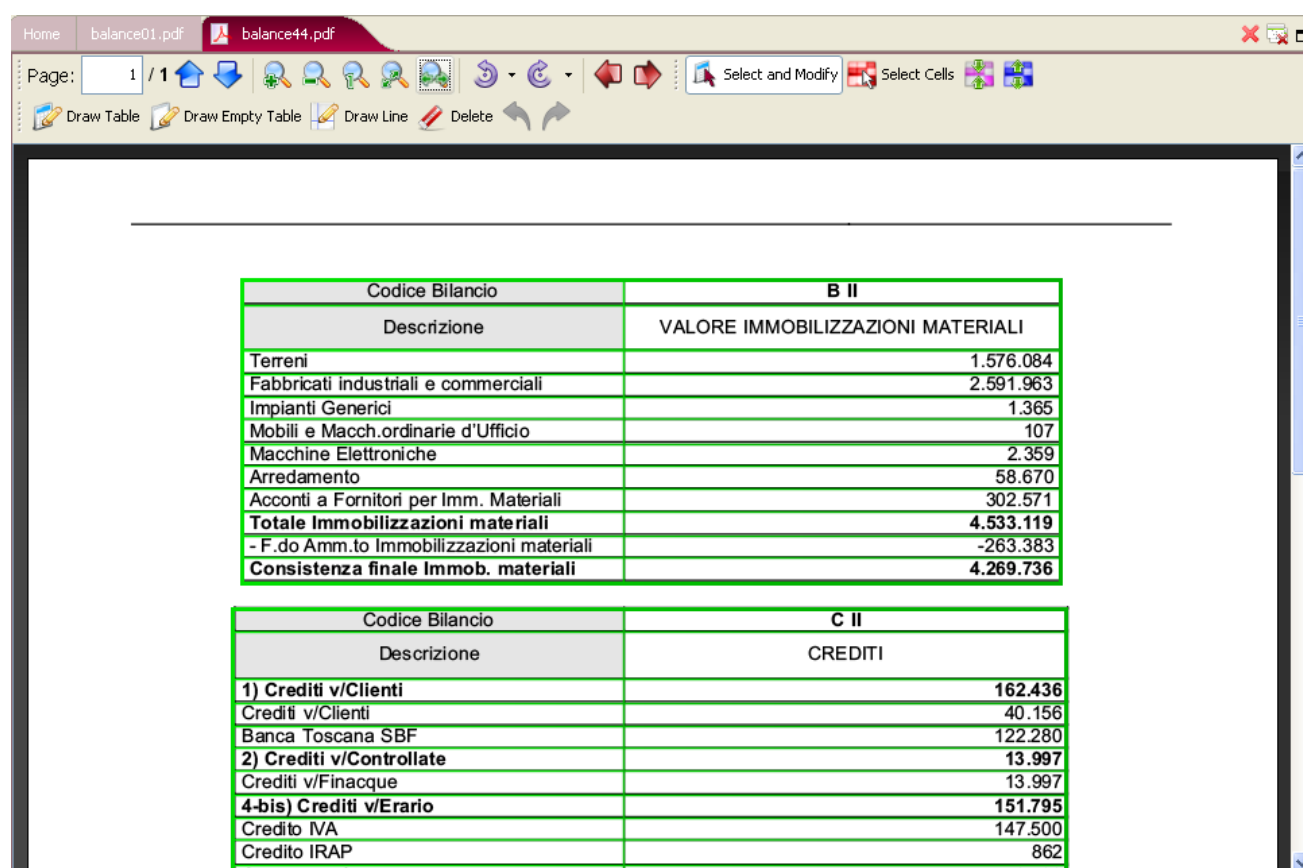


FIGURE 42. MAIN WINDOW

To view a document already loaded in the system, you need to double click the document title in [Documents](#) panel. If, instead, the document you want to view has not yet been loaded, you can select it from the file system, click it with the left button of the mouse and drag it in the central window.

For each displayed document, you will see in the upper part of the window a bar with the document title. You can switch from a document to another by simply clicking the title bar of a document.

To close a document in the visualization panel, click the first icon placed in the upper right part of the panel (Figure 43). To close all the documents at once, select the central icon. To resize the panel, choose the third icon.



FIGURE 43. VISUALIZATION PANEL CONTROLS

Moreover, by clicking a table with the right button of the mouse, a contextual menu appears, providing a quick export of a table into Excel or into the [Console](#) panel and a recognition/exportation just of the tables having the same number of rows and columns of the selected table.

