



The Free Barcode Solution
Version 1.2.0



The Free Barcode Solution
The Free Barcode Solution



The Free Barcode Solution

Version 1.2.0

Content:

1) Introduction	4
1.1)What is kbarcode ?	4
1.2)How much does it costs ?	4
1.3)Where do I find kbarcode ?	4
1.4)I need help, whom can I ask ?	5
2)Install kbarcode	6
2.1) dependencies	6
2.2) Install from a RPM File	6
2.3) Install from the Source Code	7
2.4) Start kbarcode	7
3)Starting kbarcode	8
3.1) First start – understanding the setup wizard	8
3.2) Main Menu	9
3.3) Setting the preferences	10
3.3.1) SQL Settings	10
3.3.3) Import File	11
3.3.5) On New...	12
4) The main menu	13
4.1) create and print single barcodes	13
4.2) Label designer	15
4.3) Use batch print	18
5) Examples	19
5.1) Printing barcodes in a business environment!	19
6) How Do I ?	20
6.1) change the label size later ?	20
7) Support us !	20
9) Thanks to:	20
8) SQL issues	21
A) GNU Free Documentation License	23



The Free Barcode Solution

Version 1.2.0

Copyright (c) Stefan Onken

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.1 or any later version published by the Free Software Foundation; with the Invariant Sections being LIST THEIR TITLES, with the Front-Cover Texts being LIST, and with the Back-Cover Texts being LIST. A copy of the license is included in the section entitled "GNU Free Documentation License".



1) Introduction

1.1) What is kbarcode ?

KBarcode is a barcode and label printing application for KDE 3. It can be used to print every thing from simple business cards up to complex labels with several barcodes (e.g. article descriptions).

KBarcode comes with an easy to use WYSIWYG label designer, a setup wizard, batch import of labels (directly from the delivery note), thousands of predefined labels, database management tools and translations in many languages. Even printing more than 10.000 labels in one go is no problem for **KBarcode**. Additionally it is a simply xbarcode replacement for the creation of barcodes. All major types of barcodes like EAN, UPC, CODE39 and ISBN are supported.

1.2) How much does it costs ?

kbarcode is released under the GNU/GPL licence, meaning that it's absolute free. We only ask you for one favour: please send us an email and inform us about the intended purpose and send us some feedback regarding the success.

1.3) Where do I find kbarcode ?

kbarcode is available via World Wide Web at: <http://www.kbarcode.net>. You will find here all kind of information's, samples, programs etc.



The Free Barcode Solution Version 1.2.0

1.4) I need help, whom can I ask ?

For support reasons we are offering a Mailing List. So, if you are using kbarcode in a professional environment, we strongly recommend joining the mailing list.

To join the list, please visit: <http://lists.sourceforge.net/lists/listinfo/kbarcode-users> and add your email address. After that you will get a confirmation mail, which you have simply to reply. Once done it, you are member of the kbarcode Mailing list. (low traffic). All messages send to kbarcode-users@lists.sourceforge.net will be send to all list members. We will try to answer you as soon as possible (normally within the next 8 hours).

If you don't want to join the mailing list, you can use the same address to send us mails: Please use

["kbarcode-users@lists.sourceforge.net"](mailto:kbarcode-users@lists.sourceforge.net) for kind of enquires and feedback.

We are have an IRC support channel. So, if you are familiar with IRC, please connect to the Server "irc.freenode.net" and join the "#kbarcode" channel.

2) Install kbarcode

To install kbarcode on your system you need ROOT privileges. If you don't have them or do not know, what we are talking about please contact your local system administrator.

2.1) dependencies

kbarcode need some tools installed on your machine. The dependencies are depending, which features you would like to use:

Minimum requirements:

- ✓ Linux (<http://www.linux.org>)
- ✓ KDE 3.x (<http://www.kde.org>)
- ✓ Convert (<http://www.imagemagick.org>)

for printing barcodes:

- ✓ GNU Barcode (<http://www.linux.it/~rubini/software/#barcode>)

Additional requirements for database handling:

- ✓ mysql (<http://www.mysql.org>)
- ✓ QT SQL tools (<http://www.troll.no>)

Linux, KDE 3, Convert and mysql are quite standard and will be in 99% of all cases already installed on your machine. You will find a rpm file of GNU Barcode on the kbarcode webpage as well.

Please note, that you only need mysql, if you want to use the advanced features of kbarcode, like batch print or the labeldesigner.

2.2) Install from a RPM File

This is the most easiest way to install kbarcode. On our webpage you will find ready made RPM file for some Linux Distributions. If you are lucky and we do have a rpm file for your distrubution, just download it.

To install it please do:

```
stonki@database:~> su (will ask for the root password)
stonki@database:~> rpm -Uvh <name of RPM file>
stonki@database:~> exit
```

2.3) Install from the Source Code

Install from the source code sounds difficult, but in the end it's quite easy as well. Just download the ".tar.gz" file of the latest version. In my example I created a temporary directory called "001" and I used version 1.0.0 as an example. First I do unpack it ("tar xfz"), then I start the compilation process (./configure && make). This normally takes up to 5minutes. Then I make myself root (with "su") and install it.

```
stonki@database:~/001> ls
kbarcode-1.2.0.tar.gz

stonki@database:~/001> tar xfz kbarcode-1.2.0.tar.gz

stonki@database:~/001> cd kbarcode-1.2.0/
stonki@database:~/001/kbarcode-1.2.0> ./configure && make

stonki@database:~/001/kbarcode-1.2.0> su
Password:
database:/home/stonki/001/kbarcode-1.2.0 # make install

database:/home/stonki/001/kbarcode-1.2.0 # exit
```

2.4) Start kbarcode

The easiest way is using the KDE start menu. Click on "START - Programs - kbarcode". You can also just press "ALT-F2" and then type in "kbarcode". This will start the program.

3) Starting kbarcode

3.1) First start – understanding the setup wizard

After the first start of kbarcode, you will see a dialog box of kbarcode. This wizard will help you through the set-up procedure.

