NEUHAUS

Label Software for Pros

Operators' Guide

Designed for Zebra® brand label printers,
utilizing ZPL (Zebra Programming Language).

LABEL one

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1 Introduction

Version 3.4

In choosing LabelOne®, you have chosen label-printing software which utilizes all of the features of ZPL®-compatible printers (printers manufactured by Zebra) and which ideally supports you in the process of label production.

Some Highlights:

- Intuitive operation enables starting label production quickly without a high learning curve.
- WYSIWYG interface provides a precise representation of the printed result at every step.
- Printer internal fonts may be used, as well as TrueType fonts. Printer internal fonts provide speed advantages during printing, particularly when printing sequence numbers.
- Existing images can be imported using BMP, DCX, EPS, ICO, JPG, PCX, PNG, PPM, TGA, TIF or WMF formats. The BMP and TIF formats achieve the best results.
- International regulations are precisely maintained when printing either normal or two-dimensional barcodes. The size of the barcode is calculated precisely during layout and printing based upon the content.
- Sequence numbers can be created using decimal, hexadecimal, octal, alphanumeric or alphabetic notation systems.
- The printout can be rotated 0°, 90°, 180° or 270°, and also mirrored horizontally.
- Printing is monitored and recorded as a job history.
- Variable data can be entered directly to the screen layout, by means of lists, or through a database connection.

2 Installation

2.1 Requirements

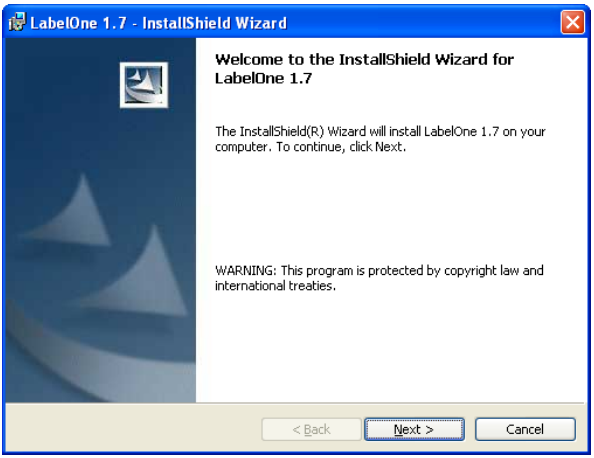
Microsoft XML must be installed for LabelOne® to operate properly. If Microsoft Internet Explorer version 5.0 or later has been installed, this requirement has already been fulfilled. The Zebra® printer must also be equipped with firmware version XXX.10.X.X or later (as indicated by Printer Configuration | Firmware).

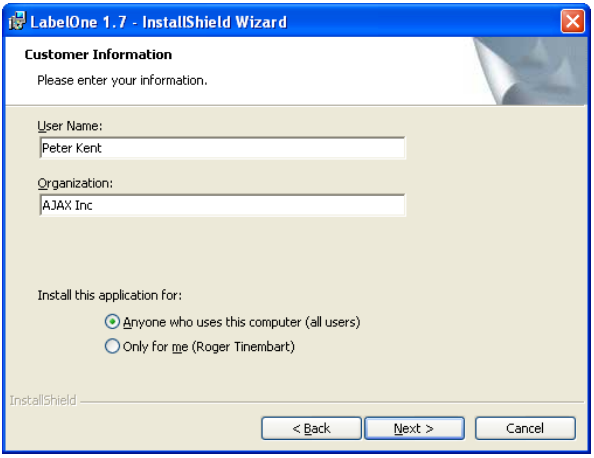
2.2 The Installation Process

Place the LabelOne® CD in the CD or DVD drive.

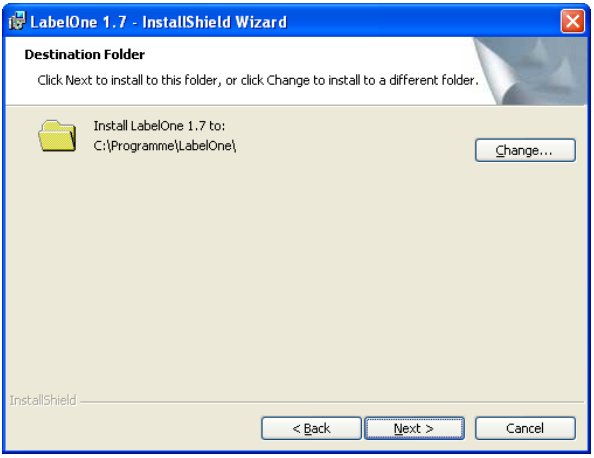
Start the installation process by double-clicking on the file, Setup.Exe, which is located in the root directory of the installation CD.

Shortly thereafter, the following dialogs will appear, which are individually confirmed by clicking on the Next pushbutton.

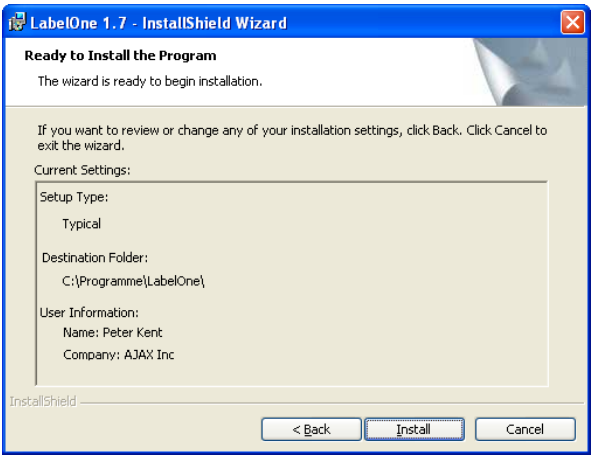




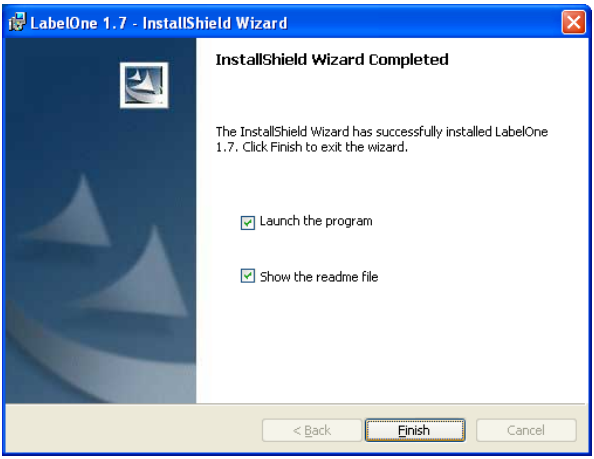
The installation directory may be changed in the next dialog. If this is not necessary, clicking the Next pushbutton continues the installation.



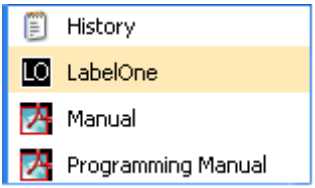
Subsequently, the selected installation options will be re-displayed. Clicking on the Install pushbutton begins the actual installation.



At the end of the LabelOne® installation process, the following dialog appears, with which the application can be immediately started. Check the checkbox, Launch the Program to do this.



The menu option, LabelOne, is added to the Start menu by the installation process with the following sub-items:



A text file is displayed under *Changes* which shows all the changes since version 1.0.

The *Manual* for LabelOne® is also available as a PDF file.

LabelOne® is the actual application for creating labels.

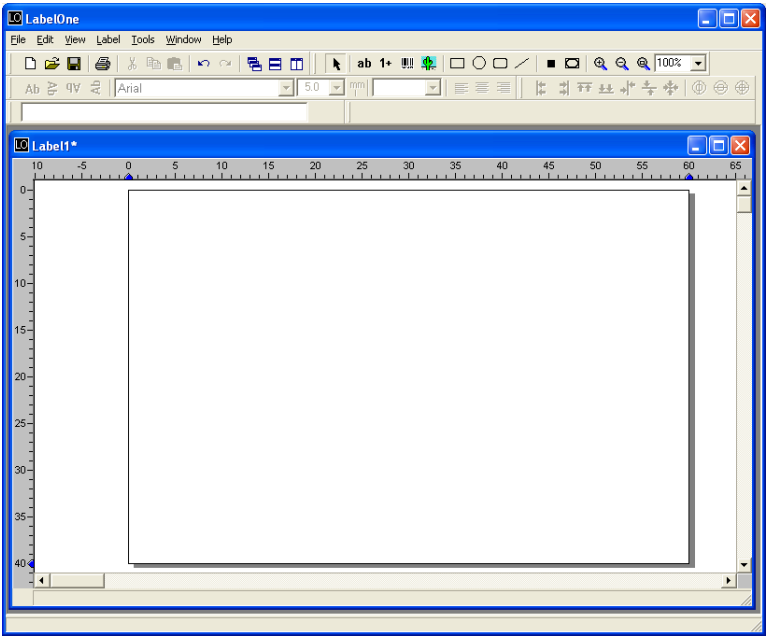
The *Programmer's Manual* contains instructions and examples for the programming interface of *LabelOne*® . The application can be automated via an OLE interface.

3 Quick Start: My First Label

Start LabelOne® either from the Start menu (StartlProgramslLabelOnelLabelOne Design) or by double-clicking the icon on the desktop.

Create a new label either by selecting the menu option FilelNew or clicking the button . Subsequently, a new window is opened with a blank label. The dimensions of the new label correspond to the default settings as explained in Section **7.2 Default Values**.

The work area should now look somewhat like the image below:



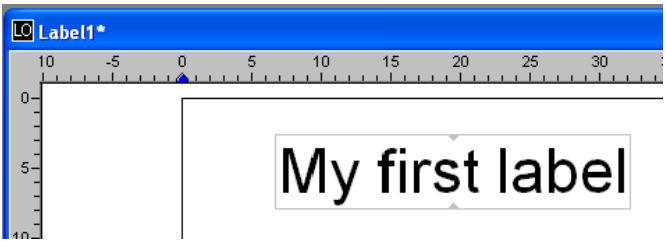
The main menu is located at the top with various toolbars arranged under it. The layout area of the new window is below that.

1: **Standard** toolbar
2: **Tools** toolbar
3: **Font** toolbar
4: **Alignment** toolbar
5: **Text Editing** toolbar
6: **Object Data** toolbar

First select the Text Tool ab from the Tools toolbar. Check that the buttons for horizontal script Ab and left justified text are depressed on the Font toolbar, and click anywhere on the new label. A blue outline will appear and you may start typing text immediately. Type "My first", but do not finish the entry yet. The text will appear simultaneously in the layout area and in the Text Editing toolbar. Now, click the button for centred text on the Font toolbar. Blue triangular sizing handles will now appear in the middle of the blue outline.

Continue entering text by typing the word "label" and watch the screen. You may now finish entering text by pressing the Return/Enter key.

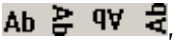
Your label should look something like this:



From the Tools toolbar, select the Selection tool (the arrow) and move it over the TextObject just created. As soon as the mouse pointer is located above the TextObject, a blue outline will be displayed around it. This indicates which object will be affected by the next mouse click. This indication can be very useful when several objects overlap each other.

Upon clicking the object, additional handles will appear, with which the size of the object can be changed. In the case of a TextObject, this also affects the font size.

Click on the TextObject, drag it to approximately the centre of the layout area and release the mouse button.

Now, double-click on the TextObject. Doing so will re-activate the Font and Text Editing toolbars, and the text can be easily modified. Use the buttons to control the font orientation  , the alignment of the text  , as well as the controls for selecting the font and font size  .

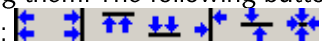
If a Windows font has been selected, the appearance of the font (normal, italics, bold, or bold italics) may also be chosen.

Create a copy of the TextObject by clicking the object with the Selection tool, and performing one of the following actions:

- Selecting one of the Edit menu commands: Copy or Paste.
- Pressing one of the hotkey options: CTRL+C, CTRL+V.
- Clicking the toolbar buttons  or  .

Now, double-click one of the TextObjects with the Selection tool. Click on the Text Editing toolbar and press the hotkey Ctrl+Enter, in order to activate the "multi-line text" feature. In the layout area, you can now see that a second line has been created in the selected TextObject. Type the text "with two lines" into this line.

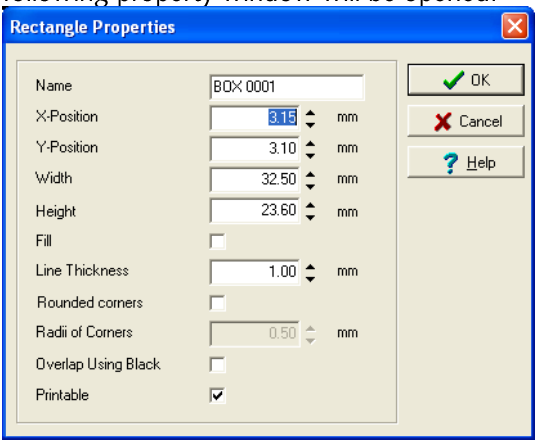
Now, select both of the TextObjects with the Selection tool. Using the following buttons, you can change the placement of the object in relation to the centre of the label either vertically or horizontally, or in both directions  . Drag an object into the upper left corner of the label and then press the button  . That TextObject is now centred, meaning that it is now located in the exact centre of the label.

Select both of the TextObjects by pressing the Shift key while selecting them. The following buttons are now active on the toolbar:  By means of these buttons, two or more objects can be aligned along their right, left, upper or lower edges in relation to each other. Test these placement options now, by moving the two TextObjects to any position, selecting both objects (all of the objects can be selected by using the hotkey CTRL+A), and clicking on the desired alignment button.

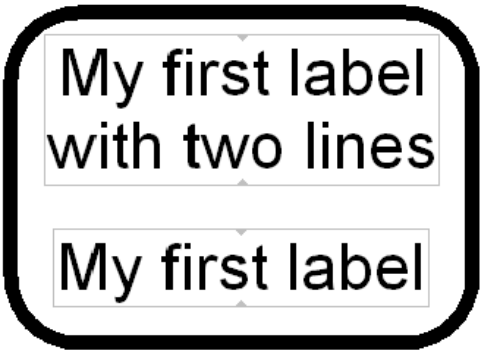
We want to add a border to our TextObjects. To do this, click the  button on the toolbar. In the layout area, click at the desired starting position and drag the mouse towards the lower right.

As soon as the desired area for the border has been selected, release the mouse button. The property window for a RectangleObject now appears, in which the various settings, such as position and line thickness, can be made. Click on the OK pushbutton. Your label should look something like this:

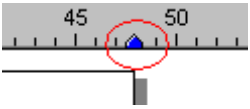
Select the Selection tool, and right-click on the border just created. From the context-menu, select the option Properties. The following property window will be opened:



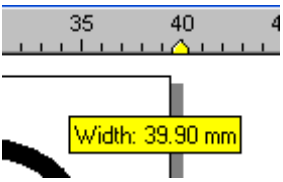
Now, activate the Rounded Corners option and enter a value of 5 in the Radii of Corners entry. Confirm this with the OK pushbutton. The label should look something like this:



There are two methods for changing the width and height of the label. One method uses the blue triangular handles; the other is by means of the menu option, Setup Page. Do the following to define the size using the blue handles.

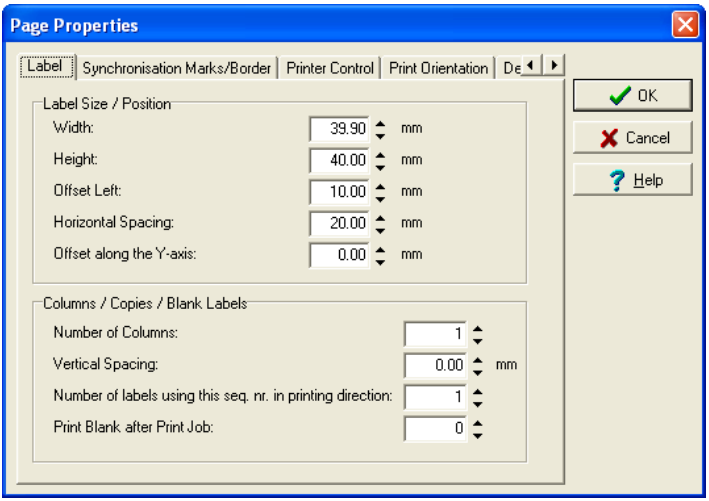


There are blue guides on the page ruler, as shown above. They can be dragged by clicking on them with the left mouse button, and holding it. During the drag operation, the current width and height are displayed in a yellow tooltip.



As soon as the desired size has been achieved, release the mouse button. The label edge in the layout area will be re-calculated and displayed.

To change the label dimensions by means of the menu option, Page Setup, select File from the main menu, and then select the option, Setup Page. A property dialog will be opened, where the width and height of the label can be defined, as well as other properties.



Enter a width of 50 mm and a height of 40 mm in the appropriate entries. Complete your entries by clicking on the OK pushbutton.

Our first label is now complete and needs merely to be saved. To do this, select the File menu, and there select the option, Save As. A dialog will now open, where the location and file name can be entered. For this, enter the name “FirstLabel.lo”. Accept your entries by pressing the Enter key or by clicking on the Save pushbutton.

4 Label Layout

4.1 Toolbars

Five toolbars are available for the most commonly used features, in order to simplify working with LabelOne®.

Standard toolbar

From this toolbar, the following core features are accessible: New Labels, Open, Save, Print, Cut, Copy, Paste, Undo and Redo, as well as arranging windows to cascaded or tiled horizontally or vertically. By means of the Undo and Redo features, the last ten actions can be undone or redone.

Tools toolbar

Various tools can be selected from this toolbar: Selection Tool, Plain Text, Sequence Numbers & Formulae, Barcodes, Images, Rectangles, Circles, Rectangles with Round Corners, and Lines. The filled black square activates synchronisation marks. The rectangle surrounding an oval activates label borders. The zoom factor can be set by using the magnifying glass. The magnifying glass with the rectangle sets the zoom factor such that the label will be adjusted to fit in the space available to the layout window.

Font toolbar

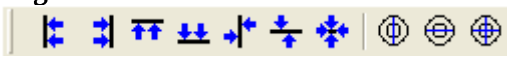
The buttons on this toolbar will become active as soon as either the Text Tool has been selected or an existing TextObject has been selected. By means of these controls, modifications may be made to font, the font orientation, the font size and the text alignment.

If a Windows font has been selected, the appearance of the font (normal, italics, bold, or bold italics) may also be changed.

Text Editing toolbar

This toolbar provides an entry field for the simple entry and editing of text. Pressing CTRL+ENTER moves to the next line and, in this way, multiple lines of text may be entered. The current line and the total number of lines are displayed on the right.

Alignment toolbar



The left section of this toolbar will be activated as soon as any two objects have been selected. This section enables the arrangement of the objects in relation to each other. Align everything selected along the left edge, the right, etc. The right section becomes active when at least one object has been selected. It enables re-positioning the selected object horizontally, vertically, or in both directions at the same time in relation to the centre of the label.

Object Data toolbar

The most important information about an object will be displayed on this toolbar when the mouse pointer has been placed above that object. If several objects partially or wholly overlap each other, the information about the object indicated by the dotted blue outline is displayed.

4.2 Menu Options

4.2.1 File Menu

The core functions for creating, opening, saving and closing a label can be selected from the File menu. From the Page Setup option, the specific properties of a label (size, columns, synchronisation marks, print control, print orientation, and general information) can be changed. A LabelOne® internal print spooler is started by means of the menu option, Setup Printer, which is similar to the Windows Printer Control. Printing the current label is started by means of the Print option. The last four files saved are listed below the Print option, in order to be able to re-open them quickly, as needed. Finally, LabelOne® is terminated by means of the Exit menu option.

4.2.2 Edit Menu

The Edit menu contains the options Undo, Redo, Cut, Copy and Paste, as well as the alignment options. All of these options may also be reached by means of the buttons on the toolbars.

4.2.3 View Menu

The View menu includes the menu options for setting the zoom factor. By means of these options, the zoom factor can be set in eleven preset steps, as well as in variable steps within the range from 25% up to 500%. Furthermore, there are options for activating and deactivating TextObject borders, the Snap-to-Grid feature and the option of displaying the grid itself.

4.2.4 Label Menu

This menu provides features which: simplify the entry of variable data, control the database connection, and print the label statistics using a Windows printer.

4.2.5 Tools Menu

The following options are available from the Tools menu: Settings, Default Values, Load Configuration and Save Configuration, as well as providing access to License Code.

Modifying the settings immediately affects the operation of LabelOne®. In comparison, modifications to the default values are used exclusively for the creation of a new label.

The LabelOne® configuration (Settings, Default Values, Printer) can be stored in and loaded from an INI file.

The last menu option is used for entering a new license number.

4.2.6 Window Menu

This menu is a standard menu, which most Windows programs provide. The arrangement of the various layout windows can be controlled by means of the options provided in the upper section of the menu. Features for selecting the active layout window are located in the lower section.

4.2.7 Help Menu

An About dialog can be opened from the Help menu, which provides information about the version of the software used, the license code, and the duration of the authorization to updates.

Additionally, the Online Help can be opened from this menu.

4.2.8 Context Menu

A context menu, which provides the currently available features for the corresponding drawing object or for the group of selected drawing objects, is displayed by clicking the right mouse button on one of the drawing object. At most, the following features may be selected:

- Attributes: the attributes dialog for the selected object is displayed (only available for individual drawing objects).

- Group Attributes: the group attributes dialog for TextObjects is displayed (only available if multiple TextObjects have already been selected).

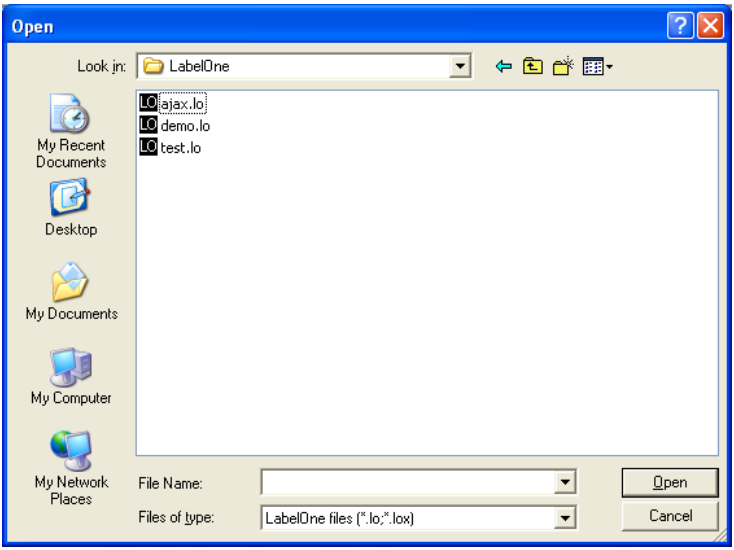
- Lock: locks the affected drawing object and, in doing so, protects it from inadvertent modifications. Locked objects cannot be modified or deleted. The only exception is those objects whose data is entered via the Data Entry Dialog and only that value may be modified. All the same, these objects are protected against inadvertent deletion or re-positioning.

- Unlock: unlocks the locked entry.