TOOLS FOR THE VISUALIZATION AND NAVIGATION OF PDF DOCUMENTS

After having opened a file in the central window of Quablo, you can explore document pages by means of the navigation controls shown in Figure 44. The downwards arrow allows to view the next page, the upwards one the previous one.

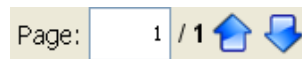


FIGURE 44. PAGE NAVIGATION CONTROLS

The second group of controls available in the toolbar is in charge of document visualization and allows to adjust the size of the document image as follows:



zooms in the page visualization;



zooms out the page visualization;



adjusts the visualization to the size of the original document image;



adapts the visualization according to the window dimension;



adapts the visualization according to the window width.

Document size can be changed also pressing [Ctrl](#) key on the keyboard and scrolling mouse wheel or using [Ctrl+](#) e [Ctrl-](#) keys combinations.

To rotate the pages of the document currently visualized, clockwise and counterclockwise controls are available (Figure 45).



FIGURE 45. CLOCKWISE AND COUNTERCLOCKWISE CONTROLS

Moreover, clicking the arrow to the right of each rotation icon is possible to select one of the following options:

- Rotate CounterClockwise/Clockwise Current Page
- Rotate CounterClockwise/Clockwise All Pages

To explore the document content focusing the attention on the recognized tables, you can use tables navigation controls (Figure 46). The rightwards arrow allows to view the next table recognized in the document, the leftwards one, the previous.



FIGURE 46. TABLE NAVIGATION CONTROLS

TOOLS FOR THE MANUAL COMPOSITION OF A TABLE

Quablo GUI allows the user to modify the layout of the tables recognized automatically, to identify tables in a semi-automatic way or to trace a table from scratch.

These interactions are supported by the tools included in the last group of the toolbar (Figure 47) and can be accessed in mutual exclusion. In other words, functions of this group can be used one at a time and only after explicit selection.

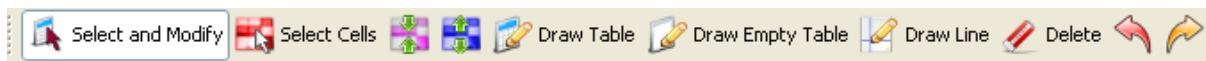


FIGURE 47. TABLE MANUAL COMPOSITION CONTROLS

In the default configuration, the active control is **Select and Modify** (mouse cursor icon). In this modality, a line or a whole grid traced on a table can be selected and moved or deleted.

To move a grid or a line you need to press the left button of the mouse and move it towards the final position. To perform micro-displacements you can use also arrow keys of the keyboard.

To delete a grid or a line, you can select the element to delete and push **Cancel** on the keyboard.

Note that on the selected table it appears a red border. In the same way, a selected line is highlighted in red.

If the active command is **Select and Modify** you can modify the recognition grid, also increasing or decreasing its dimensions. To obtain this modification it is sufficient to place the cursor of the mouse on one of the table borders and to move right or left (if the selected border is vertical) or up or down (if the selected border is horizontal).

To select a single cell, press **Select Cells** (red square icon) and click on the cell. Cell selection is highlighted by a pink coloring of the cell. To select a set of cells, instead, click on the cells, pressing **Ctrl** on the keyboard.

The cell selection enables other two functionalities:



is the icon representing [Merge Cells](#) feature and consists in merging more cells in a single one. This operation is enabled only if selected cells are adjacent. If this condition is not respected, an error message will be shown.



is the icon representing [Create rows](#) feature and consists in the partition of one or more cells in rows, following system automatic recognition heuristics.

For the semi-automatic recognition of a table, it is necessary to select [Draw Table](#) () and, then, while pressing the left button of the mouse, to trace page region in which the table you want recognize is placed.

After the release of the mouse button, a green grid will be traced on the selected table. The obtained recognition could be improved selecting proper controls for table updating.

To manually draw a table, select [Draw Empty Table](#) () to draw only the table border and then [Draw Line](#) () to split the table in rows and columns. By positioning the mouse cursor on the table border, the preview of the line to draw will be shown in blue. Click and the proposed line will be really drawn.

If you want to draw lines only for some cells, start pressing left mouse button on the line starting point, move the mouse until the line ending position and only at this point release the button.