If you want to use the advanced features, you have to setup the SQL database setting.

Note ! Kbarcode will work without SQL support. If not installed, kbarcode will not display all features !

In this dialog you have to type in a user for the SQL Database, which is able to create and fill tables. If you are not familiar with the SQL database (e.g. mysql) than study the documentation of the specific SQL database. If you like (you do not have it do it), kbarcode can create all tables for you and can add some example datas as well. This might help you to understand the logic.

Warning: If you already have data in a kbarcode database, we will delete them and create a fresh set !



We strictly recommend for business use, the setup of mysql tables. To merge existing information's (like article numbers, barcodes etc.) Yo To import your business data, you need either some external tools or you have to be familiar with the mysql tools.

You can use either Microsoft Access with some ODBC tools or phpmyadmin. PhpMyAdmin is a PHP based tool, running in a webbrowser. We are working with "phpmyadmin" and it's a great tool to handle mysql databases. See <http://www.phpmyadmin.net> for full details.

Alternative you can use "mysqlimport" to import a CSV File (Text file with seperated values).

If you are running into problems (mysql is not that easy), please join the mailing list. Or ask your local system administrator.

If you just want to test kbarcode, add some of the sample data. If you want to use it seriously, you better install your own data at once.

3.2) Main Menu

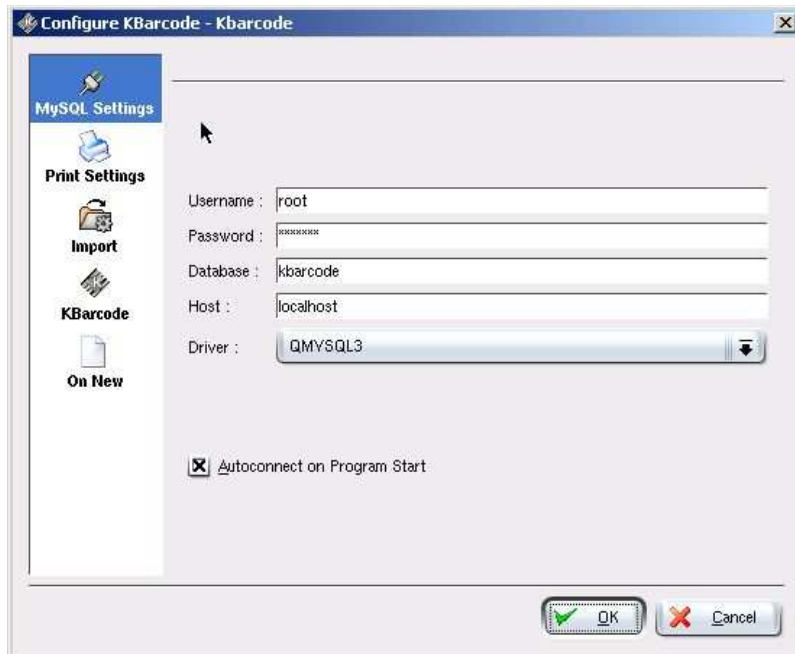
Kbarcode usaly starts in the main menu (see Chapter xx for command line parameters). The main menu ist straight forward and easy to use.



- ✓ **BARCODE GENERATOR** helps you to create single barcodes and to print or save them.
- ✓ **LABEL EDITOR** handels all labels. You can create or edit existing labels. You can also use it to print any labels, like business cards or labels with a single barcode.
- ✓ **BATCH PRINTING** offers you the possibilty of using the advanced features of kbarcode, like import files, printing high amount of labels.
- ✓ **EDIT SQL TABLES** allows you to work direct in the SQL tables. We strictly recommend a real SQL Frontend like "phpMyAdmin".

3.3) Setting the preferences

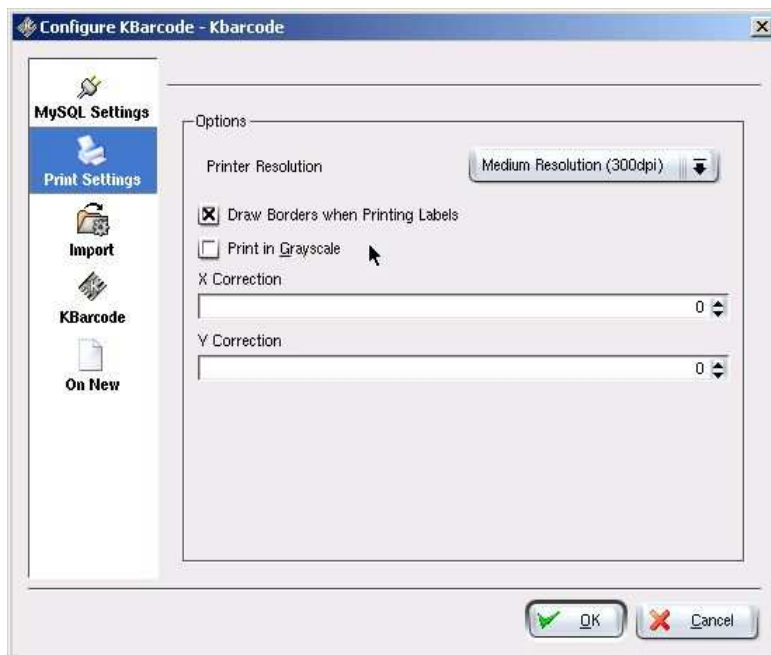
3.3.1) SQL Settings



In the Preferences Dialog you can set the settings for kbarcode ! Before you start, have a look here.

In the first dialog, you can set the SQL settings. This is done by the wizard as well, but you can edit them here. Make sure, that the checkbox "automatically connect..." is always on ! If not, you will not be connected to your SQL database.