4.3 Dialogs

4.3.1 Open file

The standard Windows dialog for opening files is displayed by selecting the option File|Open. The appearance of this dialog depends upon the versions of Windows. For this reason, it might not appear as shown in the following example:

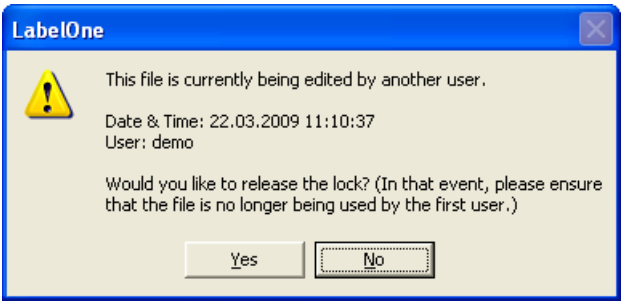


Irregardless of that, when selecting a file for the first time after starting the program, file selection begins in the initial file directory, which can be set by means of the menu option, Settings (Section **7.1 Settings**). Thereafter, file selection starts from the directory, where the last file opened was found.

Upon opening a file, a lock file is created to prevent the label file from being opened by more than one operator at the same time. This prevents the modifications (layout changes as well as, for example, the print job lists and the printing history, which are all saved together with the label) from being overwritten

reciprocally. The lock file is deleted once more, upon closing the label file.

In the event that a file is being edited, the following message will be displayed:

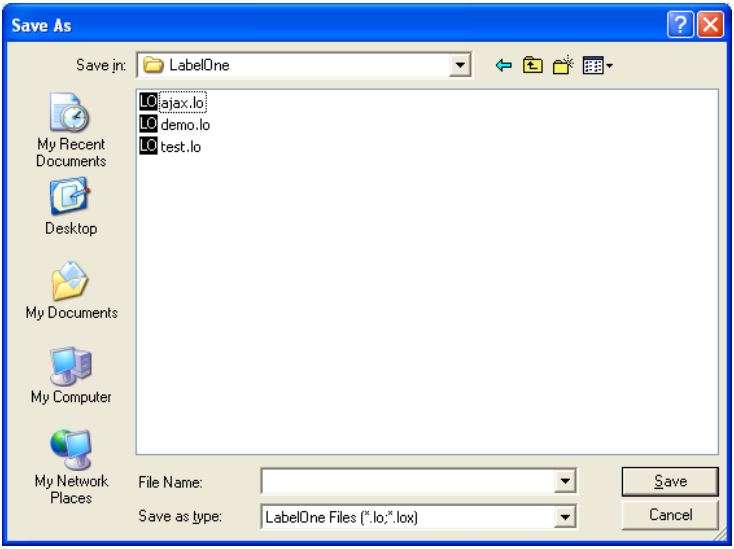


Under normal circumstances, the No button should be clicked and the operator should wait until the other operator has closed the file. In the event that a lock file has not been properly deleted (computer crash, network problems, etc.), although no one is currently editing the label file, the Yes button may be clicked. In that event, the lock file is deleted and the file may be opened normally.

When the file is opened, it will also be added to the list of recently used files, visible on the File menu.

4.3.2 File Save & Save As

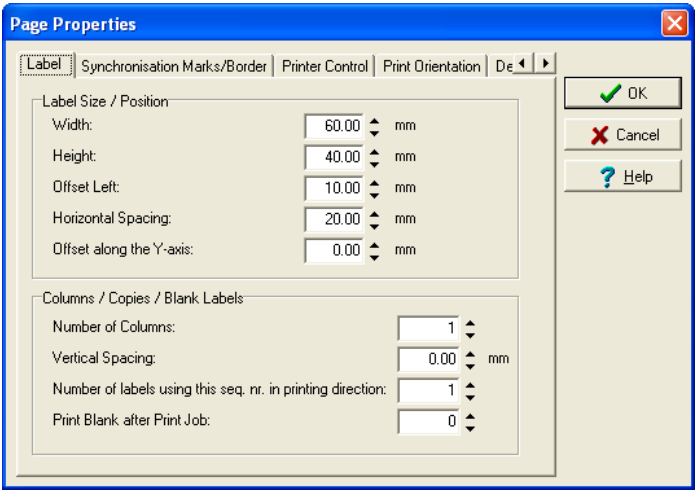
The option File|Save saves the label using the existing name. If the label is new, or the option File|Save As was chosen, the standard Windows dialog for saving files is shown. The appearance of this dialog depends upon the versions of Windows. For this reason, it is possible that it will not appear as shown in the following example:



Irregardless of that, when selecting a file for the first time after starting the program, file selection begins in the initial file directory, which can be set by means of the menu option, Settings (Section **7.1 Settings**). Subsequently, file selection starts from the directory, in which the last file opened was saved.

4.3.3 Page Setup

The following dialog is displayed by selecting the menu option FilelPage Setup.

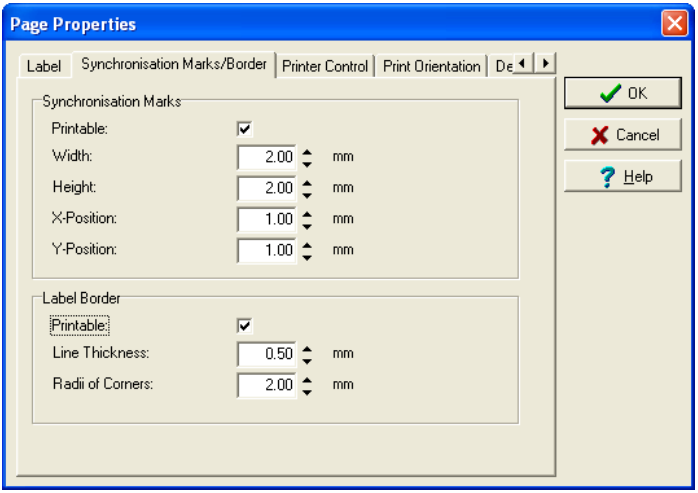


On the Label tab, the label dimensions, the left margin, and the offset to the next label column and row can be adjusted, as well as setting the parameters for multi-column labels. The first four values may be also manipulated in the layout area by moving the blue guides on the rulers.

The offset to the next row of labels assists when making precision adjustments for printing, and does not have a visually effect on the layout.

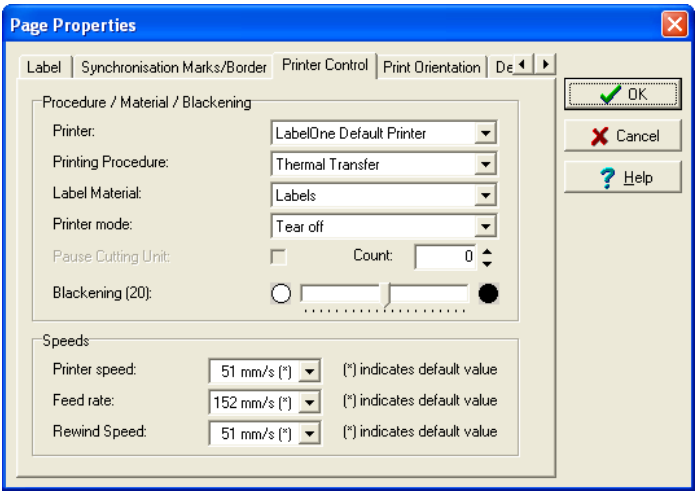
The Columns entry can accept values between 1 and 9. A maximum of nine labels may be printed horizontally. The Vertical Spacing entry determines the distance between the individual labels for multi-column printing.

The entries, Number of Labels using this Seq. Number in Printing Direction and Print Blank after Print Job, are displayed as defaults before printing, and may be overridden.



On the Synchronisation Marks/Borders tab, the printing of synchronisation marks, as well as their size and position, can be set by using the upper group of entries. These values may also be adjusted by means of the button with the filled black square on the Tools toolbar, or by dragging the synchronisation marks in the layout area.

The visibility of label borders, as well as their thickness and corner radii, may be set using the lower group of entries. The visibility can also be turned on or off by means of the button with the rectangle surrounding an oval on the Tools toolbar. The label border is normally used for testing how labels print, which will be cut. In this way, the area to be cut can be marked.



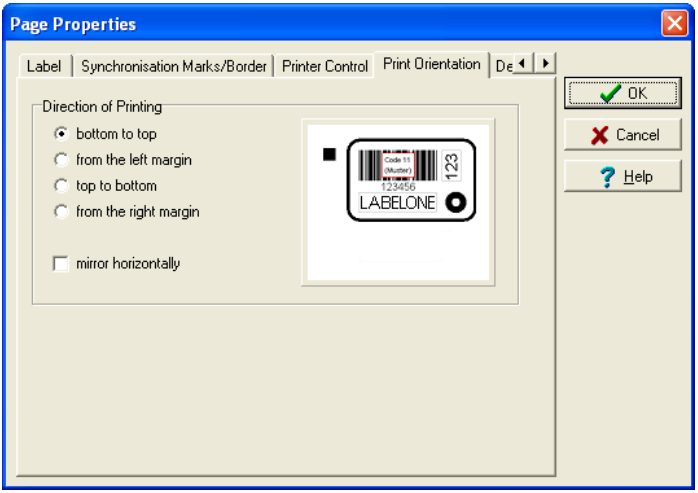
On the Printer Control tab, the printing parameters to be used for printing are made available for the current label. The Count entry is only available with the printer option Tear Off (separate) and Cutter (cutting unit). The Pause Cutter entry is only available with the Cutter (cutting unit) printer mode.

The speed for printing, feeding, and rewinding can be set using the entries in the lower group. Values appearing with stars indicate default values from Zebra®.

The following comments apply:

- Not all Zebra® printers allow blackening to be set to an absolute value. Older Zebra® printers use a relative value. A corresponding indicator will be shown upon printing, if that is the case.

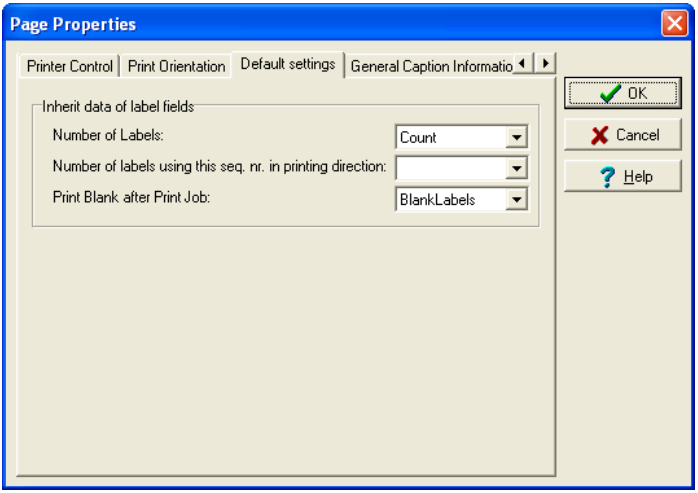
- All of the settings on this tab can be overridden before printing, either by means of manual entry, or by the default configuration of the printer used.



From the Print Orientation tab, the operator can indicate how the label should be rotated, or horizontally inverted horizontally, for printing. Four rotation settings are available, which correspond to 0°, 90°, 180° and 270° of clockwise rotation, from top to bottom.

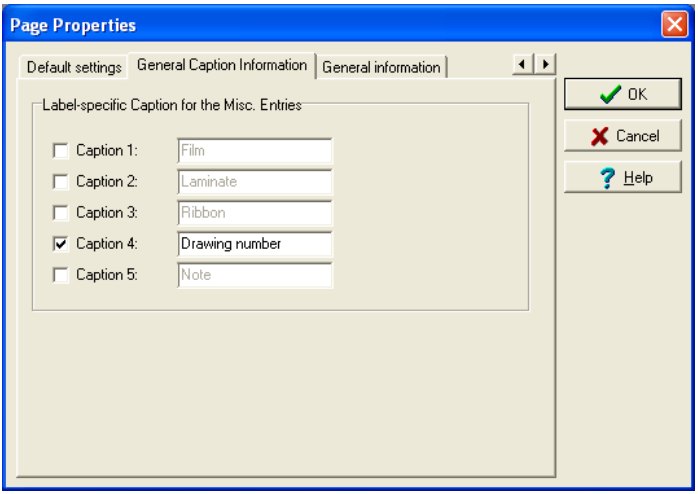
The Mirror Horizontally feature is appropriate for labels, for example, which are viewed from the back (transparent labels).

The effects of the print orientation on the print out are graphically shown to the right. This graphic is a fixed image, which is not related to the actual layout in any way.



On this tab, label entries may be selected, whose values are used as default settings during printing for: the number of Labels to be printed, the number of sequence numbers in the print direction and the number of blank labels after the print job. Normally, this involves the non-printable entries positioned on the label.

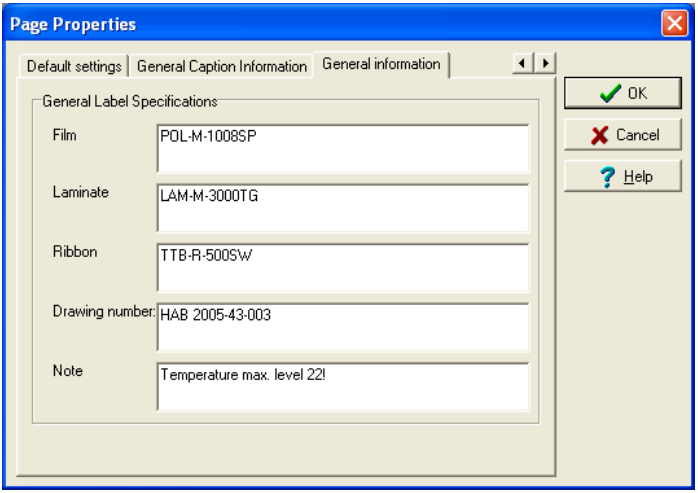
With the help of these default values, it is possible to set the corresponding entries from an external data source, for example, from a database connection or by using Cut-n-Paste to copy the values from another application to the Initial Values and Print Jobs List features.



The captions for the miscellaneous user entries can be specifically overridden for the label using this tab page. The captions may use the program defaults or customer-specific settings (Section 7.1.4 Label Tab).

If an entry is not checked, the default value will be used. If the entry is checked, the associated entry will be used for the entry of the desired caption.

The caption is shown on the next tab page.



This tab is used for the entry of information, which is important for production and which should be used again, whenever the file is. The information is also included in the Job Report (Section 6.1 Job Report).

4.4 Undo & Redo Features

The last ten changes can be undone at any time using the Undo feature. This feature is available from the menu option Edit|Undo, from the button on the Standard toolbar, or by means of pressing the CTRL+Z hotkey.

Any actions undone can be redone, if, for example, too many actions have been undone. That feature is available from the menu option Edit|Redo, from the button , or by means of pressing the CTRL+Y hotkey.

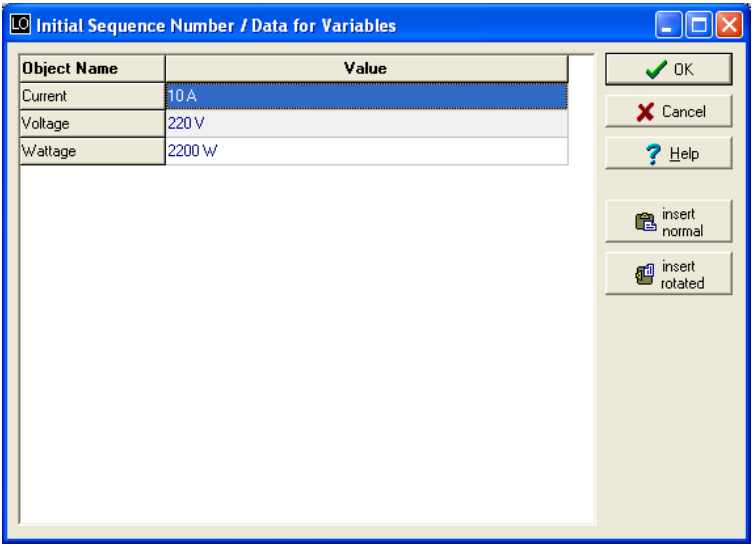
4.5 Cut, Copy & Paste Features

Selected objects can be removed using the standard Cut feature. As opposed to deleting by means of the normal Del key, the objects that were cut are moved to the clipboard and may be pasted into the same label or any other open label. The Cut feature is available from the menu option Edit|Cut, from the button  on the Standard toolbar, or by pressing the CTRL+X hotkey.

The Copy feature copies the selected objects to the clipboard. They may be pasted into the same label or any other open label. The Copy feature is available from the menu option Edit|Copy, from the button  on the Standard toolbar, or by pressing the CTRL+C hotkey.

The Paste feature adds the objects from the clipboard into the current label. The Paste feature is available from the menu option Edit|Paste, from the button  on the Standard toolbar, or by pressing the CTRL+V hotkey.

4.6 Initial Values of Sequence Numbers & Variable Data



When a label contains sequence numbers, or objects whose data is entered via the Data Entry Dialog, the values of these entries may be entered and modified using the Initial Values of Sequence Numbers & Variable Data dialog. This dialog is opened by pressing the F6 function key. The data for all relevant objects is displayed by the table. The object name is used as the name of the entry (left column). This can be set using the specific property dialogs (Sections 4.10 to 4.16). Given no other definition, the names would be, by way of example, TXT 0001, BAR 0002 etc.

The data is sorted according to the value of the Order property and listed within said order according to the object name. The order may also be changed using the appropriate property dialog (Sections 4.10 to 4.16).

The contents of the clipboard can be copied into the table by means of the buttons "Paste Normally" and "Paste Rotated". This assumes that the individual entries have been separated with tab characters. This is the case, for example, when several cells of an Excel worksheet have been selected. With the option "Paste Rotated", the orientation of the entries on the clipboard is first rotated by 90°, meaning that a horizontal list is changed to being a vertical list.

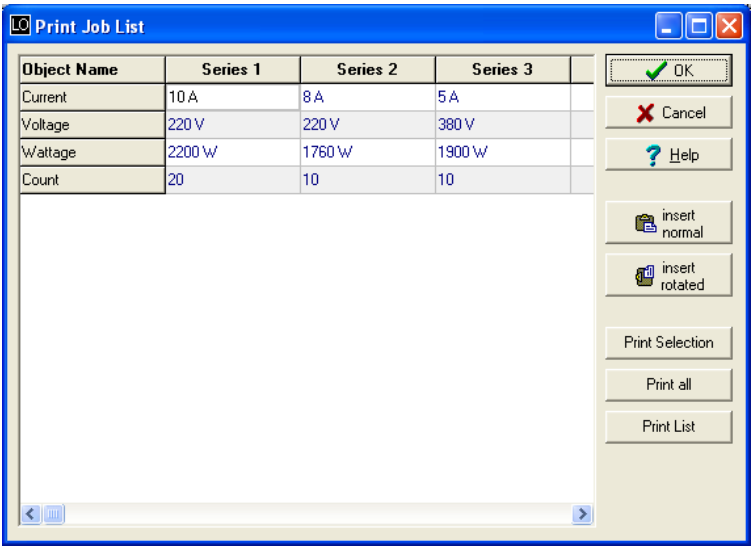
The table data can be modified as follows:

- Select the desired cell using the keys TAB, SHIFT+TAB, UP ARROW, or DOWN ARROW, and then press either F2 or ENTER. Upon pressing ENTER, the existing data is selected and modified. Upon pressing F2, the cursor is located at the end of the existing data, and additional text will be added to the existing data. It is possible to delete the existing data, character by character, using the delete key.

- Select a cell using the mouse, wait, and then click again in the cell (Be careful not to double-click). Doing so has the same result as pressing the ENTER key: the existing data is selected and overwritten as soon as an entry is made.

If the dialog is confirmed by means of OK, the data is written to the label, exactly as if the entries had been individually set to the new values manually. If the dialog is closed by means of Cancel, the label will remain unchanged.

4.7 Print Job Lists



With this feature, a variety of values can be pre-defined for variable entries (sequence numbers or objects whose data is entered by the user upon printing), and called upon as needed. If, for example, a label must be printed often with three different pieces of data then this information may be entered into the print job lists and, as needed, the data from one or all columns is printed.

This dialog is opened by pressing the F7 function key. The data of all relevant objects is displayed by the table. The object name is used as the name of the entry (left column). This can be set using the specific property dialogs (Sections 4.10 to 4.16). Given no other definition, the names would be, by way of example, TXT 0001, BAR 0002 etc.

The data is sorted according to the value of the Order property and listed within said order according to the object name. The order may also be changed using the appropriate property dialog (Sections 4.10 to 4.16).

The contents of the clipboard can be copied into the table by means of the buttons "Paste Normally" and "Paste Rotated". This assumes that the individual entries have been separated with tab characters. This is the case, for example, when several cells of an Excel worksheet have been selected. With the option "Paste Rotated", the orientation of the entries on the clipboard is first rotated by 90 °, meaning that a horizontal list is changed to being a vertical list.

The following options exist for modifying the table data:

- Select the desired cell using the keys TAB, SHIFT+TAB, UP ARROW, or DOWN ARROW, and then press either F2 or ENTER. Upon pressing Enter, the existing data is selected and overwritten. Upon pressing F2, the cursor is located at the end of the existing text, and additional text will be added to the existing data. It is possible to delete the existing data, character by character, using the delete key.

- Select a cell using the mouse, wait, and then click again in the cell (Be careful not to double-click). Doing so has the same result as pressing the ENTER key: the existing data is selected and overwritten as soon as an entry is made.

If the dialog is closed by clicking OK, the label data is stored, however, the changes cannot be seen in the current layout. If the dialog is closed by means of Cancel, the stored values will remain unchanged.

Using the buttons, Print Selection, or Print All, labels based on the current layout are printed out with the values from the selected column(s), or with the values from all of the columns.

The current data from the table is printed on a Windows printer by clicking the button, Print List, for control purposes

4.8 Quick Entry

The Quick Entry feature can be started by the F5 function key or from the menu option LabellQuick Entry. It assists with the simple entry of variable data (marked Data Entry Dialog) and the entry of initial values (marked Sequence Number). Therefore, this involves the same information, therefore, which can also be entered using the dialogs, Initial Values of Sequence Numbers & Variable Data and Print Job Lists. In the case of Quick Entry, however, a dialog is not opened, but rather the individual entries can be selected using the Tab and Enter keys, and adjusted as needed. The active entry is always outlined in blue.

During Quick Entry, the following hotkeys are available:

HotKey	Description
TAB	Move to next entry
Shift + TAB	Move to previous entry
ENTER	Confirm and move to next entry
Shift + ENTER	Move to previous entry
F2	Start data entry in Insert mode
F5	Exit Quick Entry
0..9, a..z, A..Z	Start data entry in Overwrite mode

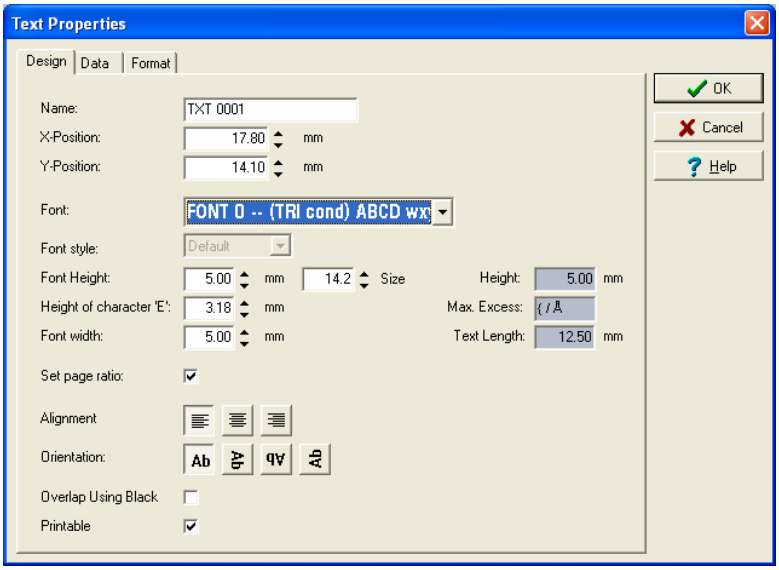
4.9 Alignment Features

If at least one object is selected, it can be aligned horizontally, vertically, or in both directions in relation to the centre of the label. This is achieved using the buttons  on the Alignment toolbar, or by means of the menu options: Centre on Label, Centre Horizontally on Label and Centre Vertically on Label; available on the Edit menu.