If you need to repeat a draw line operation only for some cells, it could be useful to select the cells group using [Select Cells](#) and then [Draw Line](#): in this way, placing the mouse cursor on the border of the group of cells, only the lines interesting the table region covered by the selected cells automatically will be proposed in blue.

In the tail end of the toolbar there are placed the functions to cancel a table or a line () and to cancel () or restore () last update made.

Finally, note that a contextual menu will be shown if you select a group of cells and click with the right button of the mouse (Figure 48). This menu enables a rapid access to [Merge Cells](#) and [Create Rows](#) functionalities, to the quick export of the selected cells into Excel or the [Console](#) panel and to the [Clear Selection](#) and [Select all Cells](#) functionalities.

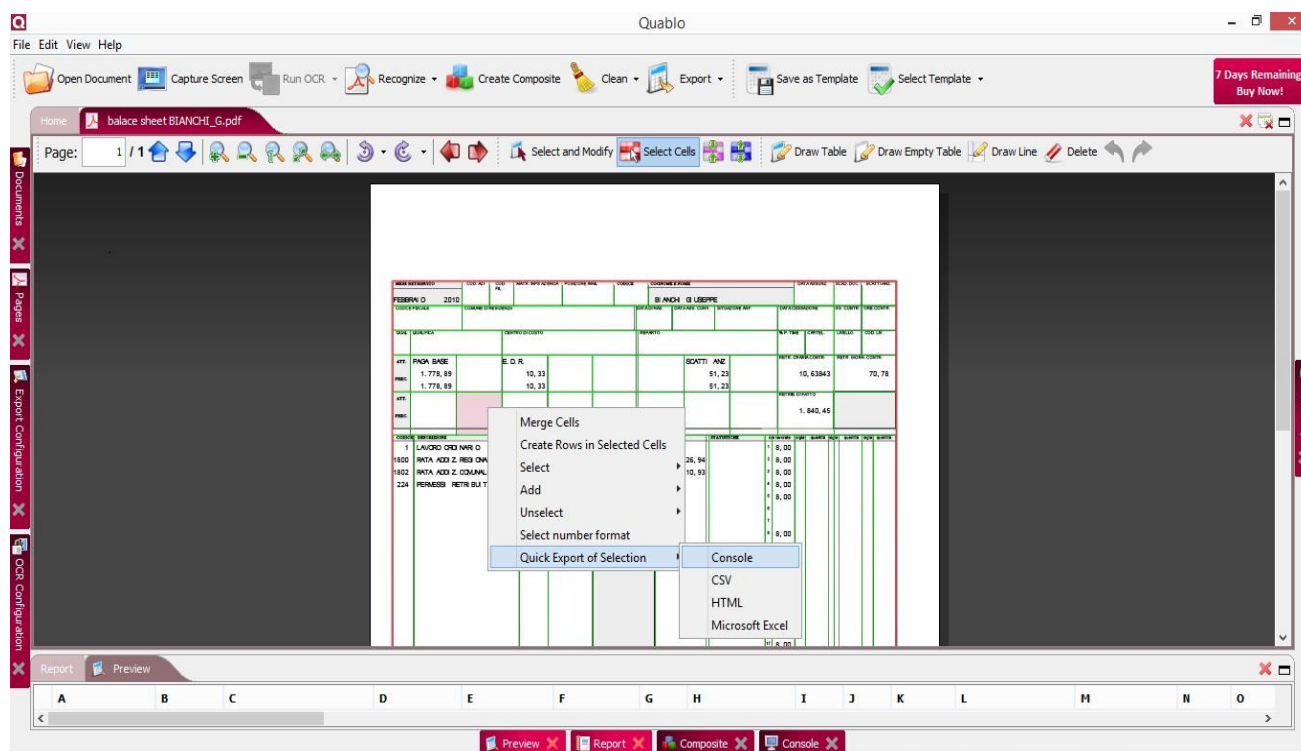


FIGURE 48. CONTEXTUAL MENU ON THE VISUALIZATION WINDOW

UTILITIES PANELS

The default configuration of Quablo GUI presents a central window and some panels along the borders of the central window. The panel content is displayed if you click on the title bar of the panel and it is hidden if you click on the symbol  in the title bar.

The proposed graphical layout can be widely customized and adapted to the user preferences both in relation to the panels position and dimension and to the interaction modality.