3.3.2) Print Settings

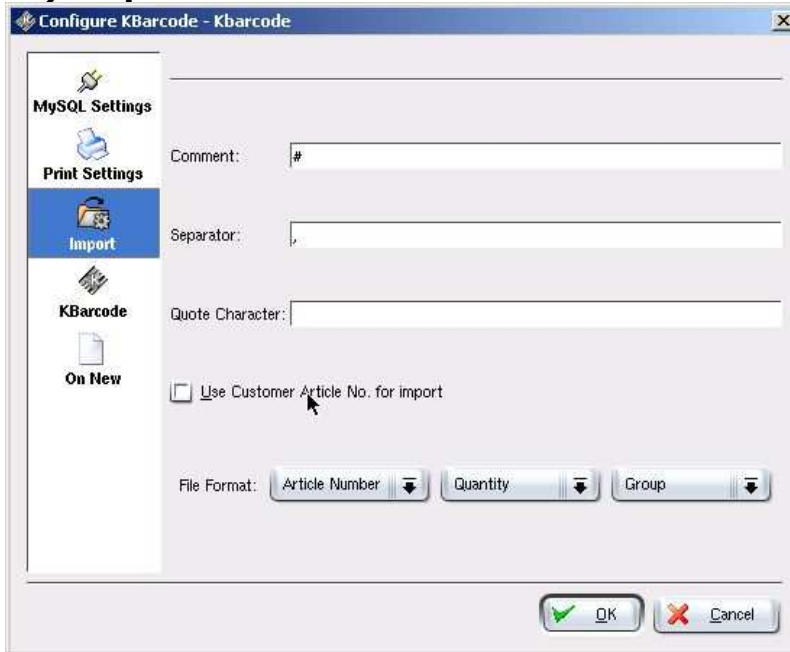


The printer settings are straight forward. The resolution is normally set to 600dpi. This is necessary to print barcodes, if the quality is below that, the barcodes are maybe not possible to read. Please check all values with your printer. For example, if your printer prints good enough with 300dpi, the whole printing will be significant faster. "Draw Borders when Printing Labels" is quite useful for the first testing. You may deselect it, when it comes to the real testing.

Printing in Grayscale is maybe a good idea to print faster. But please test it.

If you have a problem with the position of the label, you can do some settings here as well. All the labels will be moved x pixel to the right and below.

3.3.3) Import File

A screenshot of the "Configure KBarcode - Kbarcode" dialog box. The "Import" tab is selected in the left sidebar. The main area contains fields for "Comment:" (with a '#' character), "Separator:" (with a ',' character), and "Quote Character:". There is an unchecked checkbox labeled "Use Customer Article No. for import". Below these are three dropdown menus for "File Format:" with "Article Number", "Quantity", and "Group" selected. At the bottom are "OK" and "Cancel" buttons.

Configure KBarcode - Kbarcode

MySQL Settings

Print Settings

Import

KBarcode

On New

Comment: #

Separator: ,

Quote Character:

☐ Use Customer Article No. for import

File Format: Article Number Quantity Group

OK Cancel

3.3.4) Internals Settings

A screenshot of the "Configure KBarcode - Kbarcode" dialog box. The "KBarcode" tab is selected in the left sidebar. The main area contains an unchecked checkbox labeled "Ask for new label on Label Editor startup". Below it is a "Grid:" field with a value of 30. There is a "Grid Color:" field with a color picker. Below that is a "Date Format:" field with the value "yyyy-MM-dd" and a "Preview:" field showing "2003-03-27". At the bottom is an "Undo Limit:" field with a value of 25. At the bottom are "OK" and "Cancel" buttons.

Configure KBarcode - Kbarcode

MySQL Settings

Print Settings

Import

KBarcode

On New

☐ Ask for new label on Label Editor startup

Grid: 30

Grid Color:

Date Format: yyyy-MM-dd Preview: 2003-03-27

Undo Limit: 25

OK Cancel

3.3.5) On New...

The dialog "On new Article" and "On New Group" sets the behaviour when using the batch print. Imagine you are printing 100xArticle 1 and 40x Article2. With this dialog, you can force kbarcode to start on a new line or new page, or print an extra label with a big "X" or the article number !

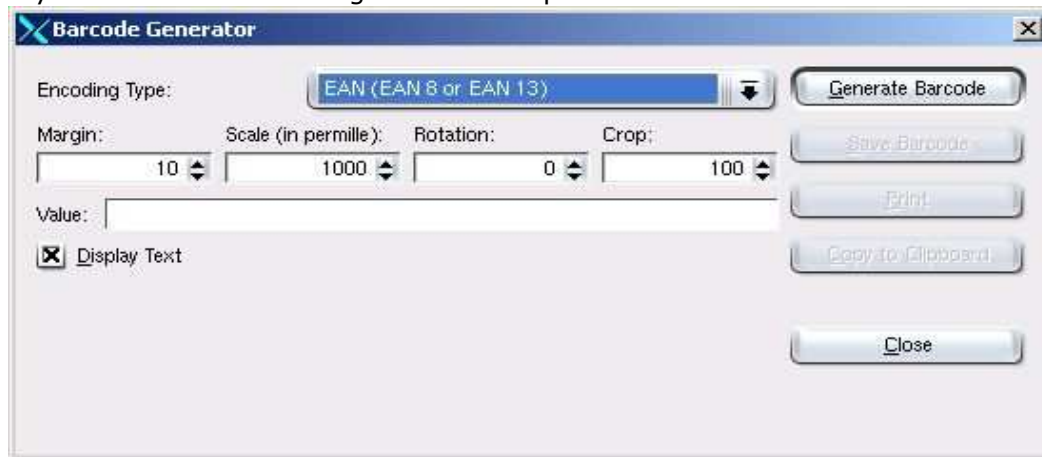


Please note, that during the batch print, all labels will be first sort by group and than by article number.

4) The main menu

4.1) create and print single barcodes

We will use this to explain you the settings of kbarcode. So please read carefully, even when you are more interesting in the batch print !