If at least two objects have been selected, they can be aligned in relation to each other. The first object selected is used as the point of reference, with which the other objects are aligned. This is done using the buttons  on the Alignment toolbar, or by means of the corresponding entries under the Edit menu.

4.10 Text Object

4.10.1 Design Tab



The Format tab on the property dialog for TextObjects enables adjusting the following parameters:

Name: The name of the object must be unique and is set to a standard name upon creation of the object; TXT nnnn for TextObjects, where nnnn represents a number between 1 and 9999. The name may be changed in order to simplify data entry when using the features Initial Values of Sequence Numbers & Variable Data and Print Job Lists (Sections 4.6 and 4.7) or in order to be able to use an appropriate designation when working with a formula (Section 8).

X and Y Positions: The horizontal and vertical positions in mm. These values are always offset from the upper left corner of the object, regardless of the orientation.

Font: The desired font can be selected using this control. The default fonts (Font 0, A, B, D, E, F, G, H and GS) are always available as well as any TrueType fonts installed on the PC. The system settings (Section 7.1.3) can be used to determine if the printer fonts (Triumvirate, Univers and/or Cyrillic) should also be available. Of course, those fonts must have already been installed in the printer to be used.

Font Appearance: If a Windows font has been selected, the appearance of the font (normal, italics, bold, or bold italics) can also be changed using this entry. The effect of the change depends upon the selected font. Not all fonts support all of the options available. If the Font entry has been set to a printer font (such as the default fonts Font 0, A, B, D, E, F, G, H, GS, as well as Triumvirate, Univers etc.), this entry will be deactivated.

The font height may be entered in points or in mm. This value includes all ascenders and descenders (j, y, Ñ, Ö, Ž etc). For this reason, a font may often appear smaller than expected. The font height for the character "E" may be set in order to compensate for this situation.

The two characters with the largest descenders and ascenders are displayed for informational purposes in the X-Height Excess entry.

Text Length and Height: These are purely informational entries. The values are calculated based on the font size and the data to be printed.

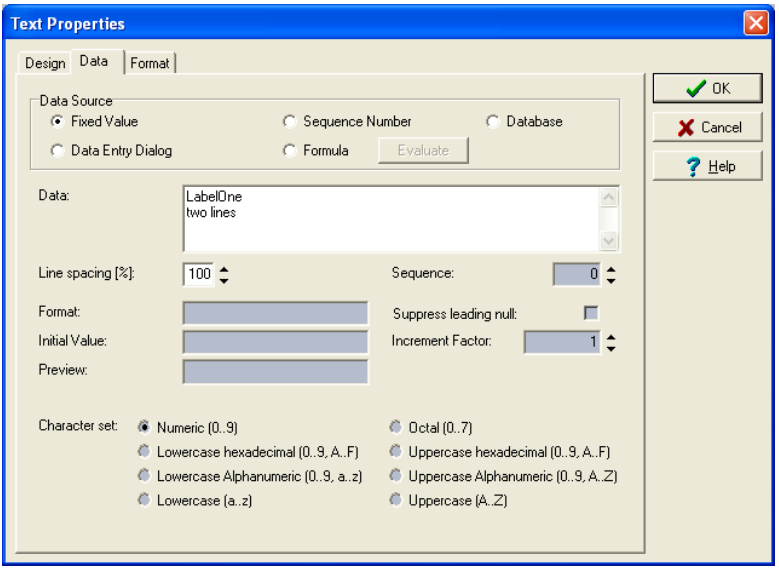
It is also possible to change the page ratio of the font for the printer fonts (Zebra 0-Font, Triumvirate, Univers, Cyrillic as well as the Fonts A-G).

The alignment (left-aligned, centred or right-aligned) and the orientation (horizontal, top-to-bottom, upside down, bottom-to-top) can be set using the corresponding buttons.

If various objects overlap each other, the checkbox, Overlap Using Black, determines if the two overlapping surfaces cancel each other out and are printed in white (unchecked) or if the overlap is black (checked).

The Printable checkbox determines if the TextObject will actually be printed, or if it only appears on the screen. Non-printable objects are indicated in green on the layout screen.

4.10.2 Data Tab

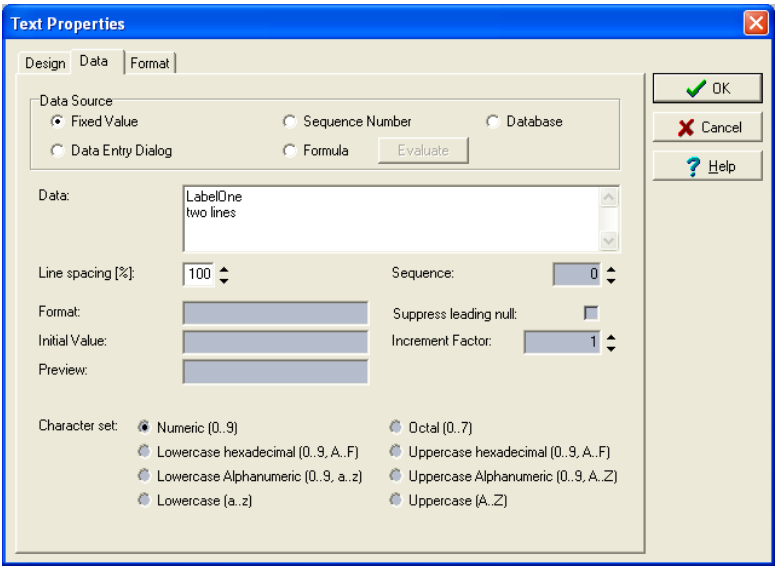


This tab page controls where the data for the TextObject comes from. Additional parameters can be defined according to the

data source, such as a template for sequence numbers, character set, etc).

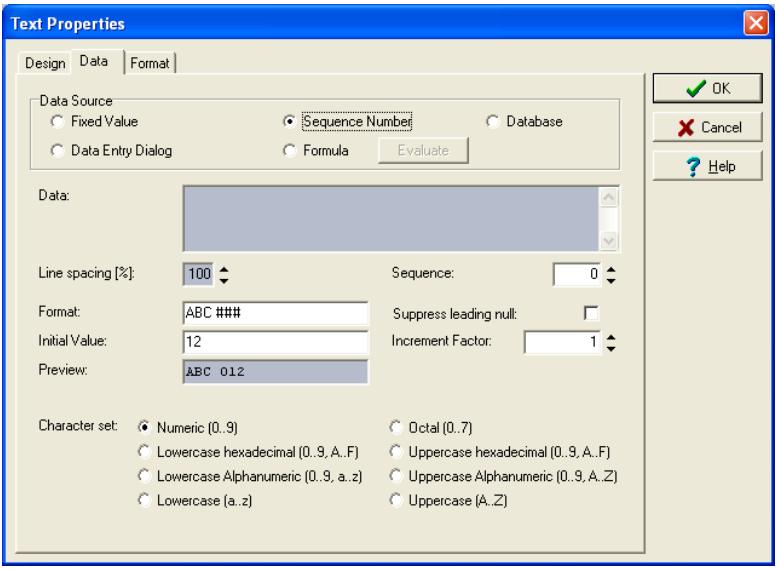
One of five options may be selected for determining the data source.

4.10.2.1 Data Source: "Fixed Value"



The content, meaning the text, is set to a fixed value and may consist of multiple lines. The offset between individual lines may be increased or decreased using the entry, Line Spacing. The entry is specified as a percentage, with 100 being the default value.

4.10.2.2 Data Source: “Sequence Number”



The content changes with each label. The format follows the rules set by the entries Template, Initial Value, Increment Factor, Suppress Leading Null and the Character Set.

Template: This entry defines which portion of the sequence number consists of fixed values and which receives the sequence number updates. The hash symbol (#) indicates the portion that is updated. The template AB99###X defines a sequence number of eight characters, where the characters AB99 and the ending X do not change. The characters ### are replaced by the respective values of the sequence number, Ex: AB99001X, AB99002X, AB99003X etc.

Initial Value: This entry provides the value of the sequence number for the next print job. This value is then increased upon the printing of each label by the increment factor. Any character can be used for the initial value, which would be permitted according to the selected character set. The initial value is indicated in blue on the layout screen.

Increment Factor: This entry indicates the amount by which the initial value is increased each time a label is printed. This entry is always a decimal number, regardless of the character set selected for the sequence number.

Suppress Leading Null: This checkbox controls whether any potential leading nulls in a sequence number are suppressed, or if the sequence number is filled with nulls to the length of the template.

Character Set: This entry indicates if the variable portion of the sequence number should be tallied decimally (0..9), hexadecimally (0..9, A..F / a..f), or octally (0..7), alphabetically (A..Z / a..z), or alphanumerically.

Order: The variable data and the initial value for the sequence number may be adjusted using special dialogs (Section 4.6 Initial Values of Sequence Numbers & Variable Data and Section 4.7 Print Job Lists) before printing labels. The adjusted data is displayed according to this order, and within the order, alphabetically by object name. By means of this value, you can adjust the alphabetic sequencing for entering the initial values.

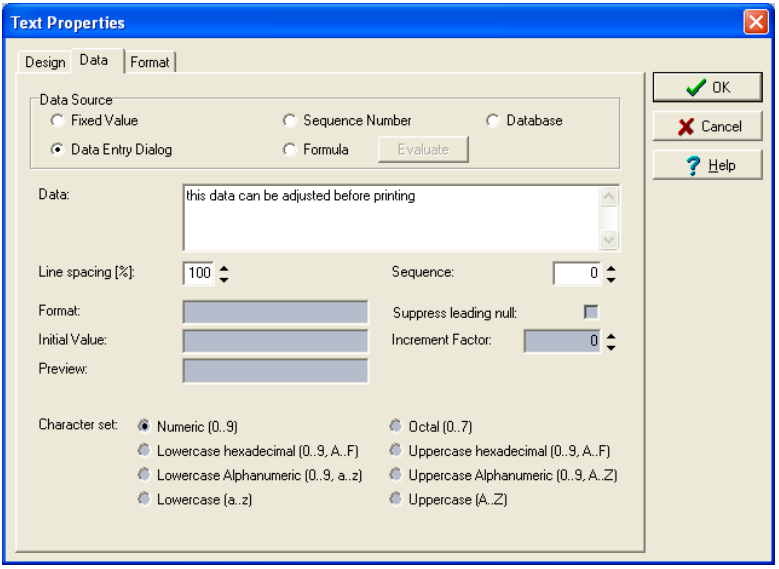
Sequence numbers are printed at different speeds according to the printer model, character set selected and the font.

- Sequence numbers using a printer font (Font 0, Fonts A-G, Triumvirate, Univers, Cyrillic) are printed more quickly because the printer itself issues the sequence number in such cases.

- This feature is more limited in older printers, when the sequence numbers are non-numerical or when the sequence number contains symbols.

- Sequence numbers using a Windows font are sent as images to the printer, which requires a much more time when the printer uses a serial connection.

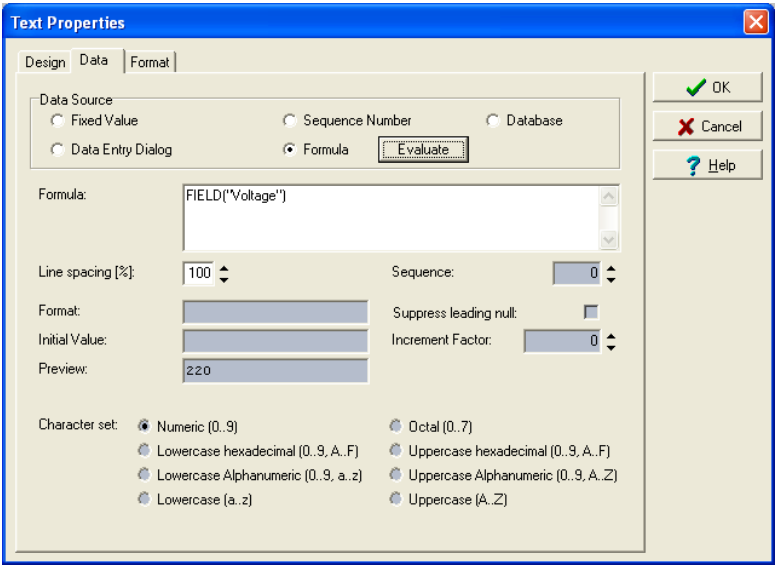
4.10.2.3 Data Source: "Data Entry Dialog"



This data source is similar to the Fixed Value option. The difference lies therein that the variable data can be adjusted using special dialogs (Section 4.6 Initial Values of Sequence Numbers & Variable Data and Section 4.7 Print Job Lists) prior to printing. If necessary, the display of the Initial Values dialog can be forced prior to printing (Section 7.1 Settings).

The adjusted data is displayed according to this order, and within the order, alphabetically by object name. By means of this value, the alphabetic sequencing for entering the initial values can be overridden.

4.10.2.4 Data Source: "Formula"



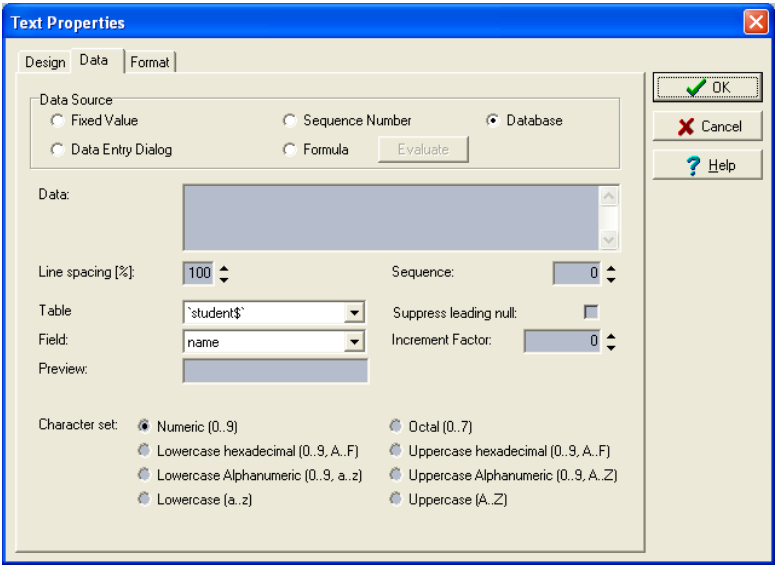
If the data source is set to Formula, the entry understood to be a formula, which is evaluated as each individual label is printed. In this way, the content of an entry is able to include the value(s) of one or more other entries. This is beneficial when, for example, a sequence number must be printed several times on a single label.

For testing purposes, the formula can be evaluated by pressing the pushbutton, Evaluate. If the evaluation is successful, the result of the formula will be displayed in a message box; otherwise, an error message would be displayed.

In addition, functions are available for calculating the values of dates and time. Section 8 Formulae contains a complete overview of all of these functions.

Because the content of each label must be sent to the printer individually, their usage causes printing to be very slow.

4.10.2.5 Data Source: “Database”

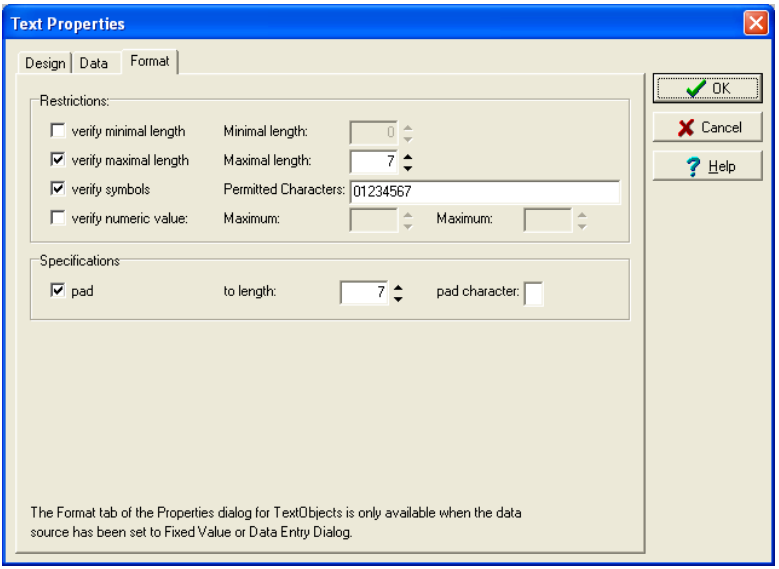


If the data source is set to Database, only two other entries are accessible. The database table and column(s) can be selected using these entries.

So that this will work correctly, the database connection must have been created already, and tested. The information regarding the table and columns should be written down during the testing procedure, and then entered into this dialog.

It is possible to further process the value(s) from the database column(s) using LabelOne formulae (Section 4.10.2.4 Data Source: “Formula”).

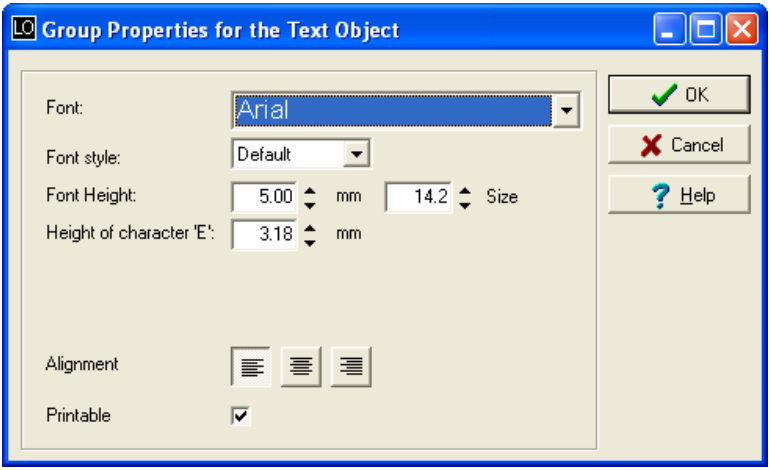
4.10.3 Format Tab



The Format tab of the Properties dialog for TextObjects is only available when the data source has been set to Fixed Value or Data Entry Dialog.

Limitations and default values used for the entry of data for the corresponding entries may be defined using these entries. Entry values which are outside of the rules are displayed in red and make printing the label impossible.

4.11 Text Objects (Group Properties)



The properties for all of the selected TextObjects are displayed in this dialog. It can be accessed from the context menu, if at least two TextObjects have been selected.

Changes to the properties are assigned to all of the selected objects. Only those properties are displayed, which are the same for all of the selected objects. The entries for properties that are different are left either blank (see the font sizing information on the example dialog) or indicated by being greyed out (see the property Printable on the example dialog).

Font: The desired font can be selected using this control. The default fonts (Font 0, A, B, D, E, F, G, H and GS) are always available as well as any TrueType fonts installed on the PC. The system settings (Section 7.1.3) can be used to determine if the printer fonts (Triumvirate, Univers and/or Cyrillic) should also be available. Of course, those fonts must have already been installed in the printer to be used.

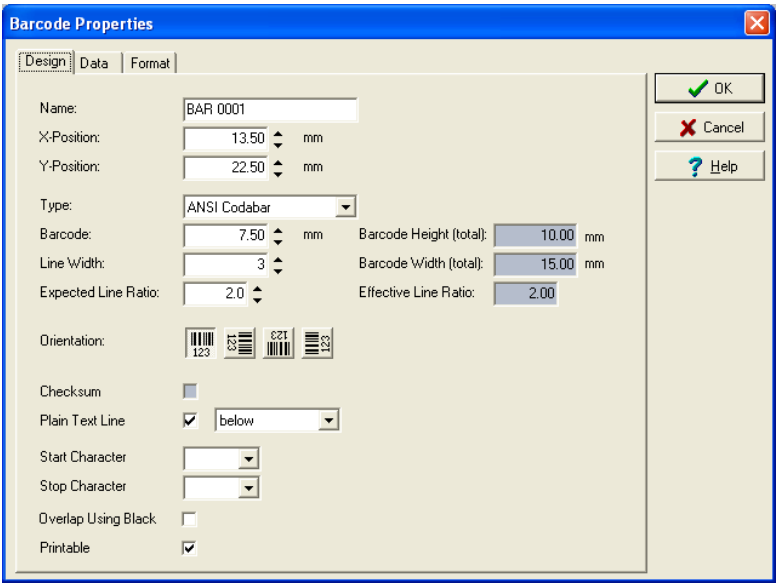
Font Appearance: If a Windows font has been selected, the appearance of the font (normal, italics, bold, or bold italics) can also be changed using this entry. The effect of the change depends upon the selected font. Not all fonts support all of the options available. If the Font entry has been set to a printer font (such as the default fonts Font 0, A, B, D, E, F, G, H, GS, as well as Triumvirate, Univers, Cyrillic etc.), this entry will be deactivated.

The font height may be entered in points or in mm. This value includes all ascenders and descenders (j, y, Ñ, Ö, Ž etc). For this reason, a font may often appear smaller than expected. The font height for the character "E" may be set in order to compensate for this situation.

Additionally, the fixed page ratio of the font can be modified for the printer fonts (Zebra® 0-Font, Triumvirate, Univers, Cyrillic as well as the Fonts A-G).

4.12 Barcode Objects

4.12.1 Design Tab



The Format tab on the property dialog for BarcodeObjects enables adjusting the following parameters:

Name: The name of the object must be unique and is set to a standard name upon creation of the object; BAR nnnn for BarcodeObjects, where nnnn represents a number between 1 and 9999. The name may be changed in order to simplify data entry when using the features Initial Values and Print Job Lists (Sections 4.6 and 4.7) or in order to be able to use an appropriate designation when working with a formula (Section 8).

X and Y Positions: The horizontal and vertical positions in mm. These values are always offset from the upper left corner of the object, regardless of the orientation.

Type: The desired barcode type (ANSI Codabar, Code 11, Code 39 etc.) is selectable. The entries described hereafter may not be editable, according to the type of barcode selected.

Barcode Height: The height of the barcode, not including the plain text line, may be set using this entry. When a plain text line is printed, the height of this line is added to the height of the barcode and is displayed as Barcode Height (Total).

Barcode Width (total) and Barcode Height (total): These are purely informational entries. The width is calculated based upon the barcode type, the line size, the effective line ratio and the data to be printed (including checksum). The height corresponds to the barcode height plus the height of the plain text line.

Scan Line Width: The line width of the barcode can be set by this entry. For most barcode types, this corresponds to the width of the thin lines in pixels. Values between 1 and 50 are permitted.

Expected Line Ratio: Several barcode types permit the ratio between the thin and thick scan lines to be modified. The ratio may be set between 2.0 and 3.0 in steps of 0.1. Because the printer can only print whole pixels, the effective line ratio is calculated from the Line Width and the Expected Line Ratio.

The two entries, Line Width and Expected Line Ratio, will be dynamically adjusted, if the width of the barcode is changed in the layout screen.