To change the position of a panel and to bring it to the same visualization level of the main window, left click on the panel title bar, drag the panel and release the mouse button only after having chosen the preferred position.

To resize a panel, click on its border and drag it left clicking until you have obtained the preferred size. Each panel can be moved in the foreground, occupying all the available area pressing the button . The resize of the same panel can be obtained pressing the button .

Finally a panel can be closed pressing the button .

The default layout can be always restored selecting [Restore Layout](#) in [View](#) menu.

DOCUMENTS

The list of PDF documents currently loaded in Quablo is visible in **Documents** panel (Figure 49).

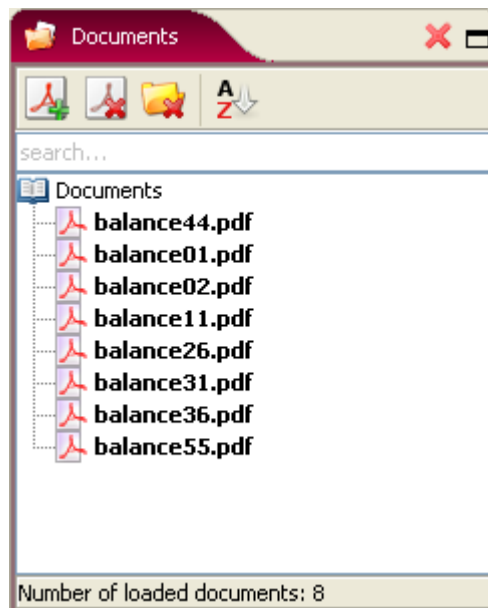


FIGURE 49. DOCUMENT PANEL

This panel is automatically opened after the loading of new files or, on user request, clicking on the panel title bar. In the upper region of the panel there is a toolbar to quickly access to the following features:

-  loads PDF documents;
-  removes selected PDF documents;
-  removes all loaded PDF documents;
-  lexicographic ordering of loaded documents..

To find a given document in the displayed list, you can use the search utility based on the document title. Insert chars sequence in the text field **search...** placed under the **Documents** panel toolbar: as soon as you start typing new chars, only documents containing in their title the typed text are shown in the list.

Finally, note that in the lower part of the panel the number of documents currently loaded is shown.

Selecting one or more documents in this panel and right clicking with the mouse, a contextual menu will appear (Figure 50), offering a quick access to the following functionalities:

- **Show selected documents:** Opens all selected documents in the visualization window;
- **Start automatic recognition on selected documents:** Runs automatic recognition on selected documents;
- **Run OCR:** Run OCR on selected documents. This option is enabled only for Quablo™ OCR.

- **Clean selected documents:** Cleans all the recognized tables in the selected documents;
- **Remove selected Documents:** Closes selected documents;
- **Open Parent Folder:** Open the folder containing the selected file.