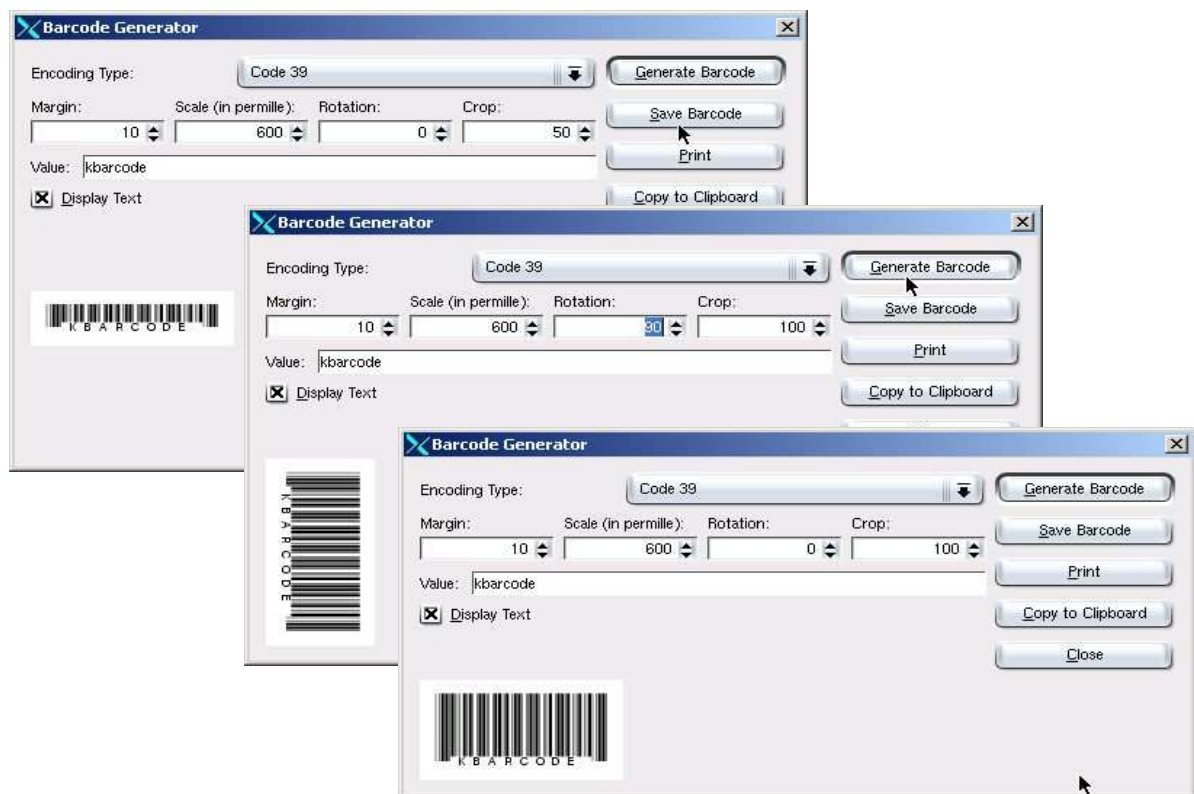
Most of the settings are straight forward. First you have to select what kind of barcode you would like to create. Kbarcode is offering you following barcode types:

- EAN (EAN 8 or EAN 13)
- UPC (12-digit EAN; UPCA and UPCE)
- ISBN (still EAN13)
- Code 39
- Code 39 (no checksum)
- Code 128 (a,b,c: autoselection)
- Code 128C (compact form digits)" });
- Code 128B, full printable ascii
- interleaved 2 of 5 (only digits)
- interleaved 2 of 5 (only digits, no checksum)
- Raw code 128
- Codabar
- MSI
- Plessey
- Code 93

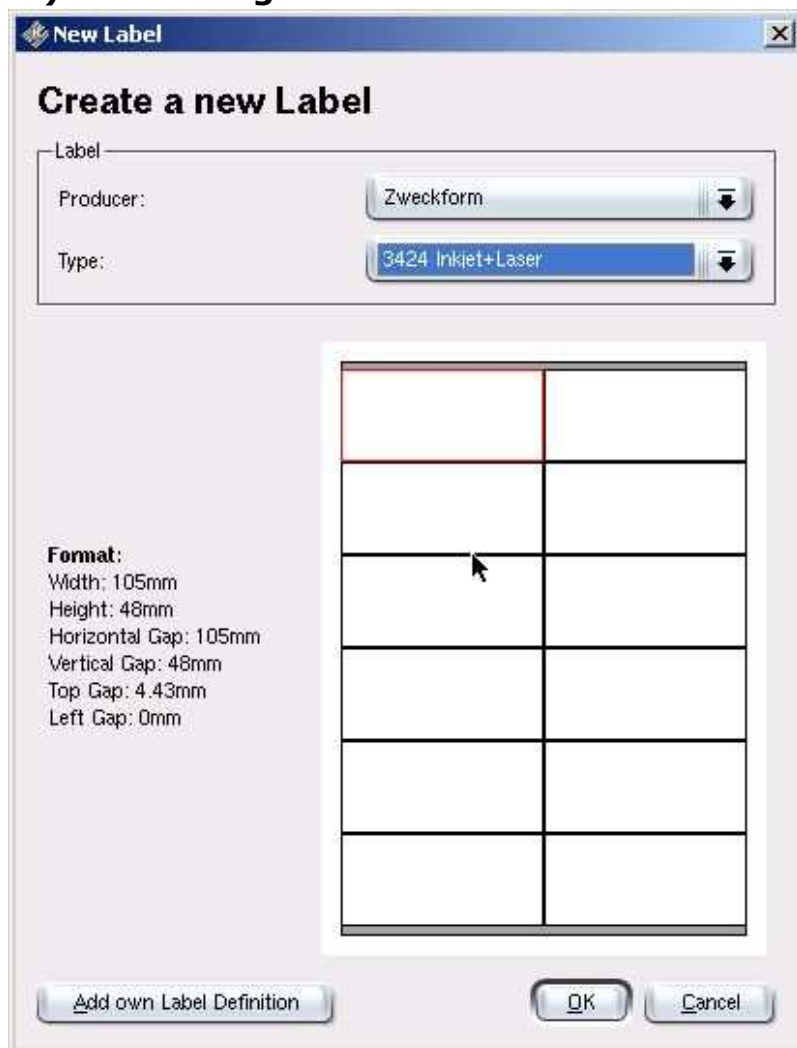
Once selected the barcode type, you can add a value for the barcode. Please note, that not all barcode types support all characters and some barcodes needs a special format. Please check more detailed informations about each supported barcode. Now you can adjust the label by changing the values:

- ✓ **border** – border around the barcode. Normally set it to a value between "0" and "15"
- ✓ **Scale** – this is the scale of the barcode in per mille (1/1000). We strongly recommend not to dropping below 700 (=70%). If the value is too small, the barcode will be not able to recognize.
- ✓ **Rotation** – you can rotate the barcode by 90, 180 or 270 degrees. Do not use any numbers in between !!
- ✓ **Crop** – cut the top of the barcode. By default barcodes are normally too tall. You can use this function to shorten the barcode without changing the scale of the barcode.

Play around with these functions. You will find the same values in the label designer. Once you created a barcode, you can easily print or save it. Alternative you can copy it into the Clipboard.



4.2) Label designer

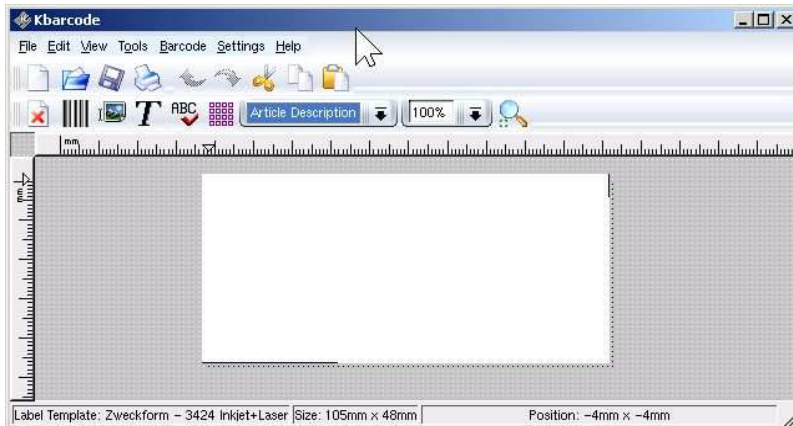


The label designer is the heart of **kbarcode**. Here you will design the labels for the batch print.

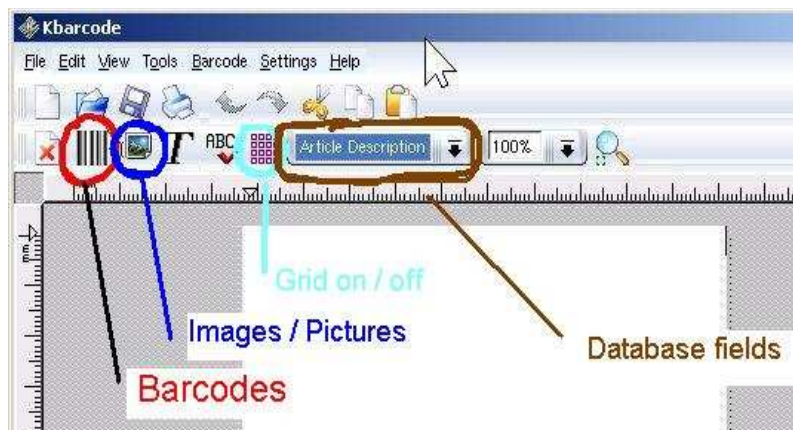
The label designer is a powerful tool to design custom barcode labels. It all starts with the dialog box, where you have to select the label, which you will use !

To create a new label definition, click on "new Label" and choose one of the defined labels – right now **kbarcode** comes with more than 1000 defined labels ! You can also simple add new label definitions.

Once you selected a label, you will see it the real scale.



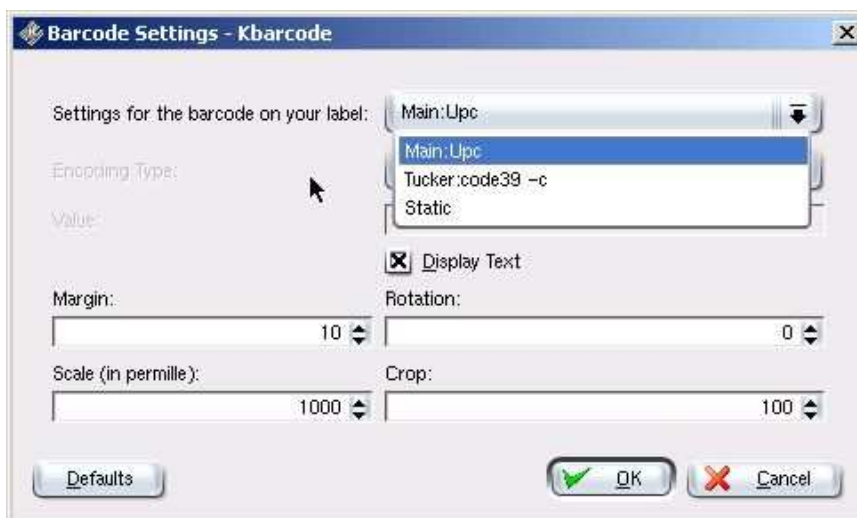
Kbarcode offers you an easy to use "what you see is what you get" interface to create now the label.