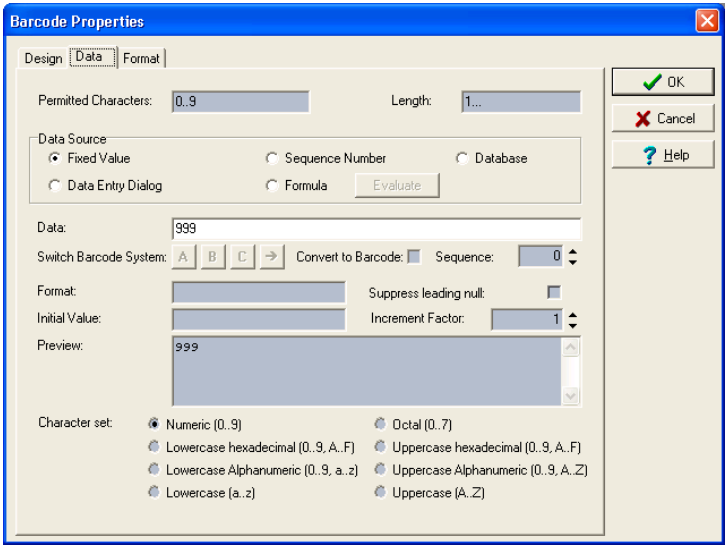
The orientation (horizontal, top-to-bottom, upside down, bottom-to-top) can be set using the corresponding buttons.

The checksum and the plain text line may be enabled as appropriate for the barcode type, and additional barcode type specific information (such as start characters, default sizes, error correction quality, etc) may be entered.

If various objects overlap each other, the checkbox, Overlap Using Black, determines if the two overlapping surfaces cancel each other out and are printed in white (unchecked) or if the overlap is black (checked). **For simple line-style barcodes, this feature is only reasonable, when with a white thermal transfer ribbon is printed on a black background. In this manner, the "holes" between the individual lines can be backfilled in white. In this case, the fact that a white rest area has been planned for both before and after the barcode for the reader should be taken into consideration.**

The Printable checkbox determines if the TextObject will actually be printed, or if it only appears on the screen. Non-printable objects are indicated in green on the layout screen.

4.12.2 Data Tab



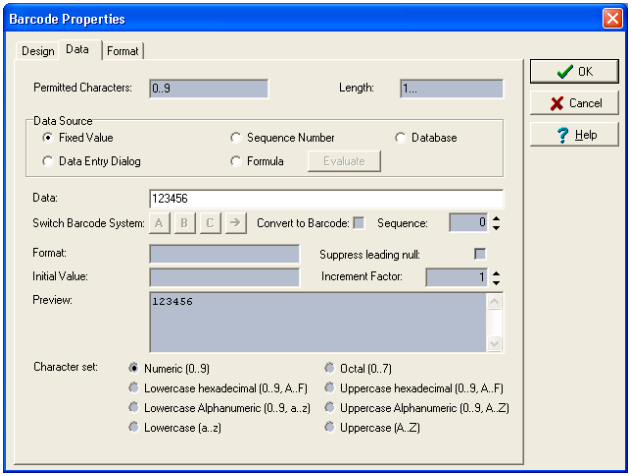
This tab page controls where the data for the BarcodeObject comes from. Additional parameters can be defined according to the data source, such as a template for sequence numbers, character set, etc).

Additionally, the two entries at the top of the dialog indicate which characters are permitted for the selected barcode type and how long the data is allowed to be.

Caution If, in particular, Code 128 and EAN 128 (A, B, C) are manually used then the user is responsible for compliance with the standards.

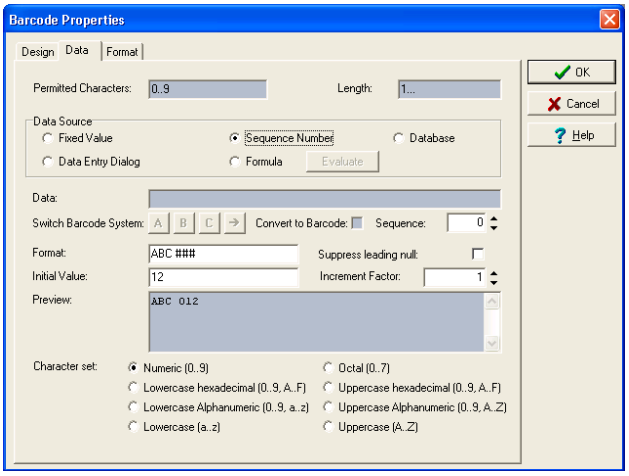
One of five options may be selected for determining the data source.

4.12.2.1 Data Source: “Fixed Value”



The content, meaning the barcode data, is set to a fixed value.

4.12.2.2 Data Source: “Sequence Number”



The content changes with each label. The format follows the rules set by the entries Template, Initial Value, Increment Factor, Suppress Leading Null and the Character Set.

The buttons for code changes (“A”, “B”, “C”) are only activated for barcode types "(GS1) Code 128 A", "(GS1) Code 128 B" and "(GS1) Code 128 C" and are only used for manually entering a code change between codes A, B and C. Warning: Not every code can represent all numbers and characters. If in doubt use "(GS1) Code 128"; in this case the code change will be generated automatically. For the GS1 types the "→" button is additionally active. It is used to insert the control character FNC1 which indicates the start of the next AI block.

Template: This entry defines which portion of the sequence number consists of fixed values and which receives the sequence number updates. The hash symbol (#) indicates the portion that is updated. The template AB99###X defines a sequence number of eight characters, where the characters AB99 and the ending X do not change. The characters ### are replaced by the respective values of the sequence number, Ex: AB99001X, AB99002X, AB99003X etc.

Initial Value: This entry provides the value of the sequence number for the next print job. This value is then increased upon the printing of each label by the increment factor. Any character can be used for the initial value, which would be permitted according to the selected character set. The initial value is indicated in blue on the layout screen.

Increment Factor: This entry indicates the amount by which the initial value is increased each time a label is printed. This entry is always a decimal number, regardless of the character set selected for the sequence number.

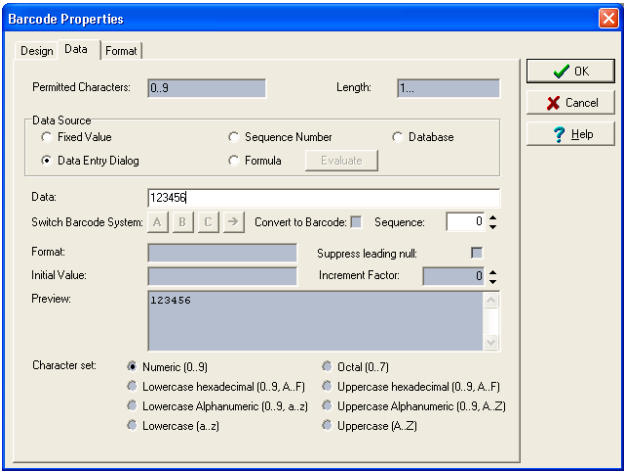
Suppress Leading Null: This checkbox controls whether any potential leading nulls in a sequence number are suppressed, or if the sequence number is filled with nulls to the length of the template.

Character Set: This entry indicates if the variable portion of the sequence number should be tallied decimally (0..9), hexadecimally (0..9, A..F / a..f), or octally (0..7), alphabetically (A..Z / a..z), or alphanumerically.

Order: The variable data and the initial value for the sequence number may be adjusted using special dialogs (Section 4.6 Initial Values of Sequence Numbers & Variable Data and Section 4.7 Print Job Lists) before printing labels. The adjusted data is displayed according to this order, and within the order, alphabetically by object name. By means of this value, the alphabetic sequencing for entering the initial values can be overridden.

With older printers, printing labels with non-numeric sequence numbers or sequence numbers that contain symbols may take more time, because the data for each label must be sent to the printer individually.

4.12.2.3 Data Source: "Data Entry Dialog"

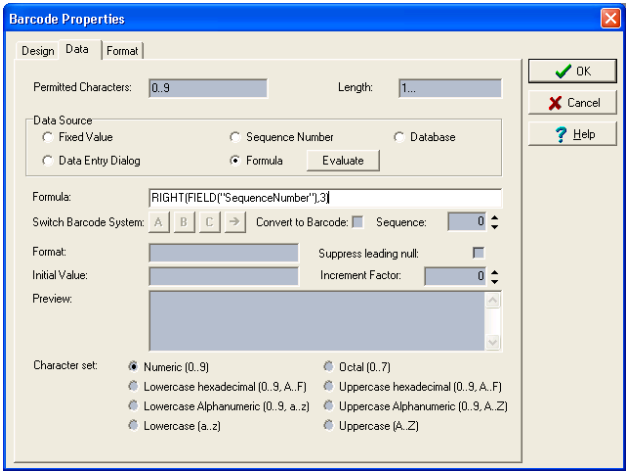


This data source is similar to the Fixed Value option. The difference lies therein that the variable data can be adjusted using special dialogs (Section 4.6 Initial Values of Sequence Numbers & Variable Data and Section 4.7 Print Job Lists) prior to printing.

If necessary, the display of the Initial Values dialog can be forced prior to printing (Section 7.1 Settings).

The adjusted data is displayed according to this order, and within the order, alphabetically by object name. By means of this value, the alphabetic sequencing for entering the initial values can be overridden.

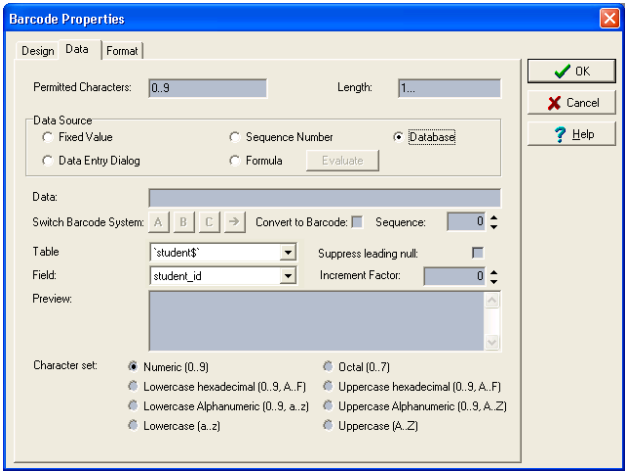
4.12.2.4 Data Source: "Formula"



If the data source is set to Formula, the entry understood to be a formula, which is evaluated as each individual label is printed. In this way, the content of an entry is able to include the value(s) of one or more other entries. This is beneficial when, for example, a sequence number must be printed several times on a single label. In addition, functions are available for calculating the values of dates and time. Section 8 contains a complete overview of all of these functions.

Because the content of each label must be sent to the printer individually, their usage causes printing to be very slow.

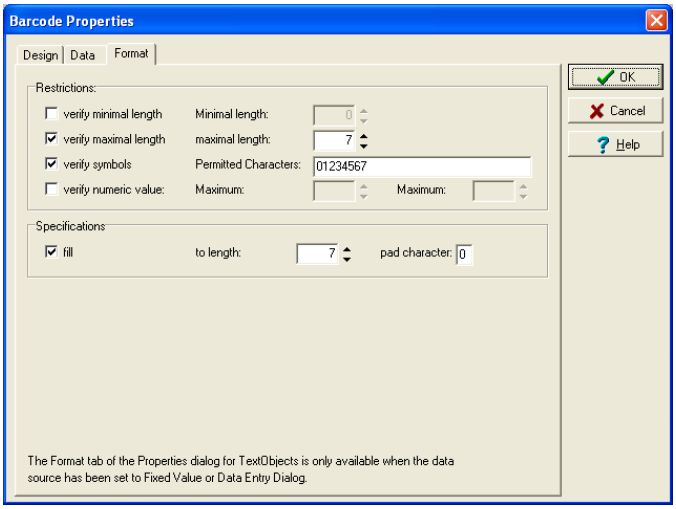
4.12.2.5 Data Source: “Database”



If the data source is set to Database, only two other controls are accessible. The database table and column(s) can be selected using these entries.

So that this will work correctly, the database connection must have been created already, and tested. The information regarding the table and columns should be written down during the testing procedure, and then entered into this dialog.
It is possible to further process the value(s) from the database column(s) using LabelOne formulae (Section 4.10.2.4 Data Source: “Formula”).

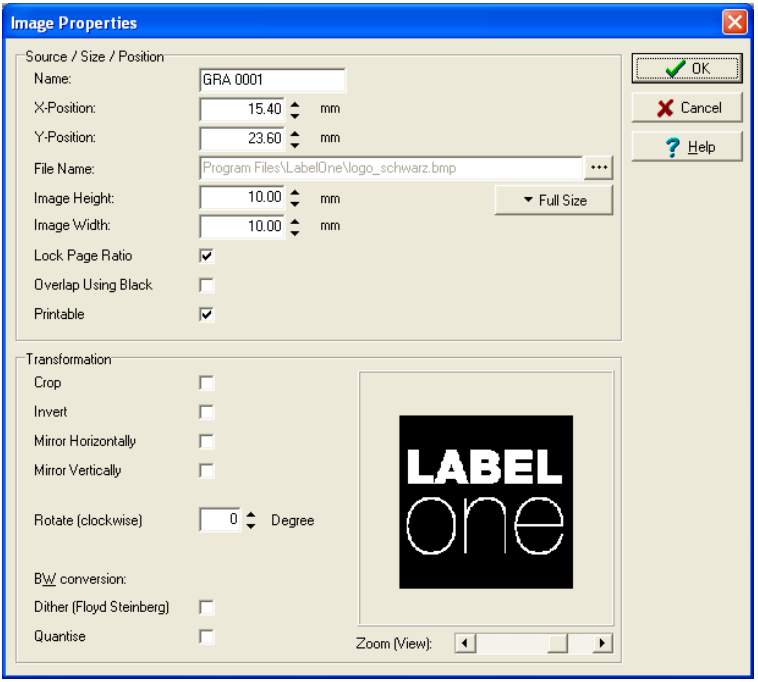
4.12.3 Format Tab



The Format tab of the Properties dialog for BarcodeObjects is only available when the data source has been set to Fixed Value or Data Entry Dialog.

Limitations and default values used for the entry of data for the corresponding entries may be defined using these entries. Entry values which are outside of the rules are displayed in red and make printing the label impossible.

4.13 Image Object



The following parameters may be set from the ImageObject property dialog:

Name: The name of the object must be unique and is set to a standard name upon creation of the object; GRA nnnn for ImageObjects, where nnnn represents a number between 1 and 9999. Theoretically, the name may be changed, although doing so seldom makes sense, because as of this writing there are no other dialogs, which use the name of the ImageObject.

X and Y Positions: The horizontal and vertical positions in mm. These values are always offset from the upper left corner of the object, regardless of the orientation.

File name: This entry is only for displaying the file name. File selection is performed using the button with the three dots next to the entry. Upon clicking this button, an image selection dialog appears, which is described in Section 4.13.1 Image Selection Dialog. For the best results, we recommend using the BMP and TIF formats.

Image Width and Image Height: The height and width of the ImageObject may be changed. If the Lock Page Ratio checkbox is checked, changing the value in one entry will adjust the value in the other entry, such that the ratio between the height and width of the image remains constant. If the ratio is not locked, both values may be set independently of one another.

Full Size: This pushbutton is only activated after the file name for the image has been set. Upon clicking Full Size, a selection list appears, from which the resolution for importing the image can be set. Available values lie between 75 and 1200 dpi. Given this information, the program calculates the full size of the image and sets the corresponding entries (width and height) to these values.

Lock Page Ratio: If this checkbox has been checked, the proportions of the original image will be maintained as changes are made to the image size. Correspondingly, only four handles are available in the corners of the object. If this checkbox has not been activated, the width may be changed independently of the height, and all eight handles are displayed on the object.

If various objects overlap each other, the checkbox, Overlap Using Black, determines if the two overlapping surfaces cancel each other out and are printed in white (unchecked) or if the overlap is black (checked).

Printable: By means of this checkbox, you determine if the image is only displayed on the layout screen, or if it will also be printed. Non-printable objects are displayed in green.

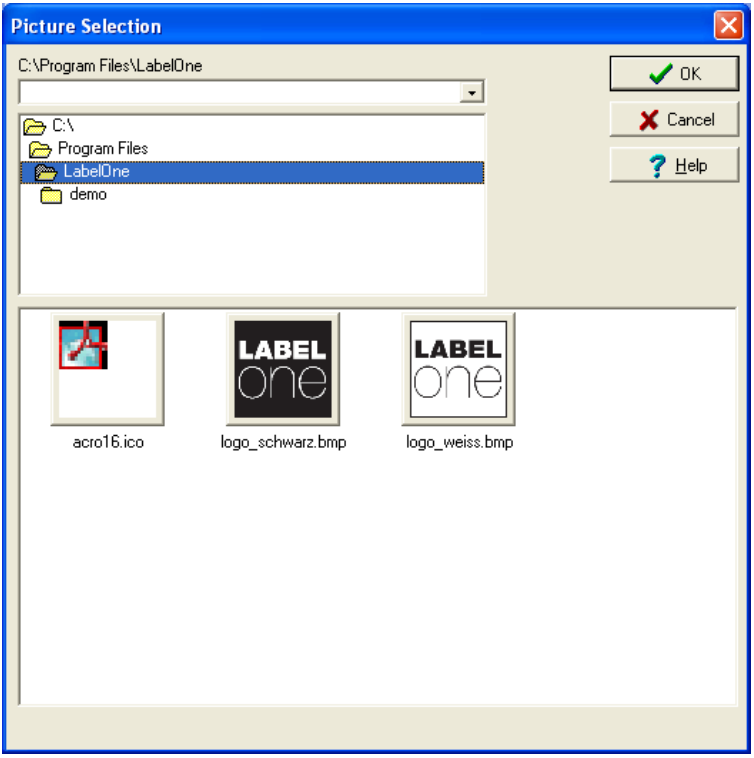
The Group of Transformation Entries:

These entries control the display of the selected image file. The original file is not changed, but rather the transformation functions are applied after the file has been imported:

- Crop: By checking this entry, the white border is cropped from the image file.
- Invert: Black regions become white, and vice versa
- Mirror Horizontally and Mirror Vertically: The imported image file is mirrored horizontally and/or vertically
- Rotate: The import image may be rotated by an angle between 0 and 359 degrees
- B&W Conversion: Zebra® printers can only print black and white images. If the selected image is in colour, it will be converted. By default, the transformation occurs at a specific luminance: Everything that is darker than the reference value becomes black; the rest becomes white. This conversion is reasonable, if, for example, a colour image was separated into fine shades of grey when it was scanned. In comparison, if a photo should be printed, the checkboxes Dither and Quantitisation can convert it appropriately, thereby providing a more realistic impression.

Zoom: This slider adjusts the image for preview purposes. However, this does not affect the size of the image on the label.

4.13.1 Image Selection Dialog



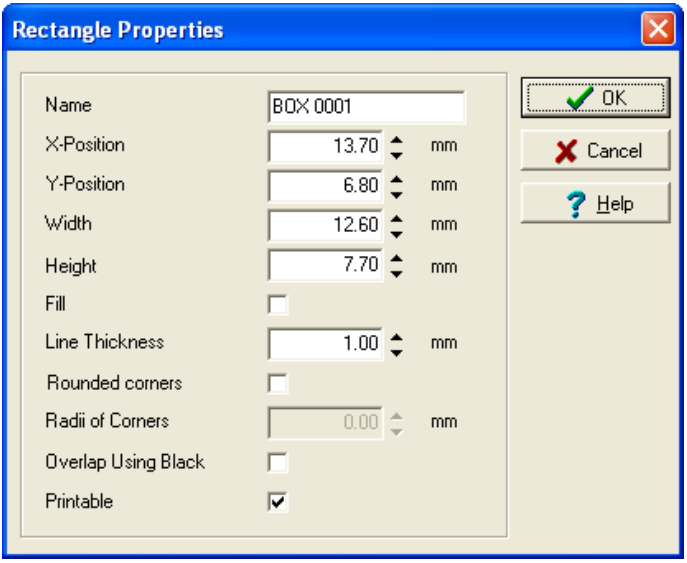
This dialog enables the visual selection of image files by displaying the individual files as thumbnails.

The drive and path can be set at the top of the dialog. The images found in that directory are then displayed at the bottom of the dialog.

When selecting a file for the first time after starting the program, file selection begins in the initial file directory, which can be set by means of the menu option "Settings" (Section 7.1.2 File Storage Tab). Subsequently, file selection starts from the directory, where the last file opened was found.

By simply clicking on a file, the name, size and creation date are shown on the bottom line. Double-clicking on a file will transfer this information to the ImageObject property dialog.

4.14 Rectangle Object



Name: The name of the object must be unique and is set to a standard name upon creation of the object; BOX nnnn for RectangleObjects, where nnnn represents a number between 1 and 9999.

Theoretically, the name may be changed, although doing so seldom makes sense, because as of this writing there are no other dialogs, which use the name of the RectangleObject.

X and Y Positions: The horizontal and vertical positions in mm. They always correspond to the upper left corner of the object.

Width and Height: The outside width and height of the rectangle, including the thickness of the lines.

Filled: Checking this entry causes the rectangle to be filled in black. In this case, the line thickness can no longer be changed.

Line Thickness: This entry changes the thickness of the line with which the rectangle is drawn. The line is always drawn on the inside of the rectangle. It does not affect the size of the rectangle. However, the line thickness may be half of the width or height of the rectangle at most. The smaller of the indicated values will be used. If the rectangle should be filled in black (checkbox Fill), the line thickness cannot be set.

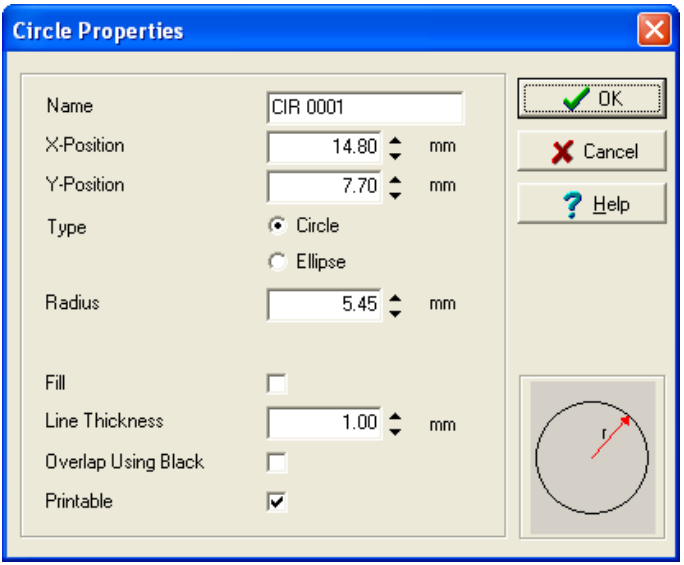
Rounded Corners: By checking this entry, a rectangle can be drawn with rounded corners. In this case, the Corner Radius entry is also activated.

Corner Radius: Enter the radius for the corners in this entry, with which the corners should be drawn. This entry is only activated if the Rounded Corners entry has been checked. The maximum value for this entry depends upon the height and width of the rectangle. At most, it may be half of the width or height of the rectangle. The smaller of the indicated values will be used.

If various object overlap, the checkbox Overlap Using Black determines if the two overlapping surfaces cancel each other out and are printed in white (unchecked) or if the overlap is black (checked).

The Printable checkbox determines if the TextObject will actually be printed, or if it only appears on the screen. Non-printable objects are indicated in green on the layout screen.

4.15 Circle Object



Name: The name of the object must be unique and is set to a standard name upon creation of the object; CIR nnnn for CircleObjects, where nnnn represents a number between 1 and 9999. Theoretically, the name may be changed, although doing so seldom makes sense, because as of this writing there are no other dialogs, which use the name of the CircleObject.