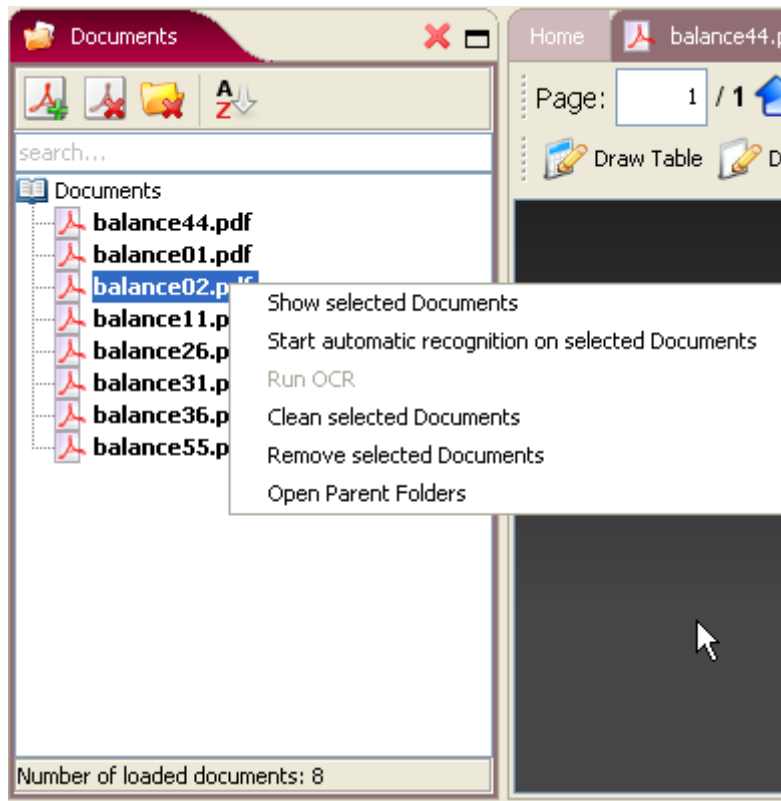


FIGURE 50. CONTEXTUAL MENU ON DOCUMENTS PANEL

PAGES

If you need to work with documents made by many pages, it could be useful to have at your disposal a tool to quickly recognize and access a single page.

Clicking on the title bar **Pages** on the left border of the main window, you can open a vertical panel hosting document pages thumbnails (Figure 51). To go directly to a selected page, you can simply click on the page thumbnail. The page currently displayed in the main window is highlighted in the thumbnails with a red border.