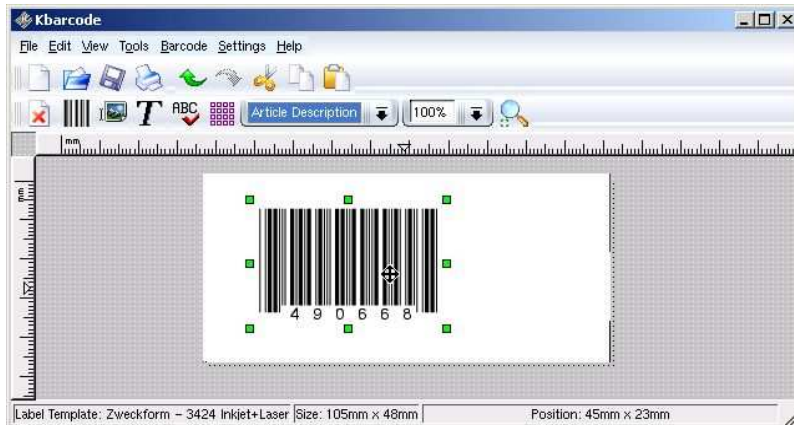
When clicking on such a symbol, it will add this item your label.

The database fields will be replaced during the batch print with the values in the database.

The barcode selection is very important, so better check twice. Kbarcode will evaluate which barcode types are used in your SQL tables, and will list them here. As an example, your main barcode is "UPC", but a customer is also using "Code39" – kbarcode will list both types here.

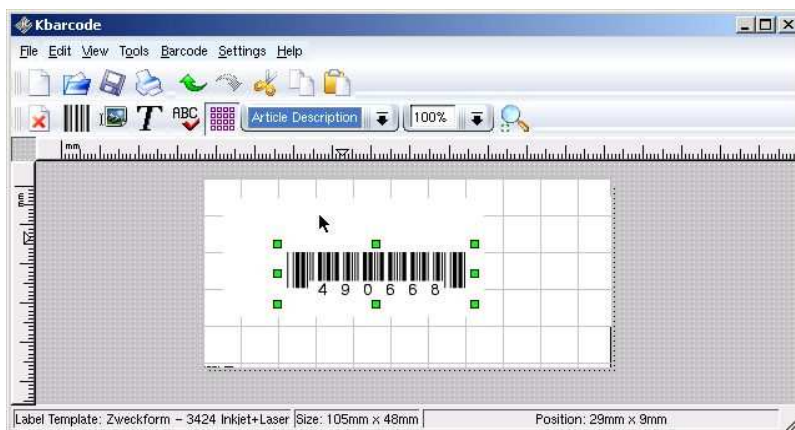


Plus a static one, if you have to print one barcode everytime on the label.



After selecting the barcode type, kbarcode will check for the longest barcode and print it on the label ! You can modify the barcode with the same settings than the single barcodes.

You can also add pictures and text to the label. You are able to resize the images or to select a special font for the text. The images might be used for a company logo.

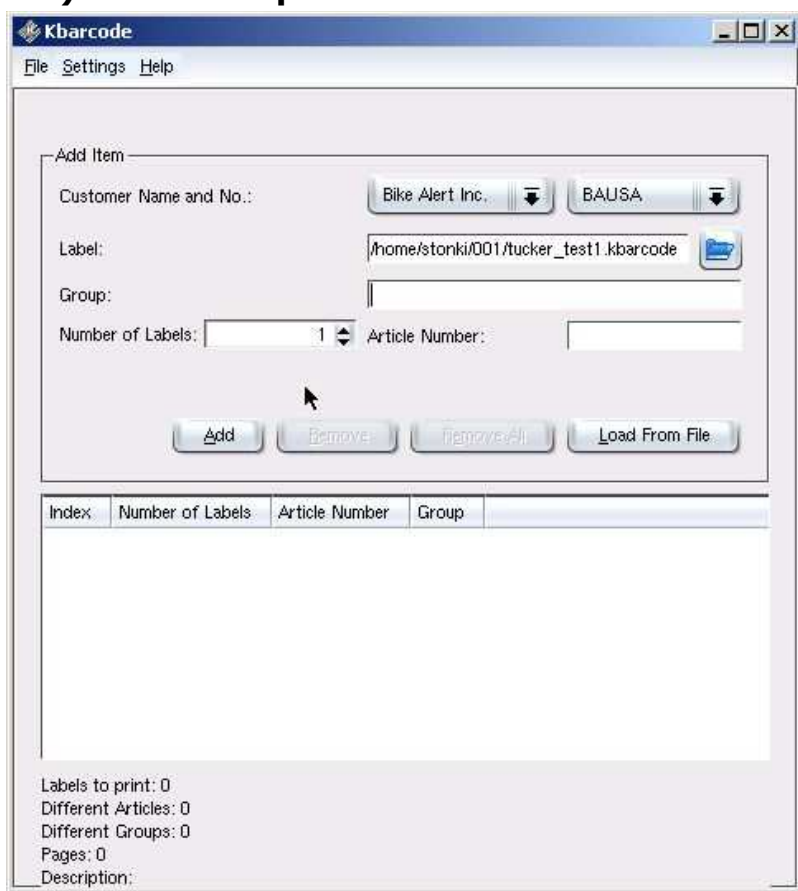


The Grid helps you to place fields within the same line.

Ok, lets head over to the fields. These are again very important and linked to the batch print dialog. You have several wild cards here, which will be substitute during the printing:

- ✓ Customer name (as selected in the batch print dialog)
- ✓ Customer number (as selected in the batch print dialog)
- ✓ Barcode Type (as selected in the "insert barcode" dialog) e.g. Code39 or UPC
- ✓ Barcode Number (referring to the printed label)
- ✓ Article Number (for which article)
- ✓ Article Description
- ✓ Line0....Line9: special fields for customers related to the article number
- ✓ File name: file name of the label
- ✓ Group: Which group

4.3) Use batch print

The screenshot shows the "Kbarcode" application window with the "Batch Print" dialog open. The dialog has a menu bar with "File", "Settings", and "Help". It contains several input fields: "Customer Name and No." with a dropdown menu showing "Bike Alert Inc." and "BAUSA"; "Label:" with a text field containing "/home/stonki/001/tucker_test1.kbarcode" and a folder icon; "Group:" with an empty text field; "Number of Labels:" with a spinner box set to "1"; and "Article Number:" with an empty text field. Below these fields are four buttons: "Add", "Remove", "Remove All", and "Load From File". At the bottom of the dialog is a table with four columns: "Index", "Number of Labels", "Article Number", and "Group". The table is currently empty. At the very bottom of the dialog, there is a status area with the following text: "Labels to print: 0", "Different Articles: 0", "Different Groups: 0", "Pages: 0", and "Description:".