Type: This entry determines if a circle or an ellipse will be drawn. A circle requires only one radius, where an ellipse requires the radii r1 and r2. The graphic image in the lower right corner indicates how the radii are used.

X and Y Positions: The horizontal and vertical positions in mm. These entries always correspond to the centre of the object.

Radius or Radii: The radius of the circle is, or the radii of the ellipse are, set by means of this entry. The graphic image in the lower right corner indicates how the radii are used.

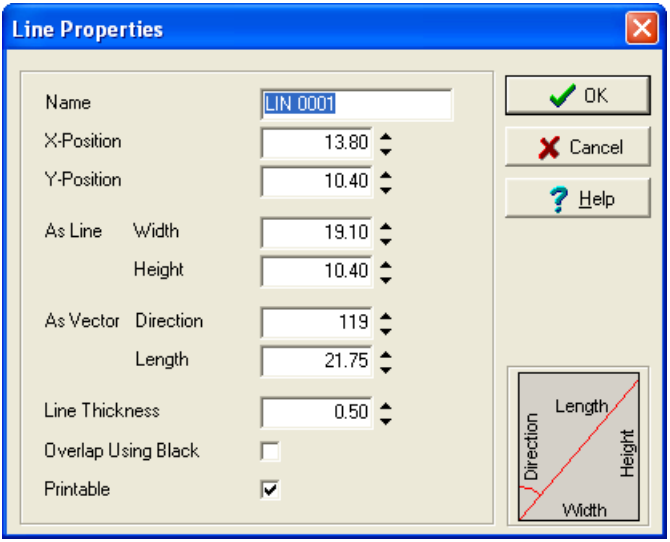
Filled: Checking this entry causes the circle or ellipse to be filled in black. In this case, the line thickness cannot be changed.

Line Thickness: This entry changes the thickness of the line with which the circle or ellipse is drawn. The line is always drawn on the inside of the circle, or ellipse, and the size is not affected. However, the line thickness may be half of the radius of the circle, or of the radii of the ellipse, at most. If the object should be filled in black (checkbox Fill), the line thickness cannot be set.

If various objects overlap each other, the Overlap Using Black checkbox determines if the two overlapping surfaces cancel each other out and are printed in white (unchecked) or if the overlap is black (checked).

The Printable checkbox determines if the CircleObject will actually be printed, or if it only appears on the screen. Non-printable objects are indicated in green on the layout screen.

4.16 Line Object



Name: The name of the object must be unique and is set to a standard name upon creation of the object; LIN nnnn for ImageObjects, where nnnn represents a number between 1 and 9999. Theoretically, the name may be changed, although doing so seldom makes sense, because as of this writing there are no other dialogs, which use the name of the LineObject.

X and Y Positions: The horizontal and vertical positions in mm. These entries always correspond to the origin of the line.

Using the Width and Height entries in the As Line section: Using these entries, you define a line in the assumption that it is the diagonal of a rectangle. Width and Height correspond to the dimensions of this imaginary rectangle, which produces the line as a diagonal.

Using the Width and Height entries in the As Vector section: Using these entries, you define a line by directly specifying the length of the line and its angle. 0° corresponds to a vertical line from top to bottom; 90° drawn towards the right; 180° towards the bottom; 270° towards the left.

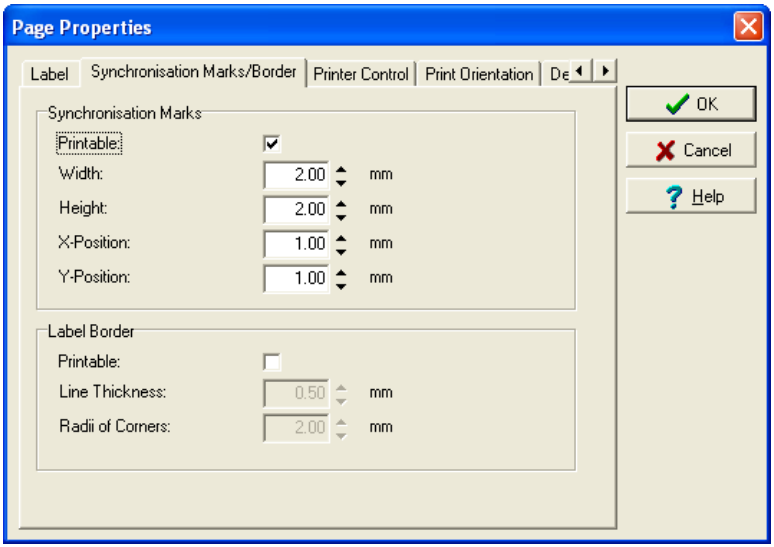
When the entries in the As Line section are changed, the entries in the As Vector section will adjust themselves, and vice-versa.

Line Thickness: By means of this entry, the thickness of the line is changed. A very thick line is drawn as a rectangle.

If various objects overlap each other, the Overlap Using Black checkbox determines if the two overlapping surfaces cancel each other out and are printed in white (unchecked) or if the overlap is black (checked).

The Printable checkbox determines if the CircleObject will actually be printed, or if it only appears on the screen. Non-printable objects are indicated in green on the layout screen.

4.17 Synchronisation Marks

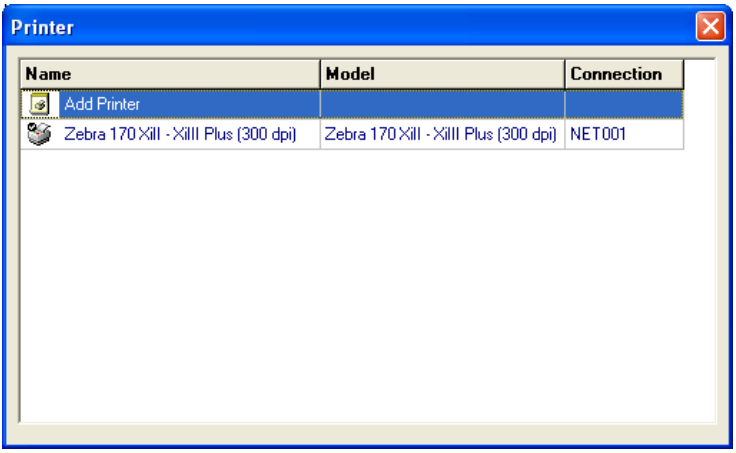


The Properties tab page on the Page Properties dialog (Section 4.3.3 Page Setup) is opened as the property dialog for synchronisation marks. From there, the synchronisation marks can be turned on or off, and the dimensions and placement of the marks can be adjusted.

5 Printing Labels

5.1 Setup Printer

LabelOne® has its own printer management, which has been constructed similarly to the Windows printer management. By means of this feature, label printers can be configured, modified and deleted. The default printer can also be set.



In order to configure a new printer, double-click on the top line. Doing so starts printer setup, which is described in Section 5.1.1.

By means of a printer's context menu (select the printer and click on it with the right mouse button), a printer can be defined as the default printer, or deleted, or its properties can be changed (Section 5.1.2 Printer Properties).

5.1.1 Printer Setup Wizard

Immediately after starting the wizard, the opening dialog is displayed. Upon clicking the Next pushbutton, all of the computer ports are listed for selection in a selection list. Select the port to which the desired printer has been connected. Serial ports are designated by "COM", parallel ports by "LPT", and devices using USB connections have the

designation "USB". **Important: No other applications may be using the selected COM or LPT ports at the same time. For this reason, Windows drivers for the printer, which LabelOne® should use, may not be installed.** This limitation does not apply to USB ports: **For a USB-printer, the Windows driver must be installed!**

For serial ports, the option for configuring their parameters appears after clicking on Next. They must be in agreement with the values of the connected printer. The values in parenthesis correspond to the default values used by most Zebra® printers upon delivery.

For the next step, the printer model can be selected. The most important piece of information for this is the printer resolution. In the event that you have a printer, which does not appear in the list, a similar printer with the same resolution may be selected.

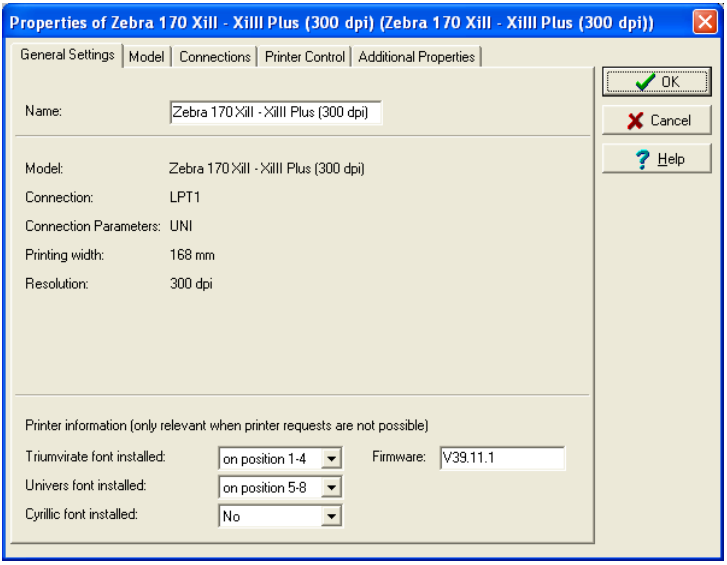
The last item of information is the name of the printer, by means of which LabelOne® connects to it. When configuring the first printer, it will automatically be defined as the default printer. Thereafter, the existing default printer will not be changed.

For informational purposes, the data will be displayed once more after clicking the Next button. In order to permanently accept the printer settings, the Wizard may be exited by clicking Finish. Otherwise, use Back to change to the corresponding dialog and correct the data.

5.1.2 Printer Properties

With the Printer Properties dialog, the properties of a printer may be modified, the print parameters configured, and the connection to the printer tested.

5.1.2.1 General Tab



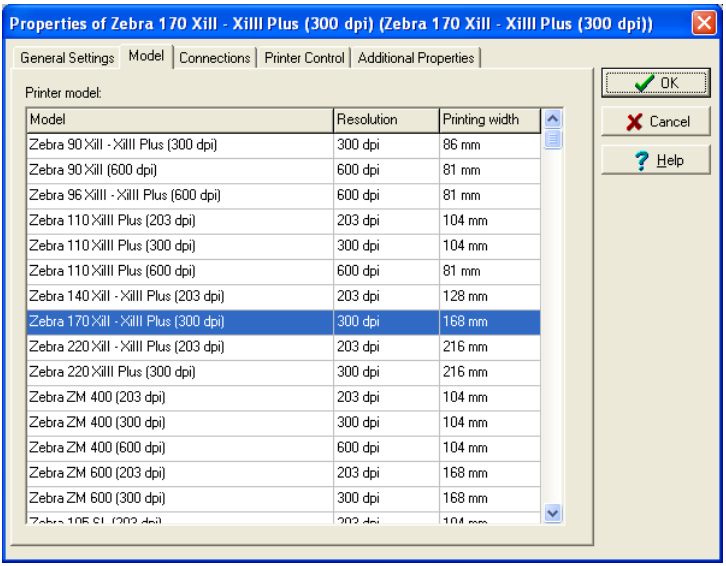
From the General tab, the name of the printer, used by LabelOne® for making a connection, can be modified. The information displayed in the centre of the tab consolidates the information contained on the other tab pages.

The entries at the bottom are only active when bidirectional communication with the printer is not possible, meaning when responses cannot be received from the printer. This may be the case with parallel ports, when data may only be sent, however not received, due to older hardware or missing operating system support. In this case, the three entries must be correctly filled in, so that LabelOne® can determine if certain ZPL® commands may be used during printing.

The configuration of whether or not bidirectional communication is possible is defined using the Settings pushbutton on the Connections tab page.

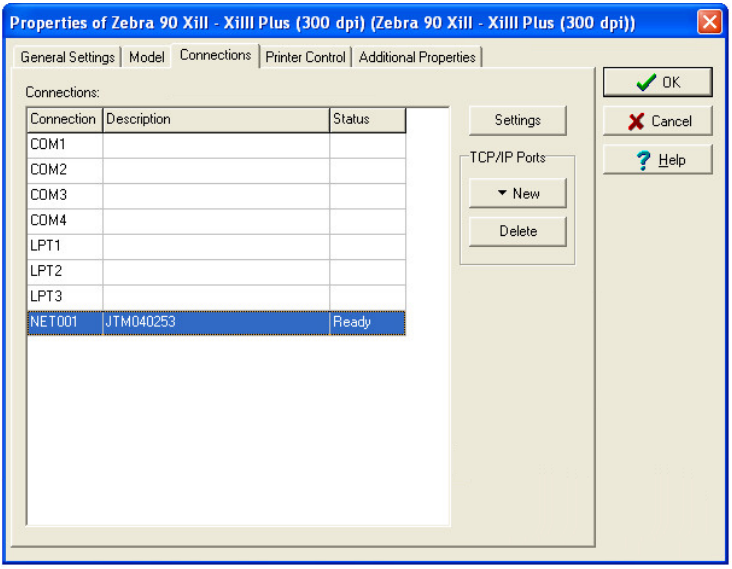
The information about whether or not the fonts Triumvirate, Univers and/or Cyrillic have been installed may be seen by printing the Zebra® printer's font list. TRIN, TRII, TRIB and TRIJ indicate the font Triumvirate; UNIN, UNII, UNIB and UNIJ, the font Univers; and CYRI, the font Cyrillic. The numbers in front of the name correspond to the position. The firmware version can be immediately seen on the printer's display.

5.1.2.2 Model Tab



The printer model can be selected from the Model tab analogously to the Printer Installation Wizard. The most important information is the printer resolution. In case your printer model is not contained in the list, a similar model with the same resolution may be used.

5.1.2.3 Connections Tab



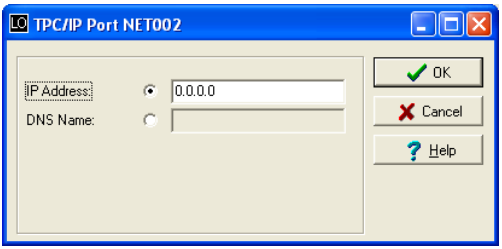
The Connections tab permits modification of the printer connections as well as the configuration of the connection parameters for serial and parallel ports by means of the Settings pushbutton. For serial ports, the data transfer speed, the data bits, the parity, the stop bits, and the flow control can be specified. For parallel ports, the only information indicates whether the port is bidirectional, or not.

The current status of the network and USB printers is shown in the "Status" column. This allows you to more easily determine the correct port if more than one printer of the same name is installed.

Additionally, there are options for defining and deleting network ports. These are required when the communication with a printer flows through a ZebraNet® PrinterServer II. Upon clicking the New pushbutton, the two options Find Automatically and Browse become available.

Find Automatically searches within the network's own the broadcast domain (whose range is determined by System Administrator), and creates a new NetPort for all ZebraNet® PrinterServer, whose NetPort has not yet been defined.

The IP address or the DNS name of the printer must be entered for Browse.



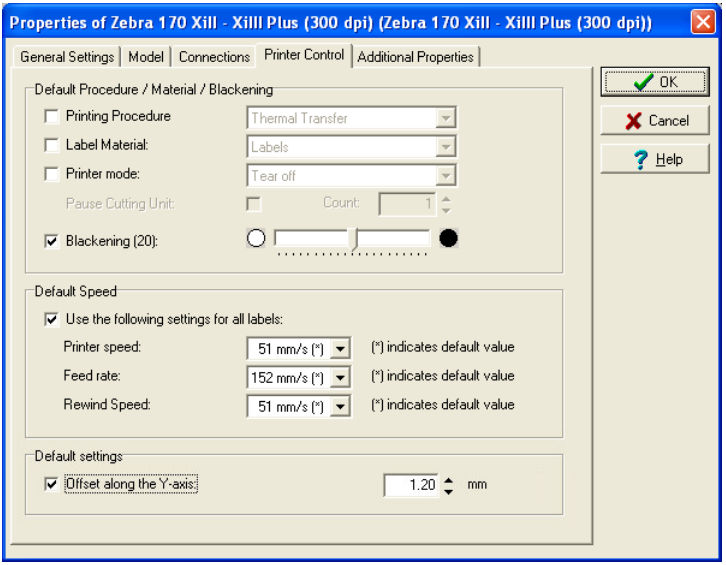
So that the print server can be communicated with in future, it must have either a DNS name, or static IP address (or the DHCP server must be configured such that it always assigns the same address to the print server). Contact your Network Administrator, if you have any questions.

Default values for serially connected Zebra® printers are 38,400 baud, 8 data bits, no parity, 1 stop bit and hardware flow control.

For parallel ports, the Bidirectional property is activated by default. It should be deactivated if printer notification really cannot be received. The easiest way to test this is by means of the Additional Properties tab.

Parameters cannot be configured for USB connections.

5.1.2.4 Printer Control Tab



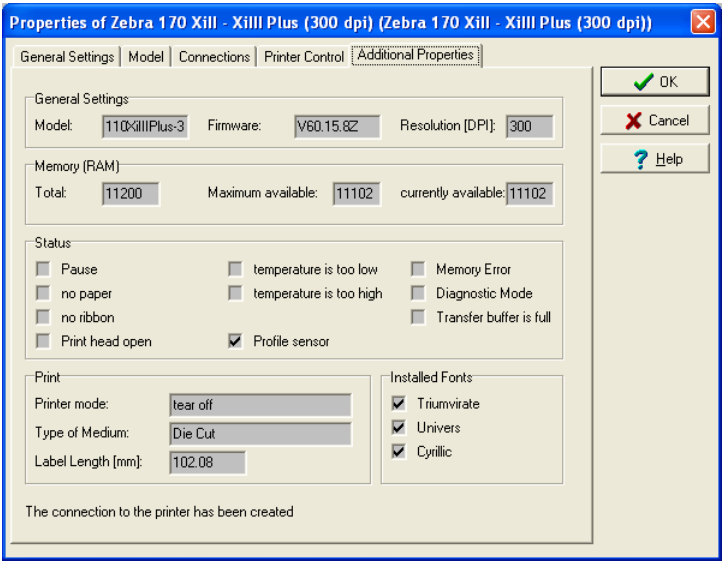
The Printer Control tab has significant importance for printing: When the checkboxes have been checked, the corresponding entries on the tab page are turned on. In this case, you may enter the global default values for printing. They override the settings made at the label level during printing.

Default settings: The offset in Y-direction serves the purpose of precise adjustment when printing. Unlike the setting of the same name at label level, the setting applies to all labels printed by this printer at the printer level. It overrides the label's corresponding value.

In the example shown, the Blackening Control and the speed for all labels to be printed by this printer are set fixedly to the preset values. For printing, the corresponding entries are locked.

The settings made at the label level apply for all settings (Printing Procedure, Label Material, etc.), which are not preset from this tab.

5.1.2.5 Additional Properties Tab

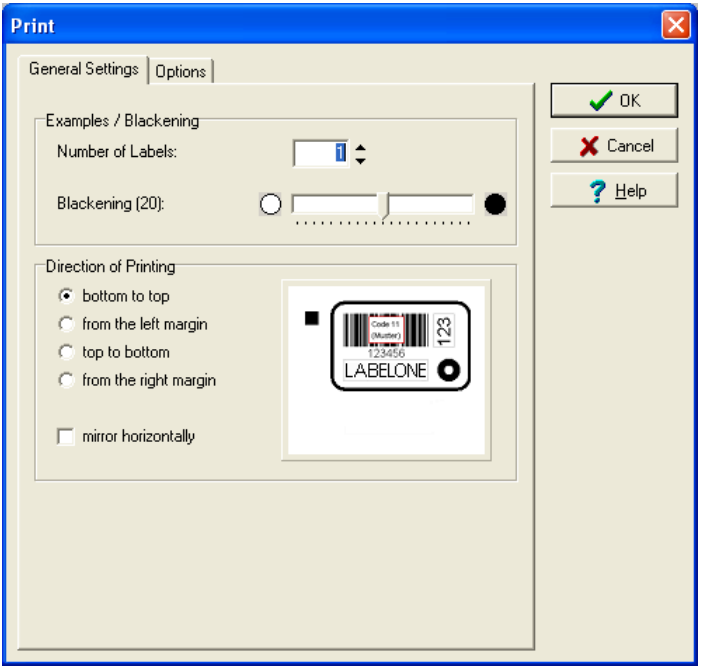


Upon activating this tab, an attempt is made to establish communications with the printer. If this attempt succeeds, the printer status is periodically polled and displayed. On the one hand, this serves to test if the port parameters are correct. On the other hand, it also examines the status of the printer.

5.2 Beginning Printing

5.2.1 Print Dialog

5.2.1.1 General Tab



By means of the Print dialog, the operator can select the number of labels, the blackening, the print orientation, and from the second tab, any additional print options.

Important: Not all Zebra® printers allow blackening to be set to an absolute value. Older Zebra® printers use a relative value. A corresponding indicator will be shown upon printing, if that is the case.

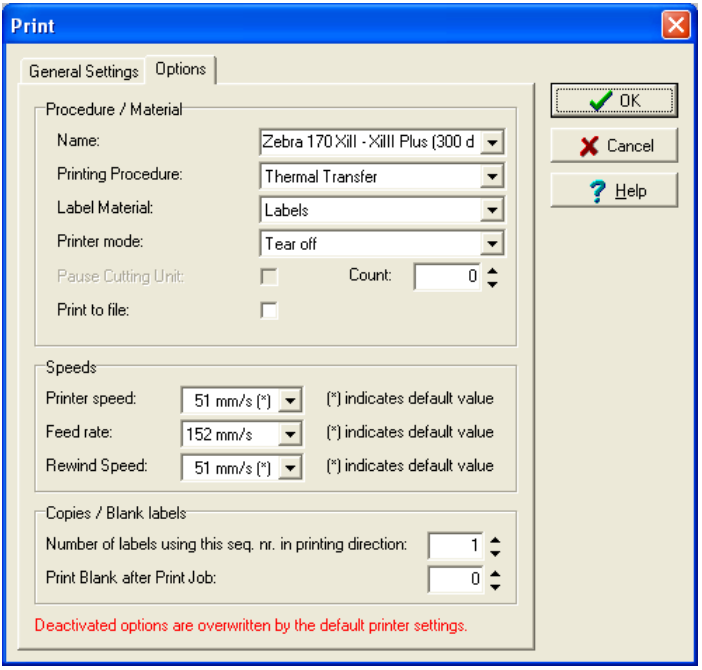
The default printer is always pre-selected as the printer and the number of examples is always set to 1 upon opening the dialog.

On the Print Orientation tab, whether the label should be rotated for printing, or also be inverted horizontally, can be set. The orientation setting originates from the default value for the label to be printed. Four rotation settings are available, which correspond to 0°, 90°, 180° and 270° of clockwise rotation, from top to bottom.

The Mirror Horizontally feature is appropriate for labels, for example, which are viewed from the back (transparent labels).

The effects of the print orientation on the print out are graphically shown to the right. This graphic is a fixed image, which is not related to the actual layout in any way.

5.2.1.2 Options Tab



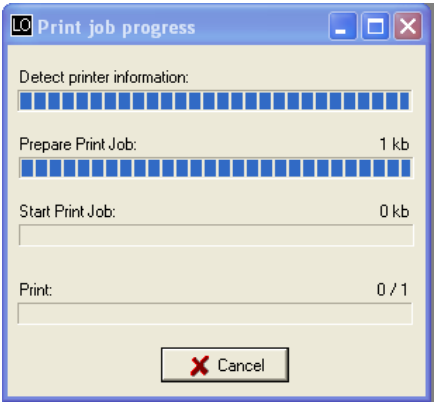
Additional printing parameters may be configured from the Options tab. They originate as default values either for the label or the printer: When the printer settings have been made (Section 5.1 Setup Printer) such that those settings override the label settings, the entries on this tab page may not be changed. Otherwise, the default values would originate from the label and not be adjustable.