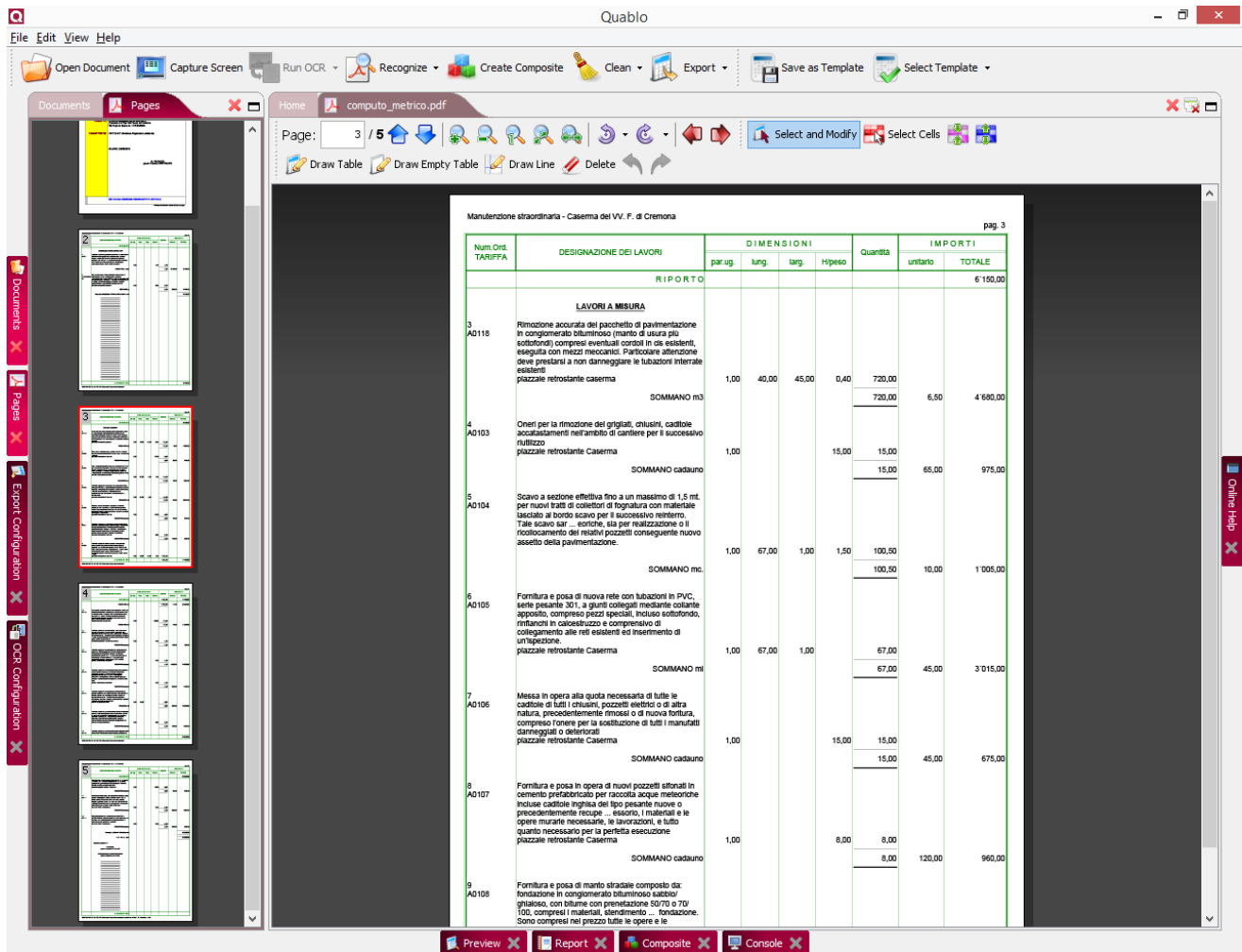


FIGURE 51. THUMBNAILS

EXPORT CONFIGURATION

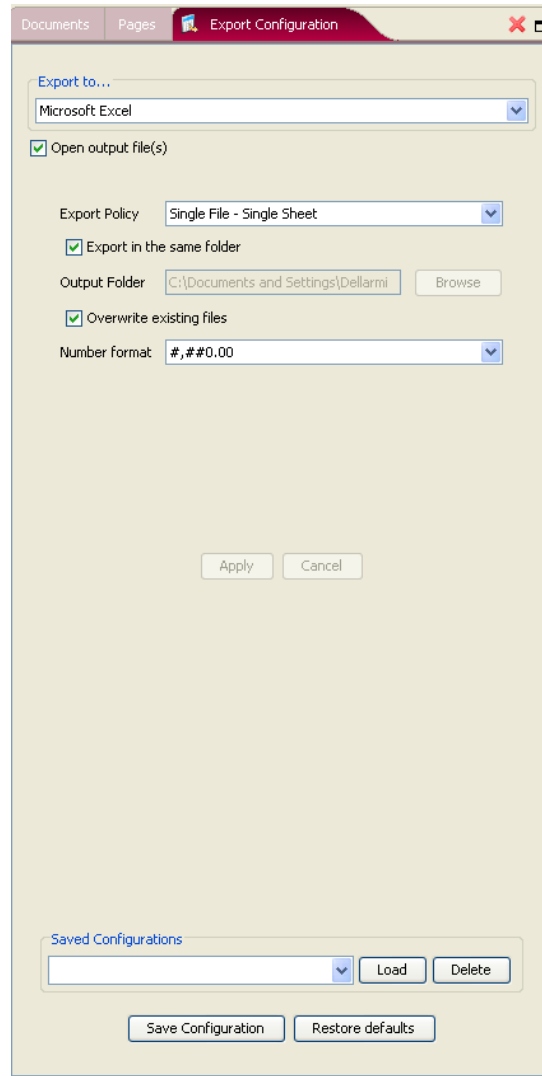
To export tables into an editable format, you have to click on the proper icon placed into the main toolbar of Quablo GUI ().

Default modalities used to export tables are shown in the [Export Configuration](#) panel.

As you can see in Figure 52, according to the default configuration, recognized tables are exported into Excel. In the same directory of the original files, Quablo will create an XLS file for each exported document, and, for each XLS file, a sheet for each recognized table.

You can change this export configuration choosing XML, CSV or textual output format instead of Excel format.

You can also decide whether to activate or not the option [Open output file\(s\)](#) to automatically open output files at the end of export process.

**FIGURE 52. EXPORT CONFIGURATION**

Moreover, it is very useful the possibility to define export rules, choosing one of the following option:

- A File for each Document – A Sheet for each Table
- A File for each Document – Single Sheet
- Single File – A Sheet for each Table
- Single File – A Sheet for each Document
- Single File – Single Sheet

You can also choose whether overwrite existing files and, finally, you can choose the numeric values format among different formats.

After the selection of the export configuration more suitable to the user need it is sufficient to click the button **Apply** to use the chosen configuration.

A particular export configuration could be saved and reused later: you need to click [Save Configuration](#) and to type the configuration name in the dialog box that will appear. Finally click [OK](#) (Figure 53).

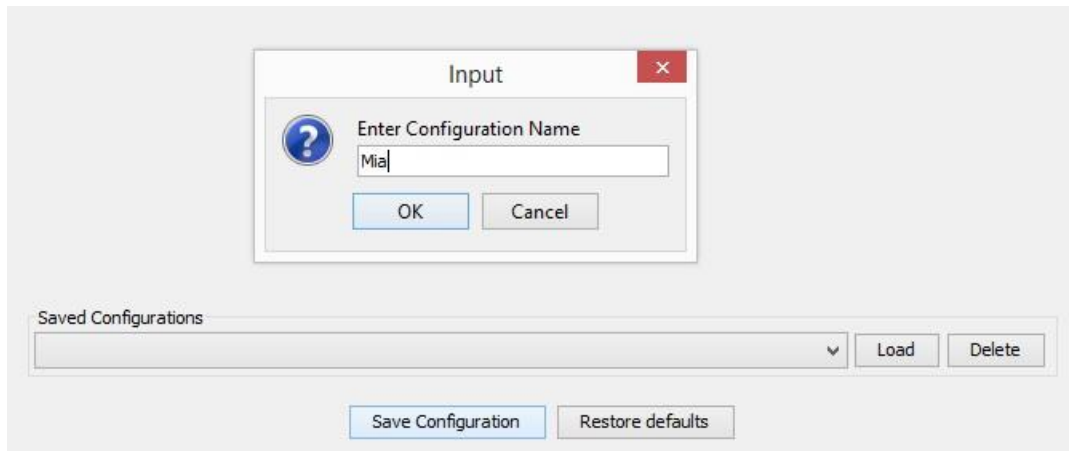


FIGURE 53. EXPORT CONFIGURATION CREATION

At this point, the saved configuration will appear among the available configurations and it will be possible to load it or to delete it if no more useful (Figure 54).

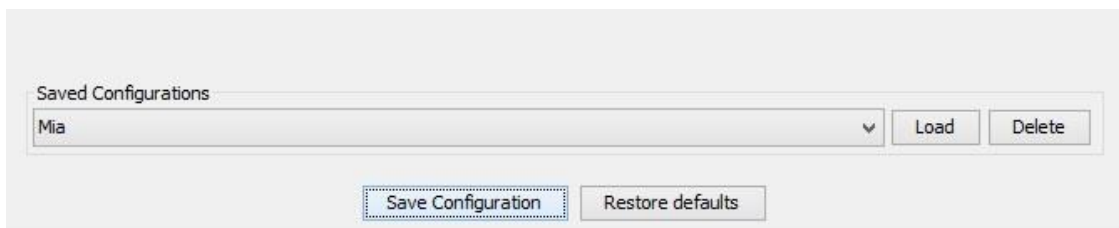


FIGURE 54. EXPORT CONFIGURATION SAVING

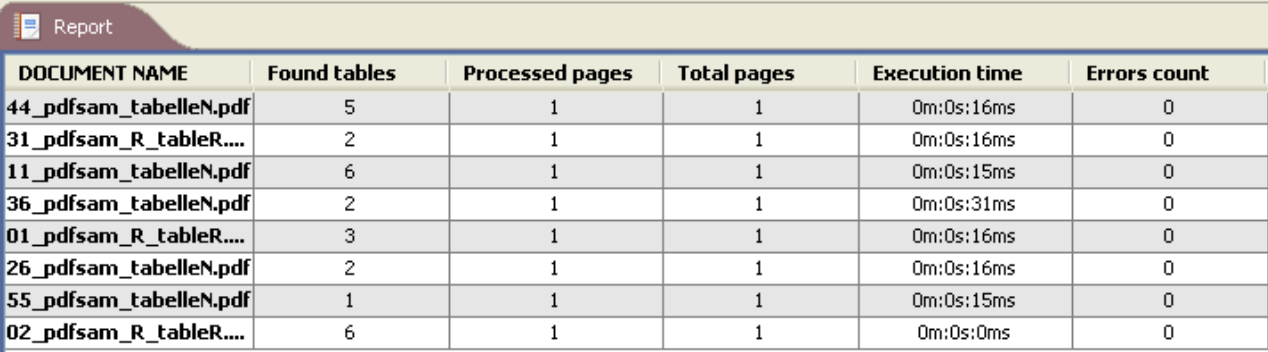
Similarly, you can restore the default configuration clicking [Restore defaults](#).

CONSOLE

[Console](#) panel is used to trace advanced information, useful for system processes monitoring, and to visualize exported tables into textual format. For this panel two options are available: one to copy and paste its content and the other one to clear it.

REPORT

After the execution of a tables automatic recognition process into a collection of documents, it could be useful to have a general view of the obtained results. For this purpose, Quablo includes the [Report](#) panel that is automatically shown after each automatic recognition process and that contains some useful information for the user as the number of tables found in each processed document (Figure 56).