The batch print dialog is now the links between the label designer and the barcodes for the articles in your system.

First you have to select a customer, than a label that you have created !

For each article you can also set a "Group". For example you have 3 different branches to deliver. Each brand will be an own group. Kbarcode will then print the barcodes first sorted by group and than by article number !

If you like you can add articles manually or you can import them using the import utility. The import file is a simple text file with three values separate by a separator (as set in the preferences dialog).

Once everything is ok, just press the "Print" button.

Please note: printing barcodes needs time ! Please expect more than one hour if printing more than 1000 labels !

5) Examples

5.1) Printing barcodes in a business environment!

In the first example we are using **kbarcode** in a small company selling computer articles. The company needs a small barcode with article number and barcode, which will be printed during stock receipt.

Create a table (in Excel or OpenOffice) with ALL article numbers, description, barcode number and barcode type (e.g. NV10, great graphic card, 123456789012, upc)

- Import this table into the "barcode_basic" table of the kbarcode database
- Open the label designer, choose a label and create a little label with the needed information
- During stock receipt, create a little text file with: Quantity, Article Number. Leave Group empty, but add it to the table. A text file might look like this:
33; NV10;
4; OO101;
- Import this text file in the batch print dialog, choose the label and PRINT
- DONE

6) How Do I ?

6.1) change the label size later ?

- ✓ load the label in the label designer and use the "edit size" function to choose another label

7) Support us !

Kbarcode needs always your help ! This does not mean, that you should be Linux wizard or computer expert. You may help us with...

- ✓ Reporting bugs
- ✓ Sending us feature requests to improve the usability of kbarcode
- ✓ Simple give us some feedbacks about success or failure of kbarcode in your company
- ✓ Helping us with translations into more languages
- ✓ Creating RPM files for Linux distributions
- ✓ Join the mailing list and contribute to the kbarcode project
- ✓ Make advertising for kbarcode and other Open Source Software
- ✓ donate some money to the PayPal Account of Dominik. For details please visit the webpage.

9) Thanks to:

Kbarcode is realised and created by:

Project Leader:	Stefan Onken	< stonki@stonki.de >
Core Programer:	Dominik Seichter	< domseichter@web.de >

Translations:

Swedish:	Anton Vaaranmaa	< antonv@postikaista.net >
Finish:	Anton Vaaranmaa	< antonv@postikaista.net >
Italian:	Daniele Medri	< madrid@linuxmeeting.net >
German:	Dominik Seichter	< domseichter@web.de >
Hungarian:	Sandor Jager	< jager@puskas.hu >
Spanish:	Miguel Revilla Rodríguez	< yo@miguelrevilla.com >

Icons:	Anton Vaaranmaa	< antonv@postikaista.net >
Logo:	Elrondo	

special thanks to all members of the kbarcode mailing list for frequent help and feedback.

kbarcode is based on several tools like "ImageMagik", "KDE", "QT". Thanks a lot !
Special thanks to Alessandro Rubini for GNU Barcode.

"Bike Alert Plc." for allowing Stefan Onken to starting this project !

8) SQL issues

Kbarcode is working without SQL support. Anyway, only we a SQL database, you can use all the unique functions and features of kbarcode, which makes it that powerful.

How to integrate kbarcode in your business enviroment is depending on a lot of factors – to much for mention here. If you need support in this cases, please refer to the mailinglist or contact us directly.

We are using a phpmyadmin, which is a web based tool , (<http://www.phpmyadmin.net/>) to import and modify data in the mysql database. This means, that we first read all the needed informations into a spreadsheet and modify here the informations to our needs. You will find later a complete list of all used fields.

is using SQL tables to store most of the information. Our test environment is using mysql as a backend. All information here are related to this mysql database, but should be similar to any other SQL database.

To handle the data in the SQL table, kbarcode is providing only basic tools. For “real life” use we recommend a solid tool, like phpMyAdmin, which is our favourite tool to deal with mysql tables. This tool helps to for example to import Excel sheets into mysql.

```
mysql> use kbarcode;
Database changed
mysql> show tables;
+-----+
| Tables_in_kbarcode |
+-----+
| barcode_basic      |
| customer           |
| customer_text      |
| label_def          |
+-----+
4 rows in set (0.00 sec)
```

```
mysql> show fields from barcode_basic;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra      |
+-----+-----+-----+-----+-----+-----+
| uid        | int(11)   |      | PRI | NULL    | auto_increment |
| article_no | varchar(50) | YES  |     | NULL    |              |
| article_desc | varchar(50) | YES  |     | NULL    |              |
| barcode_no  | varchar(50) | YES  |     | NULL    |              |
| encoding_type | varchar(50) | YES  |     | NULL    |              |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

```
mysql> show fields from customer;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra      |
+-----+-----+-----+-----+-----+-----+
| uid        | int(11)   |      | PRI | NULL    | auto_increment |
| customer_no | varchar(20) | YES  |     | NULL    |              |
| customer_name | varchar(20) | YES  |     | NULL    |              |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> show fields from customer_text;
```

Field	Type	Null	Key	Default	Extra
uid	int(11)		MUL	NULL	auto_increment
customer_no	varchar(20)	YES		NULL	
encoding_type	varchar(50)	YES		NULL	
article_no	varchar(50)	YES		NULL	
barcode_no	varchar(50)	YES		NULL	
line0	varchar(50)	YES		NULL	
line1	varchar(50)	YES		NULL	
line2	varchar(50)	YES		NULL	
line3	varchar(50)	YES		NULL	
line4	varchar(50)	YES		NULL	
line5	varchar(50)	YES		NULL	
line6	varchar(50)	YES		NULL	
line7	varchar(50)	YES		NULL	
line8	varchar(50)	YES		NULL	
line9	varchar(50)	YES		NULL	