The Count entry is only available with the printer mode Tear Off (separate) and when Cutter (cutting unit) is turned on. The Pause Cutter entry is only available with the Cutter mode (cutting unit).

The speed for printing, feeding, and rewinding can be set using the entries in the centre group. Values appearing with stars indicate default values from Zebra®.

The entries Number of Labels using this Sequence Number in Print Direction and the Number of Blank Labels to be printed after the Print Job may be set at the bottom of the dialog. When printing blank labels, the synchronisation marks are still printed.

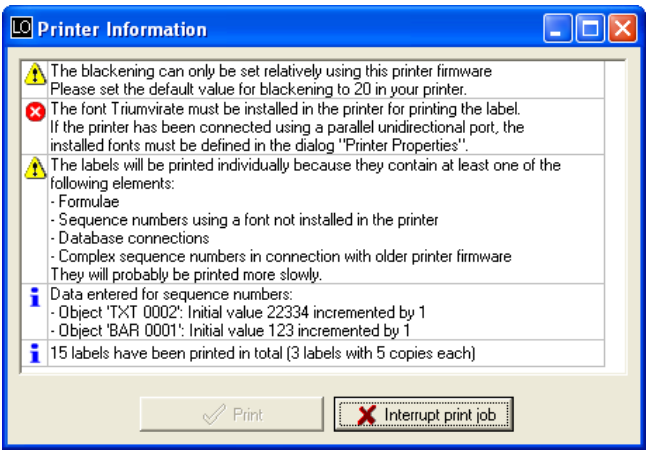
5.2.2 Print Job Progress Dialog



Upon confirming the Print dialog using OK, communications with the printer are opened in order the check the printer properties. The print job is then prepared and the requirements are compared with the capabilities of the printer.

The results of this comparison are informational messages, which are displayed in the Print Information dialog (Section 5.2.3 Printer Information Dialog). Next, the print job is transferred to the printer, which may require some time depending upon the type of connection. If bidirectional communication with the printer is possible, which is always the case with serial and USB ports, and is often so with parallel ports, then the progress of the print job is monitored and visualized using the display at the bottom. Simultaneously, the printed sequence numbers in the layout are counted so the number of printed labels is always known.

5.2.3 Printer Information Dialog



Message types, which arise from setting up the print job, may be: Informational (a blue "I"), Warnings (yellow triangle) and Errors (red circle with an "X"). If errors have been received, the print job cannot be completed and the Print pushbutton is deactivated. In the example above, the Triumvirate font has not been installed in the printer but is required by the label layout.

If this dialog should be shown in all cases, only for warnings, or only for errors, may be configured by means of a system setting (Section 7.1.4 Label Tab).

The Initial Values menu item opens a dialog, with which the values of all sequence number entries and TextObjects marked as "entered by operator upon printing" are displayed and may be adjusted.

The Print Job List menu item opens a dialog, with which the values of all sequence number entries and TextObjects marked as "entered by operator upon printing" are displayed and may be adjusted. However, the data may be entered for various sequences and recalled as needed.

6 Print Report

6.1 Job Report

A report is created by means of this feature, which provides information about the following label data:

- File name
- Dimensions
- Film, laminate, ribbon, die carrier, and comments
- Layout as the scale 1:1, if that is possible based upon the label size. Otherwise, a lower scale (1:2, 1:3, etc.) is used.

The report is initially displayed as a preview and may be printed to any installed Windows printer.

The  button may be clicked in the preview, in order to select another printer as the default Windows printer. Subsequently, a dialog appears, which permits printer selection to be made. Important: Clicking the OK button does not start the printing of the report. Only the printer has been selected. The  button must be clicked to start printing.

6.2 Print Job Report

The Print Job Report indicates when and by whom the labels have already been printed and how many labels have already been printed.

If the labels use a sequence number or contain TextObjects marked as “entered by operator upon printing”, then the data used at the time of printing is shown in the report.

The report is initially displayed as a preview and may be printed to any installed Windows printer.

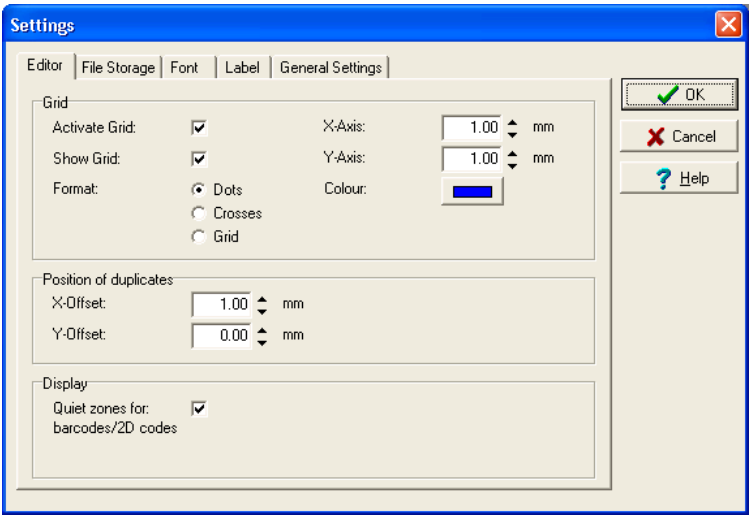
The  button may be clicked in the preview, in order to select another printer as the default Windows printer. Subsequently, a dialog appears, which permits printer selection to be made. Important: Clicking the OK button does not start the printing of the report. Only the printer has been selected. The  button must be clicked to start printing.

7 Configuration

7.1 Settings

Global settings may be made for LabelOne® by means of this dialog. The settings of the currently opened label are not changed.

7.1.1 Editor Tab



The entries on this tab page affect the operation of the graphical editor.

Activate Grid: By checking this entry, a grid feature is activated on the layout screen, meaning that dragging objects causes them to be placed at positions determined by the grid. The increments of the grid are configured by the two entries X-Axis and Y-Axis. This entry does not affect the display of the grid.

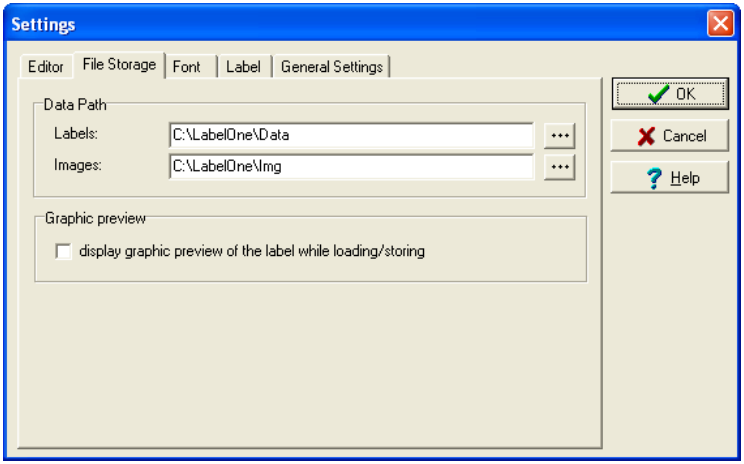
Show Grid: By checking this entry, the grid is displayed on the layout screen. In comparison, the Snap-To-Grid feature is activated by the entry Activate Grid. The size of the grid increments is configured by the two entries X-Axis and Y-Axis.

Dots, crosses, or lines may be configured for the grid symbols. Any colour desired may be chosen.

The positions, where the copied objects are pasted, can be preset by the entries X-Offset and Y-Offset. Example using the values X-Offset = 1 mm and Y-Offset = 0 mm: A RectangleObject, which is located at the X and Y positions of 20 mm x 15 mm, is copied and pasted. The new object is pasted 2mm to the right and at the same height.

Using the check box "Quiet zones for barcodes/2D codes" the representation of the quiet zones for barcodes/2D codes in the form of a green outline can be switched on or off.

7.1.2 File Storage Tab



The data directories for labels and images are configured from this tab page and determine if the graphic preview of the label should be displayed while loading/storing.

Labels: The entry indicates in which directory to start searching for label files. This setting affects the File Open dialog (Section 4.3.1 Open file) and may be set to other drives and directories for individual operators.

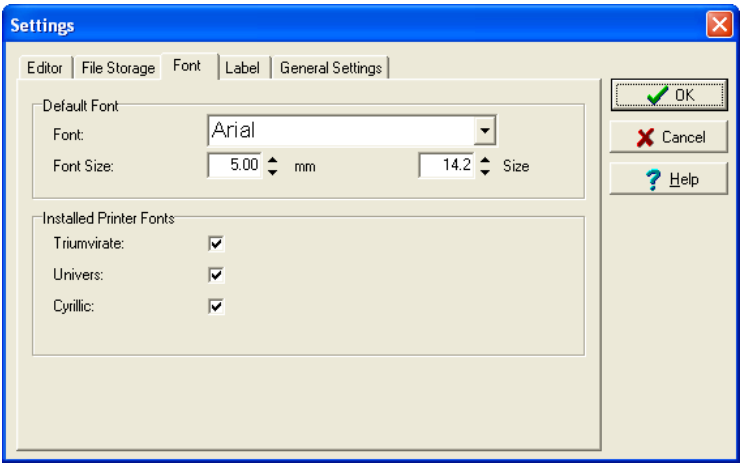
Images: This entry defines the primary directory for images. On the one hand, this setting affects the Image Properties dialog (Section 4.13 Image Object), and on the other hand, the overall operation of LabelOne®: only the relative file name is stored in the label file, if the image is located in the image directory.

Example: The image path is X:\Produktion\Grafiken. The image X:\Produktion\Grafiken\Standard\CE.bmp is associated with the label. In this case, only the path Standard\CE.bmp is stored in the label. Therewith, it does not matter if the image directories of other operators are connected using different drive letters. What is important is that the image path points to the same directory for all operators.

Example: The image is located on the IDEFIX server in the directory D:\Daten\LabelOne\Grafiken, which is shared as LOGRAFIKEN. Operator Meier connects this share to drive X on his computer. The same share is connected as drive L on the PC of operator Müller. LabelOne® is also executed on the server. On Meier's computer, the image directory needs only to be connected as X; on Müller's computer, as L; and configured on the server as D:\Daten\LabelOne\Grafiken.

Graphic Preview: With this checkbox, you determine whether a graphic preview should be displayed to the right while loading and storing a label. Displaying a preview can significantly reduce speed, especially when the network connection is slow.

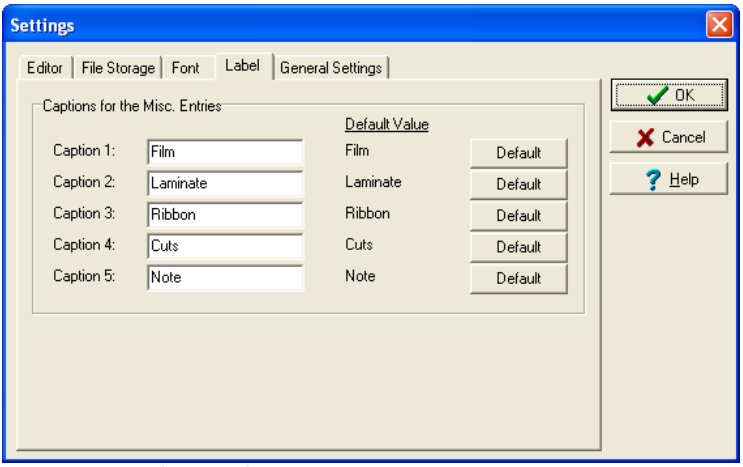
7.1.3 Font Tab



By means of this tab page, the default font and size are specified, which are configured after starting LabelOne®.

By means of the checkboxes in the Installed Printer Fonts group, you tell LabelOne® if you want to use these fonts. Of course, this is only reasonable when these fonts have been installed on the printer. If the entries are checked, the corresponding font is available from the selection list in four respective variations (normal, italic, bold and bold and italic). After the modification of this setting, LabelOne® must be re-started.

7.1.4 Label Tab

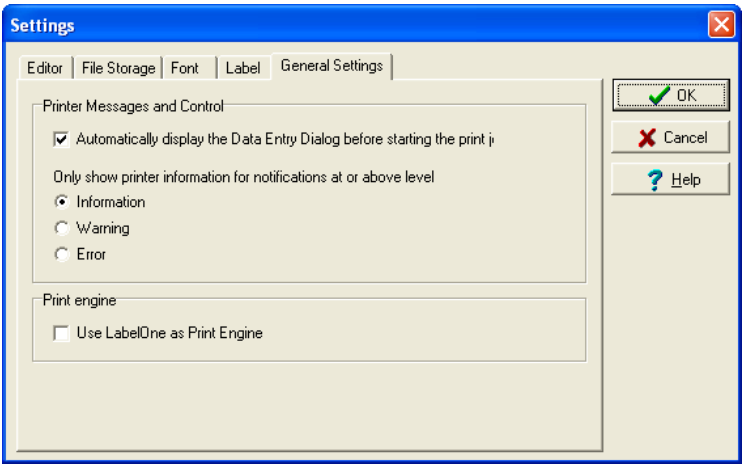


The captions for the five miscellaneous user entries, in which additional information can be stored in each label file, can be configured from this tab page. The default captioning has been formatted for the usage of a laminator and a cutter. In the event that you would like to use the appropriate entries for other information, you may adjust the captioning correspondingly.

Clicking the Default pushbutton restores the original captions.

One additional feature is the ability to set the captions specifically for each label (Section 4.3.3 Page Setup)

7.1.5 General Tab



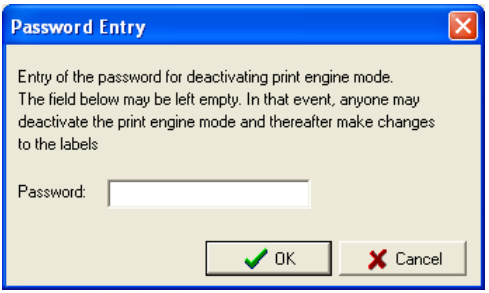
In the Printer Messages group, the first checkbox determines if the dialog for the entry of initial values and modifiable data should be automatically displayed for each print job (of course, only if the label contains at least one sequence number or an object requiring data entry).

By means of the radio buttons, you can configure the level (Information, Warning or Error) at which the information dialog is displayed. This dialog is displayed prior to the actual print job. With the default setting of Information, the dialog will appear and indicate the number of labels to be printed and the initial values of any sequence numbers. When set to Warning, only warnings (e.g. slow print job) and errors are displayed. When set to Error, you are only informed of errors (e.g. missing printer font).

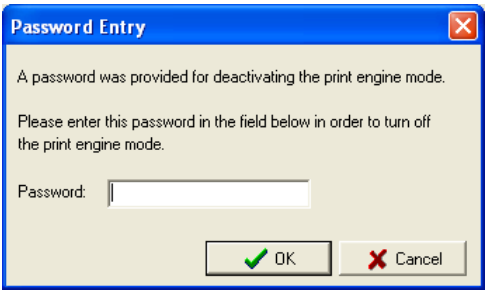
The Print Engine group determines if LabelOne® should be executed as a print engine. In this operational mode, label files can be loaded and printed out, however, modifications to the layout of a label are not possible. The following features may be used in Print Engine mode:

- Entry of the initial value for sequence number entries
- Entry of data for entries marked for such
- Modification of the position and size of the synchronisation marks
- Activation and deactivation of label borders
- Modification of the following label properties:
  - Left margin
  - Horizontal spacing to next label
  - Offset along the Y-Axis
  - Vertical spacing
  - Entry of comments
- Modification of the following print job parameters
  - Count
  - Blackening
  - Printer
  - Label material
  - Printer speed
  - Number of labels using this sequence number in the printing direction
  - Blank labels printed after the job

When the Print Engine mode is started, a password is requested:



This password is used for deactivating the Print Engine mode. You may also click the OK button without entering a password. In this case, however, anyone can deactivate the Print Engine mode and thereby make changes to the label layout. If a password is entered, the following dialog appears when deactivating this mode.

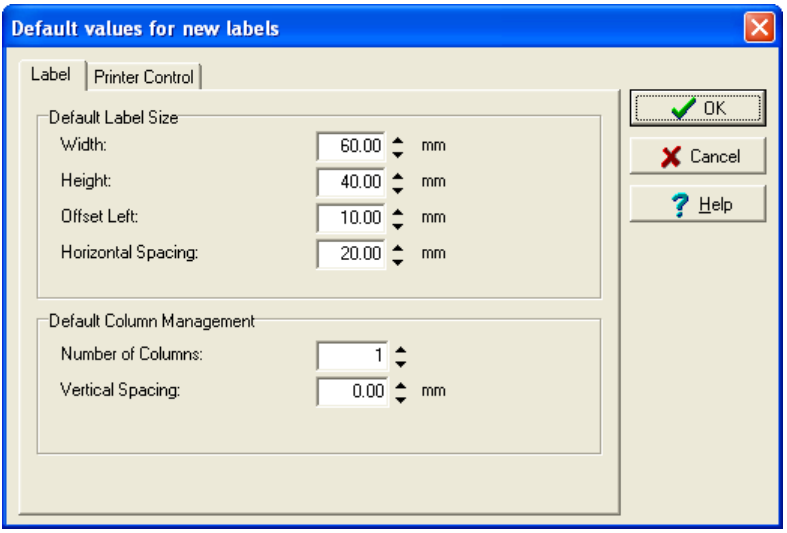


Print Engine mode can only be deactivated when the defined password is entered.

7.2 Default Values

By means of this dialog, you configure the default values for labels not yet created. The settings of the currently opened label are not changed.

7.2.1 Label Tab

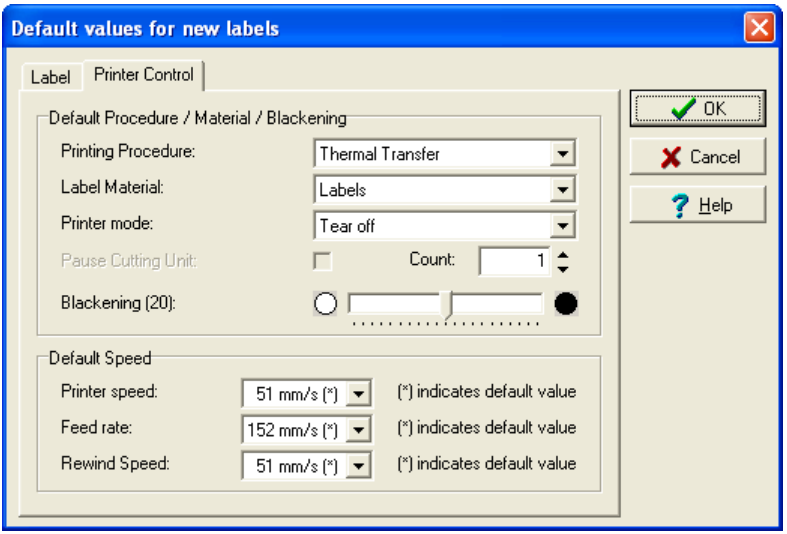


On the Label tab, the label dimensions, the left margin, and the offset to the next label column and row can be adjusted, as well as setting the parameters for multi-column labels.

The entry Number of Columns can accept values between 1 and 9. A maximum of nine labels may be printed horizontally. The Vertical Spacing entry determines the distance between the individual labels for multi-column printing.

As already introductorily mentioned, this data only applies as the default values for labels not yet created.

7.2.2 Printer Control Tab



On the Printer Control tab, the print parameters to be used for the label are entered, which should be used for a print job. The Count entry is only available with the printer mode Tear Off (separate) and when Cutter (cutting unit) is turned on. The Pause Cutter entry is only available with the Cutter mode (cutting unit).

The speed for printing, feeding, and rewinding can be set using the entries in the lower group. Values appearing with stars indicate default values from Zebra®.

The following comments apply:

- Not all Zebra® printers allow blackening to be set to an absolute value. Older Zebra® printers use a relative value. A corresponding indicator will be shown upon printing, if that is the case.

- All of the settings on this tab can be overridden before printing, either by means of manual entry, or by the default configuration of the printer used.

As already introductorily mentioned, this data only applies as the default values for any labels not yet created.

7.3 Save Configuration

The LabelOne® settings are stored in the private registry of the user who logged in accordance with the guidelines for XP compatible software. In order to ease the installation of identical workstations, the current settings can be exported to a file, which can then be imported by another operator or another PC by means of the configuration feature (Section 7.4 Load Configuration).

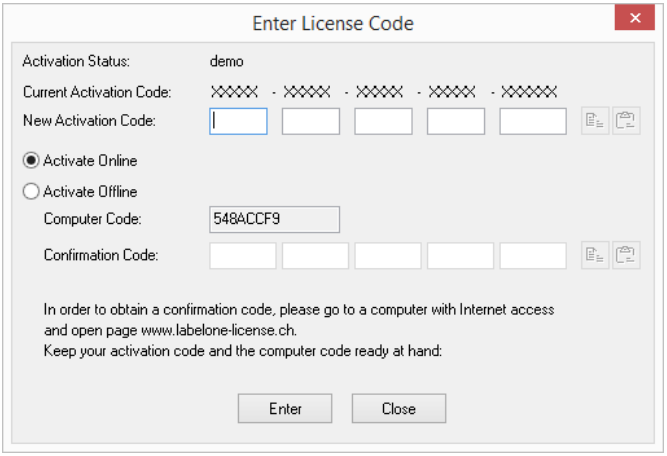
By activating this menu item, a default Windows dialog for selecting the location of the file to be saved is opened.

7.4 Load Configuration

With this feature, a configuration file, which was created by means of the Save Configuration feature (Section 7.3 Save Configuration), can be imported and the values can be transferred to the registry of the operator who is logged on.

By activating this menu item, a default Windows dialog for selecting the location of the file to be imported is opened.

7.5 Registering the activation code



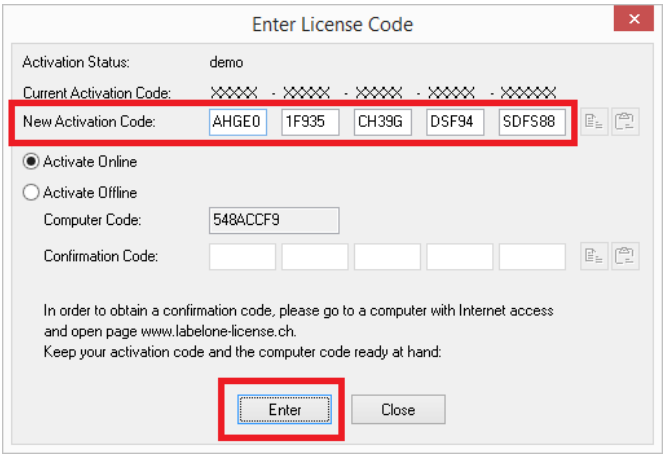
The software must be activated with an activation code to allow you to use LabelOne® productively. The "Activation" dialog box allows you to display the current activation code and register a new one. Activation can be carried out "online" and "offline". The difference is as follows:

- With online activation, the computer to be activated contacts the LabelOne® licensing server directly by means of an Internet connection. If this is successful, LabelOne® is activated in this way. This is the simpler and thus preferred method of activation.
- With offline activation, the operator activates LabelOne® from another computer via the homepage of the LabelOne® activation server.
  He or she uses the displayed computer code in order to do this. As a result of activation, the operator receives a confirmation code which he or she notes down or copies and then registers on the computer to be activated. This

method of activation is more complex and is normally used only if the actual computer to be activated does not have direct Internet access.

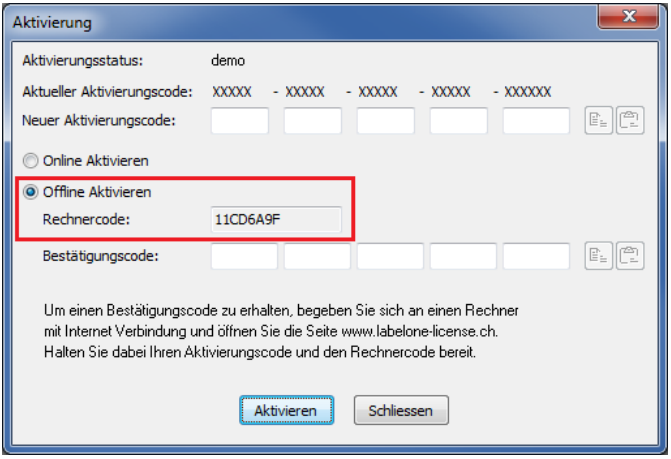
Step-by-step instructions for **online** activation: the current activation code is displayed for information purposes right at the very top. If an activation code has not yet been registered, text groups consisting of Xs are displayed. You can click on button  to copy the current activation code to the Windows clipboard and paste it into a mail program or your browser for instance.

Register the new activation code in the five input fields. Clicking on button  pastes the contents of the Windows clipboard into the fields. This means that you do not need to write down a new activation code which you have received by e-mail for instance and you simply need to enter it by copying and pasting.



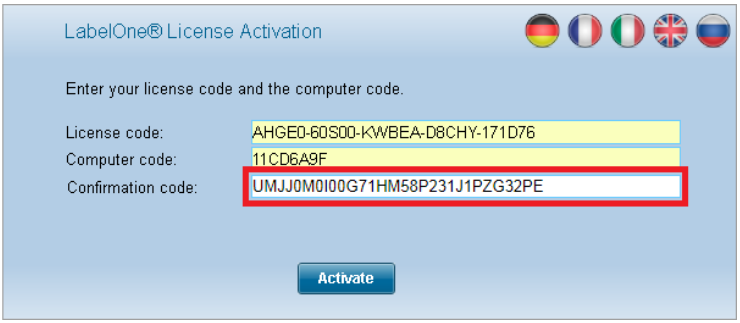
Clicking on the 'Activate' button has the new licence code checked by the LabelOne® activation server and – if everything is OK – the software on the local computer is activated.

Step-by-step instructions for **offline** activation: switch the activation mode to "Activate Offline" and note down the computer code.

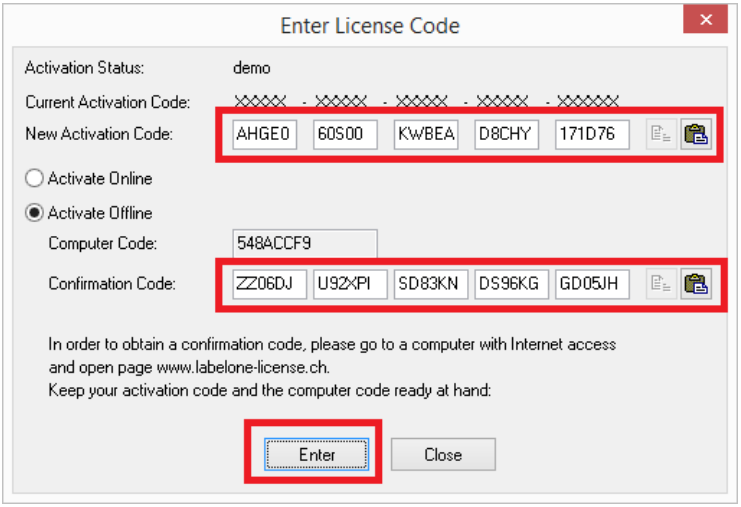


On a computer with Internet access, now open page http://www.labelone-license.ch/ Choose your required language if necessary.

Register the activation code in field "Licence Code" and register the computer code which you noted down beforehand in field "Computer Code". Then click on the "Activate" button. The matching confirmation code is displayed in the "Confirmation Code" field if LabelOne® has been activated successfully:



Note down or copy the confirmation code and return to the computer to be activated. Now register both the activation code and the received confirmation code in the Activation dialog box and click on Activate. That is how you activate LabelOne® on a computer without Internet access.



8 Formulae

8.1 Usage

The contents of sequence numbers and TextObjects can be calculated by using formulae. This makes sense, when a sequence number should be printed on a label as text, and a portion of this number is also needed for a barcode.

Another use case is the reformatting of values originating from a database.

Naturally, this can also be resolved through the usage of two sequence numbers, which are set to the same value at the beginning of the print job. However, this increases the number of errors. Only one initial value must be set when a formula is used.

At this juncture, the disadvantage to formulae cannot be disregarded: When a formula is used, each label is transferred individually to the printer, which can cause a noticeable reduction in the speed of the print process, in particular for serial printers.

8.2 Overview

All formulae are created using prefix notation, meaning the function name is given first and then the parameters. Example: ADD(2, 3.5, 7) adds the three values 2, 3.5 and 7. The result is 12.5.

The result of a function can be used as input for the next function. Example: ADD(ADD(2,3),ADD(4,5)) first adds the numbers 2 and 3, then the numbers 4 and 5, and finally the results of the two (5 and 9, respectively). The result is 14.

Strings are always enclosed in quotation marks ("Text"). Numbers may be written with or without quotation marks.

Implicit type conversion is done. A function, which expects a number, converts a string into a number by itself, and vice versa.

8.3 Access Function

The FIELD access function enables access to the value of another object.

Format: FIELD(ObjectName)

Example: FIELD("MyField") returns the value of the TextObject or sequence number with the name MyField.

8.4 Date Functions

8.4.1 DATENOW

Purpose: Returns the current date.
Format: DATENOW()
Example: DATENOW() returns 28.04.2004.

8.4.2 DAYNOW

Purpose: Returns the current day number.
Format: DAYNOW()
Example: DAYNOW() returns 28.

8.4.3 MONTHNOW

Purpose: Returns the current month as a number.
Format: MONTHNOW()
Example: MONTHNOW() returns 4.

8.4.4 YEARNOW

Purpose: Returns the current year.
Format: YEARNOW()
Example: YEARNOW() returns 2004.

8.4.5 WEEKDAY

Purpose: supplies the current day of the week or the day of the week of the date specified, in the form of a number (in accordance with ISO8601, Monday = 1, Tuesday = 2, … Sunday = 7)
Format: WEEKDAY()/WEEKDAY(date)
Examples:
- WEEKDAY() results in output 3 if called on a Wednesday.
- WEEKDAY("01.01.2017") results in output 7 (Sunday)

8.4.6 WEEKNR

Purpose: outputs the current week number or the week number of the date specified, in the form of a number (in accordance with ISO8601, starting with the week containing the first Thursday of the year).
Format: WEEKNR()/WEEKNR(date)
Example:
- WEEKNR() results in output 27 if called on 3.7.2017
- WEEKNR("01.01.2017") results in output 52

8.4.7 DATEADD

Purpose: Adds the last three numbers to the date parameter.
Format: DATEADD(Date, NumberOfDays, NumberOfMonths, NumberOfYears)
Example: DATEADD("18.04.2004", 30, 2, 1) returns 18.07.2005.

8.4.8 TIMENOW

Purpose: Returns the current time in hours, minutes and seconds.
Format: TIMENOW()
Example: TIMENOW() returns 15.36.49.

8.4.9 TIMEADD

Purpose: Adds a specific number of hours and minutes to the current time.
Format: TIMEADD(Time)
Example: TIMEADD("1.30") returns 17:06:49.

8.5 Math Functions

8.5.1 ADD

Purpose: ADD adds two or more values.
Format: ADD(Value1, Value2, ...)
Example: ADD(4, 5) returns 9.

8.5.2 SUB

Purpose: SUB subtracts two or more values.
Format: SUB(Value1, Value2, ...)
Example: SUB(9, 5) returns 4.

8.5.3 MUL

Purpose: MUL multiplies two or more values.
Format: MUL(Value1, Value2, ...)
Example: MUL(2, 3) returns 6.

8.5.4 DIV

Purpose: DIV divides two or more values.
Format: DIV(Value1, Value2, ...)
Example: DIV(6, 2) returns 3.

8.5.5 ROUND

Purpose: Rounds a value up or down.
Format: ROUND(Value)
Example: ROUND(5,3) returns 5.

8.5.6 CEIL

Purpose: Rounds a value up.
Format: CEIL(Value)
Example: CEIL(5.3) returns 6.

8.5.7 FLOOR

Purpose: Rounds a value down.
Format: FLOOR(Value)
Example: FLOOR(5.9) returns 5.

8.6 String Functions

8.6.1 LEFT

Purpose: The LEFT function returns a string of the specified length, starting from the beginning of the original string.
Format: LEFT(String, NumberOfCharacters)
Example: LEFT("LabelOne", 5) returns "Label".

8.6.2 RIGHT

Purpose: The RIGHT function returns a string of the specified length, which is located at the end of the original string.
Format: RIGHT(String, NumberOfCharacters)
Example: RIGHT("LabelOne", 3) returns "One".

8.6.3 MID

Purpose: The MID function returns a string of the specified length, which starts at a specific position.
Format: MID(String, NumberOfCharacters)
Example: MID("LabelOne", 6, 3) returns "One".

8.6.4 TRIM

Purpose: TRIM removes all of the spaces and control symbols from the beginning and end of a string.
Format: TRIM(String)
Example: TRIM(" LabelOne ") returns "LabelOne".

8.6.5 LTRIM

Purpose: LTRIM removes all of the spaces and control symbols from the beginning of a string.
Format: LTRIM(String)
Example: LTRIM(" LabelOne ") returns "LabelOne ".

8.6.6 RTRIM

Purpose: RTRIM removes all of the spaces and control symbols from the end of a string.
Format: RTRIM(String)
Example: RTRIM(" LabelOne ") returns " LabelOne".

8.6.7 UCASE

Purpose: UCASE converts the characters in a string to uppercase.
Format: UCASE(String)
Example: UCASE("LabelOne") returns "LABELONE".

8.6.8 LCASE

Purpose: LCASE converts the characters in a string to lowercase.
Format: LCASE(String)
Example: LCASE("LABELONE") returns "labelone".

8.6.9 SPECCHAR

Purpose: SPECCHAR returns the character represented by the indicated ASCII value.
Format: SpecChar(ASCII-Code)
Example: SpecChar("235") returns "ë".

8.6.10 CONCAT

Purpose: CONCAT adds two or more strings together, one after the other.
Format: CONCAT(String1, String2)
Example: CONCAT("Label", "One") returns “LabelOne“.

8.7 Miscellaneous Functions

8.7.1 CHECKSUM_I25

Purpose: CHECKSUM_I25 calculates the checksum for an Interleaved 2 of 5 barcode.
Format: CHECKSUM (String)
Example: CHECKSUM ("1234567") returns "5".

8.7.2 GS1DATA

Purpose: GS1DATA extracts data specific to AI from a GS1 data string
Format: GS1DATA (data string, AI description)
Example: GS1DATA("(01)12345678901234(02)67123456789012(03)ABCDEFGHIJKLMN", "02") returns the output "67123456789012".

9 Data Binding

9.1 Introduction

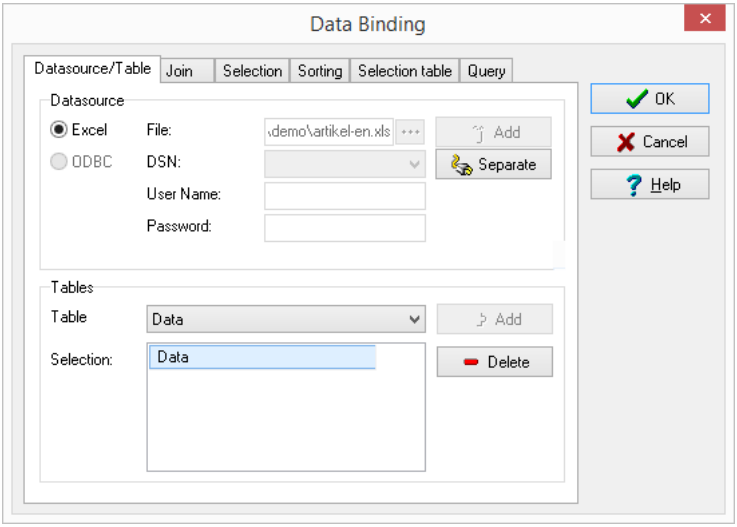
In LabelOne®, you have the option of accessing external data sources via an ODBC interface. This method is normally used to access databases such as Oracle, Sybase or Informix etc. This means that a corresponding ODBC driver must have been installed on the PC.

Besides ODBC, LabelOne® also offers a direct method for easy access to Excel worksheets. However, this type of connection allows you to access only one single sheet of the Excel worksheet. This consequently also means that you cannot use any JOINs. This should not be a restriction for typical use cases with an Excel worksheet as the data source. If you have to work with more than one worksheet even using an Excel data source and consequently need to work with JOINs nevertheless, we recommend that you use the method via an ODBC driver for your version of Excel.

Both data-binding methods (ODBC/Excel) between the LabelOne® label and the data source (database or Excel worksheet) are controlled via the 'Data Binding' dialog box which can be selected with the 'Label' menu:

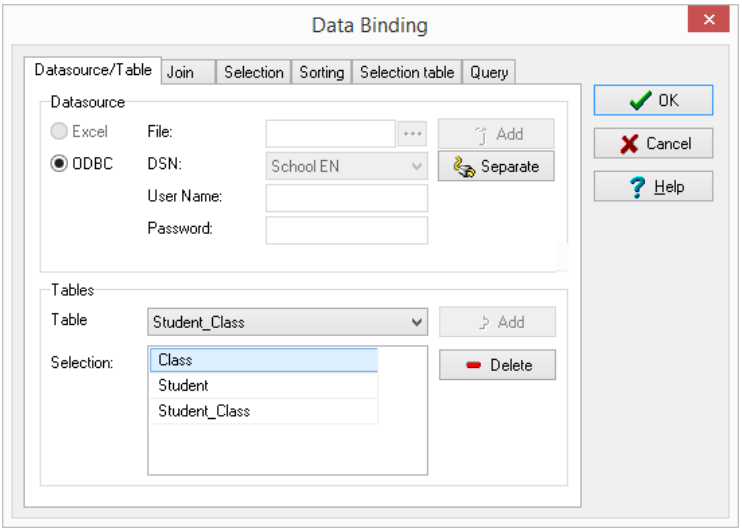
9.1.1 Database/Table tab

9.1.1.1 Excel file data source



In the "Data Source" area, activate type "Excel" and then choose the required Excel file using the button with the three dots.
Clicking on the "Connect" button opens the selected Excel file. All worksheets (i.e. the names of the sheets in the Excel file) are then displayed in the "Worksheets" area.
You can choose the required worksheet and add it to the list by clicking on the "Add" button.
If you use this connection type, you can only choose one worksheet (one sheet in the Excel file) at any one time. You must first remove the previously selected sheet if you want to choose another sheet.

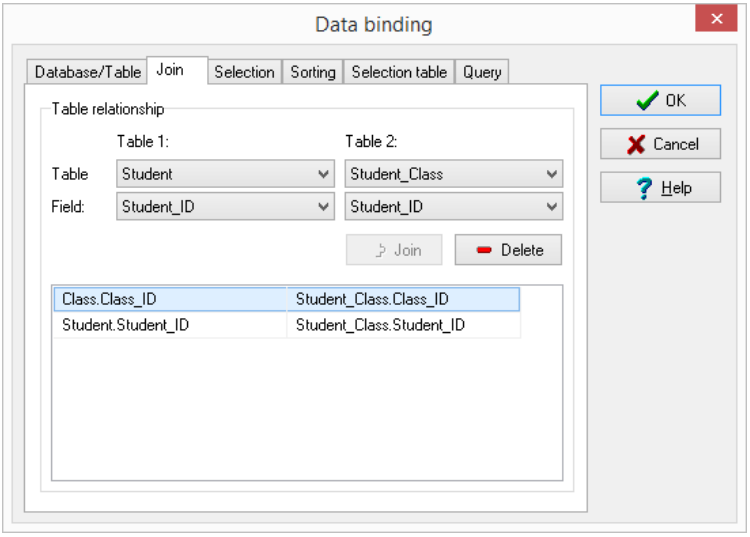
9.1.1.2 ODBC data source



Activate type "ODBC" in the "Data Source" area. The first step is to create what is called a DSN.

If necessary, the user name and password must be entered. Subsequently, the connection to the data source may be opened. The user name and password are stored in the label file, whereby the password is encrypted.
Upon opening the connection to the data source, all table and column information is read. All tables, which are needed for printing the label or for the selection of data, may be added to the Tables group for selection purposes.
In the example shown, the tables “Class”, “Student” and “Student_Class” were selected, which correspond to the three pages of the underlying Excel file.

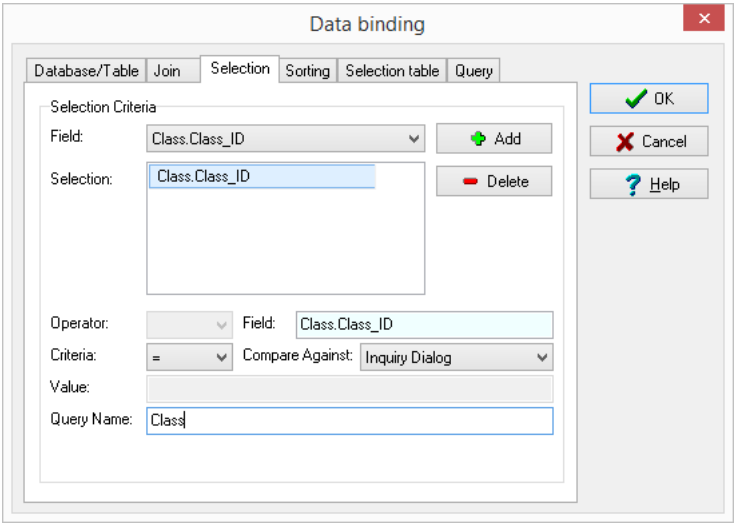
9.1.2 Join Tab



If more than one table was selected for the first tab page, the various tables should be combined into one large table by means of a so-called "join", in which columns existing in two tables but having the same name can refer to each other.

In the example shown, the columns student_class.class_id and class.class_id, as well as s.student_id and student.student_id are referred to each other.

9.1.3 Selection Tab

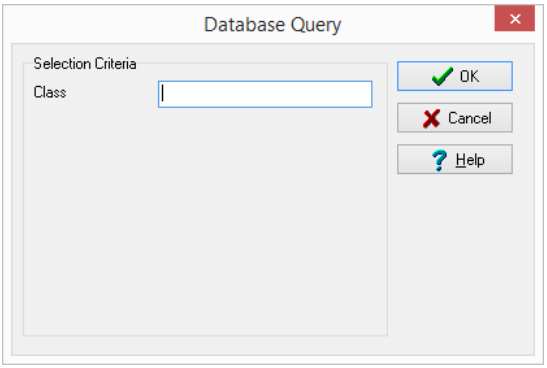


In order to be able to determine the data to be printed, selection criteria may be defined. The Selection tab makes this possible. All columns existing in the tables selected on the first tab page are available for selection in the Column list. They may be added for selection, or deleted, by means of the pushbuttons at the right side of the group.

After the selection of a column from the list in the middle, the criteria can be configured using the controls at the bottom of the tab page. In most cases, the operator AND and the comparison = (equals) are the best choices. Otherwise, the operator OR and the comparison <= (less than or equal), < (less than), >= (greater than or equal), > (greater than) and <> (unequal) are also available.

Additionally, whether a comparison operates against a fixed value, or should use a value supplied during printing, can be configured. In the first case, the value is entered directly into the Value entry. In the second case, the Query Name is entered, which is displayed upon printing, and should provide the operator with a hint of what is expected of them.

In the example shown, the following dialog appears during the print job:

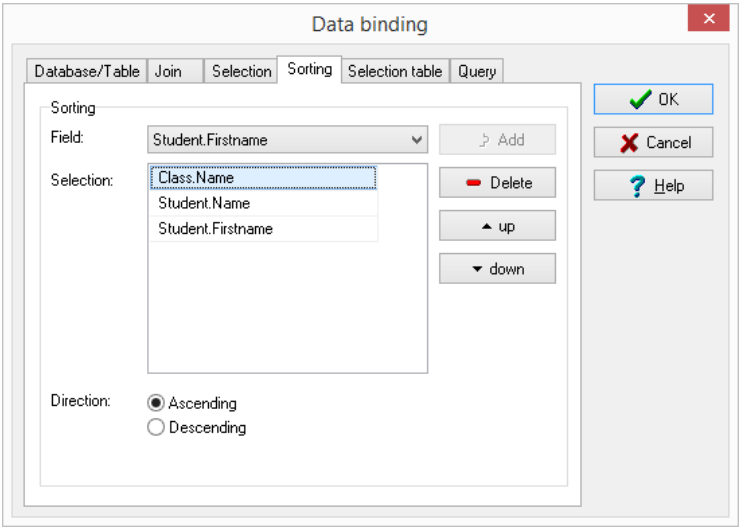


As can be seen here, the Query Name (Class) is displayed on the dialog for the database query. Subsequently, the database is searched for the desired information, and it is printed.

Up to eight query entries may be configured.

9.1.4 Sorting Tab

This tab allows you to define the fields by which the data records are sorted when printing. This allows you to control in what order the data records are printed and – if configured appropriately – in what order the data records are displayed in the selection table.

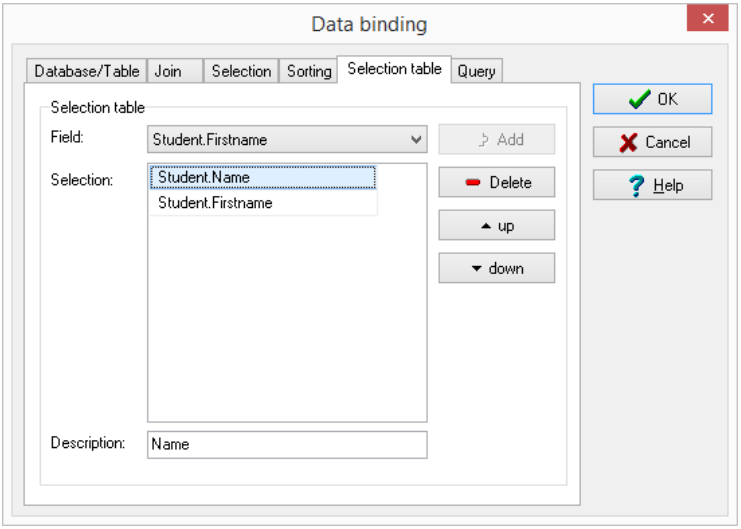


In this case, the topmost field in the selection list corresponds to the most important criterion (top priority). In addition, for each sort field, you can define the sort order (ascending or descending).

You can change the position of the selected field in the selection list and thus the priority of the corresponding sort criterion with the "up" and "down" buttons. Switching to the Query tab applies the overall database configuration, meaning the connection, the joins and the selection criteria, so that it can be tested.

9.1.5 Selection table Tab

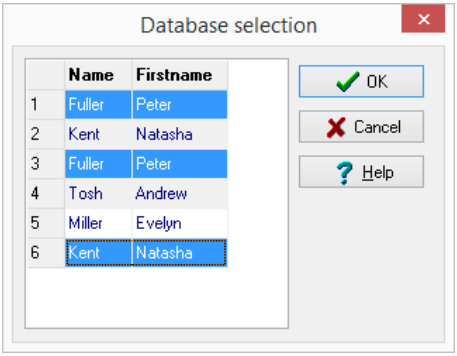
Individual fields which are displayed for selecting the data records to be printed (see also Chapter 9.1.6, Database selection) can be selected in this tab. If you select at least one field in this tab, a database selection dialog box with the data of the columns selected here is displayed before actually printing. If no fields are selected at this point, the selection dialog box is not displayed either.



You can change the position of the selected field in the selection list and thus the display order in the database selection dialog box with the "up" and "down" buttons.

9.1.6 Database selection

This selection is displayed before printing if at least one field (= one column) has been included in the selection in the "Selection table" tab (see Chapter 9.1.5, Selection table Tab).

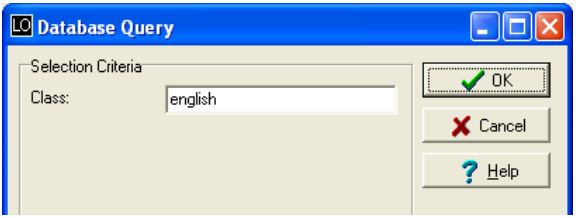


Using the mouse, the user can select a data range and, if the user simultaneously presses the CTRL key, he or she can also select individual rows. All marked rows are printed.

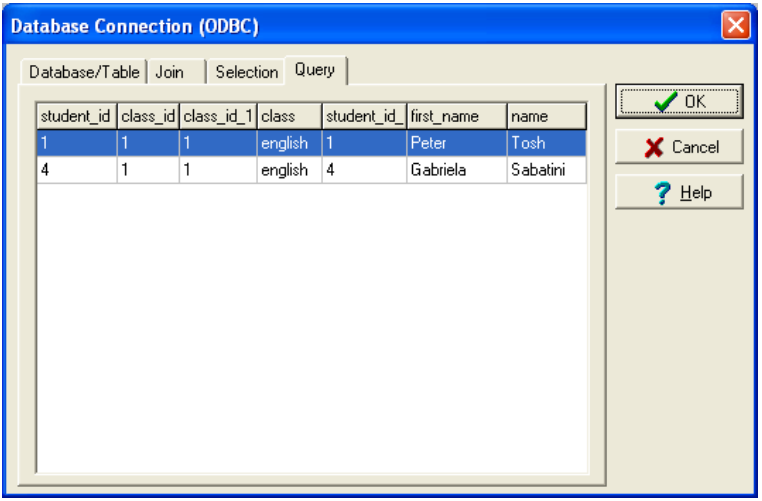
9.1.7 Query Tab

Switching to the Query tab applies the overall database configuration, meaning the connection, the joins and the selection criteria, so that it can be tested.

In the following example, the given name of the class was configured as selection criteria. As soon as the focus is moved to the Query tab, the database query dialog appears.



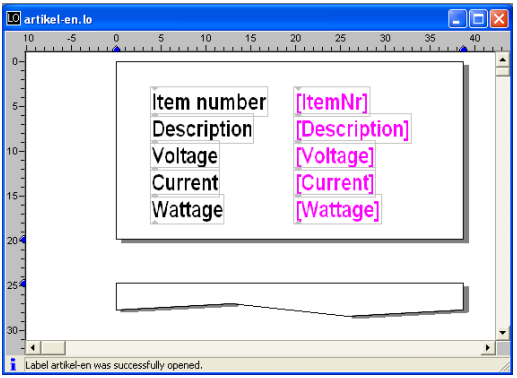
Entering "english" only reads the corresponding records, which are shown on the Query tab.



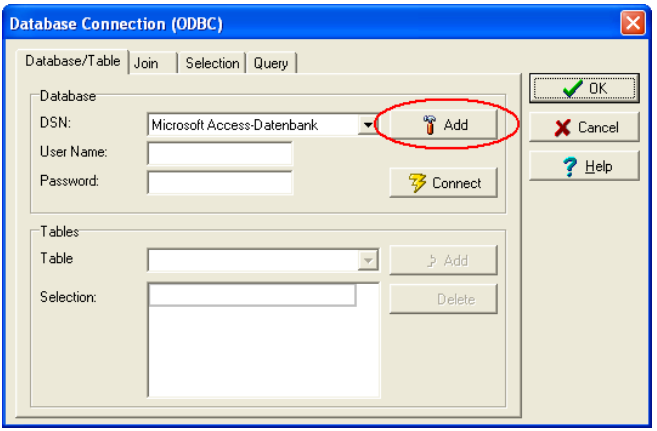
9.2 Example

The two files, artikel-en.lo and artikel-en.xls are delivered along with LabelOne. These files may be used as a simple example of a database connection. This assumes that Excel has been installed on the PC.

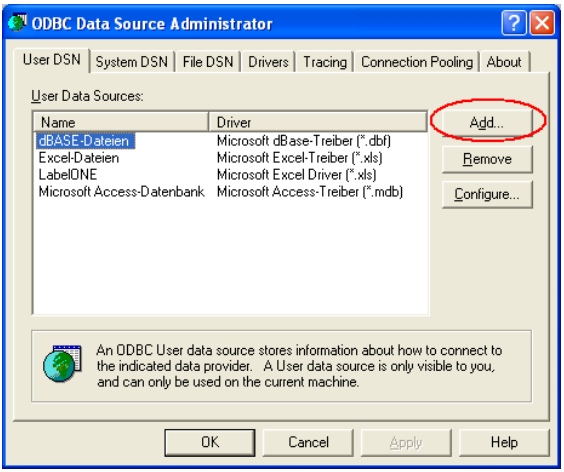
1. Open the file artikel-en.lo, which is found in the Demo directory of the LabelOne installation.



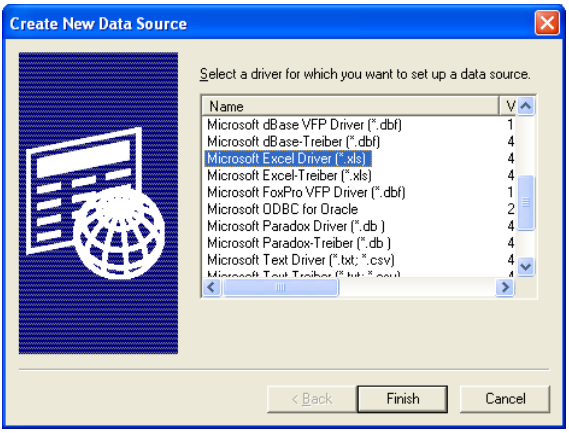
2. Select the Label menu item, and Database Connection, and click the Add pushbutton.



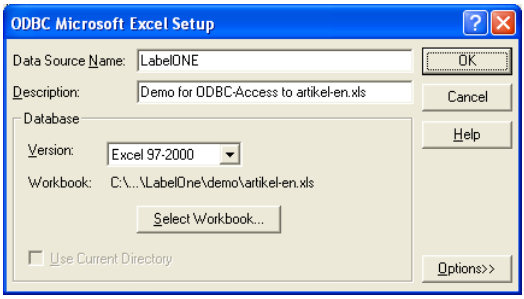
3. In the subsequently appearing dialog, click the Add button.



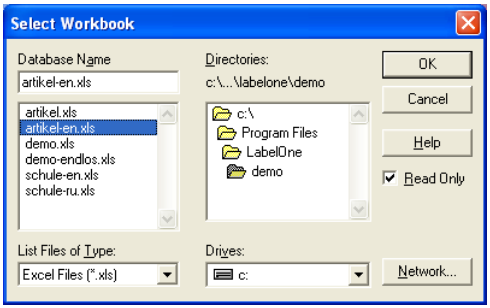
4. Select the "Microsoft Excel Driver (+.xls)" and click the Finish button.



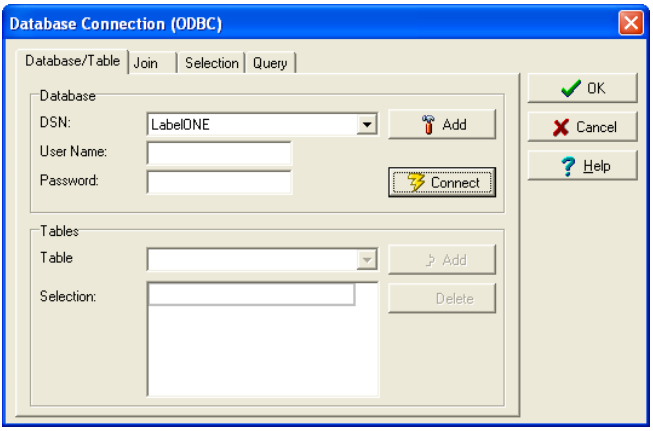
5. Give the newly created data source an appropriate name, and click on the Select Workbook button.



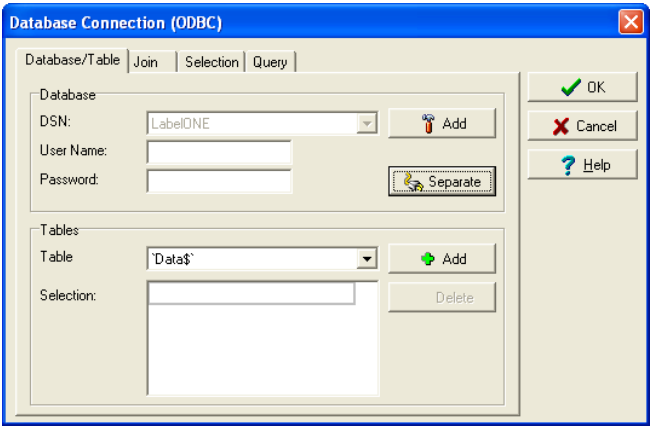
6. Now, move to the Demo sub-directory in the LabelOne installation directory, and select the file Artikel-lo.xls. Now, close the all of the dialogs using the OK button until you have returned to LabelOne:



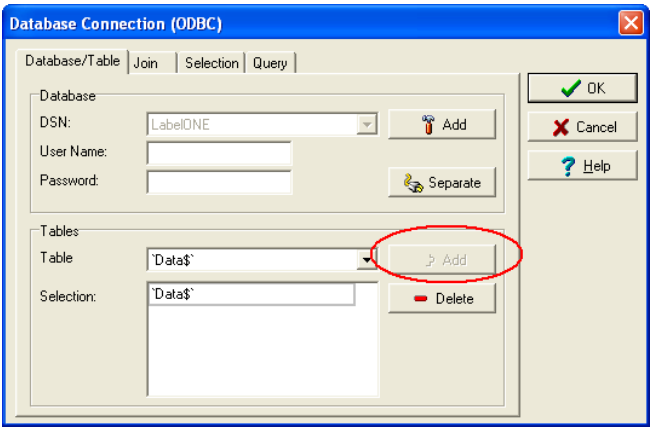
7. In LabelOne, you may now select the newly created data source...



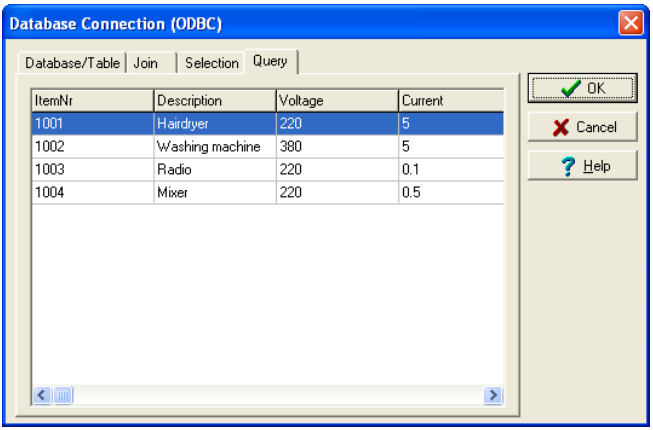
... and click the Connect button.



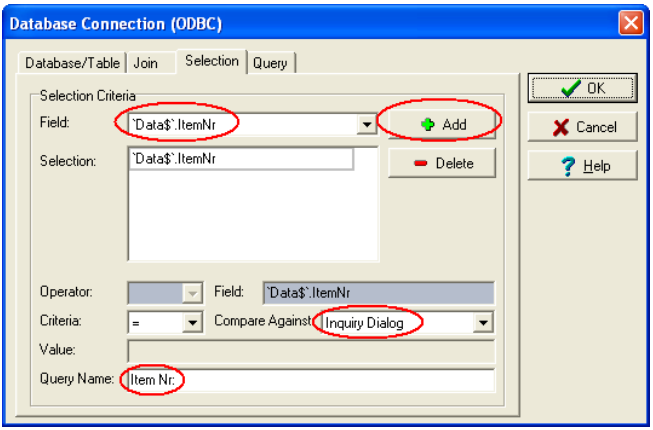
8. Select the table “Data$”, and click the Add button.



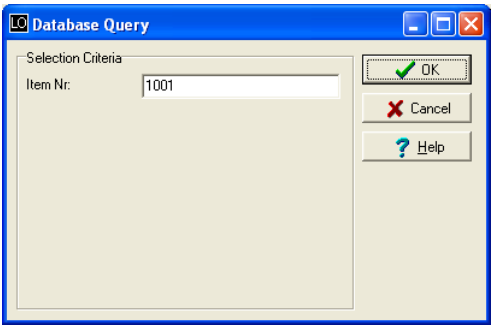
9. For a preliminary test of the database connection, you can now move to the Query tab. All of the data in the Excel file should now be displayed:



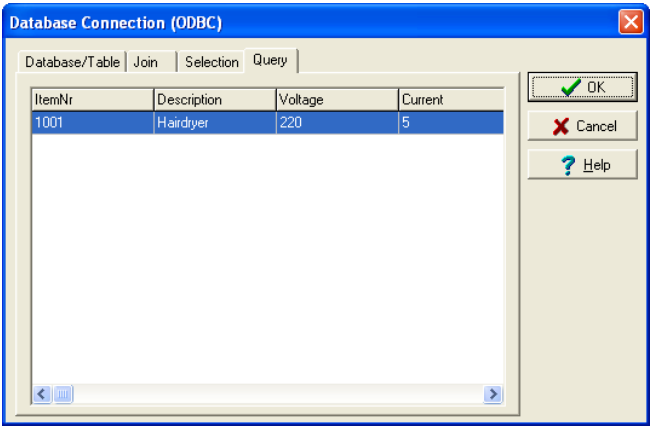
10. If all of the data should not be displayed, and later not be printed, the selection criteria should be entered. Perform the following steps in order to use the article number as a selection criterion.
- Move to the Selection tab
- Select the column Data$.ItemNr
- Click the Add button
- Select the entry Query Dialog from the Compare Against list
- Type "Item Nr:" for the entry Query Name



Now move once more to the Query tab. The following dialog is now displayed:



After the entry of the article number (e.g. 1001), only data that fulfils the criterion is shown:



9.3 Known Problems

Because databases are normally used through ODBC, the drivers use some known guidelines for the naming of tables and columns. When an Excel file is accessed by means of ODBC, the page names are used as table names, and the column headings as column names. It is therefore necessary that the names fulfil the following criteria:

- No Umlauts
- No special characters
- No spaces

Example: The name "Item-Nummer old" should be written as follows: ItemNumberOld.

10 Command Line Parameters

LabelOne® can be executed using command line parameters in order the control the individual features. All parameters are prefixed with a hyphen. Additional options may follow the parameter name. The options follow the format "name=value".

Parameter	Options	Description & Example
-load etikette.lo	-readonly (directly following a –load specification)	Loads the desired label file. When specifying an absolute path, the label is loaded directly. Otherwise, the path is relative to the default path as interpreted by LabelOne®. Ex: labelone.exe –load c:\data\test.lo
-mode min|norm|max	None	Determines whether LabelOne® should be started minimised, normally, or maximised. Ex: labelone.exe –mode max
-object name	optional	Indicates that an error should not be generated when this object is missing.
	data=xxx	Sets the value of the object to the indicated value. Ex: labelone.exe –load c:\data\test.lo –object "txt 0001" data="220V"
	mask=xxx	Determines the template used for sequence number TextObjects. Ex: labelone.exe –load c:\data\test.lo -object "serno" data="20" mask="FIX0322####"

Parameter	Options	Description & Example
	increment=nnn	Defines the amount by which the sequence number should be incremented. Ex.: increment=-1
	barcodetype=xxx	Defines the type for a normal or two-dimensional barcode. The name must correspond to the type displayed in the barcode properties dialog. The usage of upper or lowercase does not matter. Spaces may be left out or replaced with the "-" or "_" characters. Ex.: barcodetype=CODE11
	modulewidth=nnn	Indicates the width of the barcode using a range between 1 and 10. Ex.: modulewidth=3
	printable=truelfalse	Determines whether the object is printable, or not. Ex: labelone.exe –load c:\data\test.lo –object img1 printable=false
-selcrit name	value=xxx	Sets the response to the query of the named selection criterion for the ODBC connection.

Parameter	Options	Description & Example
-print	labels=nnn	Starts the print job and determines how many labels should be printed. Ex: labelone.exe –load c:\data\test.lo –print labels=3
	copies=nnn	Determines how many copies of each label should be printed. Ex: labelone.exe –load c:\data\test.lo –print copies=2
-resultfile name	None	Names the file to which LabelOne will write the results after execution.
-quit	None	Terminates LabelOne after processing the parameters. Ex: labelone.exe –load c:\data\test.lo –print labels=3 –quit

Notes regarding the usage of the parameters:

- Any parameter containing spaces must be enclosed with quotation marks. This applies to object names as well as the values to be set.
  Example:
  ... – object "txt 0001" data="this is the value for Object 1" ...
- When specifying the options, there should be no spaces around the equals sign.
  Example:
  ... –print labels=10
- Use the string "\n" at the point where a line break should be inserted into a text value, when a line break is desired. If a text value needs to use a backslash (\), indicate this by preceding the backslash with another, as in "\\".
  Example:
  ... –object "txt 0001" data="a\nmultiline text" ...
- The first line in the log file indicates the number of labels. The number of copies of the label, which were successfully printed, is indicated on the second line.

The following table shows to which object types the –object parameter can be applied, with which meanings:

Object Type	Meaning of the option data=xxx
TextObject	Defines the entire text for an object with a fixed value. Defines the initial value for a TextObject marked as a Sequence Number.
BarcodeObject	Defines the entire text for an BarcodeObject with a fixed value. Defines the initial value for a BarcodeObject marked as a Sequence Number.
ImageObject	Sets the file name.

11 Registration and Updates

11.1 Registration

LabelOne® needs to be activated in order to work.

Your personal license-/activationcode is displayed on the Enter License Code dialog in LabelOne® (Section 7.5, **Registering the activation code**) as well as on the About dialog (menu path Help|About).

11.2 Updates

The purchase of a LabelOne® license includes update authorization for the first year at no extra charge. The duration of this update authorization may be extracted from the license number (Section **Fehler! Verweisquelle konnte nicht gefunden werden. Fehler! Verweisquelle konnte nicht gefunden werden.**).

Given this license number, you would be allowed to use all versions of LabelOne® produced up to the expiration of the update authorization. You may also download such updates after the expiration of the authorization.

Versions developed later may be operated in demo mode. In demo mode, you can test all of the features in their full glory. However, all print jobs are printed with the word "DEMO" placed randomly on the label.

In order to extend your update authorization, provide your current license code when purchasing a new license from Neuhaus (order form found at www.labelone.ch).

When you receive a new license number, you may enter it using the Enter License Code dialog (Section 7.5, **Registering the activation code**).

12 HotKeys

The following table lists all of the hotkeys, which may be used with LabelOne® for accessing certain features or processes.

The designation Ctrl+X means that the Ctrl key must be depressed together with the X key.

HotKey	Description
Strg+N	Create new label
Strg+O	Open file
Strg+S	Save file
Strg+P	Print
Strg+Z	Undo
Strg+Y	Redo
Strg+X	Cut
Strg+C	Copy
Strg+V	Paste
F5	Start Quick Entry
F6	Open the Initial Values dialog
F7	Open the Print Job List dialog
F9	Activate/deactivate the text border
F10	Activate/deactivate the grid
F11	Activate/deactivate the Snap-to-Grid feature
ESC	Select another object (for multiple overlapping objects)
Spacebar	Switch back and forth between the current drawing tool and the selection tool (arrow).
Enter	Complete dragging of the selected object by means of the arrow keys.

13 License Agreement

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This is a license agreement and not a sales contract. This product is made available to you according to the following license agreement, which determines what you may do with this product, and which controls the guarantee limitations and damage claims.

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Please read the license agreement very carefully before beginning to work with the product. Upon using the product, you automatically declare that you have read the license agreement and that you agree to all of the provision of the agreement. If you are not in agreement with the license agreement, please return the entire product within ten days of the purchase date to Neuhaus AG. You will be compensated for the full purchase price.

License Agreement:
Neuhaus AG provides you with a data medium, which contains the LabelOne® computer program, a guide, a license agreement and a dongle. All of this is designated as the "Product" and permits you to use the product in accordance with the license agreement. The copyright and all other rights to the product remain with Neuhaus AG or our agents.

You may:
1. Install the program on any computers within your operation (licensee) and operate it in demo mode.
2. Use the full version of the program as the operator within the framework of the license authorization. User administration is performed by LabelOne®.
3. Obtain a free upgrade while the license is active from www.labelone.ch

You may not:

1. Copy or use the product other than as provided for in this license agreement.
2. Actively use the program without the dongle. The number of users has been encrypted in the dongle.
3. Compile the program, reverse engineer it, decompile it, or de-assemble it, unless the listed limitations are expressly annulled by applicable law.
4. Rent, lease, surrender or transfer the product outside of the listed provisions.
5. Modify the program or embed the program partially or wholly within another program.

Duration:

This license applies for the full time period of your usage of the product. It lapses as soon as you violate the agreement or the provisions. Should this be the case, you declare that you have agreed to destroy all copies of the product immediately and to return the dongle. The limitations of guaranty and liability listed below continue to remain in force, even when the license agreement itself has lapsed.

Guaranty:

We guaranty that the data medium for this product is free of material and production defects up to 90 days after the purchase date. Should such an error become apparent, return the product to Neuhaus AG and it will be replaced at no charge. This redress is your only redress in case of guaranty.

Limitations of Guaranty and Liability:

The product is made available to you on an as-is basis. Aside from the express guaranty listed above, there are no other guaranties or provisions, neither explicitly nor implicitly. This also excludes guaranty claims related to the sale quality, saleability

or suitability for a specific purpose, or such as are caused through the applicable codes, laws, business uses or trade commercial intercourse, but not limited to those. The entire risk as regards the usage and performance of the program lies with you. Neither we, nor our agents, bear any form of liability obligation towards you or any other persons or institutions for any indirect, chance damages or any subsequent damages. This also applies to damages from lost profits, lost or damaged data, or other losses commercial or financial, even then when we were informed of the possibility of such damages, or such were predictable, or for the claims of third parties. In any event, our liability and that of our agents is limited to the amount, which was paid for the product. The limitation of liability fixed here applies independent of whether the intended or actual breach of contract touches upon a basic provision or contractual agreement, or is a basic breach of contract. Several states and countries do not permit exclusion of liability or a limitation of liability for subsequent damages. For this reason, the limitation of liability might not apply to you.

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