DOCUMENT NAME	Found tables	Processed pages	Total pages	Execution time	Errors count
44_pdfsam_tabelleN.pdf	5	1	1	0m:0s:16ms	0
31_pdfsam_R_tableR....	2	1	1	0m:0s:16ms	0
11_pdfsam_tabelleN.pdf	6	1	1	0m:0s:15ms	0
36_pdfsam_tabelleN.pdf	2	1	1	0m:0s:31ms	0
01_pdfsam_R_tableR....	3	1	1	0m:0s:16ms	0
26_pdfsam_tabelleN.pdf	2	1	1	0m:0s:16ms	0
55_pdfsam_tabelleN.pdf	1	1	1	0m:0s:15ms	0
02_pdfsam_R_tableR....	6	1	1	0m:0s:0ms	0

FIGURE 55. REPORT PANEL

The automatic display of the [Report](#) panel can be disabled clicking the menu [View](#) → [Automatically show Report](#).

PREVIEW

To verify the correspondence between the table recognition result, obtained both automatically or manually, and the one expected by the user, Quablo GUI contains a panel that, given a PDF table with its recognition grid, provides a preview of the recognition done on the table (Figure 56).

The preview of a table is shown automatically each time you select a table in a PDF file and any updates to the recognized grid is immediately shown in the preview.

In the [Preview](#) panel you can modify the columns width and to open a contextual menu right clicking with the mouse.

This menu allows to:

- Copy the content of the cells selected in the preview;
- Quickly export the content of the selected cells into Excel or console;
- Configure the decimal and thousands separators to use for numeric values export.

The screenshot shows the Quablo software interface. The main window displays a document titled "Computo metrico.pdf" with a table of construction items. The table has columns for item number, description, unit, and price. The "Preview" panel at the bottom shows a detailed view of the table data.

A	B	C	D	E	F	G
1	32	32	Solo fornitura e trasporto in cantiere di conglomerato bituminoso per			
2			manto di usura 0/8, confezionato a caldo in idonei impianti e fornito			
3			in cantiere alla temperatura mai inferiore a 150 °C, con la composi-			
4			zione indicata dal capitolato speciale o generale d'appalto, con bitu-			
5			me di prescritta penetrazione in ragione del 6% sul peso del materia-			
6			le inerte, da porre in opera con idonee macchine finitrici.			
7			conglomerato bituminoso 0/8 al 6%, a peso.	€/q.le	1.000,00	4,00 4.000,00
8	33	33	Solo posa di conglomerato bituminoso 0/8 su sedi stradali, per strati			
9			di usura e per spessori medi, calcolati sull'intera superficie,			
10			mai superiori a cm. 5 e comunque sempre per unica passata. La po-			
11			sa si intende eseguita a regola d'arte, con l'uso di idonee macchine			
12			vibro-finitrici-stenditrici, cilindrate con adeguati rulli vibranti di peso			
13			variabile secondo delle specificazioni, comprese nell'importo della			
14			posa stessa.			
15			Solo posa asfalto su strada	€/mq	2.000,00	1,00 2.000,00
16			Realizzazione di strato portante di base per marciapiedi o piste cicla-			
17			bili, formato da strato minimo di cm. 10 di c.a., armato con rete elettro-			
18			incassata del diametro non inferiore a mm. 6, fornito a resistenza carat-			
19			teristica cubica a 28 gg. maggiore o uguale a 150 kg/cm² e formato			
20			con cemento Portland 325, sabbia e ghiaia di fiume lavata.			
21			Sono compresi nel prezzo la fornitura di tutti i materiali, i raccordi con			
22			i paesi carrai, la eventuale formazione di riquadri per aiuole e la for-			
23			mazione dei giunti di dilatazione.			
24			La contabilizzazione avviene in opera per metro quadro realizzato			
25			esecuzione fondo per marciapiede in cls sp 10 cm	€/mq	100,00	12,50 1.250,00

FIGURE 56. TABLE PREVIEW

COMPOSITE

The selection of the command [Create Composite](#) in the toolbar, enables the automatic display of the panel [Composite](#). This panel allows the visualization of the preview of the table that will be exported and that is under construction, selecting some cells in the tables of the current document and dragging them in a particular position of the output table.

HELP

The main goal of the [Help](#) panel is to support the user in the use of Quablo, suggesting him step by step which are the available features in a particular system utilization phase.

To obtain the complete list of all the functionalities of the guide, you can click the button [Show all Hints](#). To come back to the contextual menu, you can click the button [Show only suitable hints](#).

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