```
15 rows in set (0.00 sec)
```

```
mysql> show fields from label_def;
```

Field	Type	Null	Key	Default	Extra
label_no	int(11)		PRI	NULL	auto_increment
manufacture	varchar(30)	YES		NULL	
Type	varchar(30)	YES		NULL	
paper	char(1)	YES		NULL	
gap_top	double	YES		NULL	
gap_left	double	YES		NULL	
height	double	YES		NULL	
width	double	YES		NULL	
gap_v	double	YES		NULL	
gap_h	double	YES		NULL	
number_h	smallint(6)	YES		NULL	
number_v	smallint(6)	YES		NULL	
paper_type	varchar(30)	YES		NULL	
remark	text	YES		NULL	

```
14 rows in set (0.00 sec)
```



The Free Barcode Solution

Version 1.2.0

A) GNU Free Documentation License

Version 1.1, March 2000

Copyright (C) 2000 Free Software Foundation, Inc.

59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

0. PREAMBLE

The purpose of this License is to make a manual, textbook, or other written document "free" in the sense of freedom: to assure everyone the effective freedom to copy and redistribute it, with or without modifying it, either commercially or noncommercially. Secondly, this License preserves for the author and publisher a way to get credit for their work, while not being considered responsible for modifications made by others.

This License is a kind of "copyleft", which means that derivative works of the document must themselves be free in the same sense. It complements the GNU General Public License, which is a copyleft license designed for free software.

We have designed this License in order to use it for manuals for free software, because free software needs free documentation: a free program should come with manuals providing the same freedoms that the software does. But this License is not limited to software manuals; it can be used for any textual work, regardless of subject matter or whether it is published as a printed book. We recommend this License principally for works whose purpose is instruction or reference.

1. APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work that contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. The "Document", below, refers to any such manual or work. Any member of the public is a licensee, and is addressed as "you".

A "Modified Version" of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A "Secondary Section" is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (For example, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The "Invariant Sections" are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License.

The "Cover Texts" are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License.

A "Transparent" copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, whose contents can be viewed and edited directly and straightforwardly with generic text editors or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup has been designed to thwart or discourage subsequent modification by readers is not Transparent. A copy that is not "Transparent" is called "Opaque".

Examples of suitable formats for Transparent copies include plain ASCII without markup, Texinfo input format, LaTeX input format, SGML or XML using a publicly available DTD, and standard-conforming simple HTML designed for human modification. Opaque formats include PostScript, PDF, proprietary formats that can be read and edited only by proprietary word processors, SGML or XML for which the DTD and/or processing tools are not generally available, and the machine-generated HTML produced by some word processors for output purposes only.

The "Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, "Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.



The Free Barcode Solution

Version 1.2.0

2. VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever to those of this License. You may not use technical measures to obstruct or control the reading or further copying of the copies you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough number of copies you must also follow the conditions in section 3. You may also lend copies, under the same conditions stated above, and you may publicly display copies.

3. COPYING IN QUANTITY

If you publish printed copies of the Document numbering more than 100, and the Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible. You may add other material on the covers in addition. Copying with changes limited to the covers, as long as they preserve the title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a publicly-accessible computer-network location containing a complete Transparent copy of the Document, free of added material, which the general network-using public has access to download anonymously at no charge using public-standard network protocols. If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

4. MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

- ✓ **A.** Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.
- ✓ **B.** List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has less than five).
- ✓ **C.** State on the Title page the name of the publisher of the Modified Version, as the publisher.
- ✓ **D.** Preserve all the copyright notices of the Document.
- ✓ **E.** Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.
- ✓ **F.** Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.
- ✓ **G.** Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.
- ✓ **H.** Include an unaltered copy of this License.

- ✓ **I.** Preserve the section entitled "History", and its title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section entitled "History" in the Document, create one stating the title, year, authors, and publisher of the Document as given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.
- ✓ **J.** Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the "History" section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.
- ✓ **K.** In any section entitled "Acknowledgements" or "Dedications", preserve the section's title, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.
- ✓ **L.** Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.
- ✓ **M.** Delete any section entitled "Endorsements". Such a section may not be included in the Modified Version.
- ✓ **N.** Do not retitle any existing section as "Endorsements" or to conflict in title with any Invariant Section.

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document, you may at your option designate some or all of these sections as invariant. To do this, add their titles to the list of Invariant Sections in the Modified Version's license notice. These titles must be distinct from any other section titles.

You may add a section entitled "Endorsements", provided it contains nothing but endorsements of your Modified Version by various parties--for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard. You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

5. COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original author or publisher of that section if known, or else a unique number. Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections entitled "History" in the various original documents, forming one section entitled "History"; likewise combine any sections entitled "Acknowledgements", and any sections entitled "Dedications". You must delete all sections entitled "Endorsements."

6. COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other respects regarding verbatim copying of that document.



The Free Barcode Solution

Version 1.2.0

7. AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, does not as a whole count as a Modified Version of the Document, provided no compilation copyright is claimed for the compilation. Such a compilation is called an "aggregate", and this License does not apply to the other self-contained works thus compiled with the Document, on account of their being thus compiled, if they are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one quarter of the entire aggregate, the Document's Cover Texts may be placed on covers that surround only the Document within the aggregate. Otherwise they must appear on covers around the whole aggregate.



The Free Barcode Solution

Version 1.2.0

8. TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License provided that you also include the original English version of this License. In case of a disagreement between the translation and the original English version of this License, the original English version will prevail.

9. TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided for under this License. Any other attempt to copy, modify, sublicense or distribute the Document is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

10. FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. See <http://www.gnu.org/copyleft/>.

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation.