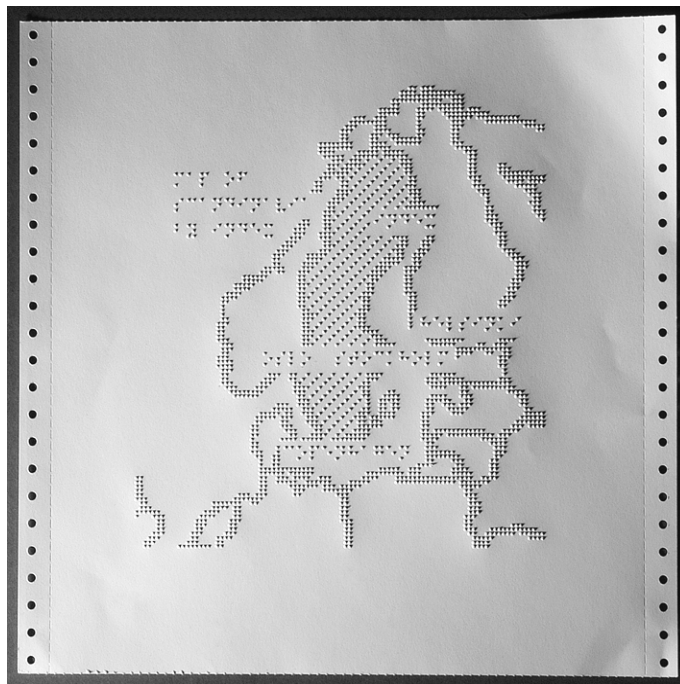


WinBraille 4 User's Manual



Index Braille AB

Table of Contents

Foreword	0
Part I About This Book	1
1 General	1
2 Version	1
3 How to Use This Book	1
4 News in This Release	1
5 Document Conventions	2
6 Terminology	2
7 Name Conventions	2
8 Related Documents	3
Part II Product Overview	4
1 WinBraille Software	4
Software Requirements	4
Functional Overview	5
Index Printer Drivers	5
IbPrint	5
2 Other Index Braille Software	6
3 Other Index Braille Products	6
4 Support	6
Part III Installation and Start Up	7
1 Installation Phases	7
2 Preparing the Installation	7
Upgrading from WinBraille 2.0	7
Adding a TCP/IP port in W2000/Server	8
3 WinBraille Installation Overview	10
Macro Install and Uninstall	11
4 Installation Details	11
Downloading WinBraille	12
Starting WinBraille	12
Installing WinBraille	12
Embossing a Test Page	13
The Readme File	13
Part IV Setting up WinBraille	14
1 Select Standard or Professional Edition	14
2 Setup Overview	15
3 Setup a Personal Profile	16
4 Frequently used settings	16

Setting up the embosser(s)	16
Setting up the Page Layout	17
Setting up the Header	18
Setting up Graphics	19
Setting up Hyphenation	19
Setting up the Braille Translation	19
Capital Prefix on/off	21
5 Advanced Settings	21
Saving your work in a Project	21
Setting up Preferences	22
Using Templates	22
Creating a Custom Installation Package	23
Using the Automation Modes	23
6 Distributed Installation	24
Part V Embossing	25
1 Embossing from Word	25
2 Embossing from Excel	25
3 Embossing from Windows	26
4 Embossing using IbPrint	26
5 Embossing using Duxbury Files	27
Part VI Tutorials	28
1 Embossing Braille with Tactile Graphics	28
2 Embossing Multiple Braille Languages	35
3 Creating a Personal Profile	38
4 Using Profiles	41
Part VII Tools	43
1 Index Setup	43
Version	43
Installing a Custom Installation Package	43
Creating a Custom Installation Package	44
2 Index Add Printer Wizard	45
Installing an Embosser locally	46
Installing an embosser connected to a local parallel port.....	46
Installing an embosser connected to a local serial port.....	47
Installing an embosser connected to a local USB port.....	48
Installing an embosser to a network port.....	48
Installing a Network embosser	49
Embosser connected to Windows 2000 Workstation or Server.....	50
Embosser connected to a Print Server.....	50
3 WinBraille Image Editor	51
Introduction	51
Overview	51
How to use the editor from a document in WinBraille	52
Insert an image in a document.....	52
Insert a TGD image.....	53

Create a new image	55
Working with the Image Editor	56
The Convert Dialog.....	56
Reference	58
Image Editor Menu.....	58
Image Editor Tool Bar.....	59
Image Editor Status Bar.....	59
4 The Rule File Editor	59
Menu Reference	59
File Menu.....	60
Edit Menu	62
Search Menu	62
Rule File Menu.....	63
Font Menu.....	65
Help Menu.....	66
Example on how to use the Rule File Editor	66
5 IbPrint	69
6 Embosser Utility	69

Part VIII WinBraille Menu Reference 70

1 Menus	70
2 The File Menu	70
New... ..	70
Open... ..	71
Save	72
Save As... ..	72
Save Project	72
Save As Project... ..	72
Save As Template... ..	73
Close	73
Close Project	73
Close All	73
Page Setup... ..	73
Print... ..	74
Emboss... ..	74
Preview... ..	75
Exit	76
3 The Edit Menu	76
Undo	76
Redo	76
Cut	77
Copy	77
Paste	77
Paste And Translate	77
Delete	77
Select All	77
Find... ..	77
Replace... ..	78
Go to Page... ..	78
4 The View Menu	78
Normal Page Layout	78

Centered Page Layout	79
Status Bar	79
Translation Display	80
Zoom	81
Show white spaces	82
Display All Help Messages	82
Professional Edition	82
5 The Insert Menu	82
Insert Translated Text...	82
Page Break	83
Insert Image	83
6 The Format Menu	83
Character...	83
Paragraph...	84
Bullets and numbering	85
Attributes	85
Increase Level.....	86
Decrease Level.....	86
1,2,3	87
A,B,C	87
a,b,c	87
I,I,I	87
i,i,i	87
Bullet	87
None	87
Style...	88
Tabs...	91
7 The Table Menu	91
Insert...	91
Table...	91
Column to the left.....	92
Column to the right.....	92
Row above.....	92
Row below.....	92
Delete	92
Table	92
Columns.....	93
Rows	93
Select	93
Table	93
Row	93
Cell	93
Gridlines	93
Properties...	94
8 The Document Options Menu	94
Document Properties...	94
Braille Format...	95
Braille Style Format...	96
Change Profile...	97
Shortcuts	97
9 The Braille Menu	98
Translate	98

Exceptions...	98
Sample Translation...	99
Character Table...	100
10 The Profile Menu	100
Manage Profiles...	100
Edit Profile...	103
Shortcuts	111
Manage Templates...	112
Edit Format...	113
Manage Rule Files...	125
Manage Exceptions	128
11 The Window Menu	130
Tile Horizontal	130
Tile Vertical	130
Cascade	130
Arrange Icons	130
12 The Internet Menu	130
Index Home Page	130
Check for Upgrades	131
Software Performance Report	131
13 The Tools Menu	131
Emboss Test page	131
Edit Rule File...	132
Image Editor...	132
Index Add Printer Wizard...	133
Index Setup...	134
Language...	134
Macro	135
Record	135
Stop	135
Play	135
Open	135
Save	135
Application Components	136
14 The Help Menu	136
Help Topics	136
About WinBraille...	136
15 Key mapping	137
Function Keys	137
Movement Keys	137
Control Keys	137

Part IX Translation File Reference 139

1 Introduction	139
2 WinBraille Contraction Rules	139
3 Conventions	139
4 Translation File (Rule File) Structure	140
Sections	140
The Header Section	140
Variables	141

Includes	141
The Definitions Section	141
The Define Statement	141
The Predefined Definitions	142
The Symbol Definitions	144
The Character Set Definition	144
The Password Definition	144
Default Character Definition	145
The Attribute Definitions	145
States	145
The State Definitions.....	145
The User Defined State.....	146
The Global State.....	146
The Local State.....	146
The Internal, or Interface State.....	146
Interface	147
The Interface Definitions.....	147
State Interface.....	147
Variable Interface.....	147
Interface Declaration Example.....	147
External Rules	148
External Translation Rules.....	148
The Parameter Definition.....	148
The External Function Definition.....	148
The Dependent File Definition.....	149
Lists	149
The List Definitions.....	149
The List Rule Definitions.....	150
The Character Equivalence Definitions.....	151
Translation Rules	151
The Contraction Rules: Inserting Rules and Replacing Rules.....	151
The Inserting Rules.....	152
The Replacing Rules.....	153
Rule Order.....	154
Control Translation Order for a Single Rule.....	155
Using and Assigning Variables.....	155
Recursive Translation.....	155
What happens during the conversion process?.....	156
Tables	156
The Braille Table.....	156
The Duplicate Character Table.....	157

Part X Appendix 159

1 Default Profile Settings	159
Index Default Installation 1	159
Index Default Installation 2	159
2 Custom Installation Packages	160

Index 161

1 About This Book

1.1 General

This book describes the WinBraille software. The book is intended for system administrators and end users.

As a prerequisite, you should understand the basics for the Braille language and the functionality of embossers in general.

1.2 Version

Version:2005-02-02

1.3 How to Use This Book

To get an overview of WinBraille and all the other Index Braille products, read [Product Overview](#).

To get an overview of the news in this release of WinBraille, read [News in this release](#).

As a system administrator you should read [Installation](#) for how to install and set up WinBraille.

As an end user you should start by making yourself acquainted with how to emboss documents. This is described under [Embossing](#). If you then want to modify the default settings and preferences, read [Setting up WinBraille](#). You can also get detailed help by reading and following the [Tutorials](#).

1.4 News in This Release

WinBraille 4.x has the following new functions compared with WinBraille 3.x:

Graphics

A full featured image editor is included in WinBraille. The editor can read and convert images from: bmp, jpg, png, sig, wmf, gif and tif formats. You can also include images in your Word document and directly convert the whole document, including the images, into Braille and Tactile images.

Graphics is supported

- for version 3 Embossers firmware 11.01 or higher
- for Windows 2000 and Windows XP

Graphics is NOT supported

- for version 2 embossers
- Version 3 Basic, Everest firmware below 10.31
- Version 3 4X4 PRO firmware up to 11.00

Hyphenation

Hyphenation of the document can be done in several ways, you choose which to use:

- Wrap words shorter than a given number
- Hyphenate according to a specific rule file.
- Always hyphenate to get the text right aligned.

Updated user interface

A number of updates to the user interface has been done providing new features and simplifying the usage of

WinBraille.

Spool file

The default location for the spool file for the WinBraille driver has been moved to "...Document And Settings\AllUsers\Application data\WinBraille\AddPrinter\Print". Your system administrator can also choose which directory the spool file shall be placed in.

Extended macro functionality

It is now possible to record menu selections in WinBraille

For more details, please read the readme file.

1.5 Document Conventions

The following text conventions are used.

Documented functions	Format	Comments
Speech Feedback	"echoed message"	
Starting programs	menu 1/ menu 2/ menu 3 etc.	
Program name	"Program Name"	
Selected menu in program	"menu item/menu item"	
Buttons in Dialogs	OK , Cancel etc.	
Dialog questions	"Do you want to continue?"	

1.6 Terminology

Term	Explanation
Embosser	Printer that produces Braille texts as raised indents in paper
Braille translation files	Files used by WinBraille that define the text to Braille translation. The Braille translation files is for contracted or not contracted Braille

1.7 Name Conventions

The various software products and deliverables provided by Index Braille are listed below together with the short names used in this document.

Full name	Short name	Description
WinBraille	WinBraille	Braille editor for Index embosser
Index Embosser Utility	Embosser Utility	Support and installation utility for Index Embossers
Index IbPrint	IbPrint	Print utility for simple text files
Index Speech Tool	Index Speech	Software to make local speech interface on Index Embossers
Index Braille Printer Driver	Index Printer Driver	The Windows drivers for the Index Braille Embossers
Index Braille CD	Index CD	CD containing all Index Braille software
Index Braille Embosser(s)	Index Embosser(s)	The embossers produced by Index Braille
Index Setup	Index Setup	Installs Custom Packages
Index Add printer Wizard	Add Printer Wizard	Installs Index printer drivers

Index Translation File	Translation File	Formerly called Rule File. The file that contains the description of the specific language translation.
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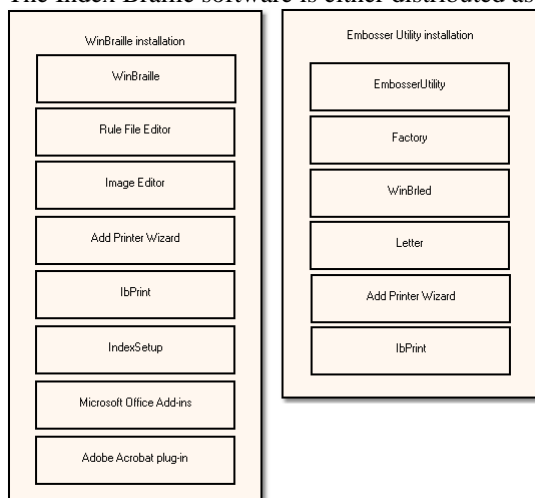
1.8 Related Documents

Document Title	Description
Index Catalogue	The Index Braille Product Guide
Index Braille Embossers Manual	The Manual describes how to unpack, install setup, use and maintain Index Embossers.

2 Product Overview

2.1 WinBraille Software

The Index Braille software is either distributed as part of WinBraille or as part of the Embosser Utility:



2.1.1 Software Requirements

WinBraille supports the following Windows Operating systems and Microsoft Office Packages.

Operation System	Office 2000	Office XP	Office 2003
Win 2000	X	X	X
Win XP, PRO SP2, Service Pack 2	X	X	X
Win XP, Home SP2, Service Pack 2	X	X	X

Restrictions

The Macro for Adobe Acrobat requires version 5.x or 6.x of Adobe Acrobat. Please note that the Macro does not support Adobe Reader .

WinBraille 4 do not support serial communication.

The computer must allow installation of Kernel mode drivers.

Screen resolutions

WinBraille requires the following screen resolutions:

- 1024 x 768 pixels
- 1280 x 1024 pixels

For other resolutions, WinBraille could give faulty page layout on screen.

2.1.2 Functional Overview

Exclusively for Index Users

After installation of WinBraille the user can emboss documents from the majority of Windows compatible programs in the same easy way as printing to a laser printer. A blind user can access WinBraille with a screen reader, Braille display or synthetic speech. WinBraille automatically set up the Index Embosser(s).

Emboss from Word and other document types

The Index Embosser prints your Word document according to your standard template for Braille. Select "File/Emboss" to emboss the document. All Windows editors and programs (for example MS Excel, MS Explorer, MS Outlook) can be used with WinBraille. If you use MS Word, Adobe Acrobat and WinBraille itself you can also change the settings for the translations and embossing.

Braille Translation

Translate contracted and uncontracted Braille using WinBraille. The definitions that are required to do the translation for most of the major languages is available as custom packages. The number of languages is steadily increasing, 32 and counting. With WinBraille you or your Index distributor can create a custom package for your own language.

Graphics

Use WinBraille to insert and translate graphical images to tactile images with 0,5-2,5 mm resolution or build tactile images directly with WinBraille's powerful Image Editor. WinBraille's graphical features give new heights to the production of Braille books and Magazines. The Image Editor makes it possible for you to:

- translate images to Tactile Graphics
- adjust contrast, color etc
- import images files (BMP, TIF, WMF, PNG, JPG, GIF, JPEG, SIG)
- insert Braille in tactile images
- insert tactile letters in tactile images

Note: Place one empty line before and after the picture to get better Braille tactile output.

Advanced Formatting

WinBraille contains functions for the automatic production of Braille books and newspapers: dual page numbering (ink/braille), headers, translation into several languages in the same document, tables, bullets, header/footer handling and advanced formatting.

6-dot key entry

WinBraille supports 6-dot key entry.

Support of Index Version 2 Embossers

WinBraille supports older Index Embossers.

2.1.3 Index Printer Drivers

The Index Printer drivers take care of the integration between the Windows operating system and the Index Embossers. Install them using the Add-Printer Wizard (started from WinBraille).

2.1.4 IbPrint

IbPrint is a straight forward drag and drop program for printing text files, setup files, vertical alignment files etc to Index Embossers. See [Embossing using IbPrint](#) for details.

2.2 Other Index Braille Software

Firmware

The Index Firmware is the software that executes in the Embossers. It is stored in the embossers EEPROM, see the Index Braille Embossers manual for details.

Embosser Utility

You use the Embosser utility mainly for:

- Firmware upgrade
- Local speech upgrade
- Installation of Own Braille tables
- Network setup

See the Index Braille Embossers manual for details

Index Speech Tool

Index Braille distributors use the Index Speech Tool to create local speech for the embossers user interfaces. It is therefore password protected. If you are an Index Braille distributor contact Index Braille support for password and help. As an Index Braille distributor you create the speech recordings using the tool and send them to Index support. Index Braille takes the resulting speech files, converts them to embosser format and places them at www.indexbraille.com.

2.3 Other Index Braille Products

Embossers

Index Embossers have been delivered in centuries to the blind community and to the people that serve the blind. See the Index Braille Embossers Manual.

Acoustic Cabinets and Hoods

Embossing is by the very nature of the task, fairly noisy. Index Braille provides acoustic cabinets that makes it possible to place the embossers in an ordinary office environment. See the Index Braille Embossers Manual.

Braille Stapler

Index Braille also provides a Stapler, dedicated for Braille documents and books, see the Index Braille Embossers Manual.

2.4 Support

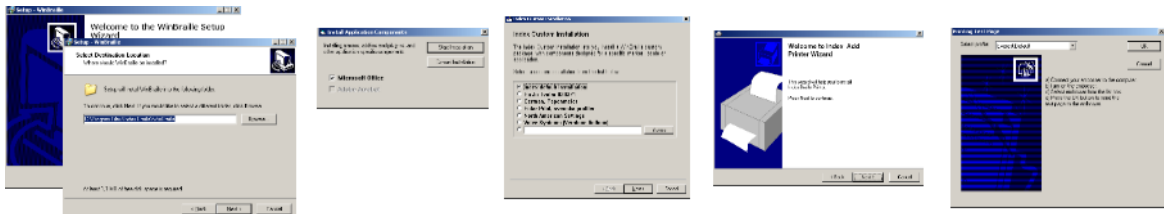
WinBraille together with all other Index Braille software is available on the Index CD, included in all Embosser shipments. WinBraille and WinBraille upgrades are also available over internet, www.indexbraille.com, free of charge.

3 Installation and Start Up

3.1 Installation Phases

The installation is divided in four phases;

- Answer questions about destination folder, license agreement etc.
- Custom installation of WinBraille (Profiles, Translation Files etc.)
- Adding printer drivers to the system.
- Test page print out.



Verify that you fulfill the [Software Requirements](#) before you start the installation of WinBraille.

3.2 Preparing the Installation

If any of the following statements are true, read the corresponding section, otherwise go directly to [installation overview](#).

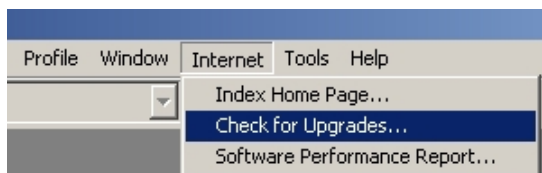
- You have a previous WinBraille 2.0 installation on your computer, go to Upgrading from [WinBraille 2.0](#)
- You want to add a TCP/IP port in Windows 2000 Server, go to [Adding a TCP/IP port in Windows 2000 Server](#).

Update to latest WinBraille version

Your computer has to be connected to Internet or have the latest Index CD installed

Close all other programs

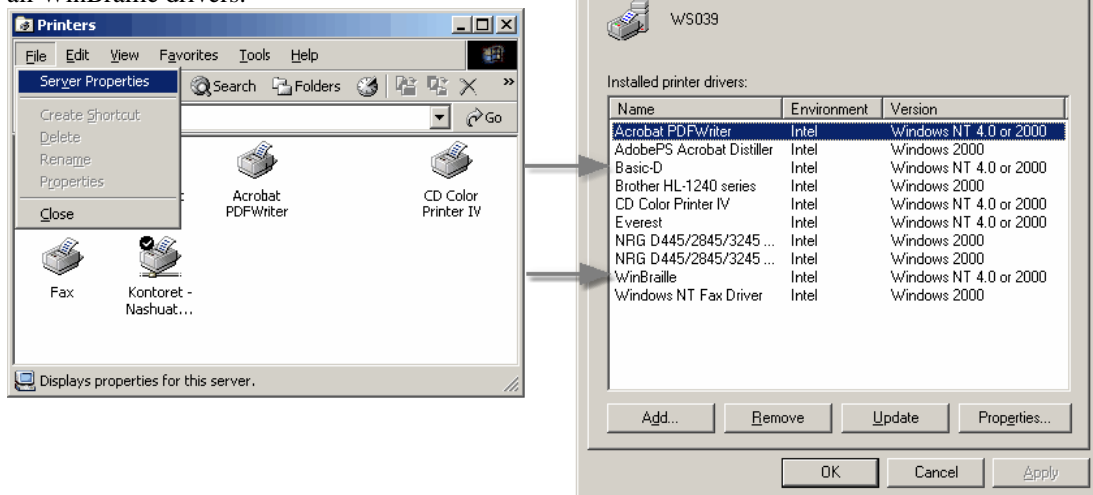
Select Internet, Check for Upgrades..., and upgrade your WinBraille



3.2.1 Upgrading from WinBraille 2.0

If a previous installation of WinBraille 2.0x has been installed in the system (WinBraille 2.04 or lower) this installation must be removed from the system before installing WinBraille 4.00. To be sure the drivers are removed from the system in Windows 2000, a check could be done in the Printer folder

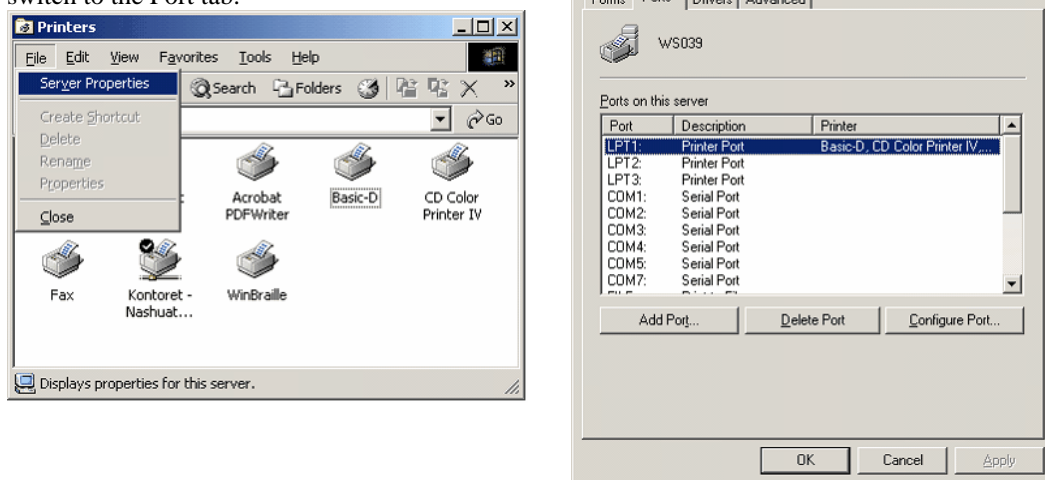
Select "Server properties/Drivers" and remove all WinBraille drivers.



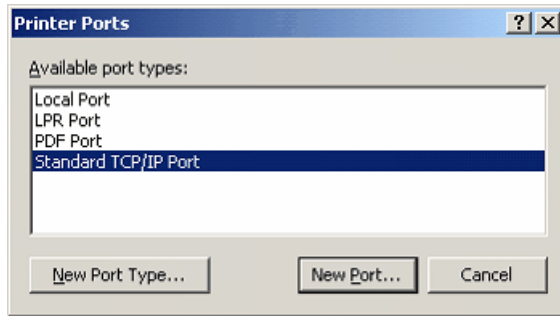
3.2.2 Adding a TCP/IP port in W2000/Server

To connect the embosser to the Ethernet port, a valid TCP/IP port must exist in the system before running the Index Add Printer Wizard.

Select Server Properties in the printer folder and switch to the Port tab.



Press Add Port
Select "Standard TCP/IP Port" and press New Port...

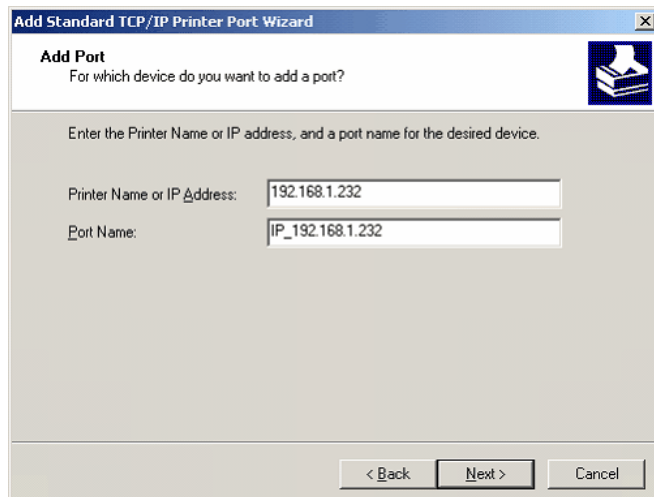


When the Add Standard TCP/IP Printer Port Wizard starts up, press the Next button to continue.

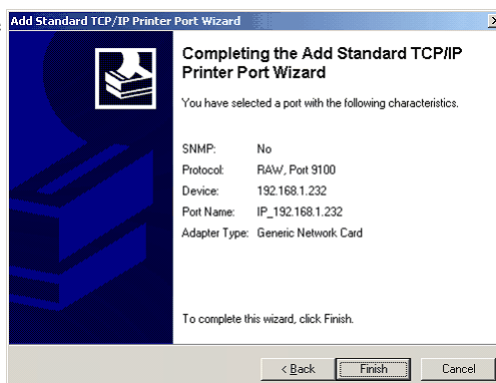


Ask your Network administrator for a valid IP address. If the network is DHCP configured it is possible to associate the MAC address in the embosser to a fixed IP address. To get the MAC address for the Embosser, press HELP + HELP on the front panel and the Embosser will emboss a page with the settings of the embosser. The MAC address is included in the Braille page. Another solution is to create an IP address outside the DHCP IP-range.

After entering a valid IP address, press the Next button.



The port will now be available from the Index Add Printer Wizard.



3.3 WinBraille Installation Overview

Installing WinBraille

Install WinBraille from the Index CD from or www.indexbraille.com. Start the program and follow the installation wizard instructions. If a security messages pops up, press Run to continue.

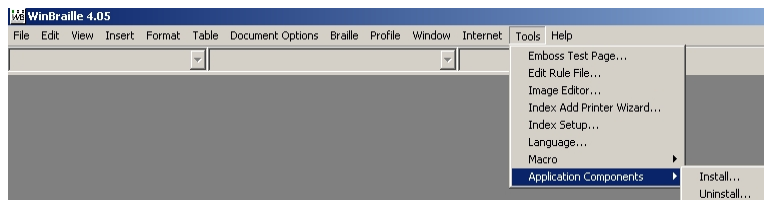
Note: To install WinBraille you have to be logged in as system administrator.

Step	Name	Action	Comments
1	Welcome	Next	Information about WinBraille Version.
2	Licence agreement	Check Accept agreement, press Next	Information, General Licence agreement for all Index Braille softwares
3	Compatibility	Next	Information, Supported Windows Operation System and Office versions
4	Select Destination Location	Normally: Check accept default, press Next	
5	Select Components	WinBraille Installation (Normal) Printer Driver Installation	WinBraille installation = Normal installation of WinBraille including Index printer drivers. Printer driver installation = Index Printer Driver installation when used with other Braille editors
6	Select Start Menu Folder	Normally: Check accept default, press Next	C:/.../Index Braille/WinBraille
7	Select Additional Tasks	Normally: Check accept default, "Create desktop icon", press Next	Desktop icon = at your desktop Quick Launch icon = at task bar
9	Ready to Install	Software location information; press Install	Information summary of the selected information, start the program installation.
10	Install Application Components	Select MS Office and/or Adobe Acrobat and press Start Installation	Installs Macros for MS Office and Adobe Acrobat 5.0 or 6.0.
11	Index Custom installation	Select "Index Default Installation" if your language is not available from the list and then press Next	Local automatic set ups of: WinBraille profiles, Braille translation languages, templates, paper size etc
12	Index Custom Installation Option	Select Embosser Model; Press Finish to start "Add Printer Wizard" for selected embosser.	1 = Index Printer Driver not installed: Complete the Add Printer Wizard 2 = Index Printer Driver already installed: Select "no" in the confirmation message. Required information: - Embosser model and version - Communication: USB, Parallel, Network, Serial Network: TCP/IP address

13	Emboss a test page	Check Accept to emboss test page	See Emboss a test Page
14	First time: Opens the Readme document	Press OK	The document presents the WinBraille revision history. When you press OK WinBraille reads, translates and embosses

3.3.1 Macro Install and Uninstall

Use WinBraille in Professional edition. Change it to Professional edition by "View/ professional edition".



Install Macro

Close all Microsoft Office and Adobe Acrobat programs.
From WinBraille select "Tools/ Application Components/"
Press **Install...**
Check Microsoft Office and/ or Acrobat and press **Install**

Uninstall Macros

Close all Microsoft Office and Adobe Acrobat programs.
Select "Tools/ Application Components/"
Press **Uninstall...**
Check Microsoft Office and/ or Acrobat and press **Uninstall Components**

3.4 Installation Details

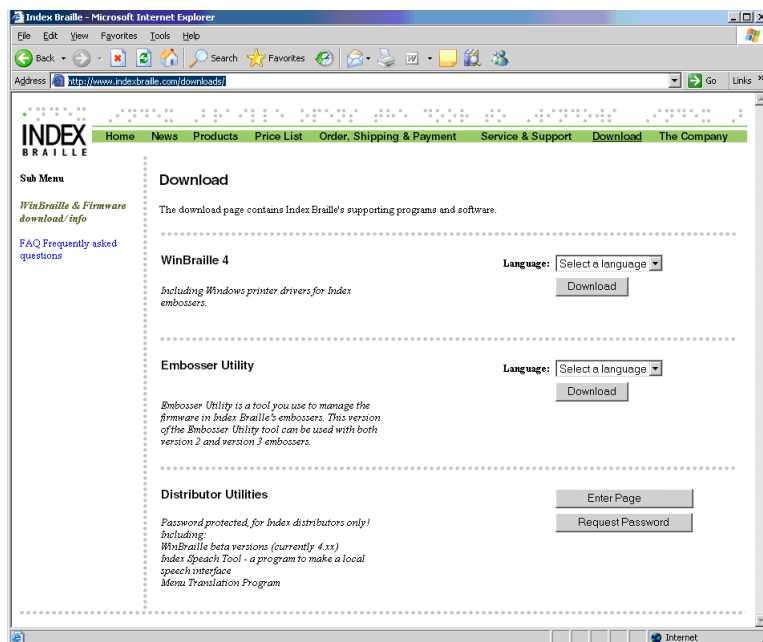
The WinBraille system consist of two parts, the application WinBraille and the necessary printer drivers for communicating with the Embossers. Select "WinBraille Installation" to automatically install both the WinBraille and the necessary printer drivers for the Embosser. The "Printer driver Installation" selection will only install printer drivers.

If you are installing an Index Embosser on a Windows Server you should choose the "Printer driver Installation" because the WinBraille application is not needed on the server.

WinBraille can be installed from the Index CD or downloaded from www.indexbraille.com.

3.4.1 Downloading WinBraille

Download WinBraille from the Index Braille web page: <http://www.indexbraille.com/downloads/>



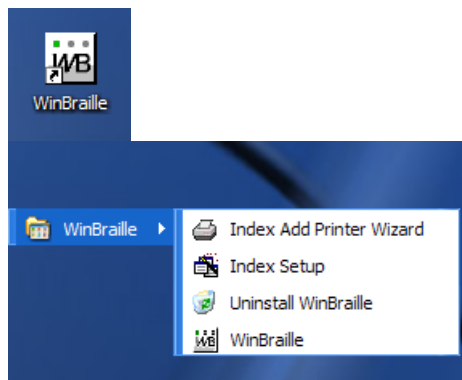
Select a proper language and Download

Choose a language for the WinBraille menus and press the **Download** button. Save the file (Approximately 15 MB) on your hard drive.

3.4.2 Starting WinBraille

After a WinBraille installation you can start WinBraille either from your desktop icon

or by selecting WinBraille using "start/Index Braille/WinBraille/WinBraille"



3.4.3 Installing WinBraille

Installing WinBraille

Login with Administrator rights

Close all programs on your PC

Start the WinBraille installation Wizard, see [WinBraille Installation Overview](#)

Installing a Custom Installation Package

The Custom Installation Package will install all default settings for selected language or distributor. See [Custom Installation Package](#).

Installing an embosser

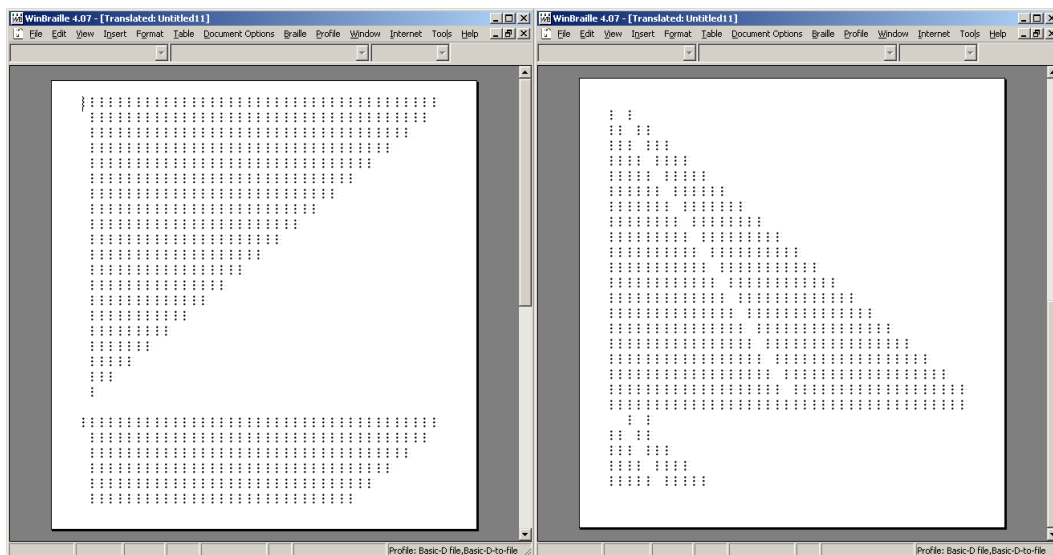
If you answered **Yes** above the Add printer Wizard is automatically started. See Add printer Wizard instructions for further information.

3.4.4 Embossing a Test Page

You are asked to send a test page to the embosser when you start WinBraille for the first time. Make sure that you:

- have connected the embosser to the computer,
- the embosser is turned on,
- you have selected the correct embosser from the list if you have more than one embosser before you press the **OK** button.

A test page with a predefined pattern will be sent to the embosser. See the figures below. If you have a single sided embosser they will come in two sequential pages and on a double sided embosser the left figure is the front page and right figure the back page.



3.4.5 The Readme File

WinBraille opens a Read me document when you start the program for the first time. This document contains some information on how to use WinBraille, and changes since the last version. Please read the document before you start using WinBraille.

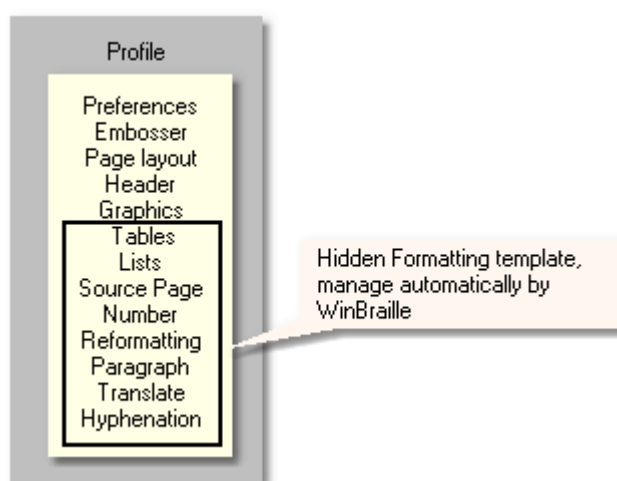
Note: This document is only shown the first time you start WinBraille.

4 Setting up WinBraille

4.1 Select Standard or Professional Edition

Standard Edition

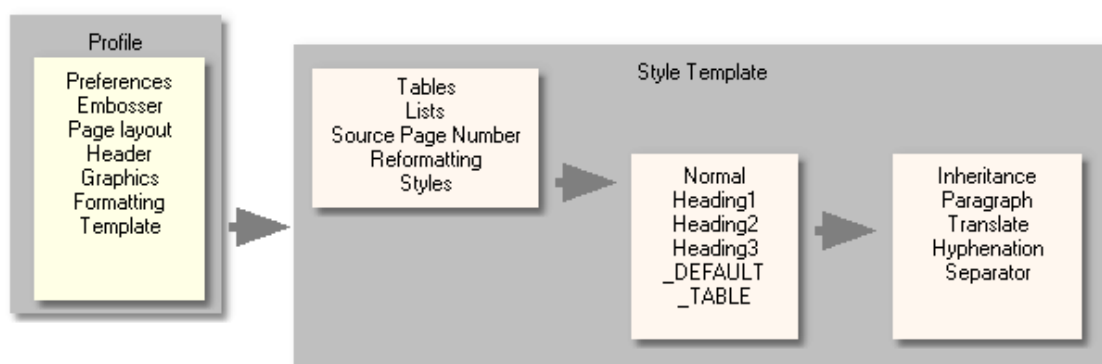
In the Standard Edition, all settings are applied for the whole document. WinBraille is by default set to standard edition after installation.



Professional Edition

In Professional Edition the Braille Formatting template is visible. You can create and manage Braille formatting templates independent of the profiles.

To switch between the Standard and Professional, select the "View/ Professional Edition" menu item.



Enabled Functions in Professional		
WinBraille Menu	Tool	Edit Rule File...
		Index Add Printer Wizard...
		Index Setup...
		Language...
		Macro ->
		Application Components ->
	Document Options	Document Properties...
		Braille Format...
		Braille Style Format...
		Change Profile...
		Shortcut ->

Information connected to a specific Style	Paragraph	Setting of how to handle spaces, tab, indents, line spacing, alignment
	Translate	Select Braille translation language and exception file
	Separator	Select separator line, position, character and justification
	Hyphenation	Select on/off, methods

4.2 Setup Overview

Standard Edition

Menu Profile/Shortcuts->	Used for	For more information see	Comments
• Preferences...	Automation level, Braille or character, zoom, display	Setting up Preferences	
• Embossers...	Embosser model, Old firmware, Single or double sided, z-folding	Setting up Embossers	Frequently used
• Page layout...	Braille page size, margins	Setting up Page Layout	Frequently used
• Headers...	Braille page number etc	Setting up Header	Frequently used
• Graphics...	Graphic function on/off	Setting up Graphics	Frequently used
• Tables...	Tables from Excel, Word, three alternative formats	Setting up Tables	
• Lists...	Bullet and numbering lists	Setting up Lists	
• Source Page Number...	Separation line with source page # in Braille document	Setting up Source Page Number	
• Reformatting...	Space, empty line, new page conversion to braille doc	Setting up Reformatting	
• Hyphenation...	Hyphenation, three alternatives	Setting up Hyphenation	Frequently used
• Translate...	Language - select text to Braille translation (G0=Computer, G1=Literary, G2=Contracted)	Setting up Translate	Frequently used

Professional Edition

Menu Profile	Used for	For more information see	Comments
PROFILE			
• Preferences...	Automation level, Braille or character, zoom, display	Setting up Preferences	Global
• Embossers...	Embosser model, Old firmware, Single or double sided, z-folding	Setting up Embossers	Global
• Page layout...	Braille page size, margins	Setting up Page Layout	Global
• Headers...	Braille page number etc	Setting up Header	Global
• Graphics...	Graphic function on/off	Setting up Graphics	Global
• Formatting Template	-> Select template and Edit formatting template		
TEMPLATE			

• Tables...	Tables from Excel, Word, tree alternative formats	Setting up Tables	Template
• Lists...	Bullet and numbering lists	Setting up Lists	Template
• Source Page Number...	Separation line with source page # in Braille document	Setting up Source Page Number	Template
• Reformatting...	Space, empty line, new page conversion to Braille document	Setting up Reformatting	Template
• Styles	-> Select Braille style and modify Braille style	See Styles	Default = All styles inherit style template values from _DEFAULT
BRAILLE STYLE			
• Inheritance	The information in selected Braille style is: <ul style="list-style-type: none"> • Own setting • Inherit from Braille Style (_DEFAULT) 	See Inheritance	Default = the information in all Braille Styles inherit from _DEFAULT
• Paragraph		Setting up Paragraph	Braille Style
• Translate	Language - select text for Braille translation (G0=Computer, G1=Literary, G2=Contracted)	Setting up Translate	Braille Style
• Hyphenation	Hyphenation, three alternatives	Setting up Hyphenation	Braille Style
• Separator	Separation line before or after a paragraph		Braille Style

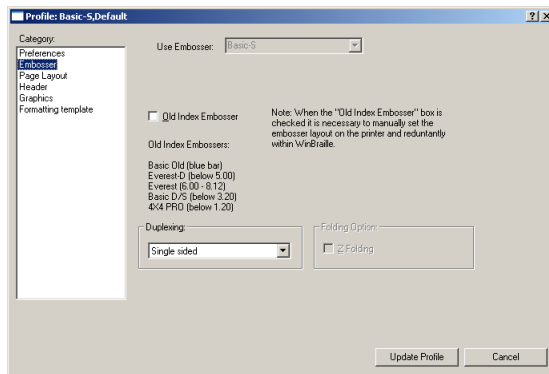
4.3 Setup a Personal Profile

Use the personal profile to setup WinBraille for a specific working task, for example to emboss email on an Everest with A4 paper. For detailed information see Tutorials [Create a Personal Profile](#)

4.4 Frequently used settings

4.4.1 Setting up the embosser(s)

The first you should do is to set up the embosser(s). Click "Profiles->Embosser":



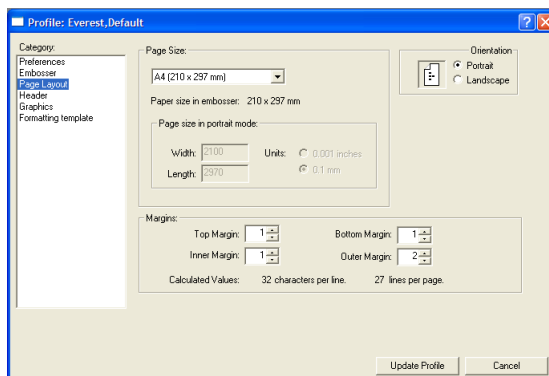
Choose embosser and then set up the embosser settings or verify that the defaults are to your satisfaction, see the table below.

Setting	Default Value	Info and Options
Old Index Embosser	Not selected, see on screen embosser model info	Old embosser = no tactile graphic support Old embosser = Basic old (blue bar), Everest-D (below 5.00), Everest (6.00-8.12), Basic-D/S, 4X4 PRO (below 1.20)
Duplexing	Basic-S = Single sided, Basic-D = Double sided, 4X4 PRO = Saddle stitch binding, 4Waves PRO = Double Sided	
Folding Option, Only Basic-D and 4Waves PRO	z-folding off	The complete z-folding braille document is in book format directly after cutting the paper out stack.
Setting	Default Value	Info and Options

For more information, see [Embosser](#).

4.4.2 Setting up the Page Layout

Next you should set up the paper margins, the page size and orientation. Click "Profiles->Page layout"



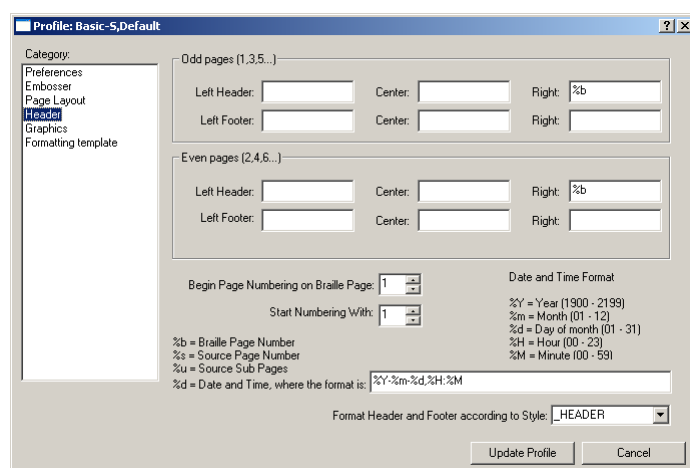
Set up the paper or verify that the defaults are to your satisfaction, see the table below.

Setting	Default Value	Info and Options
Page Size:	Page Size Basic, 4Waves PRO = W12" x L12" Everest, 4X4 = A4 (W210 x L297 mm)	Set page size for 4X4 PRO in saddle stitch binding mode as the folded page size and not the full paper size. Example: Paper size A3, set up Page Size in WinBraille to A4.
Orientation (Portrait default)	The Landscape orientation can only be used on paper with a maximum length of 297 mm.	
Margins:	Top Margin = 1 (default) Inner Margin = 1 (default) Bottom Margin = 1 (default) Outer Margin = 1 (default)	WinBraille calculates the "characters per line" and "lines per page" and displays it in "Page Layout/ Margins"

For more information, see [Page Layout](#).

4.4.3 Setting up the Header

To set up the header, Click "Profiles-> Header":



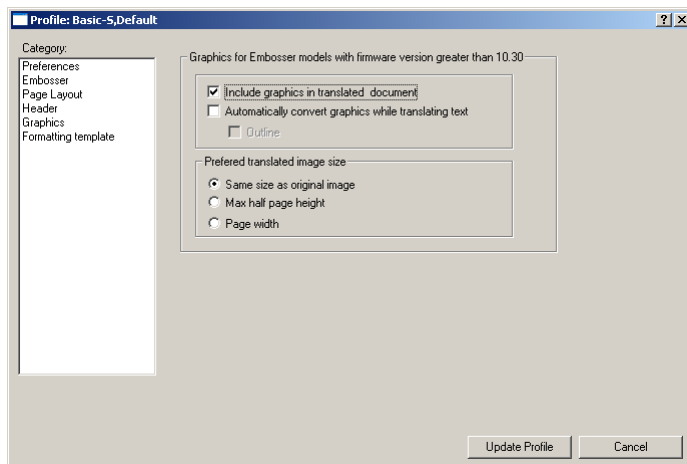
Set up the header, the defaults are shown below.

Setting	Default Value	Info and Options
Odd Pages	Right = %b	Follows Windows standard, example: %b = Braille Page Number %s = Source Page Number %d = date and time Windows format
Even Pages	Left = %b	
Begin Page number on Braille page no:	1	The braille page number starts on the defined page
Start Numbering With	1	Braille page number starts with #

For more details, see [Header](#).

4.4.4 Setting up Graphics

To set up the tactile Graphics, another important setting, click "Profiles-> Graphic":



See [Graphic](#) for more information.

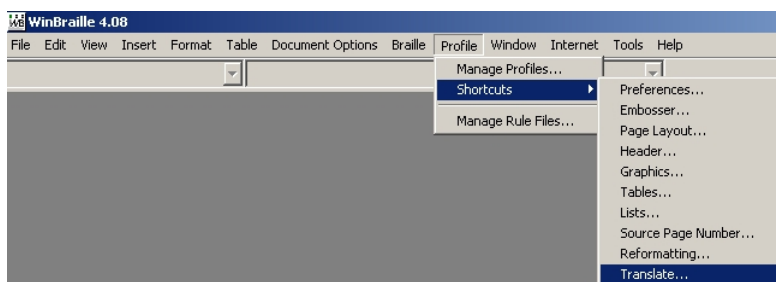
4.4.5 Setting up Hyphenation

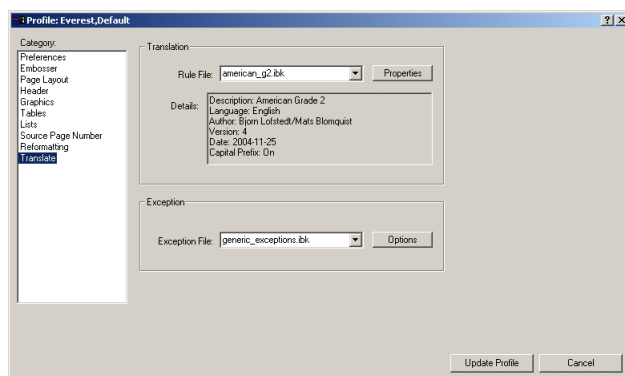
Setting	Default Value	Info and Options
Hyphenation	1. No Hyphenation (Word wrap active) 2. Right Alignment 3. Wrap words less than X characters 4. Hyphenation according to rulefile	Alternative 4 is only selectable when the hyphenation is defined in used Rule file

See [Hyphenation](#) for more information.

4.4.6 Setting up the Braille Translation

To set up the text to Braille translation, Click "Profiles-> Shortcuts -> Translate" (WinBraille Standard Edition)





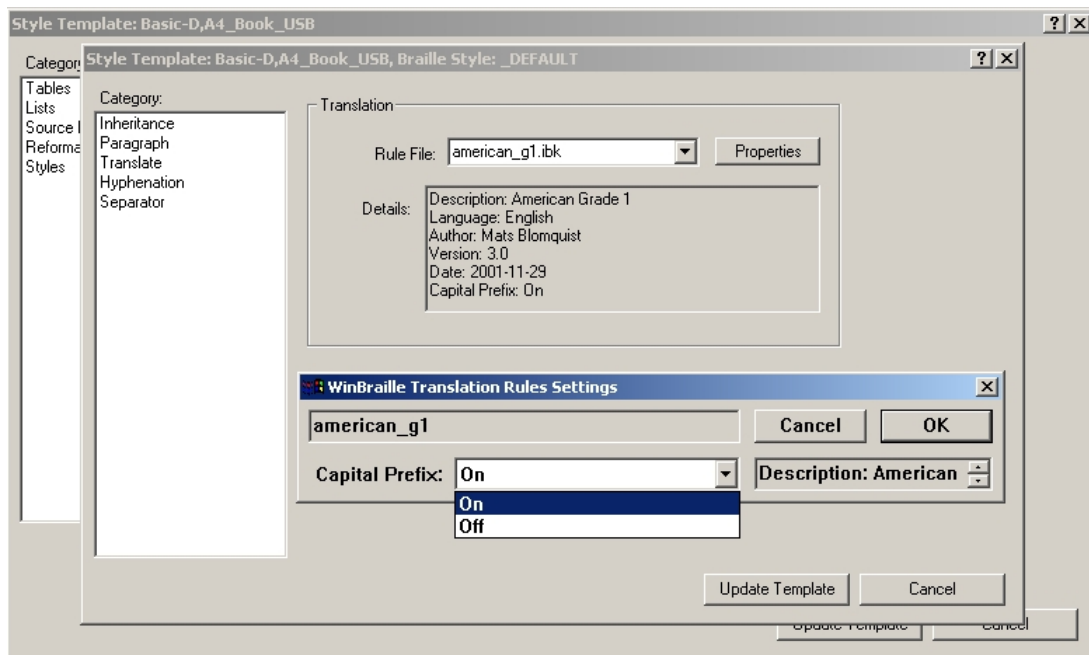
It is vital that you choose the correct translation file and exception file for you document(s). The defaults below are normally only relevant if you use american English.

Setting	Default Value	Info and Options
Space	1. Keep original spaces 2. Exchange multiple spaces with single space (default tagged) 2.1 Keep indents as is	
Indents	1. Left = 0 Characters 2. Right = 0 Characters 3. First line = 0 Characters 4. As in document (not tagged)	
Tab	(not active)	This function exchange the TAB sign with a defined number of spaces
Distance (Only Professional)	1. Top = 0 lines 2. Bottom = 0 Lines	This function defines the distance above and below the paragraph with this style.
Attribute	Bold, Italic, Underline (default = not tagged)	This function is only supported in american_g2.bk. When tagged prefix and suffix will mark the attribute.
Insert page break before paragraph (Only Professional)	(not active)	Places the paragraph with this style at the beginning of next page. Typically used with "Header 1" to force them to start on the beginning of a new page.
Line Spacing	1 Lines	
Alignment	Left	Alignment of the style Standard = Complete document Professional = Connected to each style
Concatenated adjacent paragraphs	(not active)	This function will delete all formatting from the original document, will override other formatting settings. Standard = Never use it Professional = Use it when for example bead text is strange formatted in original document

See [Translate](#) for more information.

4.4.6.1 Capital Prefix on/off

Select "Translation" and press "Properties". Select capital prefix on or off, this option is normally available in literary braille translation files (rule files).

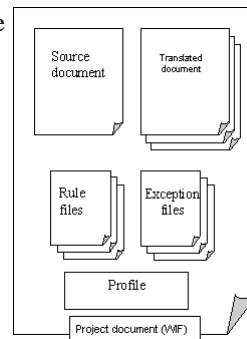


4.5 Advanced Settings

4.5.1 Saving your work in a Project

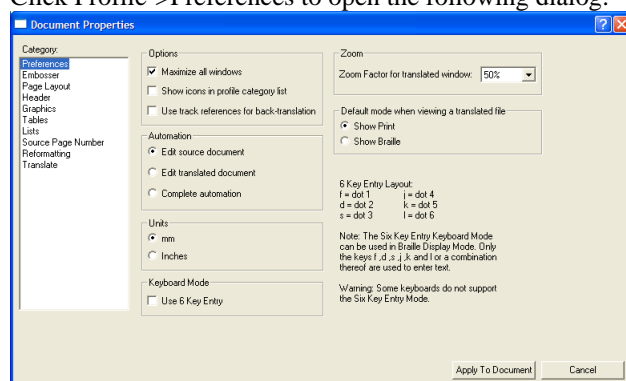
In WinBraille you will work with both the source and the translated document. Save the complete work as a project (WIF-file) using "File/Save As Project"

A project file is used to move WinBraille files from one computer to another computer even when the embosser model or paper size differs.



4.5.2 Setting up Preferences

Click Profile->Preferences to open the following dialog:



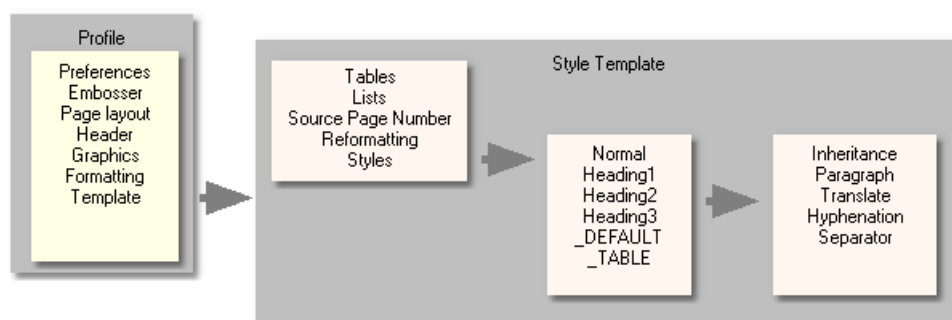
The table below describes the settings you can make and the defaults:

Setting	Default Value	Info and Options
Page Size:	Page Size Basic, 4Waves PRO = W12" x L12" Everest, 4X4 = A4 (W210 x L297 mm)	Set page size for 4X4 PRO in saddle stitch binding mode as the folded page size and not the full paper size. Example: Paper size A3, set up Page Size in WinBraille to A4.
Orientation (Portrait default)	The Landscape orientation can only be used on paper with a maximum length of 297 mm.	
Margins:	Top Margin = 1 (default) Inner Margin = 1 (default) Bottom Margin = 1 (default) Outer Margin = 1 (default)	WinBraille calculates the "characters per line" and "lines per page" and displays it in "Page Layout/ Margins"

For more information, see [Document Properties](#).

4.5.3 Using Templates

The Templates include formatting and Braille translation information.



	Standard Edition (Professional edition not checked)	Professional Edition
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Formatting Information: Tables Lists Reformatting	Complete document	Complete document
Braille Translation settings Translate, Braille translation file (rule file)	Complete document	Connected to each Style
Other Style Template Settings: Tables Lists (bullet list) Source Page Number	Complete document	Complete document
Other Style Template Settings: Reformatting Hyphenation Separation	Complete document	Connected to each Style

See [Setup Overview](#)

Default Style

The style _DEFAULT exists in all Templates. This style is created automatically when you create a new WinBraille Template. If you use a style that is not available in the currently selected template, that style will inherit its features from the _DEFAULT style.

Creating a new template

Delete the text in the WinBraille source Window, the Style information is still included in the "empty" document.

Save the new Template; File/ Save as Template/ File name (example EnFrTemplate.wtf)

See [Create a Personal Profile](#) for more examples how to create and use templates.

4.5.4 Creating a Custom Installation Package

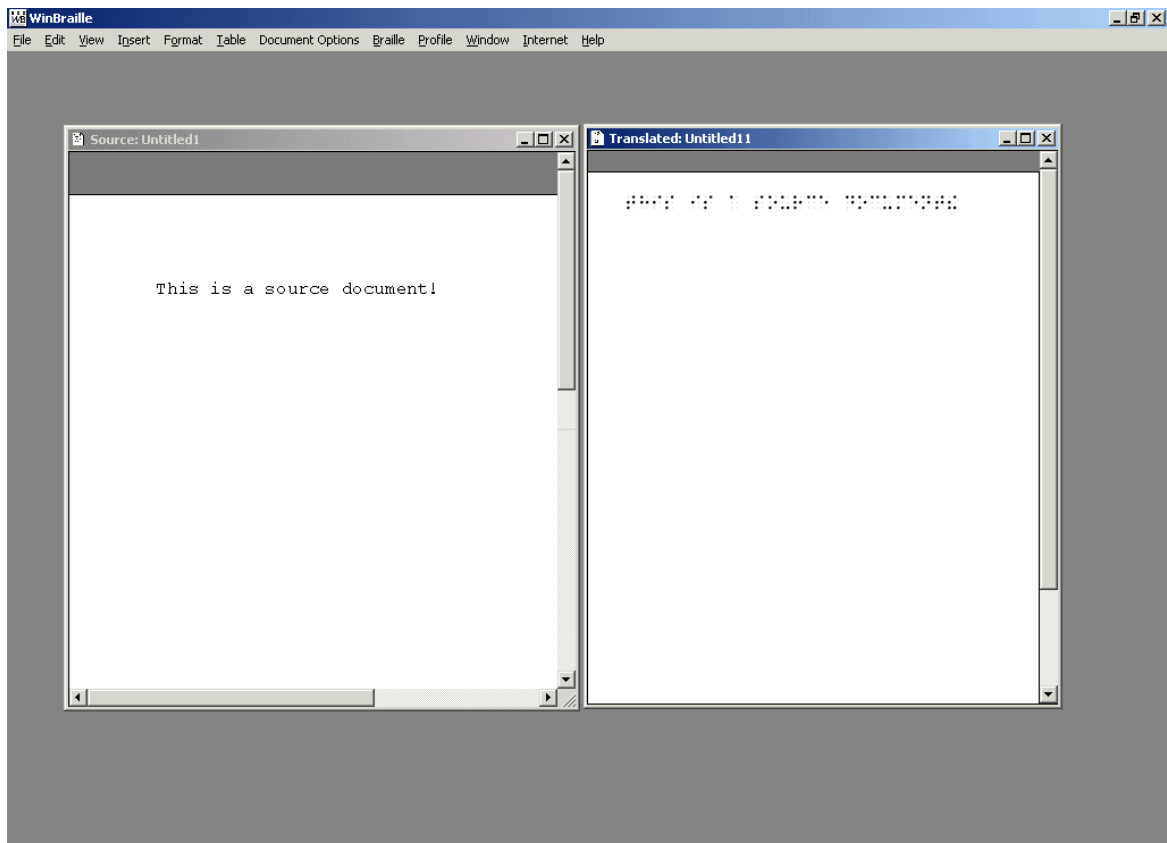
A Custom Installation Package is a package of profiles, templates, menu languages and Braille translation files used for a specific market. See also [Index Default Installation](#) for the defaults used at installation. See "Index Setup" instructions.

4.5.5 Using the Automation Modes

Edit Source Document

Set "Automation" to "Edit source document" to make WinBraille the main Braille word processor.

WinBraille will then show the original "Source document". Translate to Braille according to the default profile, by pressing CTRL+T. WinBraille will translate, format and display it.



Edit Translated Document

The document will be translated to Braille before WinBraille displays it. Both the source and the translated document is displayed, see the figure above.

Complete Automation

When you use "Complete automation", WinBraille will work in the background. It is not possible to include tactile graphics in this mode.

4.6 Distributed Installation

Only for Networks Administrators.

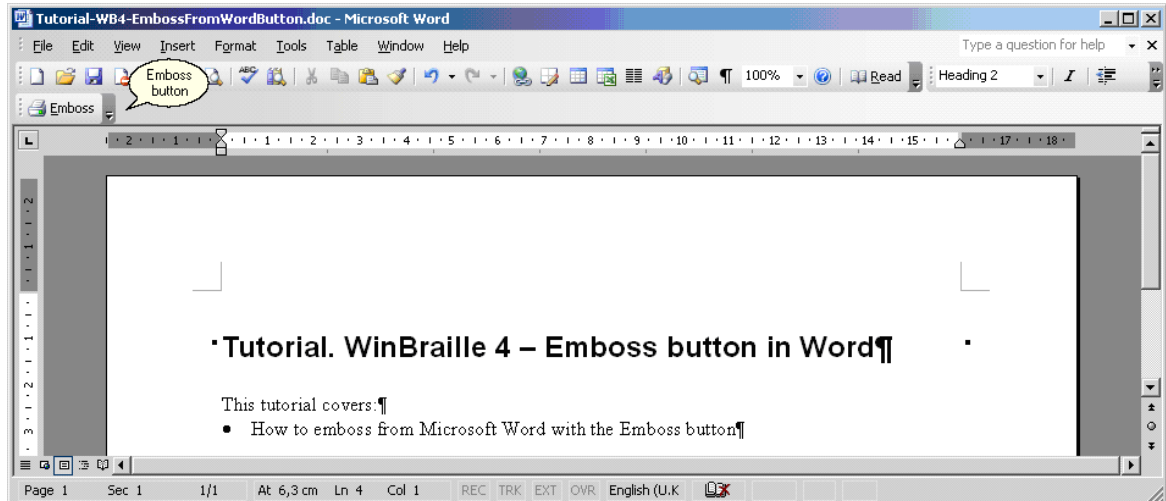
This function makes an exact copy of the WinBraille installation on several clients.

1. Download the latest WinBraille version, for example `wbeng41x.exe`.
2. Run the installation program with the parameter `/SAVEINF`:
`wbeng41x.exe /SAVEINF=file.inf`
3. Copy `wbeng41x.exe` and `file.inf` to the other machines or to a CD.
4. Go to the machines and install (from the CD) with the command:
`wbeng41x.exe /LOADINF=file.inf /SILENT`

5 Embossing

5.1 Embossing from Word

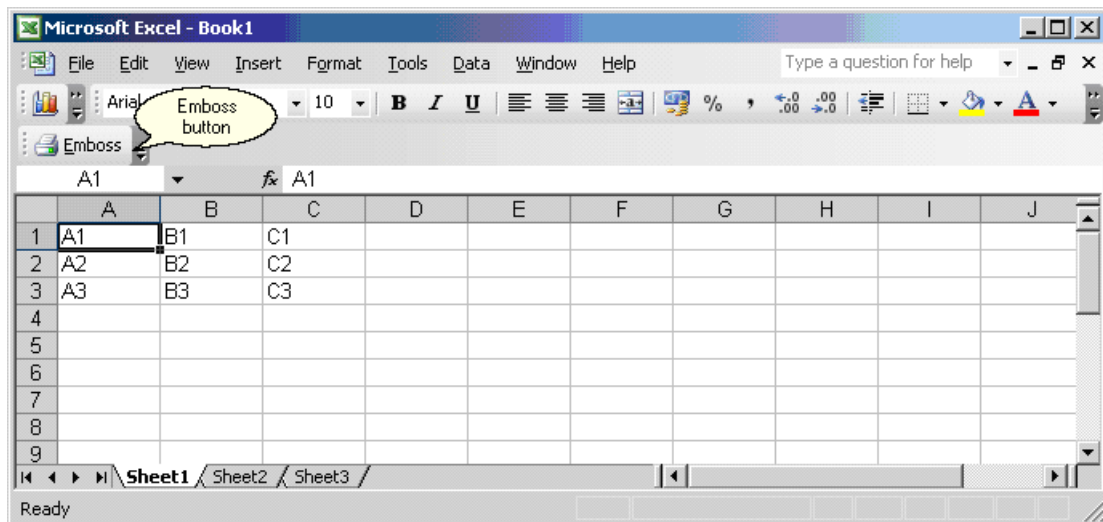
The WinBraille installation installs an Emboss button just below the tool bar in Word.



Press **Emboss** to emboss your document on an Index Braille embosser. The document will be formatted and translated according to the settings in the default profile in WinBraille

5.2 Embossing from Excel

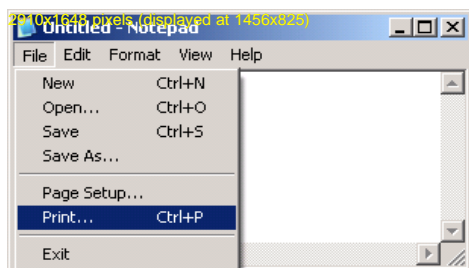
The WinBraille installation installs an Emboss button just below the tool bar in Excel.



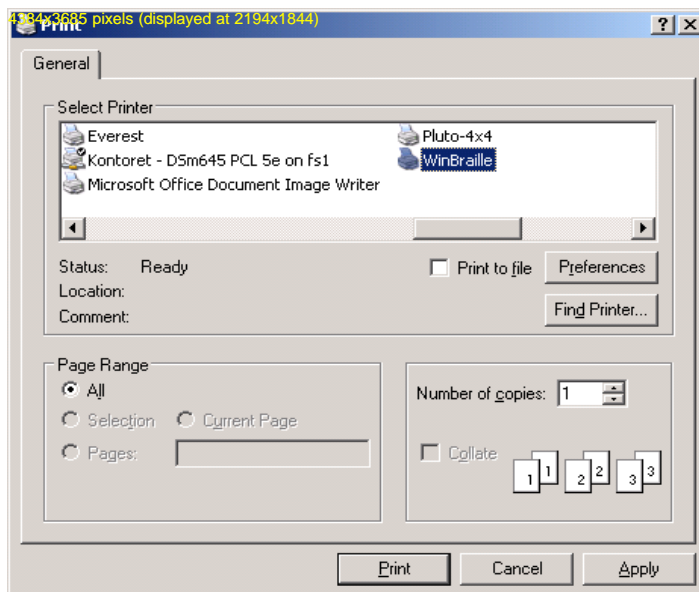
Press **Emboss** to emboss your document on an Index Braille embosser. The document will be formatted and translated according to the settings in the default profile in WinBraille

5.3 Embossing from Windows

The tutorial uses Notepad to demonstrate how to emboss from a Windows application. Select the "File"-">"Print" menu.



The standard Print dialog appears. Select the "WinBraille" printer (embosser).



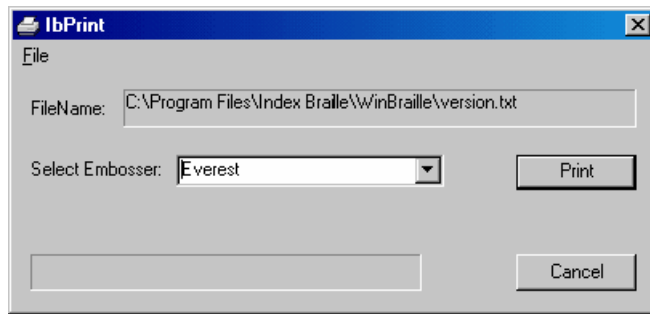
Press **Print** to emboss the document. The document will be sent to the selected embosser "WinBraille" with the WinBraille default Profile.

5.4 Embossing using IbPrint

To emboss ordinary text files to Index Braille Embosser you can use the utility IbPrint. The application can be found in the WinBraille directory. Create a shortcut to the program and place it on the desktop if you need to emboss text files directly.



To emboss a file using IbPrint just drag and drop the file on the application. Select the Embosser and press **Print**.



IbPrint do not support tactile graphic on 4X4 PRO.

5.5 Embossing using Duxbury Files

Open and emboss the translated Braille file (*.brf) from for example Duxbury. Open with the command "File"-">"Open" menu and select file type (*.brf). Press **Emboss** to emboss your document on an Index Braille embosser.

6 Tutorials

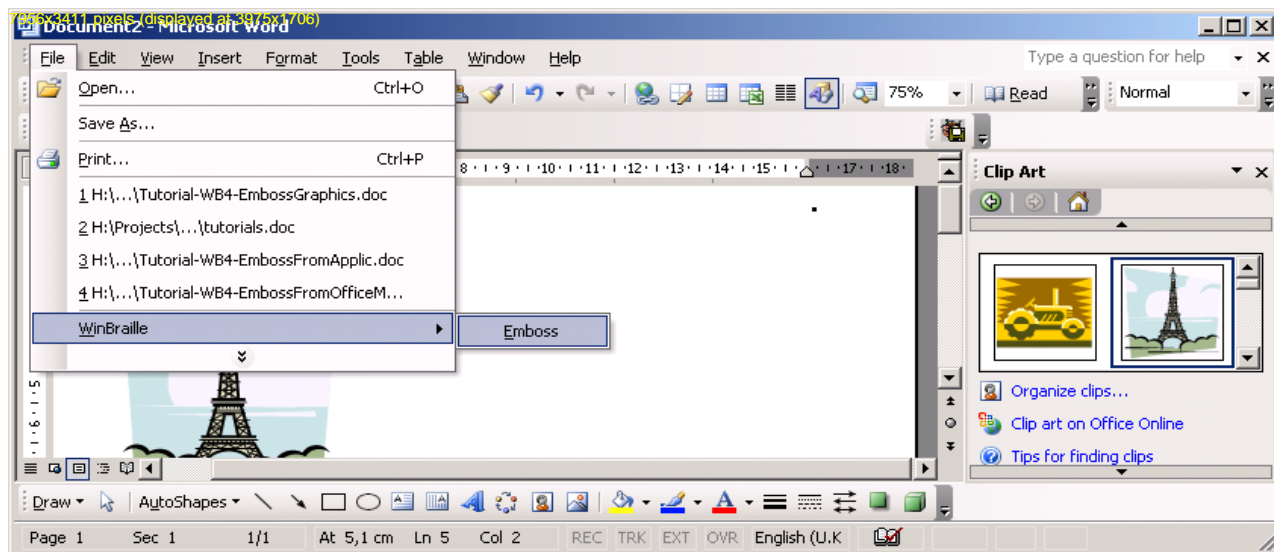
6.1 Embossing Braille with Tactile Graphics

Insert a clip art picture into a Word document

Emboss to WinBraille

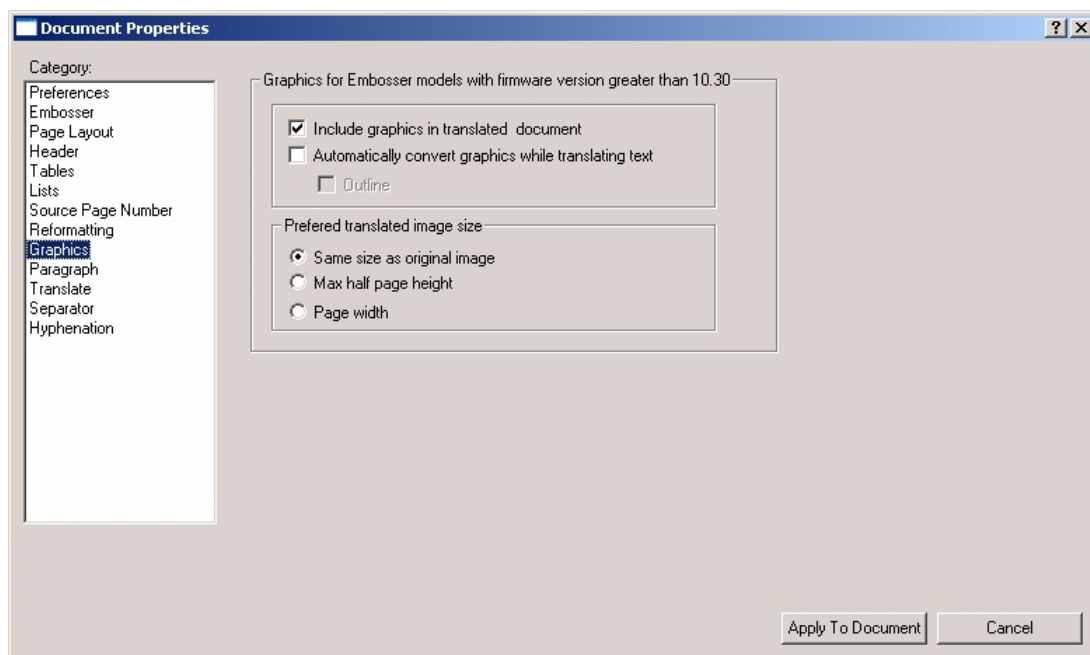
Start with WinBraille in "[Professional edition](#)".

Select "File"->"WinBraille"->"Emboss" when you are ready to emboss the document. Use the menu, not the "Emboss" button.

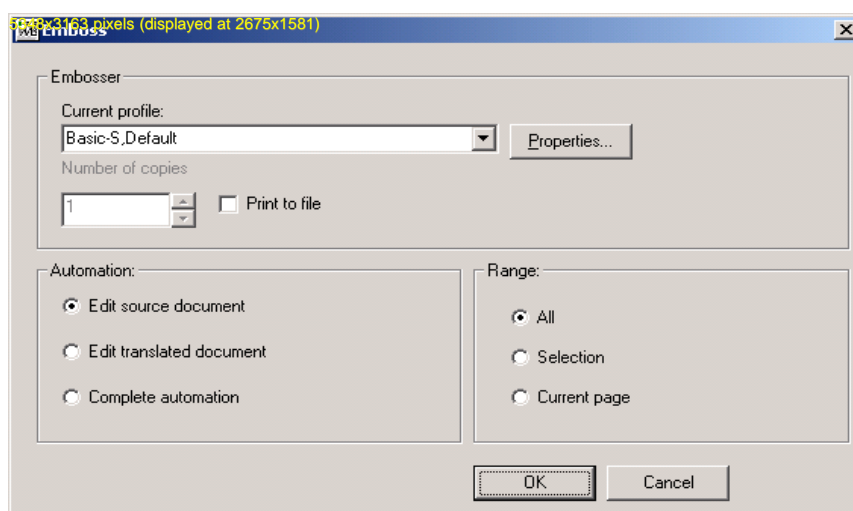


Setup the Profile to include graphic by Profile/ Shortcuts ->/ Graphics/

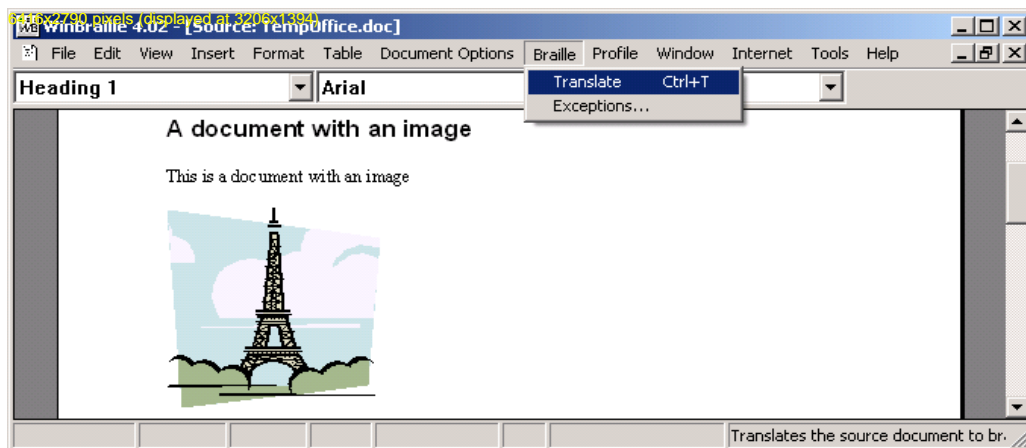
Select the "Graphics" category and check the item "Include graphics in translated document"



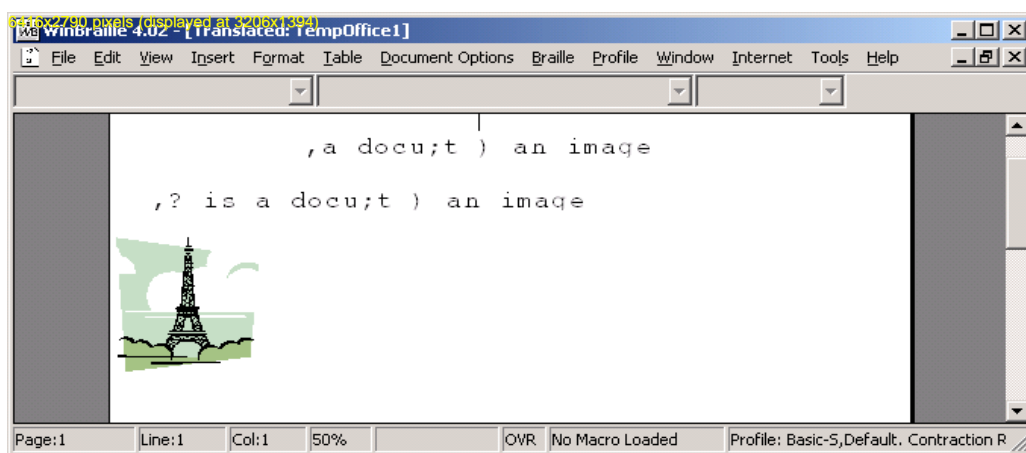
Select the Automation option "Edit source document"



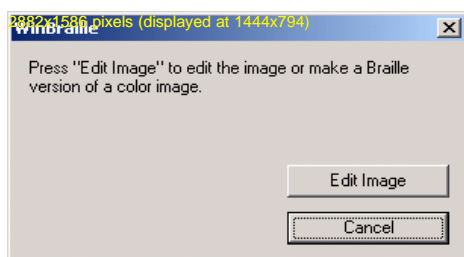
WinBraille starts and shows the source document.
Select "Braille"->"Translate" from the menu.



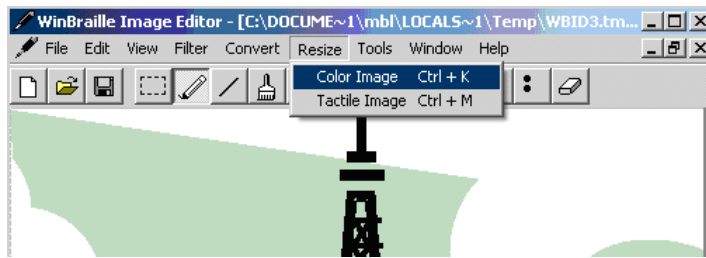
WinBraille formats and translates the document. The image will also be transferred to the translated document, but not converted. Double-click on the image. A message box pops up, select to edit the image.



Press **Edit Image**. WinBraille Image Editor starts and displays the image.

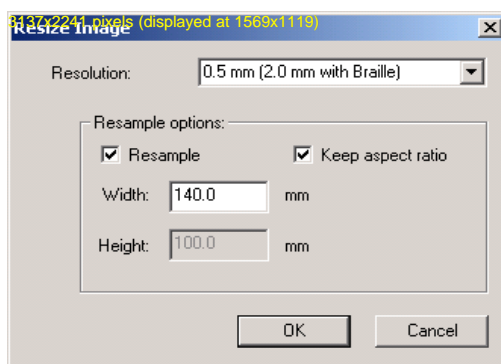


Start by setting the proper size before image conversion. Select "Resize" -> "Color Image".

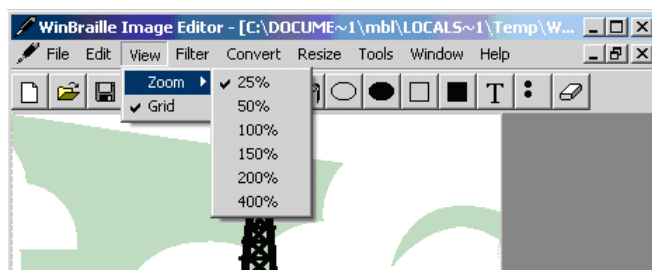


Select the following in the Resize Image dialog.

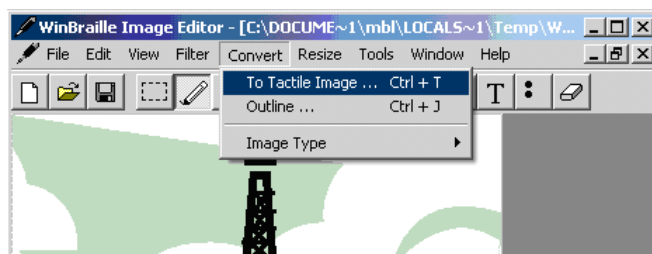
- Keep the resolution as it is.
- Check the "Resample" option.
- Check the "Keep aspect ratio" option.
- Set the width to 140 mm.
- Press **OK**.



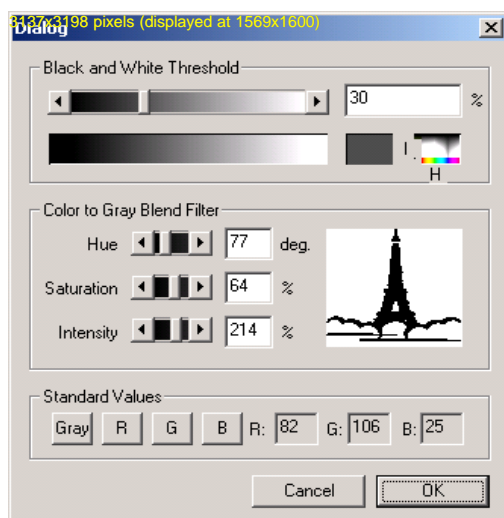
Select "View"->"Zoom", and select zoomfactor.



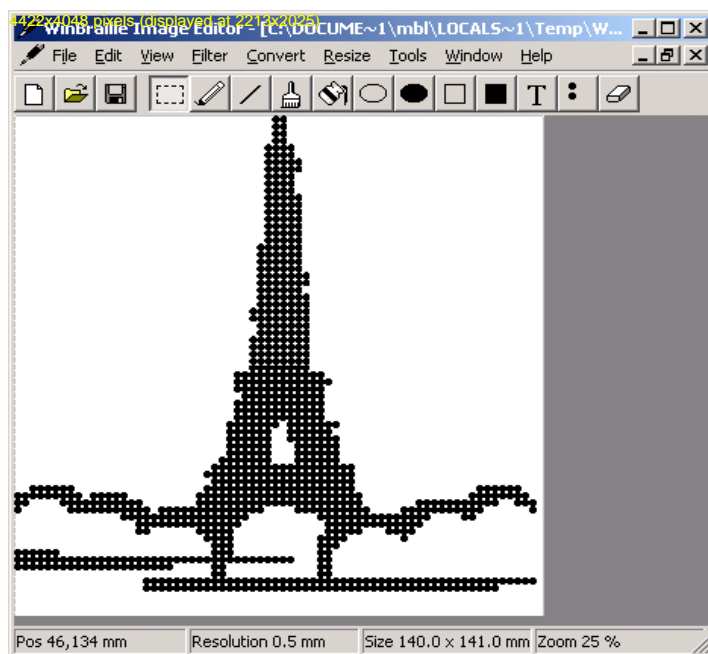
Convert the color image to a tactile image: Select "Convert"->"To Tactile Image"




Press OK. The next dialog lets you change the conversion parameters.



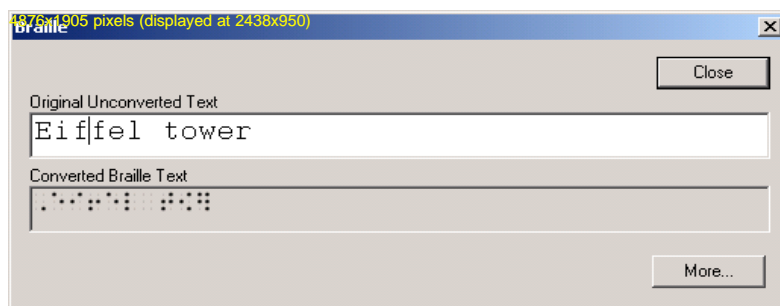
Here is the result:



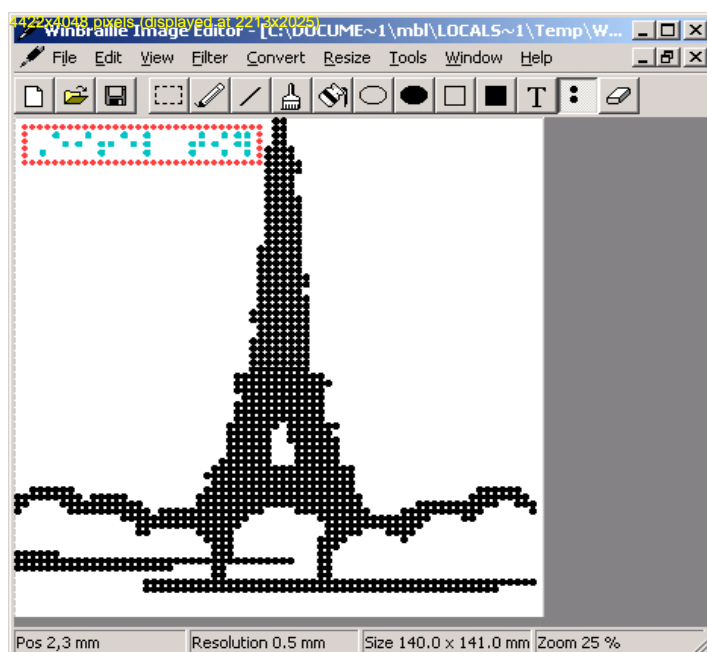
Let us enter Braille text. Select the Braille tool, either from the tool bar (the button ) or from the menu "Tools"-">"Braille".



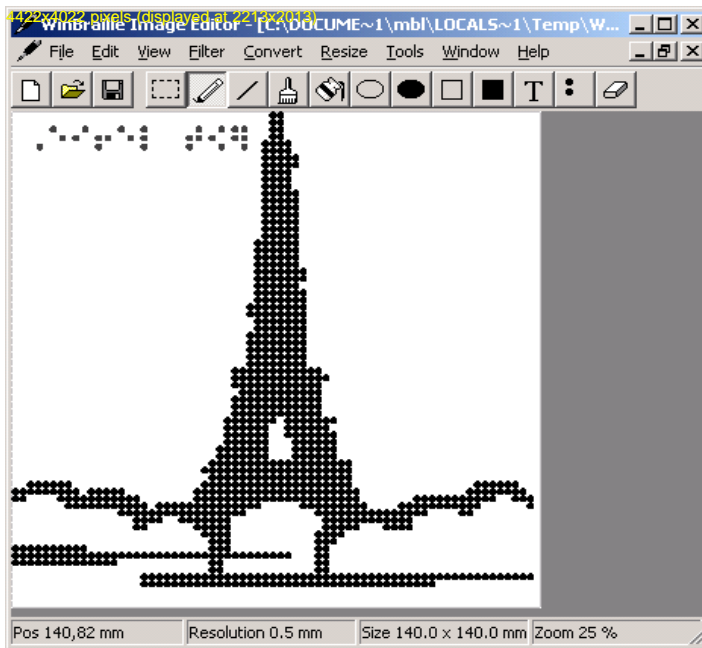
Type the text "Eiffel tower"



Hoover the mouse cursor over the image and press the left button. The Braille text appears surrounded by a red frame. Place the text at a proper location and release the button. You can replace the text as long as the Braille dialog is opened and the red frame is visible.

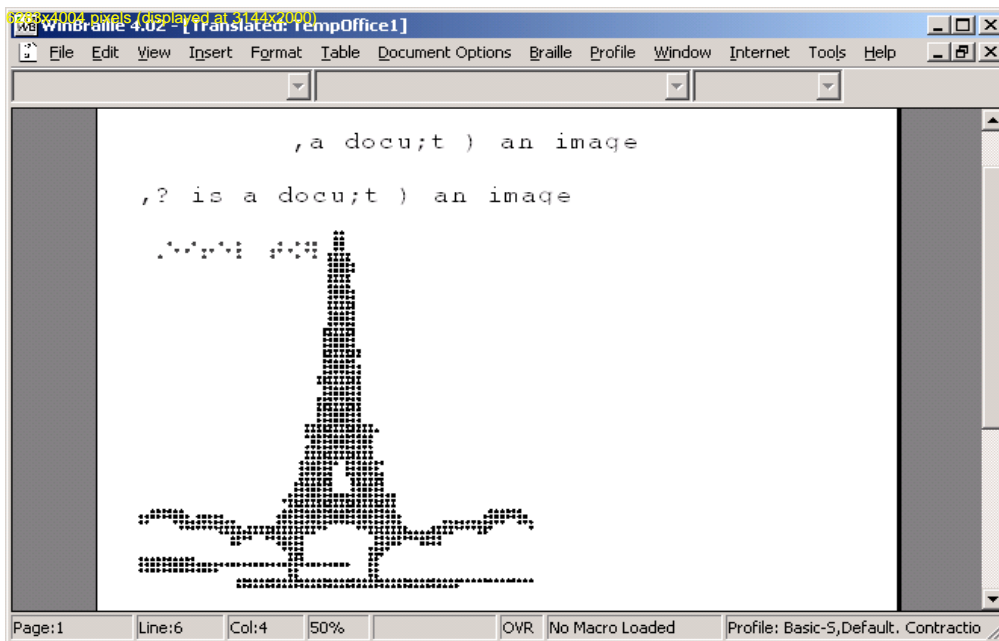


The red frame disappears and locks the text when you close the Braille dialog.



Select "File"-">"Exit" to exit WinBraille Image Editor and return to WinBraille with the converted tactile image included.

Note: Place one empty line before and after the picture to get better Braille tactile output.



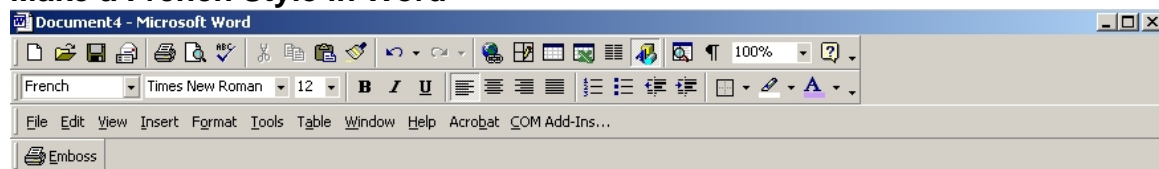
Emboss the document on your Index Braille version III embosser, firmware 10.31 or higher.

6.2 Embossing Multiple Braille Languages

Start with WinBraille in "[Professional edition](#)".

The tutorial shows how to translate several languages in the same text, in this case combining English grade 2 with French grade.

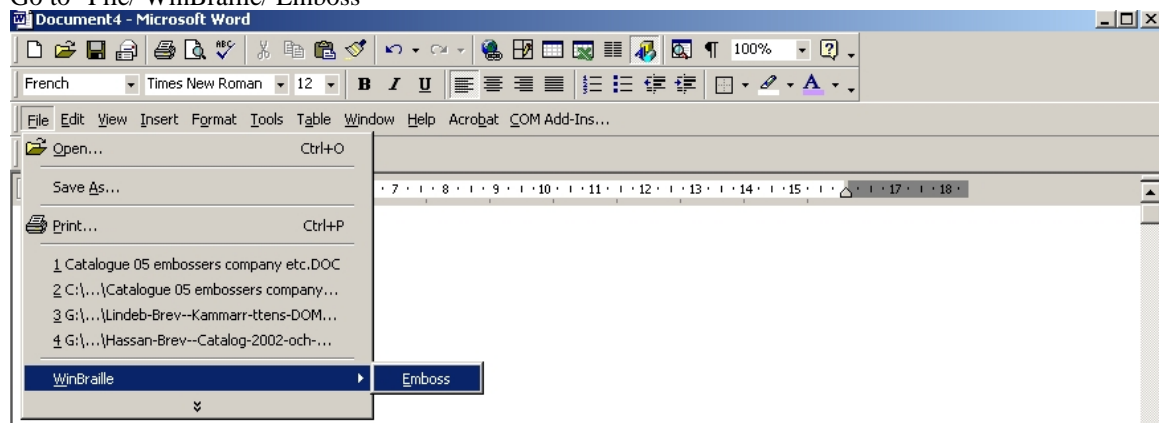
Make a French Style in Word



1. Make a document with the required styles. Example type the words "Normal" and "French".
2. Type a new style name (French) in the style Window in Word, press enter.
3. Select a Paragraph in your document and the style (French)
4. Select another Paragraph in your document and select "Normal"

Emboss the Word Document to WinBraille

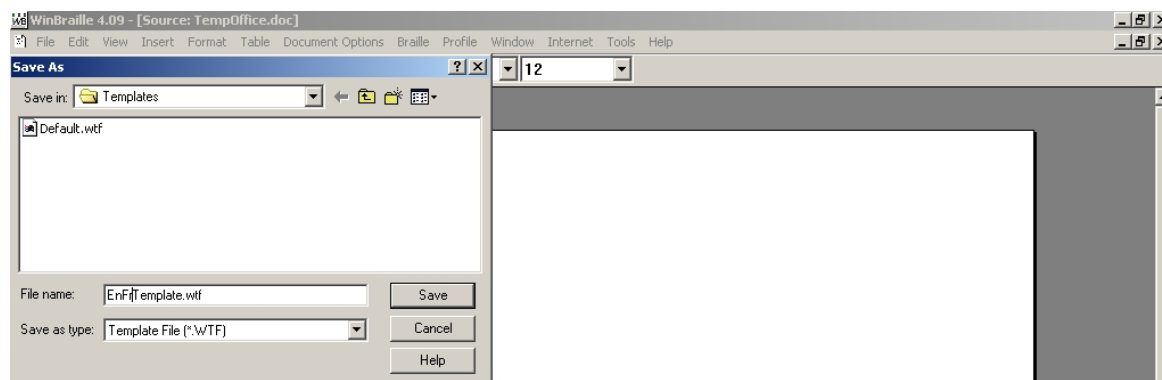
Go to "File/ WinBraille/ Emboss"



Create a Template

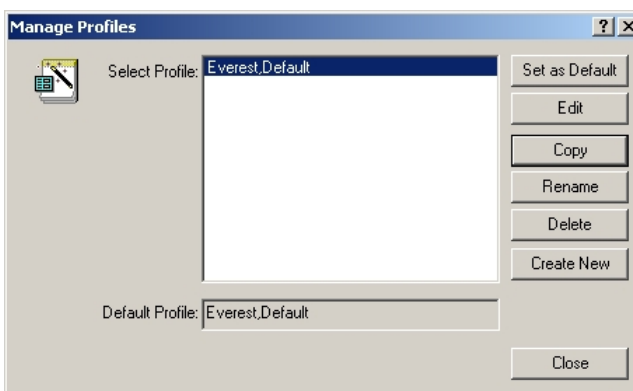
Delete the text in the WinBraille source Window, the Style information is still included in the "empty" document.

Save the new template using "File/ Save as Template/".



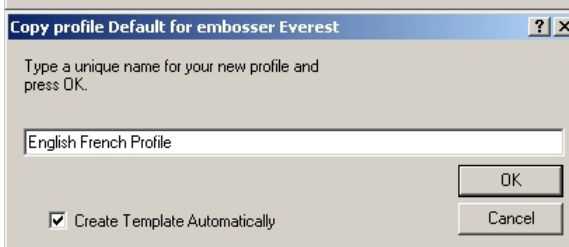
Create an English French Profile

From "Profile/ manage profile/ " select the default profile and press **Copy**.



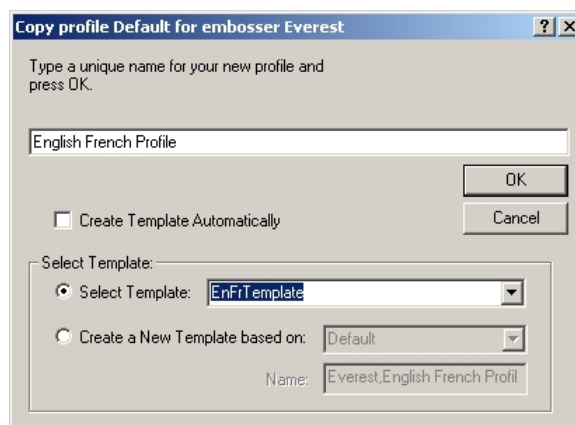
Enter "English French Profile" as the name of the new profile.

Uncheck "Create Template Automatically" to expand the window, see the next figure.



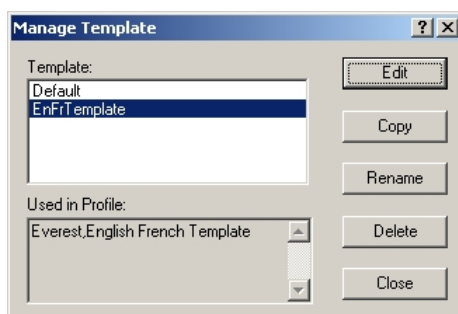
Check "Select template" and select the previously created template "EnFrTemplate".

Press **OK**.

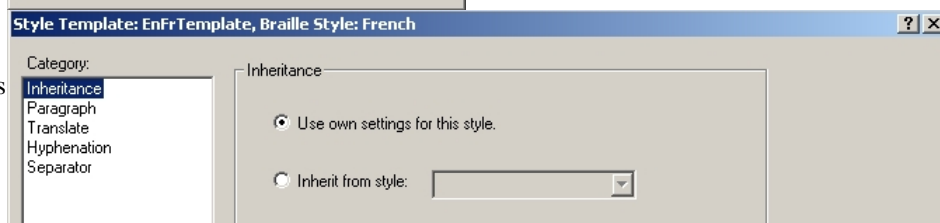


Connect the French Braille Translation to the Template

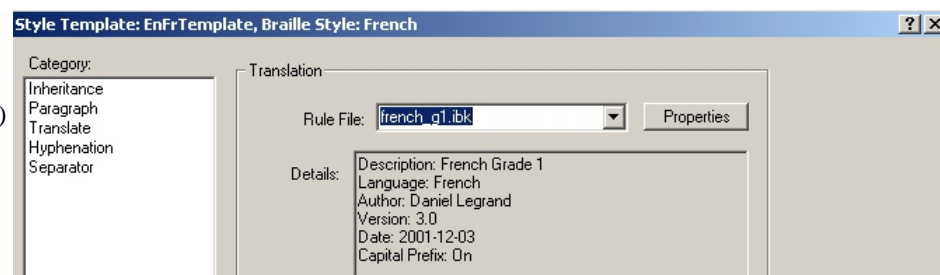
Use "Profile/Manage Template..." then select the template from above "EnFrTemplate" and press **Edit**.



Press "Inheritance" and check "Use own settings for this style"

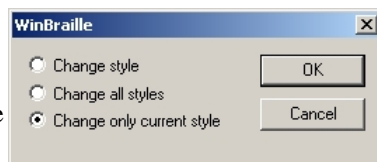


Press Translate and select a Rule File (Braille translation language and grade) in this case French_g1.ibk and press **Update Template**



During the Update Template process this message will be displayed. You have the following choices:

Select "Change only current style" (The Style with translation following French_g1.ibk)



Emboss a Multiple Language Document

1. Make a document in Word with two Paragraphs
2. Select first Paragraph and the "Normal" Style
3. Select second Paragraph and the "French" Style
4. Emboss to WinBraille
 - "File/ WinBraille/ Emboss" and select "English French Profile"
 - Press **ctrl T** to translate to Braille
 - then emboss using "File/ Emboss"
5. Resulting Braille printout
 - First paragraph = English grade 2 Braille
 - Second paragraph = French Grade 1

6.3 Creating a Personal Profile

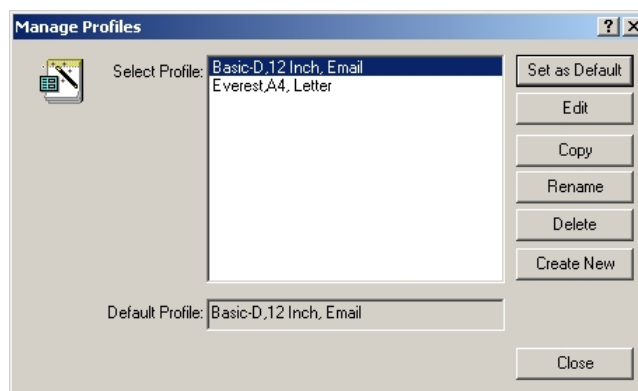
This profile is made for Braille book production on a Basic-D using 11" paper.

The Tutorial describes how to make a personal Profile with the following characteristics.

1. Paper length 11 Inch
2. Page Numbering, Odd pages, right upper corner, Even Pages Left upper corner
3. Formatting of "Header 1" with centred justification and separation line above
4. Formatting of all other text as _Default
5. Braille Translation Language american_grade2.ibk
6. Hyphenation, in all text except "Header 1"

Set WinBraille in Professional mode.

Select "Profile/ Manage Profile..."



Press **Create New**, give the Personal Profile the name "11 Inch, Book" and select the Basic-D embosser from the list.

Set Page Length to 11 Inch. Select Page Layout (this Window will automatically be displayed), select your paper size and enter margin values.

Create New Profile

Use Embosser: Basic-D Add Embosser

Type a unique name for your new profile and press OK.

Profile Name: 11 Inch, Book OK

☒ Create Template Automatically Cancel

Profile: Basic-D, 11 Inch, Book

Category: Preferences Embosser Page Layout Header Graphics Formatting template

Page Size: 11.5" x 11"

Paper size in embosser: 11.5" x 11.0"

Page size in portrait mode:

Width: 11500 Units: 0.001 inches
Length: 11000 0.1 mm

Margins:

Top Margin: 1 Bottom Margin: 1
Inner Margin: 3 Outer Margin: 6

Calculated Values: 39 characters per line. 25 lines per page.

Update Profile Cancel

Select Heading and type "%b" for Braille page number.

Profile: Basic-D, 11 Inch, Book

Category: Preferences Embosser Page Layout Header Graphics Formatting template

Odd pages (1,3,5...)

Left Header: Center: Right: %b

Left Footer: Center: Right:

Even pages (2,4,6...)

Left Header: %b Center: Right:

Left Footer: Center: Right:

Begin Page Numbering on Braille Page: 1

Start Numbering With: 1

%b = Braille Page Number
%s = Source Page Number
%u = Source Sub Pages
%d = Date and Time, where the format is: %Y-%m-%d.%H:%M

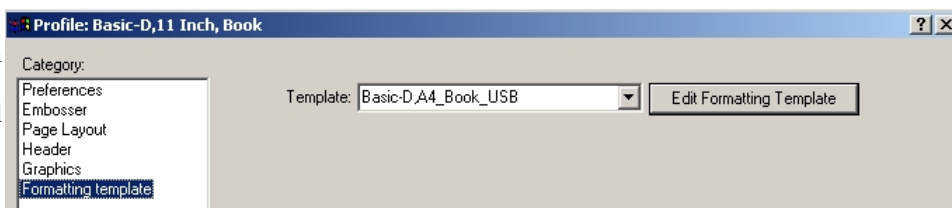
Date and Time Format

%Y = Year (1900 - 2199)
%m = Month (01 - 12)
%d = Day of month (01 - 31)
%H = Hour (00 - 23)
%M = Minute (00 - 59)

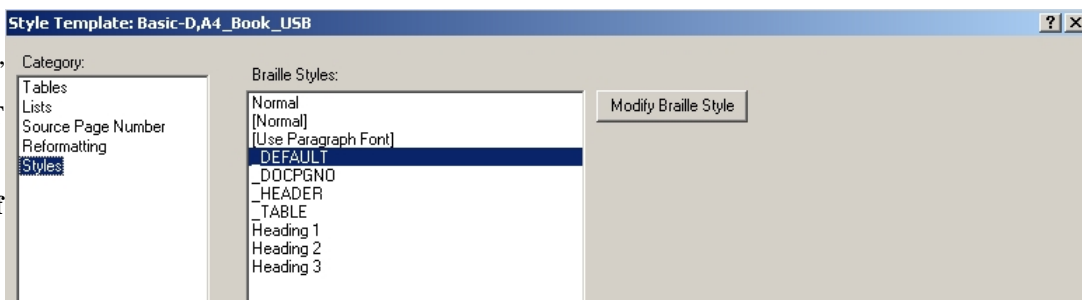
Format Header and Footer according to Style: DEFAULT

Update Profile Cancel

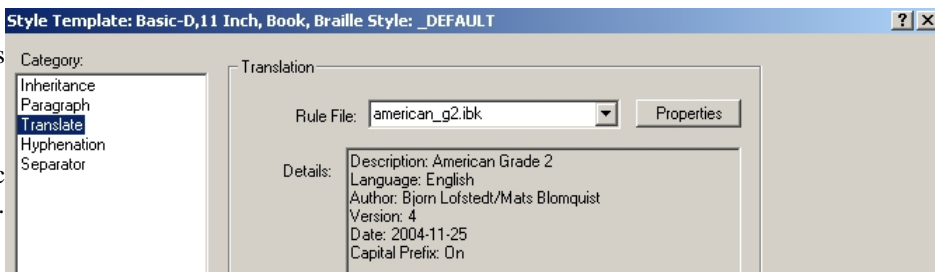
Select
"Form
att
ing
Tem
plate"
and
press
**Edit
Form
att
ing
Tem
plate**

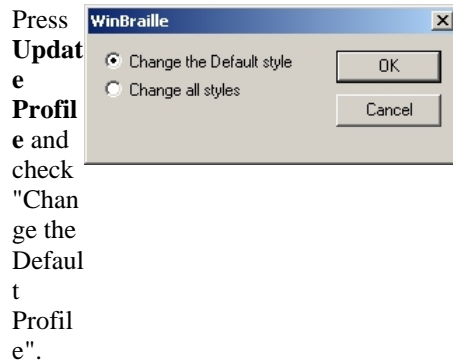


Select
"Style,
_DEF
AULT"
and
press
**Modif
y
Brail
le
Style.**
Check
"User
own
setting
s for
this
style"



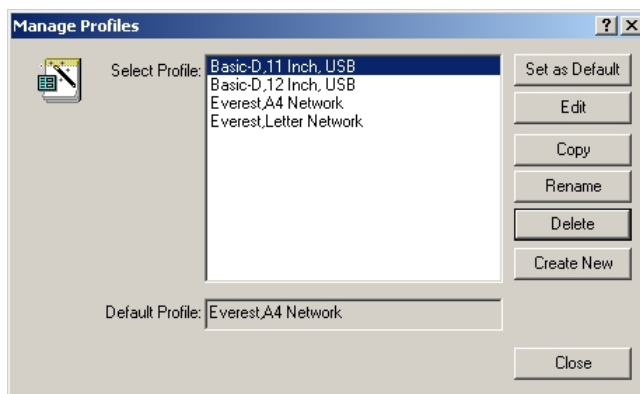
Select
"Trans
late"
and
select
americ
an_g2.
ibk
from
the list
Select,
Hyphe
nation
,
check
"Wrap
lines
with
less
than
3".





6.4 Using Profiles

Typically you use profiles to define the settings for a specific Index embosser. The most frequently used settings are alternative paper sizes and Braille translation languages (rule files).



Here follows an example how to setup and use a profile.

Install Everest and Basic Embossers

Start by installing two embossers using Add Printer Wizard (or use two already installed embossers).
Install Everest as a Network Printer in Add Printer Wizard.
Install Basic-D as a USB Printer in Add Printer Wizard.

Create Two Profiles per Embosser

Follow the example [Create a Personal Profile](#) to create the following profiles:

- Basic D 11 inch, USB
- Basic D 12 inch, USB
- Everest, A4, Network
- Everest, Letter, Network

Edit the Personal Profiles

Setup your personal Profile values to the specific embosser. Adjust the paper length.

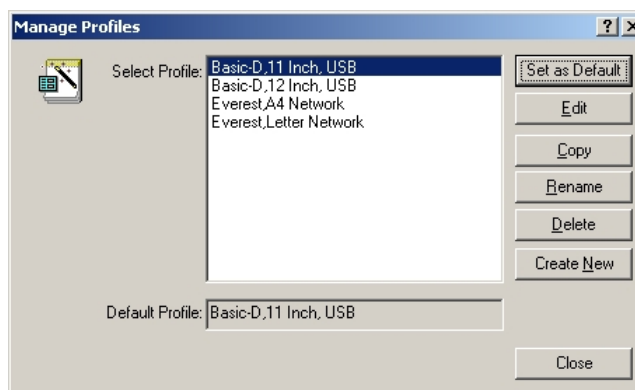
Adjust paper length on Basic-D to 11 inch in the Profile Basic-D, 11 Inch, USB.
- Select "Profile/Manage Profile" /select Basic-D, 11 Inch, USB/ and press **Edit**
- In the "Page Layout" (Page Size) select 11 Inch paper and press **Update Profile**

Repeat this setup sequence to personalize the other 3 profiles.

Set as Default Profile

Choose one of these default profiles (the Basic-D, 11 inch) as the default used without any active selection.

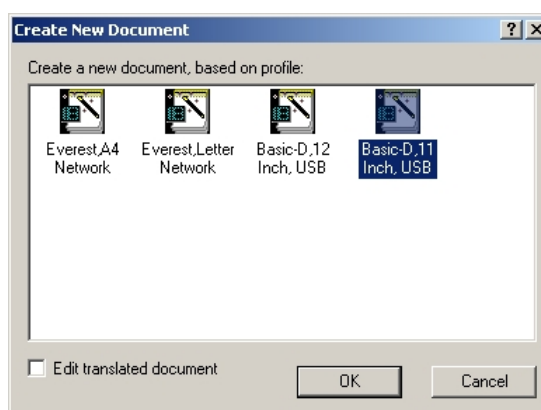
Select "/Profile/Manage Profile", press **Set as Default**



Use the Profile

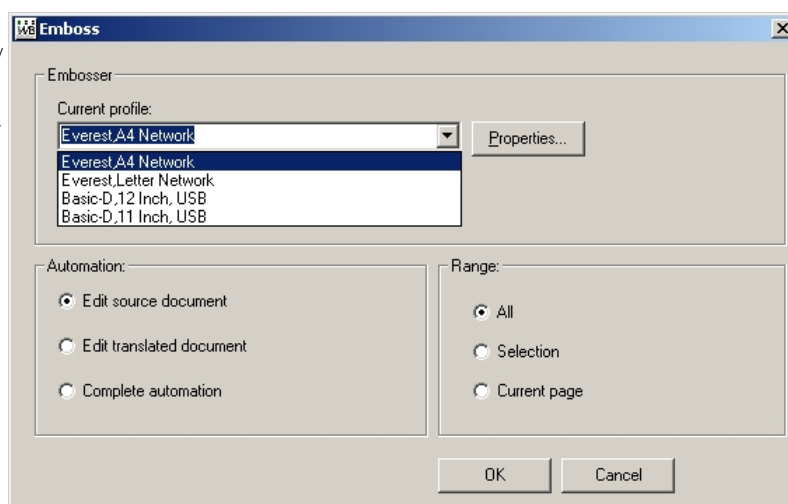
Select profile in the print dialog in "File/ WinBraille/ Emboss" or when you open a new document in WinBraille.

Example: Select a profile when you create a new document in WinBraille



Select a profile when you emboss from Word or Excel, select "File/ WinBraille/ Emboss" in the print dialog that pops up and press OK.

When you emboss from other Windows application the default profile will be used.



7 Tools

7.1 Index Setup

Start Index Setup from the Windows Start menu: **Start/ Programs/ Index Braille/ WinBraille/ Index Setup**

The Index Setup program provides the following functions:

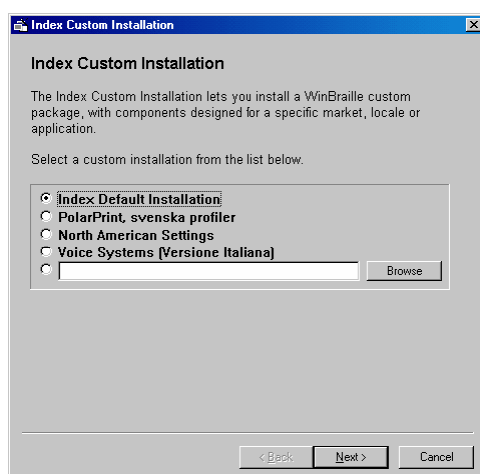
1. Install a Custom Installation Package from the Index CD, language and distributor specific.
See [Installing a Custom Installation Package](#).
1. Make a backup of your personal WinBraille setting.
2. Recover your personal WinBraille settings.
3. Make a Distributor Custom Installation Package, including contact details and logo.
See [Creating a Custom Installation Package](#).

7.1.1 Version

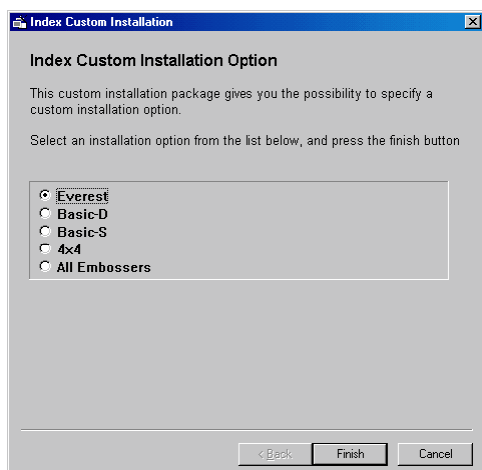
Version:2005-02-02

7.1.2 Installing a Custom Installation Package

A Custom Installation Package is a package of profiles, templates and contraction rules that you can select for a specific market, locale or application. Run Index Setup to install a default profile for your installation of WinBraille. Select one of the available packages, or browse to the location of your custom installation package.



Most packages have more than one option. Press **Next** to open the selected packet and select one of the package's options.



The "Index Default Installation Package" contains five options, one for each embosser model and one package with profiles for all Index Embossers. If only one model has been installed, select that model. If more than one model has been installed, select "All Index Embossers". Press **Finish** to end the custom installation.

See [Default Profile Settings](#) for the settings in the "Index Default Installation Package".

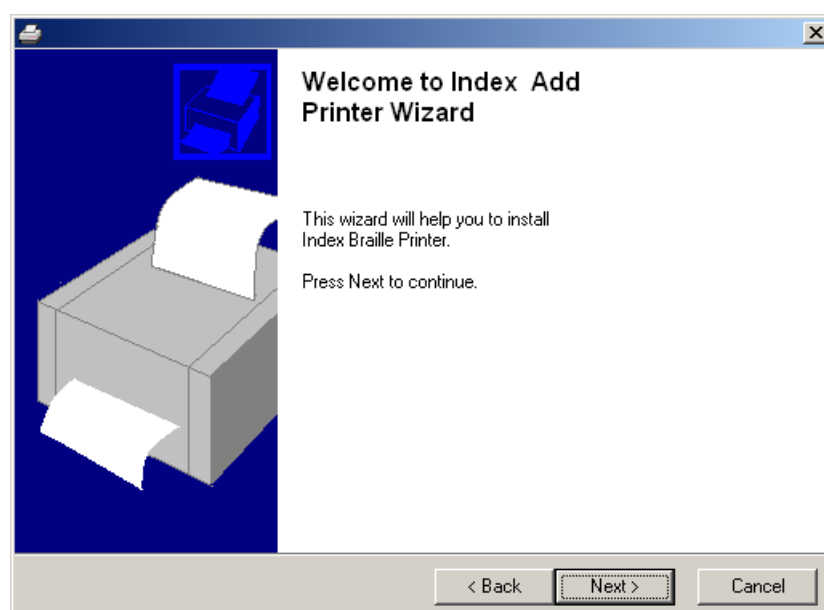
7.1.3 Creating a Custom Installation Package

Follow the following step by step description to create a custom installation package:			
	Task	Action	Comments
1	Use WinBraille to set up a Profile, a Template, a Translation File and an Exceptions list on your computer.		
2	Check your personal settings before starting the Index Setup program. It is not possible to make any changes to the WinBraille settings during the creation of a personal custom installation package.		
3	Start	Index Setup program	C:/ program/ Index/ WinBraille/ Index Setup
4	Create	Select "Create a New Custom Installation Package" Press Next	Create a new package.
5	Welcome	Press Next	
6	Custom Installation Package	Select "New Package"	
7	Type a Package Name	Type a file name Press New	File name convention "country distributor.wcp" Insert the file name of your personal setup file.
8	Type a name	Type a package name Press Next	File name convention "country distributor", same as the file name
9	Save your Custom Installation package	Press Next to save the package	Save your Custom Installation package
10	Retailer Information	Select "No retailer information" Press Next	Retailer information is added by Index support

11	Package Option	Select type of "Multi Option Package" Press Next	Multi Option Package = Several embossers are installed in the package, selectable when installing the custom Installation Package Multi Option Package (not tagged) = A complete package without selection during installation
12	New Option	Type "Option Name" Press Next	Name Convention: "Embosser Name", example Everest USB, 4X4 PRO Network
13	Include Profiles in the Setup	Click to Select Profile (-s) Press Next	The installed profiles in WinBraille can be selected
14	Save Custom Installation Package	Select default profile Press Save	
15	Repeat for more embossers	Press Back until the "Page Option" (three times) Repeat step 11-14	To create similar packages for more embosser models:
16	Saved Custom Installation Package	Press Finish to save the package	Package saved at: C:\programs\Index Braille\WinBraille\ Install\ "file name.wcp" (country company.wcp). Select your "package name" in Index Setup to re-install your personal WinBraille settings.

7.2 Index Add Printer Wizard

The Index Add Printer Wizard is available from the Tools menu in WinBraille and also from the Program Folder.



7.2.1 Installing an Embosser locally

Installing an embosser locally

The installation process guides you through the installation of the embosser. This is performed with the help of the Add Printer Wizard. (You can run this wizard later from within WinBraille any time if you need to install another Index Embosser). The wizard contains a couple of pages. Read the information on each page, enter requested information, and press **Next**. You need the following data about your embosser to finish the wizard:

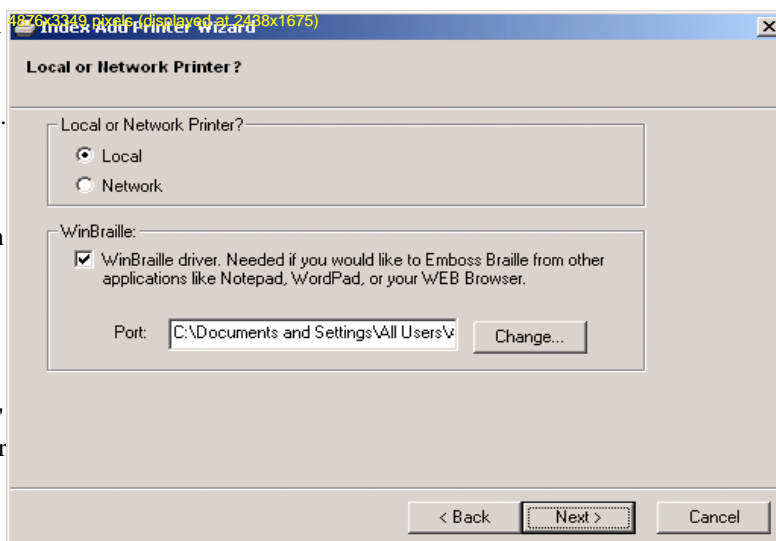
- The embosser model (Everest, Basic-S, Basic-D, 4x4 PRO or 4Waves PRO)
- Where you have connected the embosser, i.e. the port (Serial, Parallel, USB, Network or TCP/IP)
- If you connect the embosser through a TCP/IP port, you also need to enter the embosser's TCP/IP address

7.2.1.1 Installing an embosser connected to a local parallel port

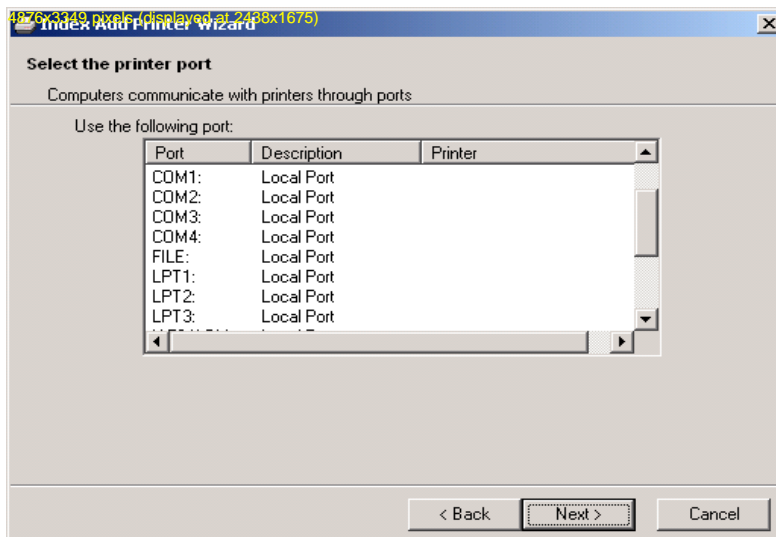
Press **Next** to go to the second page. In this example the embosser shall be connected to the local LPT1 parallel port. Check the "Local" selection.

The **WinBraille driver** option is marked per default. Do not change the WinBraille driver port unless agreed with Index support.

Note: The "WinBraille driver" selection is greyed if the driver is already installed on the computer. Press **Next**.



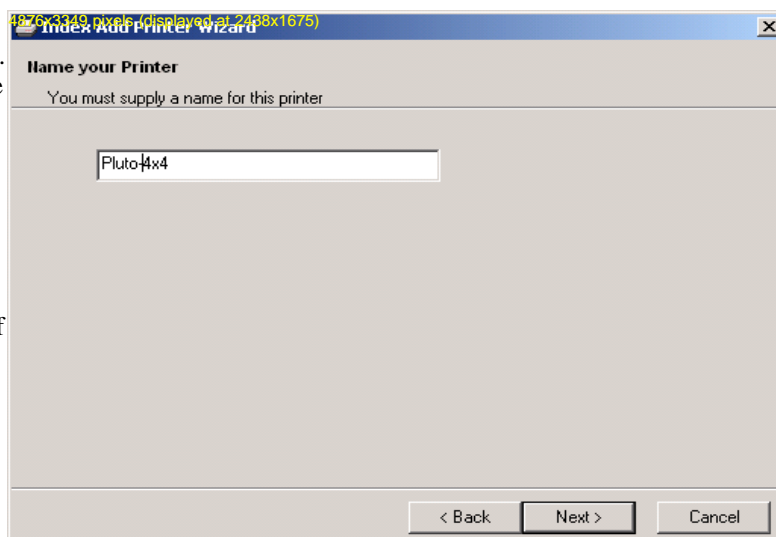
Select the printer port on page three. Select LPT1 and Press the **Next**.



The fifth page gives an option to name the embosser. The default name is the same as the model. Type a suitable name for your embosser, in this example "Pluto-4x4"

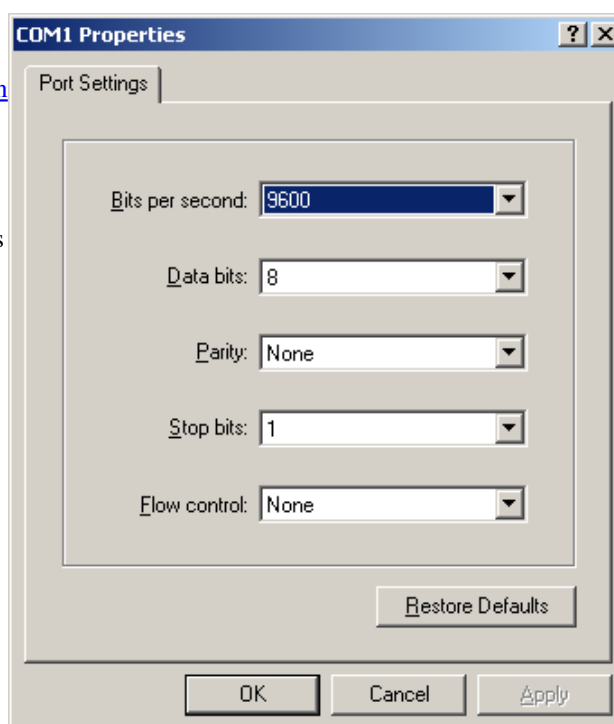
On page six, you can decide whether you want to share your embosser with others. If you decide not to share, leave the settings as they are and press **Next**.

The last page shows the settings you have made for your embosser. Press **Finish** to complete the installation. The drivers will now be copied and installed. This can take a while.



7.2.1.2 Installing an embosser connected to a local serial port

To connect the embosser to one of the serial ports follow the description for [Installing an embosser connected to a local parallel port](#) except for the selection of the port which should be a serial port in the system. After the installation is finished, open the Printer folder and select "Properties" for the installed Embosser. Select the "Port" tab and press the "Configure Port" button.



The communication parameters differ between Version III embossers and version II embossers (Embossers with serial number below 30 000). For recommended values see below

Parameter	Version II	Version III
Baud rate	9600	38400
Data bits	8	8
Parity	None	None
Stop Bits	1	1
Handshake	Hardware	Hardware

Note!

The communication parameters in the embosser and in this dialog must match. After setting up the driver, verify that the settings in the embosser consist with the settings made in the port configuration dialog. From the embosser front panel, press **Setup**. Press **Group** until the Embosser echoes "Communication". Use **Item** and **Value** to change the settings according to the settings in the Port configuration dialog.

For version III Embossers, the embosser item "Serial Mode" must be set to "Print".

7.2.1.3 Installing an embosser connected to a local USB port

Follow the description for [Installing an embosser connected to a local parallel port](#) except for the selection of the port which shall be the USB port. The behavior of the Index Add Printer Wizard differs depending on if a USB port exist in the system before the installation start or not.

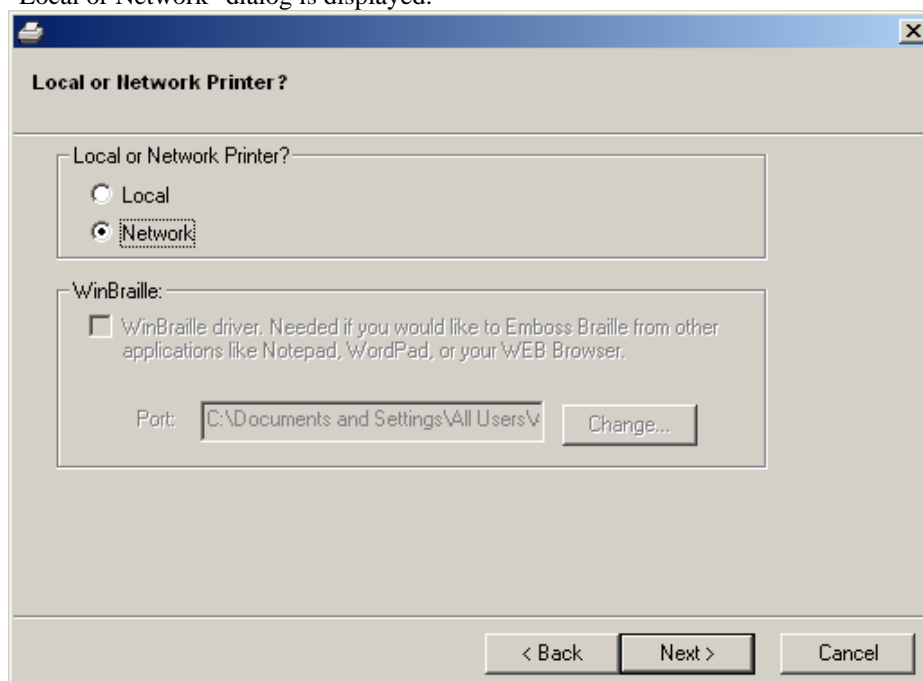
On windows 2000/XP the installation is straightforward. Depending on which operating system you have Windows sometimes need to know where to find the driver location. In that case always select the "..\Program Files\Index Braille\WinBraille" folder and follow the instructions.

7.2.1.4 Installing an embosser to a network port

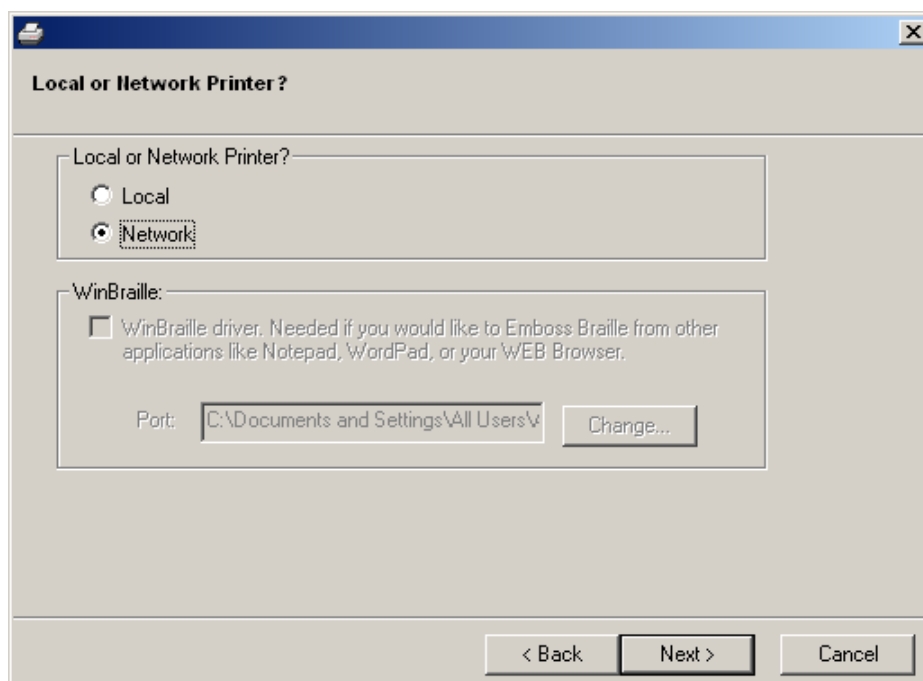
Follow the description for [Installing an embosser connected to a local parallel port](#) except for the selection of the port which should be the TCP/IP port that exist in the system. When the installation is completed, run the Index Embosser Utility to update the IP settings in the Embosser. See also the Index Braille Embosser Manual.

7.2.2 Installing a Network embosser

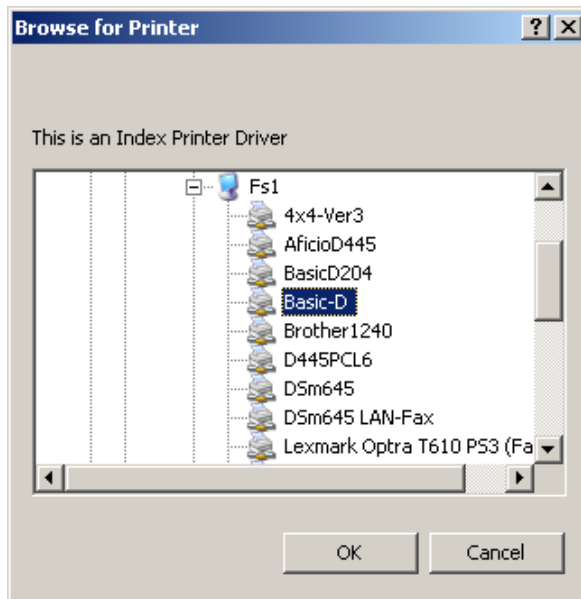
Installing a network printer on a client requires that the shared printer has already been installed on a server or a Workstation. For more information see "The Printer sharing dialog". After the "Welcome" dialog the "Local or Network" dialog is displayed.



Check "Network" and press **Next**.



Browse for your printer and press **OK**. Note that it is only possible to select Index Embosser printers. **OK** will be disabled for all printers except Index Braille Printers



After the Installation is finished check that the Embosser has appeared in the Printer folder. Note the line below the printer, indicating that it's a network printer.



7.2.2.1 Embosser connected to Windows 2000 Workstation or Server

If the printer is connected to a Windows 2000 Workstation or Server, you should not install WinBraille. Instead you should install a local Index Braille Printer that is shared to the Network users. Run the Index Add Printer Wizard and select the driver from the Drivers folder on your Index CD.

7.2.2.2 Embosser connected to a Print Server

If you want to connect an Index Braille Printer to a Print Server in your Network you must first install and configure the Print Server. To install and configure a Print Server please refer to the documentation for the Print Server.

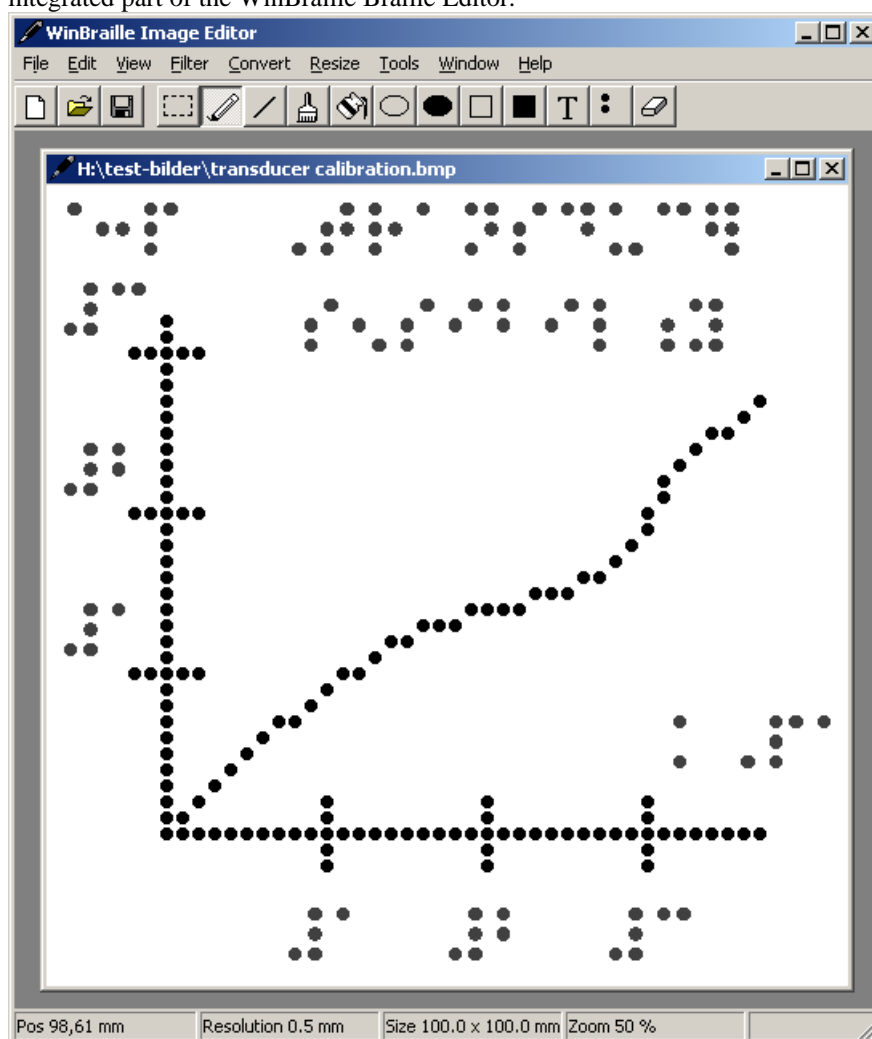
When you have added the Print Server as a local port on a Server, Workstation or Client you can proceed with the printer installation as per the appropriate section above depending on the operating system. During

the local installation of WinBraille you should be able to see the Print Server in the list of local ports.

7.3 WinBraille Image Editor

7.3.1 Introduction

The WinBraille Image Editor is a tool for creating and editing tactile images. It is distributed as an integrated part of the WinBraille Braille Editor.



7.3.2 Overview

This document covers:

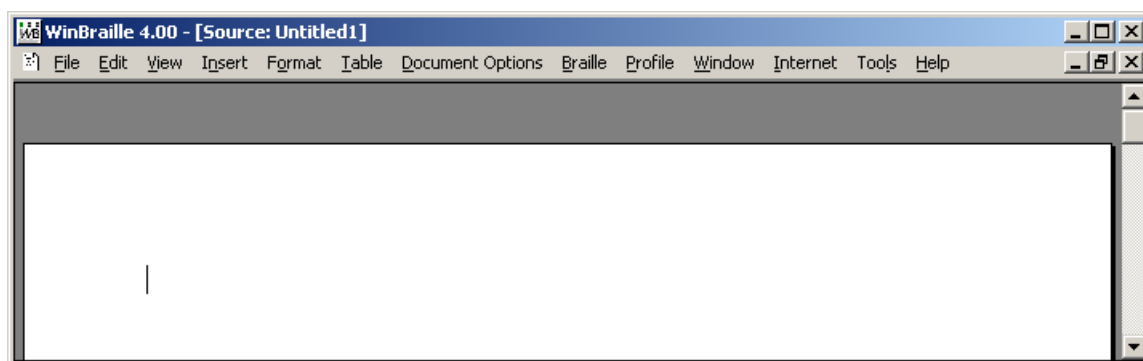
- How to use the image editor from a document in WinBraille
- The image editor as a stand-alone tool
- Working with the WinBraille Image Editor

- Reference

7.3.3 How to use the editor from a document in WinBraille

WinBraille documents (starting with WinBraille version 4) can contain images. You can for example open a Word document, or emboss a document from Word, and transfer all images to the embosser. You have to convert most images to Braille before you emboss them, though. Here's where the Image Editor comes in.

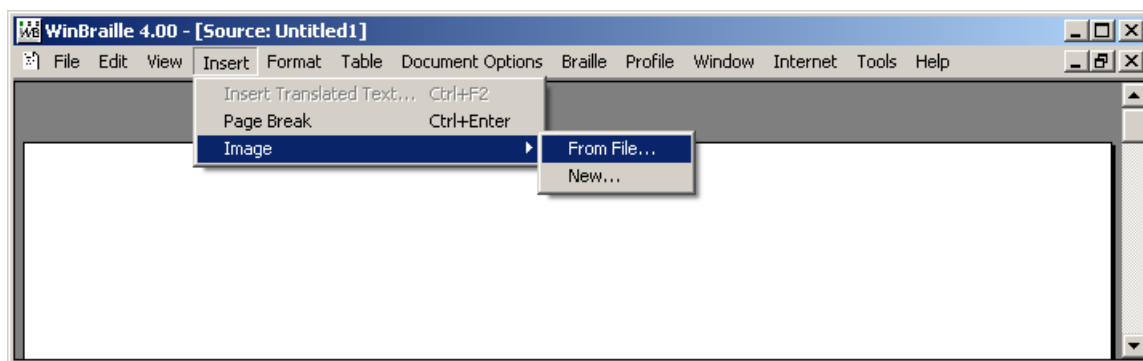
This section describes how you can use the Image Editor to convert your images to a suitable form so you can emboss them on your embosser. First, start WinBraille and create a new empty document. We presume in the rest of this section that you are familiar with WinBraille and know how to create a new document, know how to translate the document to Braille, and know how to send it to the embosser.



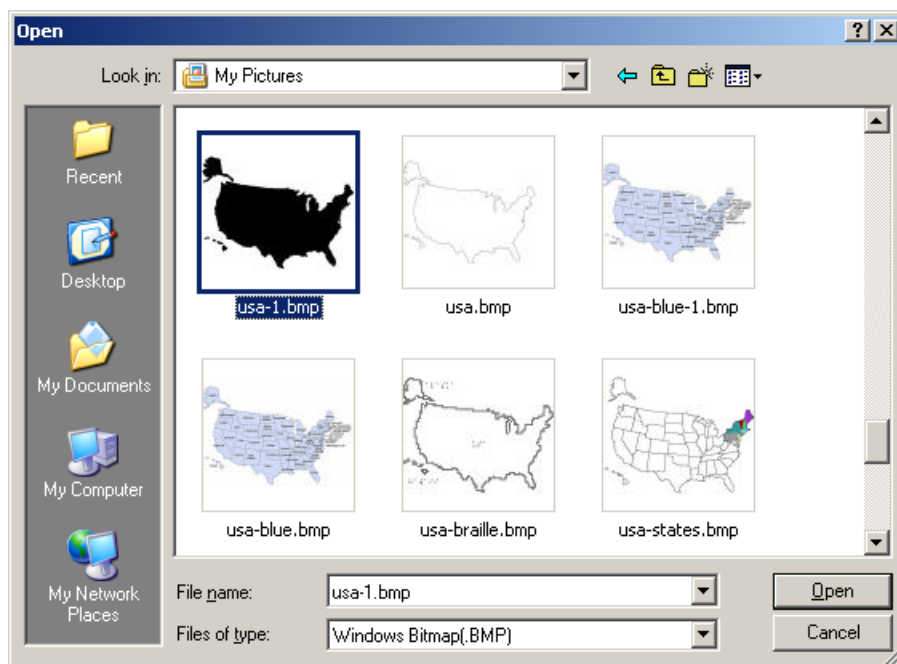
You create or insert images in the source document. You have no option to insert new images into the translated document once the document has been translated to Braille.

7.3.3.1 Insert an image in a document

You insert images with the "Insert - Image - From File" menu option in WinBraille. The image will be placed in the document at the current cursor position. Note that you can only insert images in the source document.



Browse to a folder with images and select an image.



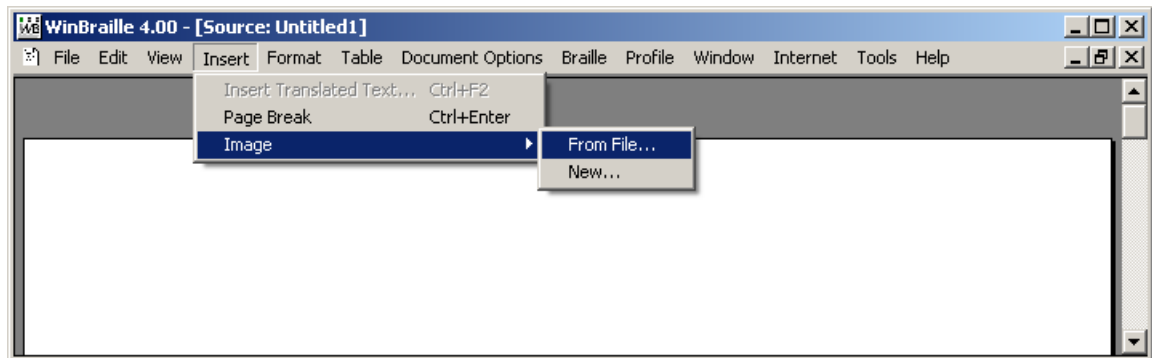
The image might not fit properly in the source document, but remember that the embossed paper size and image size differ, some times considerably, from the sizes in the source document. You will probably resize the image later to get a size that is more suitable to be embossed as a Braille image.



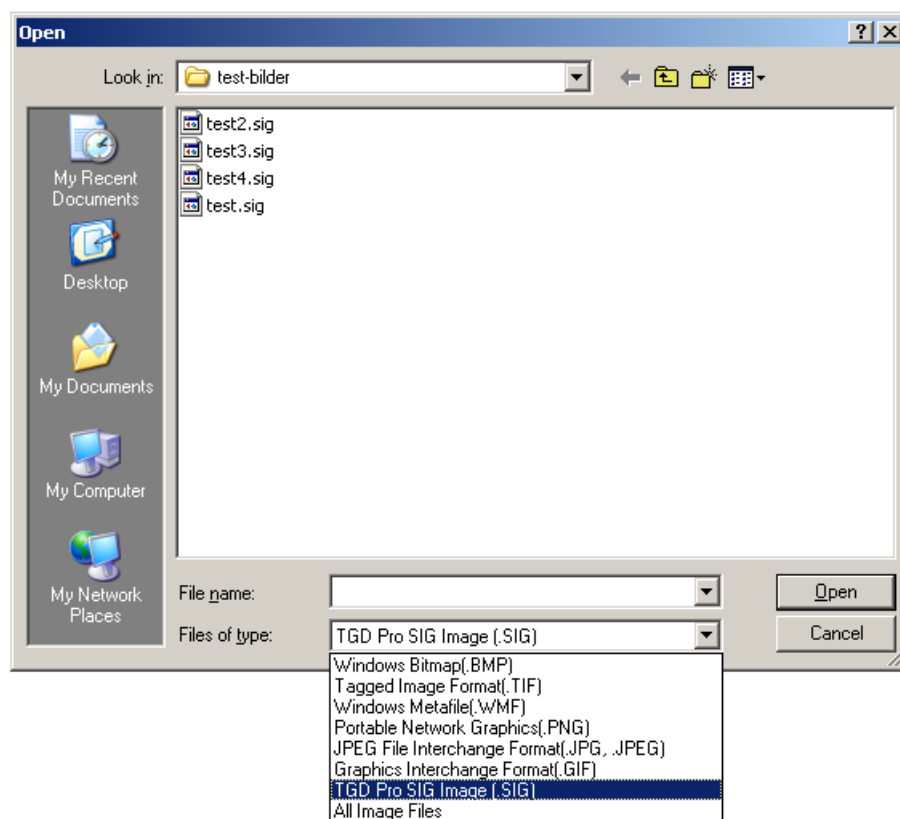
7.3.3.2 Insert a TGD image

You can include images in TGD PRO's image file format SIG in your document. However, Microsoft Word does not recognize this image format. The image must be converted to a format that Word can recognize, otherwise you can not save the document neither in the Word's "doc" format nor as a WinBraille "wif"-file (in which case the document proper is stored with the "doc" format inside the "wif" file). WinBraille performs this conversion automatically, but you have to supply some information that WinBraille needs for the conversion.

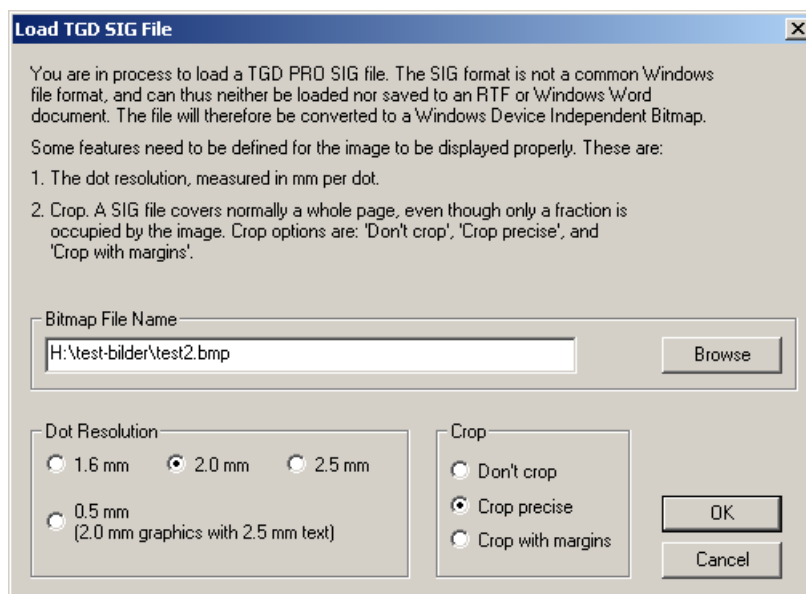
You insert a TGD PRO SIG file with the "Insert - Image - From File" menu, in the same way as you insert images in other formats.



Select the TGD PRO SIG image file type:



An extra dialog box pops up. You have to supply some information that WinBraille needs to load the image properly.

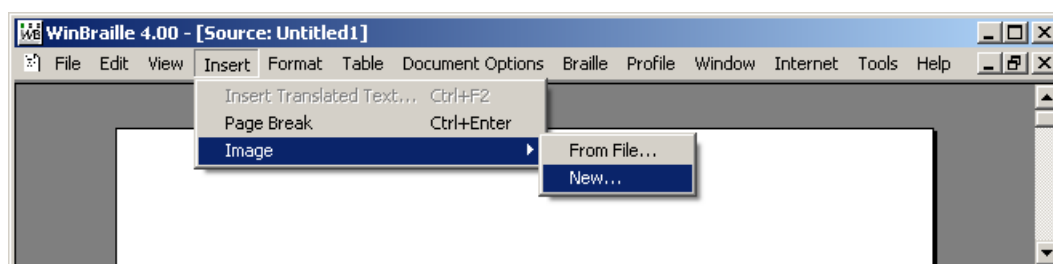


The dot resolution (distance between each individual dot) will affect the size of the converted image. Select 0.5 mm if you will likely type Braille in the image. Otherwise you can select one of the three other options. 1.6 mm resolution makes the smallest size. 2.5 mm makes the largest.

You should select "Crop precise" or "Crop with margins" if the dots only cover a part of the image. (Most TGD PRO images cover a whole page, even though the image proper does only cover a fraction of the image).

7.3.3.3 Create a new image

New images are created with the Image Editor. WinBraille automatically invokes the Image Editor and opens the "New Image" dialog when you select the "Insert - Image - New" menu option in WinBraille.



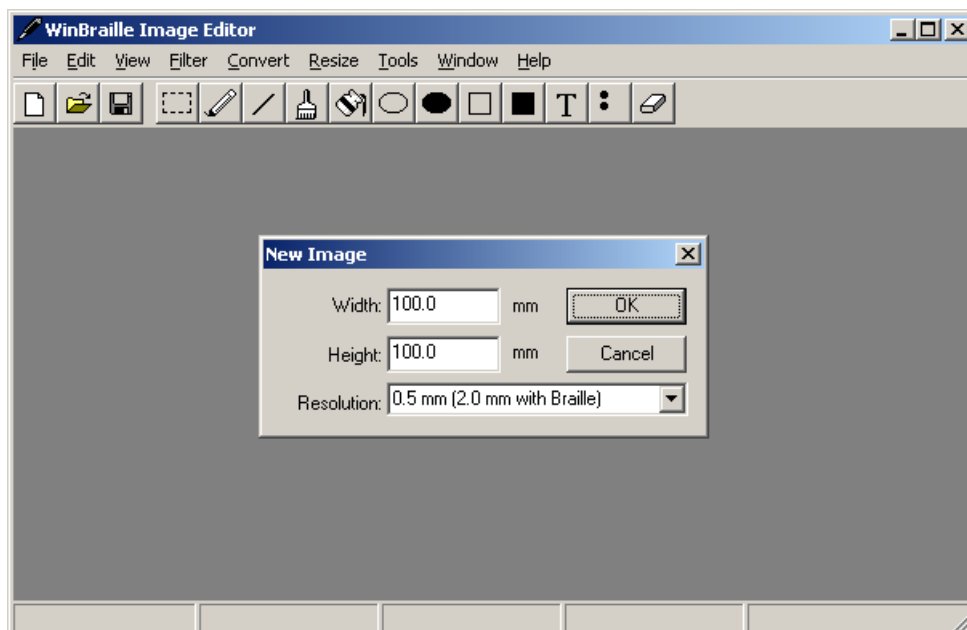
Supply proper values in the "Width" and "Height" fields. The values are in mm, with a resolution in 10th of mm. Select a suitable dot resolution for your image. Available resolutions are:

- 0.5 mm (2.0 mm with Braille)
- 1.6 mm
- 2.0 mm
- 2.5 mm

Select 0.5 mm resolution if you are going to mix Braille text and graphical dots in the same image. (0.5 mm is the least common resolution for dots in a Braille cell, which are separated with a distance of 2.5 and 3.5

mm, and graphical dots, which have a resolution of 2.0 mm in this option).

Select one of the options 1.6, 2.0 or 2.5 mm resolution if the image will not contain any Braille text. The 1.6 mm resolution creates the smallest size, while the 2.5 mm creates the largest.



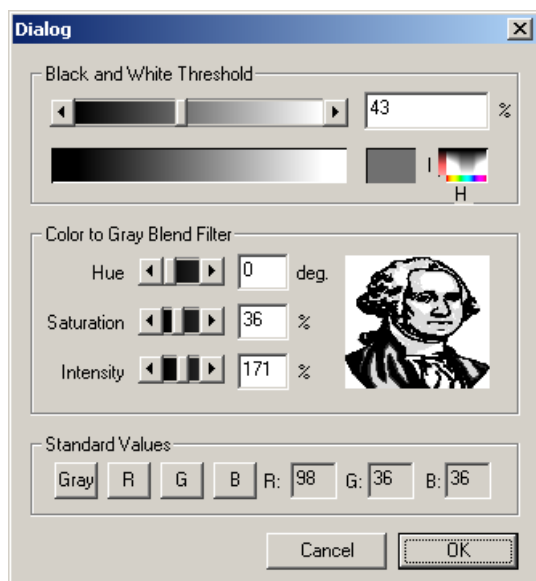
7.3.4 Working with the Image Editor

The main purpose of the Image Editor is to convert color images to tactile images. The recommended procedure to achieve this is:

1. Open an existing image or create a new (or double click on the image if you are in WinBraille and you are editing a converted document with images).
2. Resize the image to a suitable size for a tactile image.
3. Eventually filter the image (the result is sometimes better if the color image is inverted before it is converted).
4. Convert the image, either directly, or with the Outline function.
5. Change the parameters in the Convert dialog if necessary.
6. Use the tools to polish and finish the image.
7. Eventually add "letter font" text with the "Black Text" tool or Braille text with the "Braille" tool.
8. Save the image.

7.3.4.1 The Convert Dialog

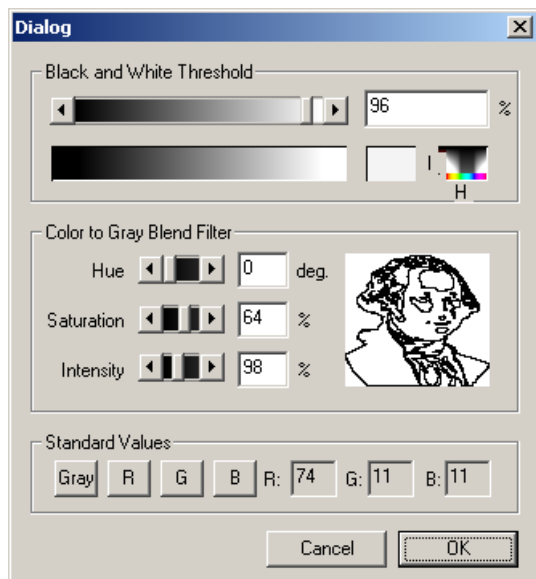
A dialog box pops up when you select either "To Tactile Image" or "Outline" from the Convert menu. This dialog contains some settings for the performance of the conversion. It is almost always necessary to adjust at least some of the parameters to get a good result.



The "Black and White Threshold" sets the gray level threshold between the black dot and the white background. The "Color to Gray Blend Filter" can be used to filter and emphasize a specific color in the image. The small box with axes marked with "I" and "H" in the upper right corner gives a hint about the filter parameters.

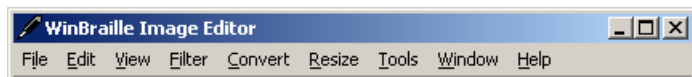
One of four sets of standard filter parameters can be selected with the buttons "Gray", "R" (Red), "G" (Green) and "B" (Blue).

The Outline function is performed in two steps. Step one performs the outline function on the color image. Step two converts the outlined image to a tactile image.



7.3.5 Reference

7.3.5.1 Image Editor Menu



The Image Editor's functions are organized in nine menu groups.

The File menu contains standard Windows functions to open, create and save images. The File menu also contains the preferences settings. Preference settings define the editor's behaviour on startup.

The Edit menu contains the undo and redo functions and functions to copy and paste parts of the image to and from the clip board.

The View menu controls how images are displayed on the screen.

The Filter menu contains four functions to manipulate the original image and one function to manipulate the tactile image. Functions that apply on the original color image are:

- Convert to gray scale
- Convert to black and white
- Outline the image, i.e. produce an image where the borders between dark and light fields are drawn.
- Invert the color image

The function that apply on the tactile image is:

- Invert the tactile image

The Convert menu contains the functions that actually convert the original image and produce a tactile image. Two functions are supplied, "To Tactile Image" and "Outline".

The Convert menu also contains a function to define the currently active image's type, whether it is a color image or a tactile image. All images are stored in a Windows standard bitmap format. There is no information in the image that tells whether it is a color image or a tactile image. The Image Editor uses a more or less intelligent method to determine the image's type when you open an existing image. This method is not actually stone-proof. If it fails, use the "Convert - Image Type" to change the type of the image to the correct type.

The Resize menu contains two functions to resize the image. One for the original color image, and one for the tactile image. Use the "Resize - Tactile Image" when you resize tactile images, so the size of the dots are maintained. (The dots would otherwise be re sized as well).

Use the Tools menu to select the drawing tool. Available tools are: Pencil, Line, Brush, Fill, Circle, Filled Circle, Rectangle, Filled Rectangle, Black Text, Braille, an Eraser, and a Select box. The Tools menu also contains a function to select the brush and eraser size, and a function to select one of fourteen fill patterns.

The Window menu contains the standard Windows Tile, Cascade and Arrange items. The Window menu also contains a Redraw function. Not all functions redraw the images completely after every operation, since redrawing large images can take a considerable time. It can be annoying to wait while the image is redrawn after every operation if it is performed often.

The Help menu contains the standard "Help Topics" and the "About" information.

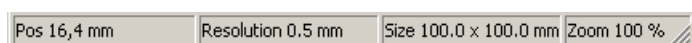
7.3.5.2 Image Editor Tool Bar



The Tool Bar contains the three most used functions from the file menu: New, Open and Save, and the twelve available tools: Pencil, Line, Brush, Fill, Circle, Filled Circle, Rectangle, Filled Rectangle, Black Text, Braille, the Eraser, and the Select box.

- Use the left mouse button to draw on the image with the selected tool.
- Use the right button with the Pencil and the Line tools to erase what you just draw.
- The right button selects the brush size for the Brush and the Eraser tools and the pattern for the Fill tool.

7.3.5.3 Image Editor Status Bar



The Status Bar has four display fields. The first field shows the cursor's position in mm from the upper left corner of the image. The second field contains information about the image resolution. The third field displays the image's size in mm. The last fourth field contains information about the zoom factor.

7.4 The Rule File Editor

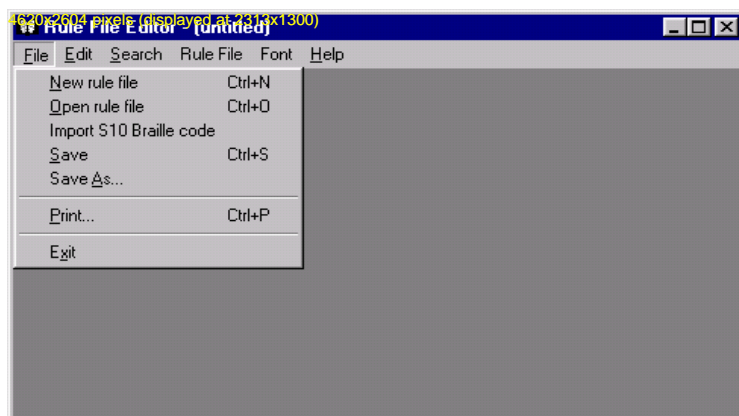
7.4.1 Menu Reference

Use the WinBraille Rule File Editor Ibrfe.exe to edit and compile WinBraille Rule Files. The menus in Ibrfe are: "File", "Edit", "Search", "Rule File", "Font", "Help":

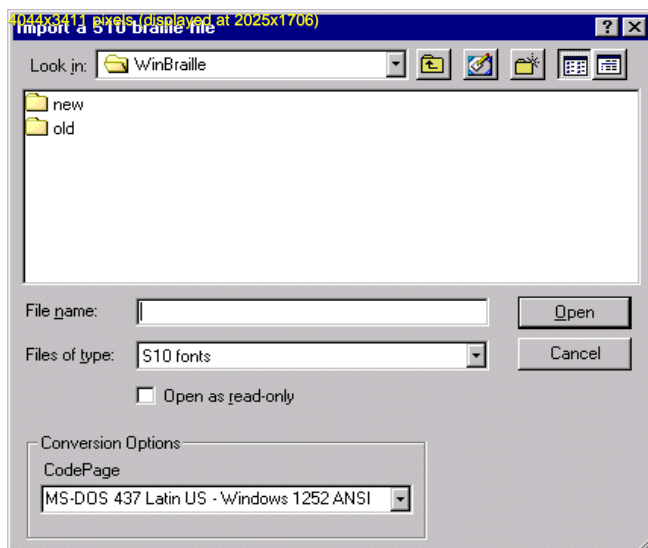


7.4.1.1 File Menu

All menu items except "File/Import S10 Braille code" are standard selections. You use the "File/Import S10 Braille code" to import Index Braille's S10 Braille Code files:



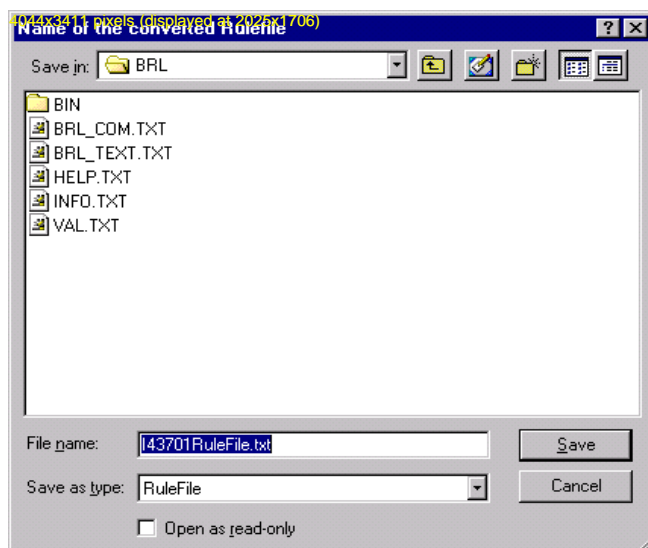
You must supply a DOS code page when you import an S10 file:



The selected code page determines how the characters in the S10 file are interpreted. The following conversion alternatives are currently available:

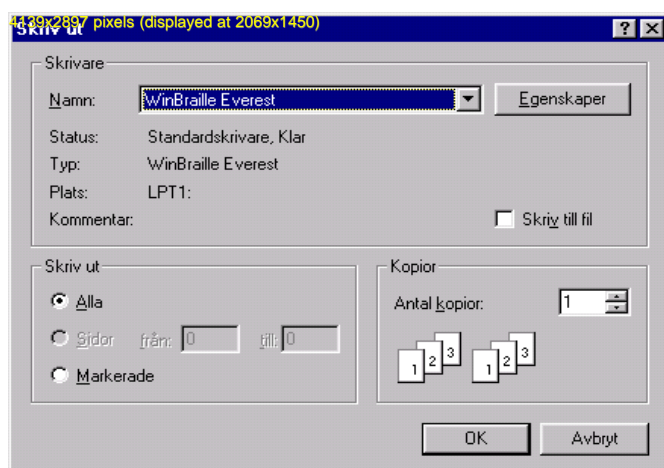
- MS-DOS 866 Cyrillic – Text compatible with Windows 1251 Cyrillic code set
- MS-DOS 437 Latin US – Text compatible with Windows 1252 ANSI code set
- MS-DOS 850 Latin 1 – Text compatible with Windows 1252 ANSI code set
- MS-DOS 852 Latin 2 – Text compatible with Windows 1250 Eastern Europe code set
- No conversion

You are also prompted to give a name to the resulting WinBraille rule file:



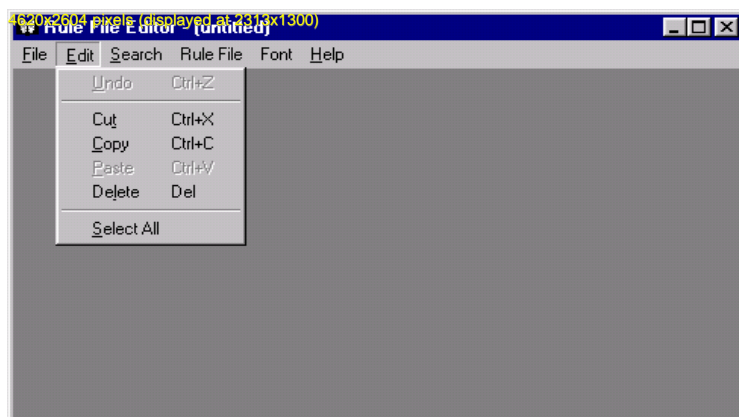
The created rule file can be seen as a template. In most cases you must edit the file manually to get a satisfying result.

The "File" menu alternatives "New rule file", "Open rule file", "Save", "Save as..." and "Print..." all use the standard Windows dialogues for opening and saving files and for printing. The texts in these dialogues will therefore be in the local Windows language, as seen in the pictures above and below. This screen capture was taken when the Rule File Editor was run under a Swedish version of Windows.



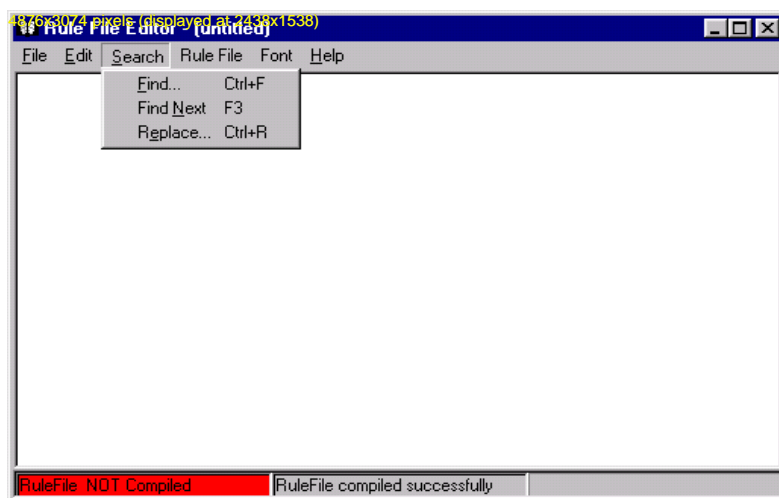
7.4.1.2 Edit Menu

The "Edit" menu has the standard menu alternatives: "Undo", "Cut", "Copy", "Paste", "Delete" and "Select All".

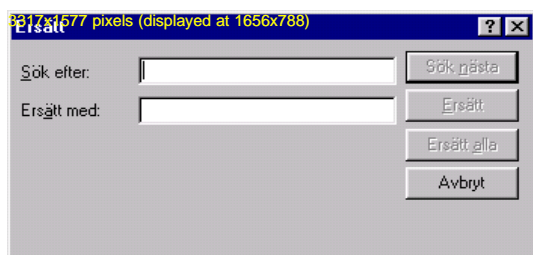


7.4.1.3 Search Menu

The "Search" menu provides functions to search and replace text in the file. Available menu alternatives are: "Find...", "Find Next" and "Replace..."

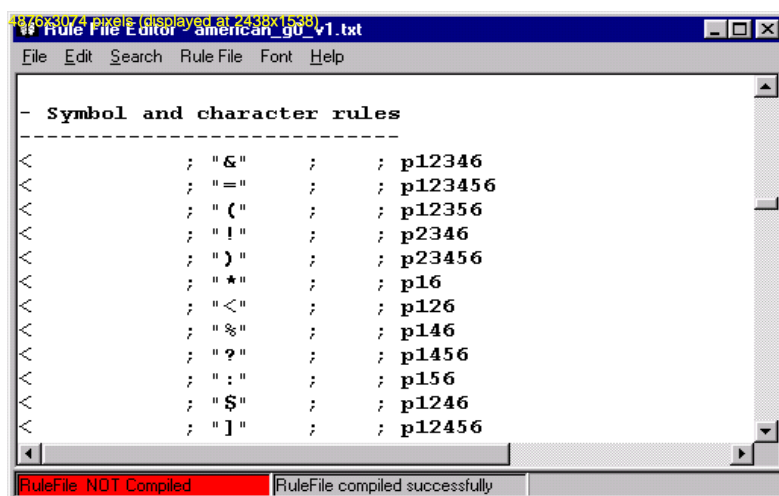


The search and replace functions use Windows standard dialogues. The texts in these dialogue boxes are therefore in the local Windows language, as shown in the example below.

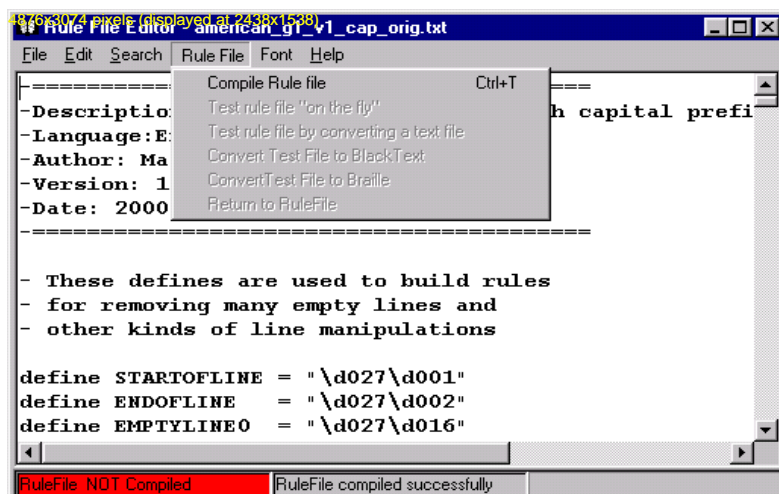


7.4.1.4 Rule File Menu

When you edit a new rule file, or open and change an existing file, the status line will have a red field with the text "RuleFile filename NOT Compiled" to indicate that the rules in the editor need to be compiled for the binary .ibk-file to be updated with the new changed information:



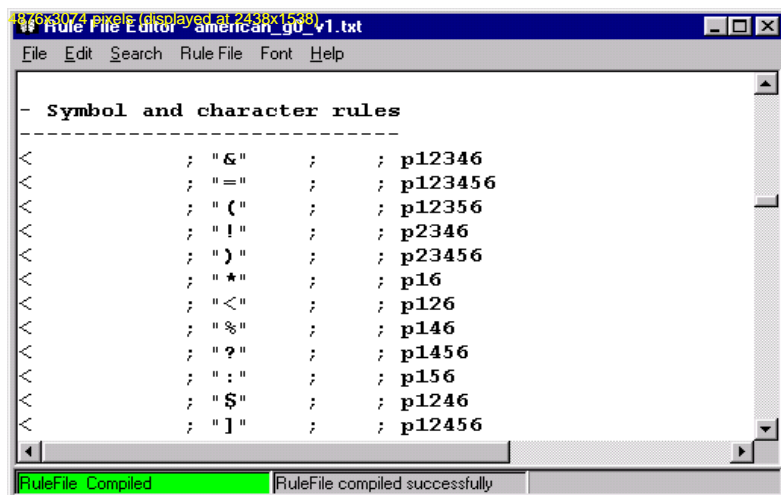
When you have changed the text in the file, the only available menu alternative in the "Rule File" is "Compile Rule file":



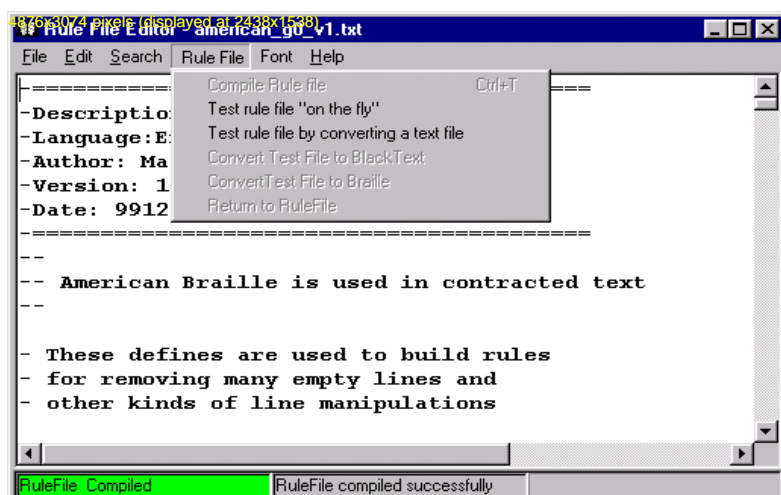
During the compilation, a dialogue with an indicating bar will be shown. You can interrupt the compilation and discard the changes by clicking on the "Stop" button.



When you have compiled the file, the red status field will be switched to green, with the text "RuleFile filename Compiled".



In this state the "Rule File" menu has two other alternatives: "Test rule file 'on the fly'" and "Test rule file by converting a text file":

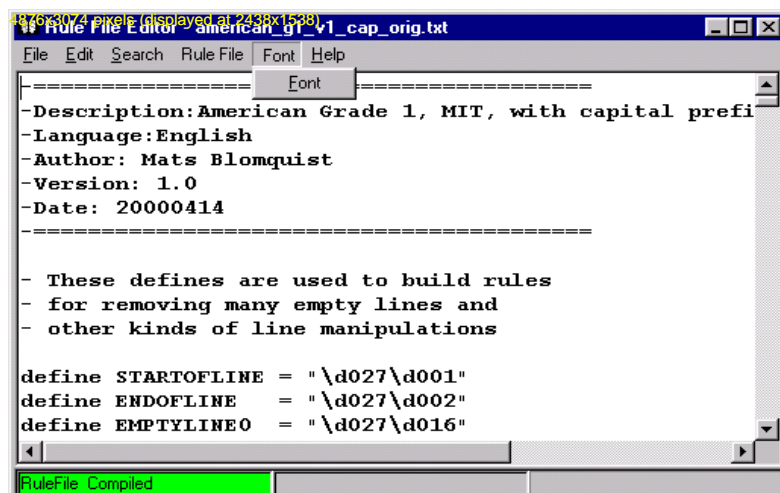


The "Test 'On The Fly'" dialogue has two options: "Edit Unconverted Text" and "Edit Converted text". With the "Edit Unconverted Text" option, you can type text in the "Original Unconverted Text" window. The converted text will appear both as "Converted Black Text" and as "Converted Braille Text".

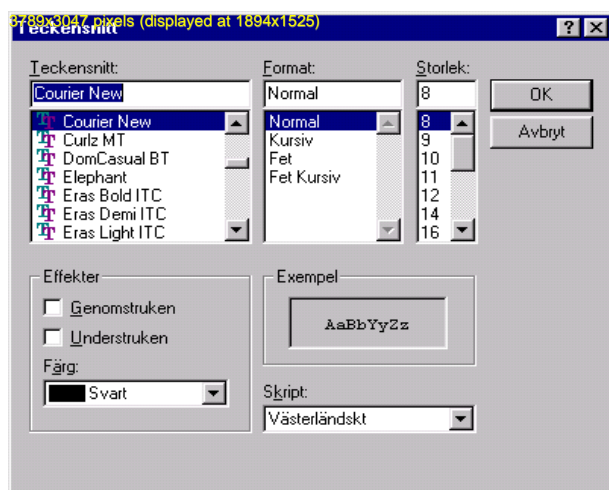
The "Edit Converted Text" gives you the possibility to select "Converted Black Text" and see the corresponding "Converted Braille Text". Nothing will appear in the "Original Unconverted Text" window, though, since back translation is not performed. With this dialogue, you can immediately test the rules and see how they interpret the typed text and how the converted text will be shown on the screen.

7.4.1.5 Font Menu

The "Font" menu makes it possible to change font in the editor. This is useful when you create rule files in foreign languages.

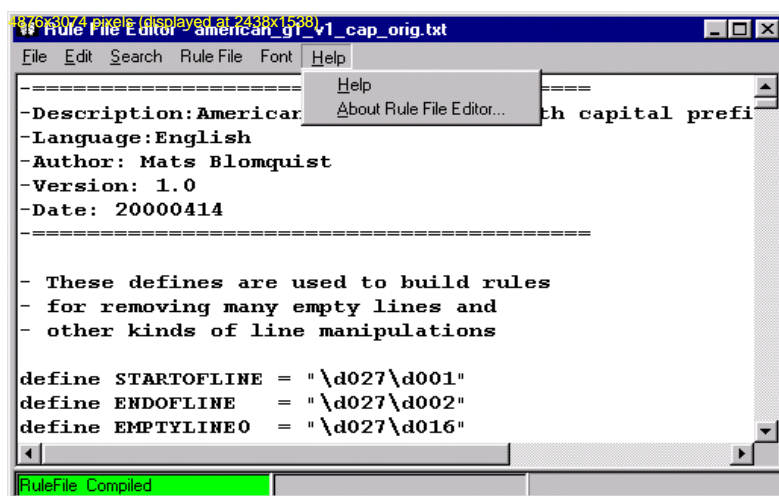


The "Font" option uses the standard Windows font dialogue. All text will therefore be in the local Windows language, as shown in the screen capture below.



7.4.1.6 Help Menu

The last menu, "Help" has two options, the "Help" option and the "About Rule File Editor..." option.

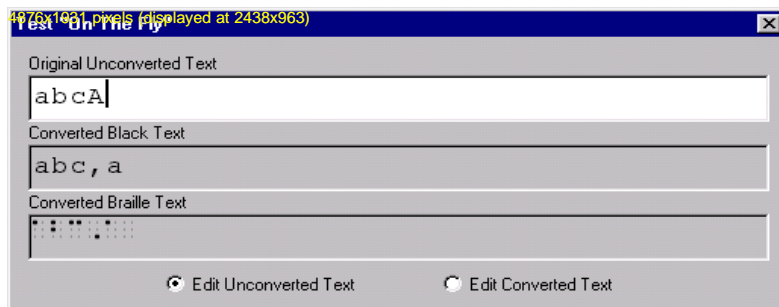


The "About Rule File Editor..." selection displays a dialogue with the copyright information and version number of the Rule File Editor.

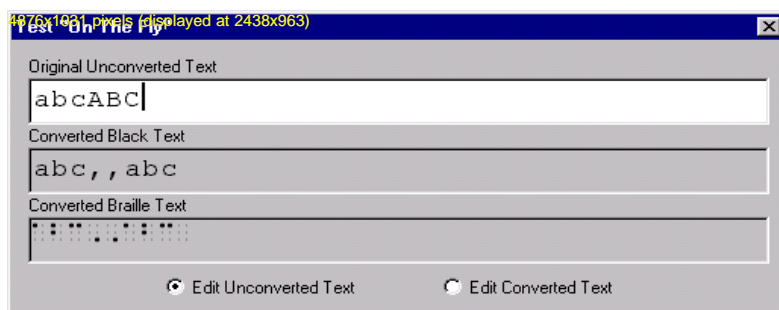
The "Help" selection opens the Windows Help for the WinBraille Rule File Editor.

7.4.2 Example on how to use the Rule File Editor

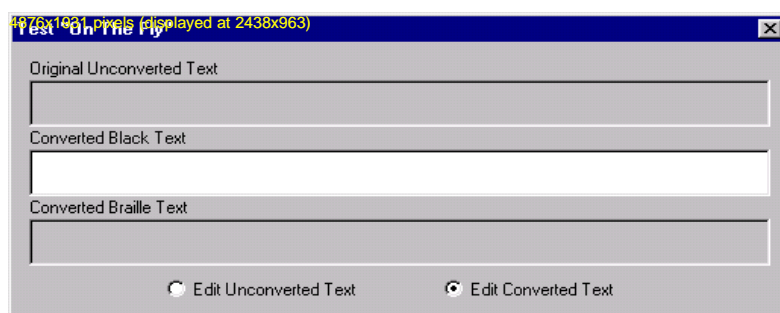
Use American Grade 0 (rule file american_g0.ibk). Type the small letters "abc" followed by a capital "A" in the "Original Unconverted Text" field. (The option "Edit Unconverted Text" is selected).



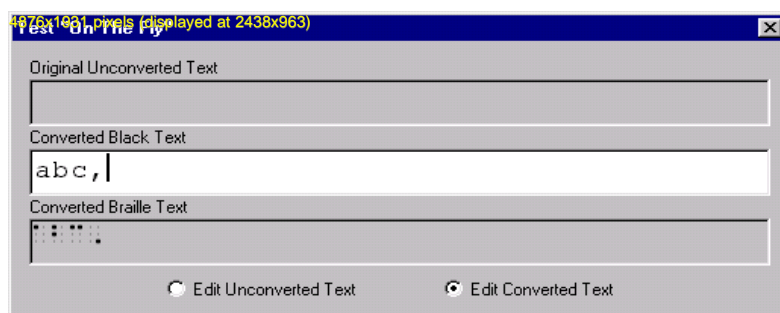
A capital prefix is automatically inserted. Proceed with the capital letters "BC", and note that the single capital prefix is replaced with a multi-capital prefix:



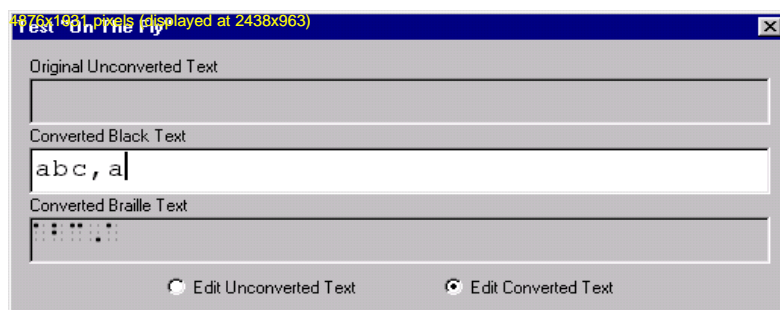
Repeat this using the "Edit Converted Text" option.



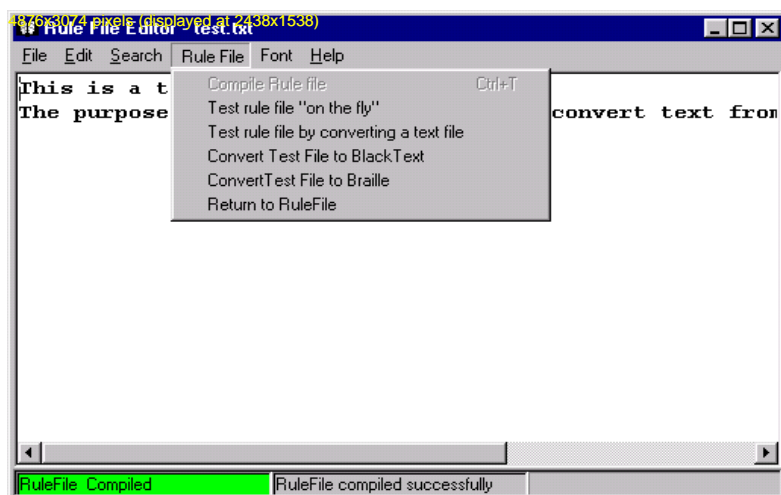
Type the letters "abc", followed by a comma. (The capital prefix in American grade 1, dot 6, corresponds to a comma in American grade 0, which is used as the Black Text coding).



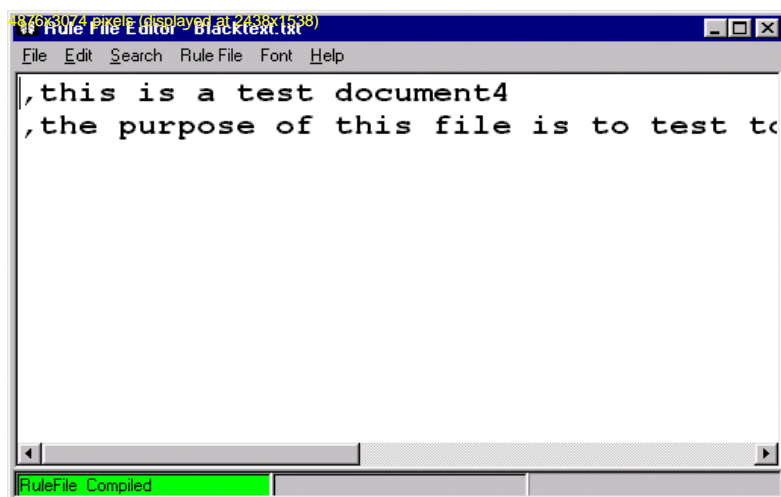
End with the small "a", and you receive the same result as if you had typed "abcA" in the "Original Unconverted Text" field. If you want to type the "Converted Black Text" that corresponds to the "Original Unconverted Text" "abcABC", you have to manually insert a second comma to represent a multi-capital prefix.



The menu alternative "Test rule file by converting a text file" gives a possibility to do exactly what the menu says. Given a text file, you can load it into the Rule File Editor and apply rules to the whole file. After you have loaded the file, you have three more menu alternatives: "Convert Text File to Black Text", "Convert Text File to Braille" and "Return to RuleFile". The latter is used to exit the text file and return to the rule file.



Convert the text File to black text with the alternative "Convert Text File to Black Text":



Convert to Braille with the alternative "Convert Text File to Braille":



7.5 IbPrint

The utility IbPrint is a small application for embossing documents directly to an Index Braille Embosser. See [Embossing using IbPrint](#) for details on how to emboss documents.

7.6 Embosser Utility

You use the Embosser Utility to maintain the Index Embosser, thus it is described in the Index Braille Embossers Manual.

8 WinBraille Menu Reference

8.1 Menus

WinBraille has 13 menu items: File, Edit, View, Insert, Format, Table, Document Options, Braille, Window, Internet, Tools, and Help.

WinBraille is available in two editions, a standard edition and a professional edition. The editions differ in the number of available menu items. Manipulation of styles and templates are disabled in the standard edition, thus all menus that manipulate styles and templates are not available in the standard edition.

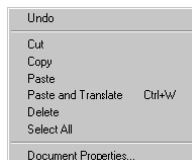
The source and Translated document menus

The source and the translated documents have associated pop-up menus you can open with the right mouse button when you hover the mouse over a document.

The source document menu contains 15 of the most usable menu items from the main menu.



The translated document menu contains eight of the most usable menu items from the main menu.

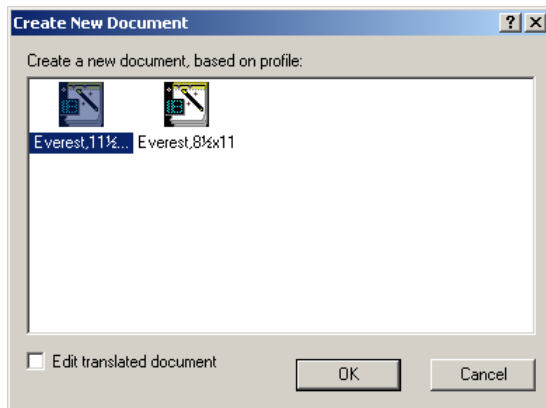


8.2 The File Menu

8.2.1 New...

Command Key: Ctrl + N
Available: Always

This menu item opens a dialog "Create New Document", that allows you to create a new empty document, based on one of the profiles that is currently available in the WinBraille system.



The dialog contains the following controls:

- A list control with all profiles available in the system.
- A check box "Edit translated document". Mark this box if you only want to create a Braille document and don't want a source document.
- **OK**. Creates a New Document, based on the currently selected profile.
- **Cancel**. Cancels the operation.

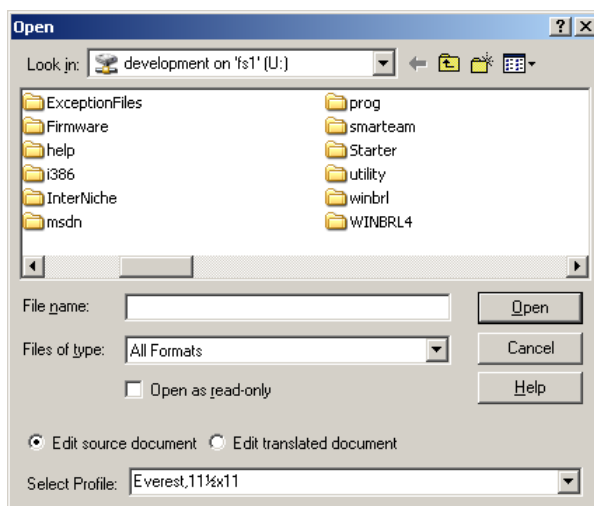
The default selection will always be based on the profile that is chosen as the "Default Profile". A newly installed system only has one profile, called "Embossor Name", "Default". Use your arrow keys to navigate to the preferred profile and use the TAB key to select OK.

8.2.2 Open...

Command Key: Ctrl + O

Available: Always

This menu item opens the "Open" dialog, which allows you to open a document in WinBraille. The layout of the dialog depends on the operating system you are using. In the English version of Windows 2000, the Open dialog looks like:



WinBraille supports the following formats:

Format	File Extension
ASCII Files	TXT
HTML Files	HTM,HTML
Rich Text Files	RTF
WORD Files	DOC
WinBraille Files	WBR
WinBraille Template File	WTF
WinBraille Project File	WIF

Select the Edit source document radio button if you want to open the document as a source document. Select Edit translated document if you want to open the document translated to Braille. If you select Edit translated document, and open a source document, the document will be automatically translated before it is displayed. The source document will not be available after translation. The "Select Profile" list box displays the profile that will be used when opening the document. It is possible to select any profile installed in the system.

8.2.3 Save

Command Key: Ctrl + S
Available: When a document is opened and modified

Saves the contents of a file you are editing to a disk file.

8.2.4 Save As...

Command Key: None
Available: When a document is opened

Saves the contents of a file you are editing to a disk file. This menu item opens the "Save As" dialog, that allows you to save the document to a disk file. The layout of the dialog depends on the operating system you are using.

8.2.5 Save Project

Command Key: None
Available: When a Project document is opened

The Save Project menu item will save all documents that belong to the project.

8.2.6 Save As Project...

Command Key: None
Available: When a document is opened

The Save as Project function saves the document with all its opened connected documents as a project. The project is saved as a "WIF" file. (WinBraille Interchangeable Format).

This menu item opens the "Save As Project" dialog. This dialog allows you to save the document(s) as a Project. The layout of the dialog depends on the operating system you are using. The source document and all corresponding translated documents will be stored in the project, together with the profile, the template and all referenced translation files and exception files. The WIF file can be used to transfer a project from one WinBraille system to another system.

8.2.7 Save As Template...

Command Key: None

Available: In the professional edition, when a document is opened

The Save as template function will save the document as a WinBraille Template. The template file is stored in the Template directory.

8.2.8 Close

Command Key: Ctrl + F4

Available: When a document is opened

This command will close the active document without closing the application.

8.2.9 Close Project

Command Key: None

Available: When a Project document is opened

This command will close the active document and all other documents that belong to the same project file, without closing the application.

8.2.10 Close All

Command Key: None

Available: When a document is opened

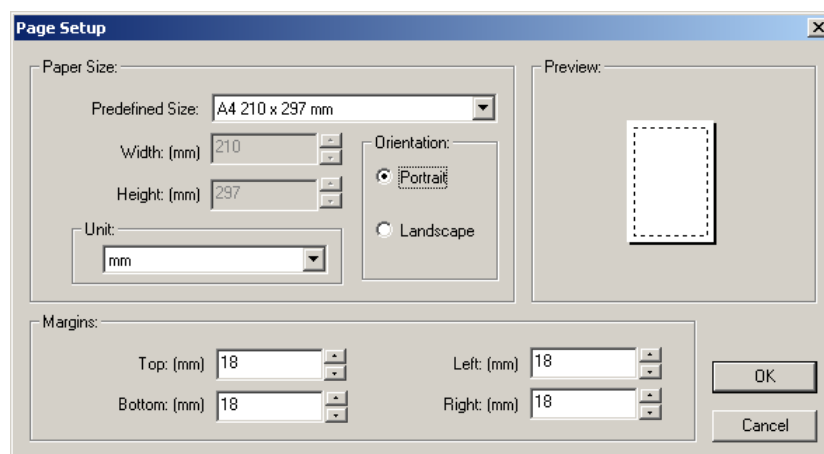
This command will close all documents without closing the application.

8.2.11 Page Setup...

Command Key: None

Available: When a document is opened

This command will open the dialog Page Setup. The Page Setup dialog is used to set paper size, orientation and document margins.



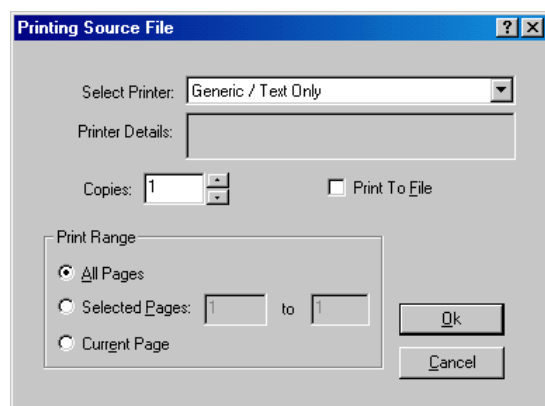
8.2.12 Print...

Command Key: Ctrl + P

Available: When a document is opened

The Print dialog gives you the possibility to print a source document or a translated document to any printer connected to your system, except Index Braille Embossers. Printing a translated document (Braille view) can be useful for educational purposes. The dialog contains several controls, which gives you the possibility to change some settings before you print the document.

- **Select Printer:** A list box containing all printers in the system, except Index Braille Embossers.
- **Printer Details:** A field with information about current selected printer. Your administrator can fill in this field, in order to give you some useful information about for example the location of the printer, etc.
- **Copies:** Number of copies to print.
- **Print to File:** When this option is selected, a dialog box will be displayed after you have pressed the OK button. The new dialog will query about the printout file name.
- **Group Box, Print Range:** Contains 3 controls for selecting the page range:
- **All Pages:** Select this option if you want to print the whole document.
- **Selected Pages:** When this option is selected, 2 extra controls are enabled; "From Page" and "To Page". Fill in the appropriate page range and press the **OK** button to print the selection of the document.
- **Current Page:** Just print the current page.



8.2.13 Emboss...

Command Key: Ctrl + B

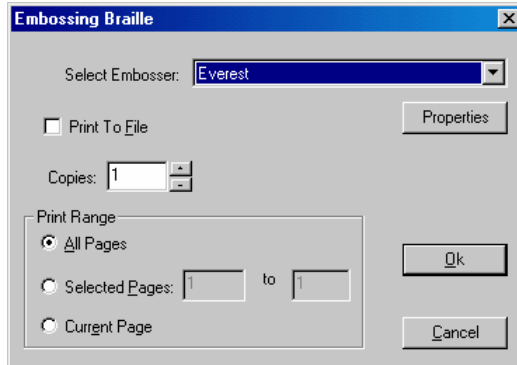
Available: When a document is opened

The Emboss dialog gives you the option to change several settings before you emboss the document to your Index Braille Embosser. If the Document is not translated, a translation of the source document is performed before the dialog is displayed. If the active document is a source document and a translated document exists that the user has edited, a new translation is started before it is embossed. If the user has not edited the translated document, WinBraille will switch to that Window and emboss it without any prior translation. Below there is a description of all controls in the dialog.

- **Select Printer:** A list box containing all printers in the system, except Index Braille Embossers.
- **Printer Details:** A field with information about current selected printer. Your administrator can fill in this field, in order to give you some useful information about for example the location of the printer, etc.
- **Copies:** Number of copies to print.
- **Print to File:** When this option is selected, a dialog box will be displayed after you have pressed the OK

button. The new dialog will query about the printout file name.

- **Group Box, Print Range:** Contains 3 controls for selecting the page range:
- **All Pages:** Select this option if you want to print the whole document.
- **Selected Pages:** When this option is selected, 2 extra controls are enabled; "From Page" and "To Page". Fill in the appropriate page range and press the OK button to print the selection of the document.
- **Current Page:** Just print the current page.



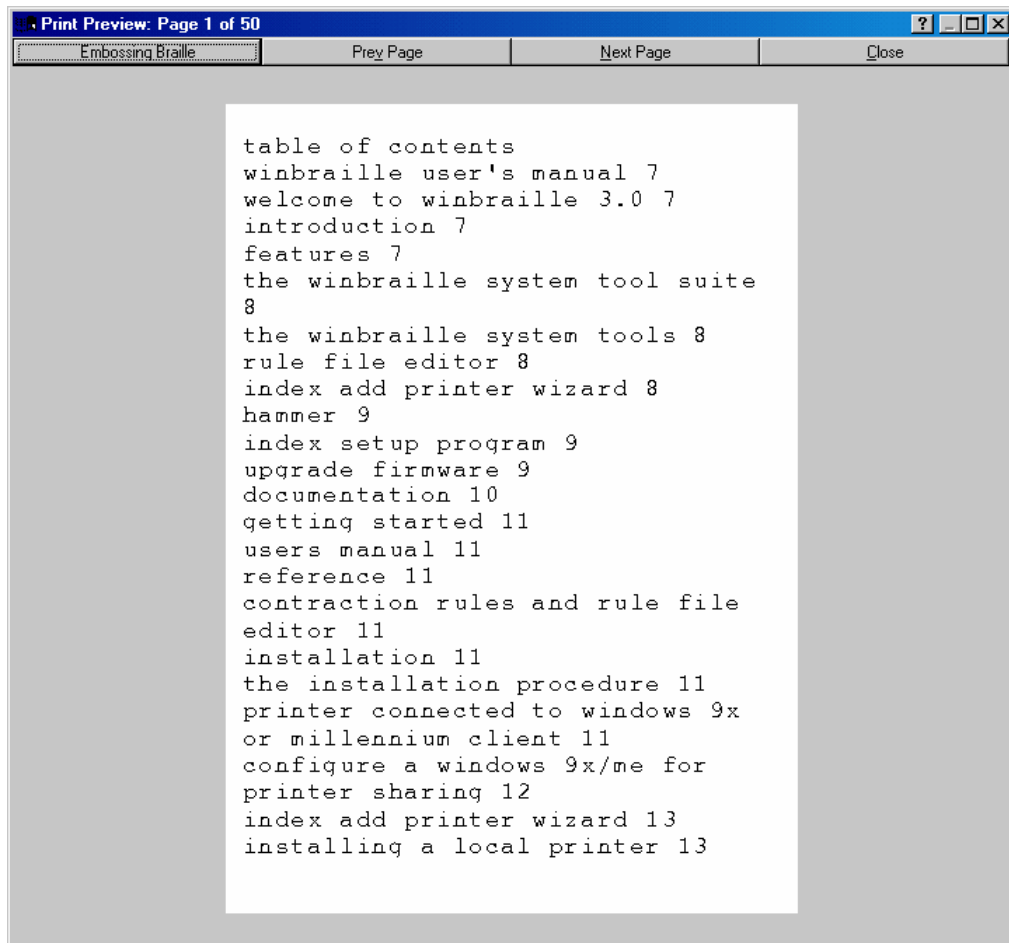
8.2.14 Preview...

Command Key: None

Available: When a document is opened

The Preview command opens a dialog box and displays the document, as it will be printed on the paper. The dialog has 4 buttons: **Print...**, **Prev Page**, **Next Page** and **Close**.

- **Print...:** Open the Print dialog to print the document.
- **Prev Page:** Display the Previous page.
- **Next Page:** Display the Next Page.
- **Close:** Close the preview dialog.



8.2.15 Exit

Command Key: None
Available: Always

The exit command closes all opened documents and exits WinBraille.

8.3 The Edit Menu

8.3.1 Undo

Command Key: Ctrl + Z
Available: When a document is opened and you have edited the document

Undo the last operation.

8.3.2 Redo

Command Key: Ctrl + Y
Available: When a document is opened and you have edited the document

Redo the last operation.

8.3.3 Cut

Command Key: Ctrl + X

Available: When a document is opened

Cut the current selection and place it in the clipboard.

8.3.4 Copy

Command Key: Ctrl + C

Available: When a document is opened

Copy selected text to the clipboard.

8.3.5 Paste

Command Key: Ctrl + V

Available: When a document is opened and the clipboard is not empty

Paste the content in the clipboard to the current insertion point in the document.

8.3.6 Paste And Translate

Command Key: Ctrl + W

Available: When a document is opened and the clipboard is not empty

Paste the content in the clipboard to the current insertion point in the document. The content in the clipboard is translated according to the current profile.

8.3.7 Delete

Command Key: Del

Available: When a document is opened

Delete current selection.

8.3.8 Select All

Command Key: Ctrl + A

Available: When a document is opened

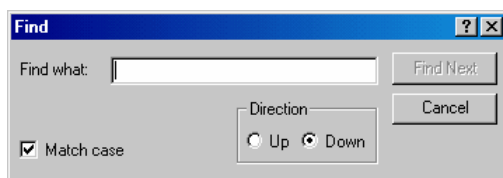
Select the complete content of the current document.

8.3.9 Find...

Command Key: Ctrl + F

Available: When a document is opened and the document contains text

Open the Find dialog box, which makes it possible for you to find text in the current document.

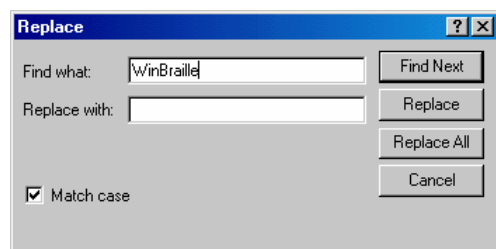


8.3.10 Replace...

Command Key: Ctrl +HF

Available: When a document is opened and the document contains text

Open the replace dialog box, which makes it possible for you to replace text in the current document.



8.3.11 Go to Page...

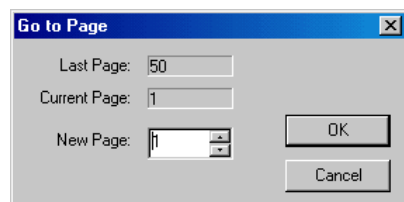
Command Key: Ctrl + G

Available: When a document is opened

This command opens the "Goto Page" dialog. The purpose of this dialog is to get a fast way to go to a specific page, without using the scroll bars or the movement keys.

The dialog contains 5 controls:

Last Page	Displays the last page in the document.
Current Page	Displays the current Page.
New Page	The field to type your new page.



When the dialog is displayed, the active control will be the New Page control. Use your arrow key to select a new page or type directly in the field. The default page is always the current page.

8.4 The View Menu

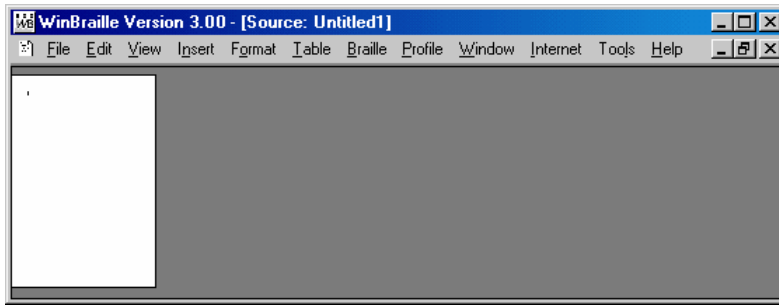
8.4.1 Normal Page Layout

Command Key: None

Available: Always

WinBraille offers two different page modes: Normal Page Layout and Centered Page Layout.

The document pages are displayed with gaps, borders, margins and a gray background. The number of pages depends on the text.

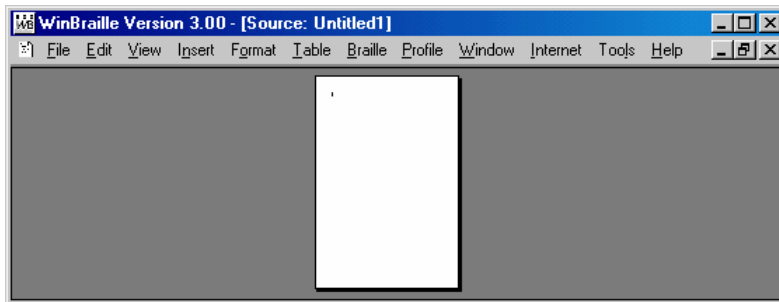


8.4.2 Centered Page Layout

Command Key: None
Available: Always

WinBraille offers two different page modes: Normal Page Layout and Centered Page Layout.

This view works in the same way as the page view, but WinBraille displays three-dimensional pages, which are centered in the window's client area.



8.4.3 Status Bar

Command Key: None
Available: Always

When this option is selected, WinBraille will display a Status bar at the bottom of the window and a Tool bar at the top.

The Tool Bar

The Tool bar displays the current style, font and font size.



The Status Bar

The Status bar displays important navigation information.

The fields are from left to right:

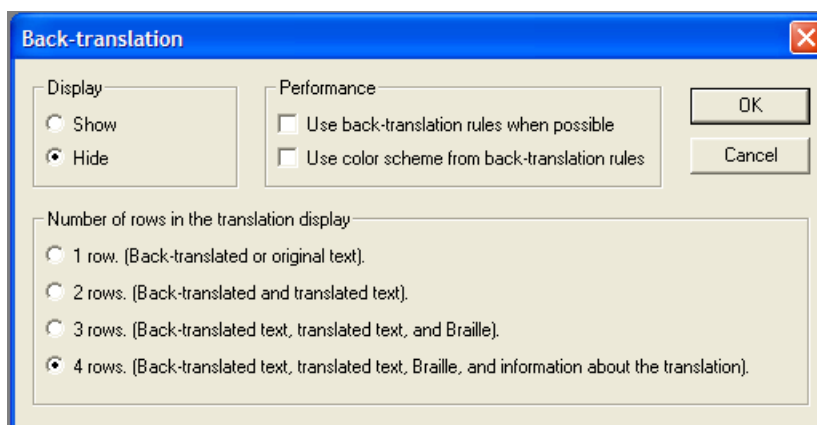
- Page – Displays current page, starting with page 1.
- Line – Displays the current Line relative from the top of the page.
- Column – Displays the current column.
- Zoom – Displays the current zooming factor.
- Table – If the cursor is inside a table, this will display the current row and column.

- Insertion mode – Displays INS when the editor mode is INSERT and OVR when the mode is OVERWRITE.
- Macro – This field displays information about the loaded macro, or the text "No Macro Loaded".
- Profile – Displays the name of the current profile, currently loaded contraction rules, and characters per line and lines per page.

Page:1 Line:4 Col:1 50% table(2,1) INS No Macro Loaded Profile: Everest.Default. Contraction Rules: american_g0. Cpl: 32. Lpp: 27

8.4.4 Translation Display

Activate the translation display to see the translation while you are typing in the source document, or to see the original or back-translated text while you are typing in the translated document.



Display

Check "Show" to view the translation display. Check "Hide" to hide the display.

Performance

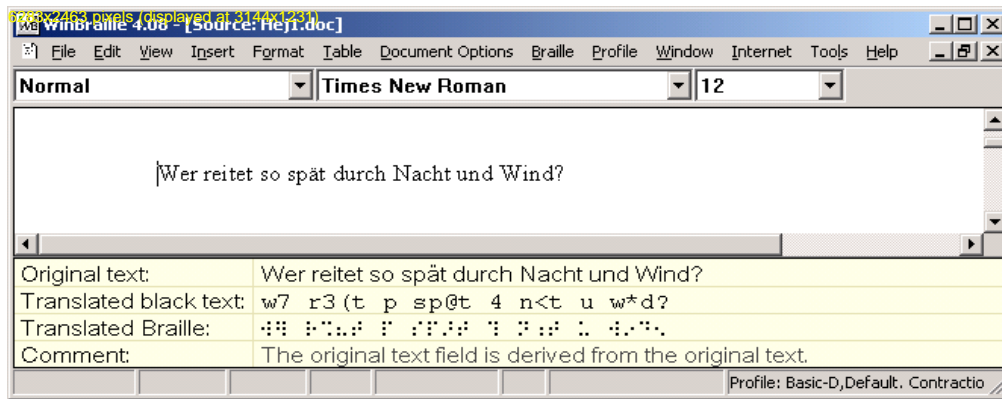
Some, but not all, translation rules can do both forward and back translations. Check the "Use back-translation rules when possible" to enable the back-translation rules.

Note: Enabling this feature can slow down the translation considerable.

WinBraille can present back-translated text with different colors for contractions, prefixes and un-contracted text. Check "Use color scheme for back-translated rules" to turn on this feature.

Number of rows in the translation display

The figure below shows the display with the first line of text from a famous poem by Goethe.



The display can show one, two, three or four rows of information.

1 row: The display shows the original text, or the back-translated text if this feature is enabled.

2 rows: The display shows translated text in addition to the original or back-translated text.

3 rows: The display also shows the translated text in Braille.

4 rows: A comment is displayed in addition to the information in the other three rows.

8.4.5 Zoom

50%

Command Key: None

Available:	When a document is opened
------------	---------------------------

Set the zooming factor for current document to 50% of its original size.

75%

Command Key: None

Command Ref	None
Available:	When a document is opened

Set the zooming factor for current document to 75% of its original size.

100%

Command Key: None

Available:	When a document is opened
------------	---------------------------

Set the zooming factor for current document to its original size.

50%

Command Key: None

Available:	When a document is opened
------------	---------------------------

Set the zooming factor for current document to 150% of its original size.

200%

Command Key: None

Available:	When a document is opened
------------	---------------------------

Set the zooming factor for current document to 200% of its original size.

Page Width

Command Key: None
Available: When a document is opened

Set the zooming factor for current document so the window will display the whole width of the page.

Whole Page

Command Key: None
Available: When a document is opened

Set the zooming factor for current document so the window will display exactly one page.

8.4.6 Show white spaces

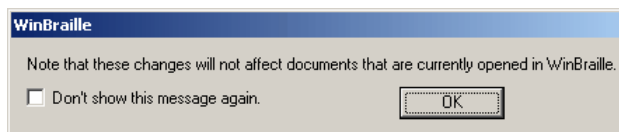
Command Key: None
Available: When a document is opened

This menu item will make space and paragraph end symbols visible.

8.4.7 Display All Help Messages

Command Key: None
Available: Always

This menu item will enable all help messages that have the check box "Don't show this message again".



8.4.8 Professional Edition

Command Key: None
Available: When no documents are opened

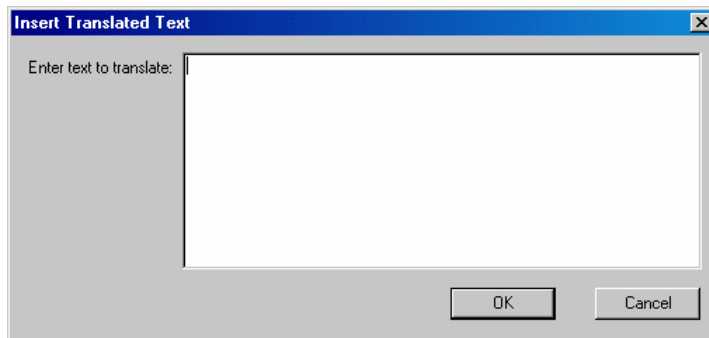
This menu item will toggle between professional and standard edition. In standard edition mode manipulation of styles and templates are disabled. When activating professional mode, WinBraille will shut down and restart with a new menu.

8.5 The Insert Menu

8.5.1 Insert Translated Text...

Command Key: Ctrl + F2
Available: When a translated document is opened

When the document is translated, extra text can be added as plain text and translated before it is inserted. This menu item opens a dialog box where you add your text. Press **OK** to translate the text and add it at the current input position in the translated document.



8.5.2 Page Break

Command Key: Ctrl + ENTER
Available: When a document is opened

Insert a new page at current input position.

8.5.3 Insert Image

Command Key: None
Available: When a source document is opened

Insert an image at the current input position.

From File..

Opens a File dialogue. Use it to browse to the image file and press Open.

New

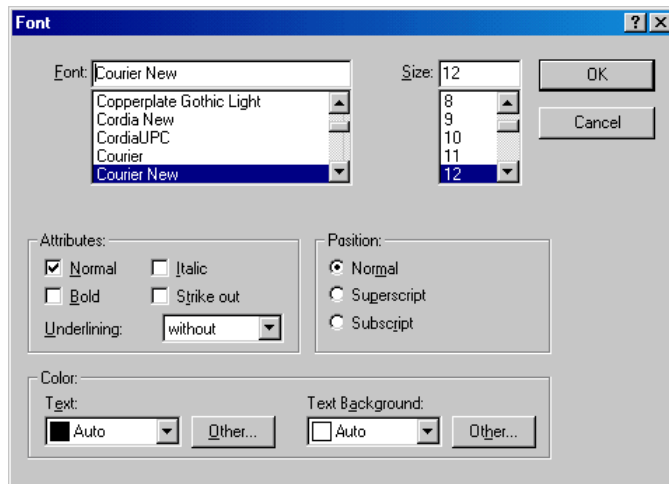
Starts the Image Editor. See the Image Editor.

8.6 The Format Menu

8.6.1 Character...

Command Key: Ctrl + D
Available: When a source document is opened

This menu item opens a dialog box, which contains all available fonts and point sizes for the currently selected printer. Font attributes and values for subscript and superscript can also be set.



The dialog consists of font, font size and three groups of controls: Attributes, Position and color.

Attributes

This group of controls is used to set the following attributes:

- Bold
- Italic
- Strike out. Draws a horizontal line across the characters.
- Normal. Removes the above mentioned attributes.

Position

- Normal. The horizontal position is normal.
- Superscript. When this option is set, an extra field is enabled, giving you the possibility to exactly set the new height above the text line in points.
- Subscript. When this option is set, an extra field is enabled, giving you the possibility to exactly set the new height below the text line in points.

Color

- Text. The text list box is used to set the color of the text. The list box contains the system's standard colors.
- Other. The button "other" opens the standard color dialog with a larger selection of colors.
- Text Background. The Text Background list box is used to set the background color of the text. The list box contains the system's standard colors.

8.6.2 Paragraph...

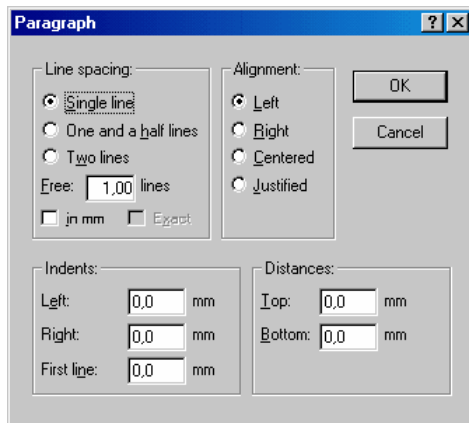
Command Key: None

Available: When a document is opened

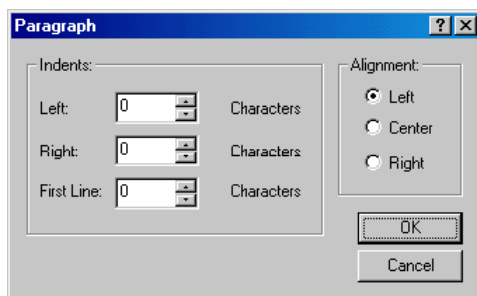
This menu item opens a dialog box, which can be used to set attributes for all currently selected paragraphs.

The available attributes depends on if it is a source document or a Braille document.

For a source document, the attributes are line spacing, alignment, indents and the distance to the previous and the following paragraphs. All values are set in millimeters; the value for line spacing can be set either in millimeters or as a multiple of the font size.



For a Braille document, the attributes are indent and alignment. All values are set in characters.



8.6.3 Bullets and numbering

Command Key: None

Available: When a source document is opened

The Bullets and numbering menu item contains the following sub menu items:

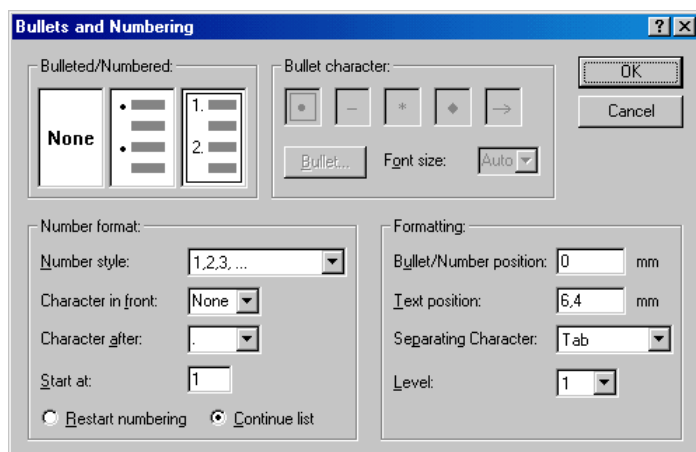
- Attributes
- Increase Level
- Decrease Level
- 1,2,3
- A,B,C
- a,b,c,
- I,I,I
- i,i,i
- Bullet
- None

8.6.3.1 Attributes

Command Key: None

Available: When a source document is opened

This menu item opens a dialog box, which can be used to set the attributes for all selected paragraphs. The dialog box contains four group boxes; Bulleted/numbered, Bullet character, Number format and Formatting.



Bulleted/Numbered

This group of controls contains the buttons None, Bullet and Numbered:

- None, Remove numbering or bullets for all selected paragraphs.
- Bullet, Set all selected paragraphs to bulleted lists. The group box Bullet character will be enabled, giving you the option to change the size and appearance of the bullet character.
- Numbered, Set all selected paragraphs to numbered lists. The group box Number Format will be enabled, giving you the option to change the number format.

Command Key: None
 Available: When a source document is opened

This menu item will set the selected paragraphs to normal paragraphs.

8.6.3.2 Increase Level

Command Key: None
 Available: When a source document is opened

This menu item will increase the level of numbering for all selected paragraphs. See example below:

Before:

1. First Item
2. Second Item
3. Third Item

After:

1. First Item
2. Second Item
3. Third Item

8.6.3.3 Decrease Level

Command Key: None
 Available: When a source document is opened

This menu item will decrease the level of numbering for all selected paragraphs. See example below:

Before:

1. First Item
2. Second Item
3. Third Item

After:

1. First Item
2. Second Item
3. Third Item

8.6.3.4 1,2,3

Command Key: None

Available: When a source document is opened

This menu item will set the selected paragraphs to a numbered list. The format will be Arabic numbers.

8.6.3.5 A,B,C

Command Key: None

Available: When a source document is opened

This menu item will set the selected paragraphs to a numbered list. The format will be capital letters.

8.6.3.6 a,b,c

Command Key: None

Available: When a source document is opened

This menu item will set the selected paragraphs to a numbered list. The format will be lower case.

8.6.3.7 I,I,I

Command Key: None

Available: When a source document is opened

This menu item will set the selected paragraphs to a numbered list. The format will be Roman capital letters.

8.6.3.8 i,i,i

Command Key: None

Available: When a source document is opened

This menu item will set the selected paragraphs to a numbered list. The format will be Roman lower-case letters.

8.6.3.9 Bullet

Command Key: None

Available: When a source document is opened

This menu item will set the selected paragraphs to a bulleted list.

8.6.3.10 None

Command Key: None

Available: When a source document is opened

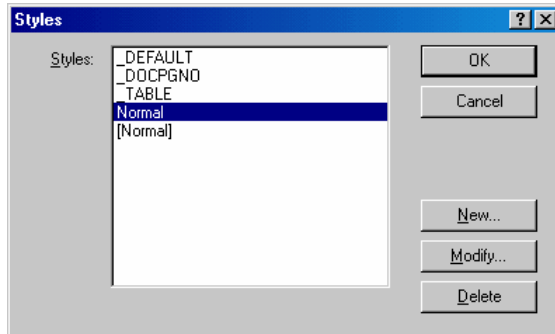
This menu item will set the selected paragraphs to normal paragraphs.

8.6.4 Style...

Command Key: None

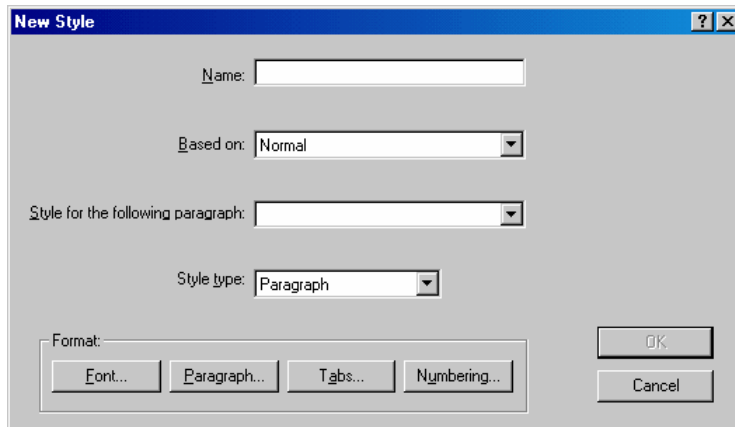
Available: When a source document is opened

This menu item opens a dialog box, which can be used to add, modify and delete any style in the document.



New Style

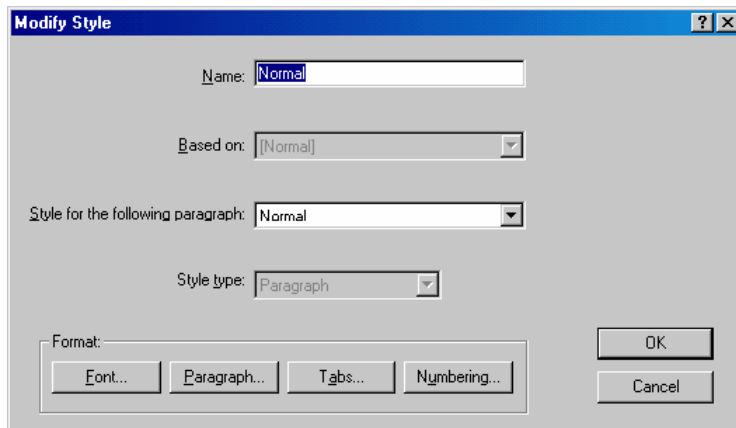
When pressing the "New..." button, the "New Style" dialog is displayed. The New Style dialog and the modify dialog is similar except that some of the options in "Modify Style" is read only.



The "New Style" dialog contains several controls. A short description of the controls is given below after Modify Style..

Modify Style

The Modify button opens the "Modify style" dialog. The "Modify style" dialog is where you change the attributes for the selected style.



The "Modify Style" dialog contains several controls. See below for more information.

Name

Type the name of the new style.

Based on

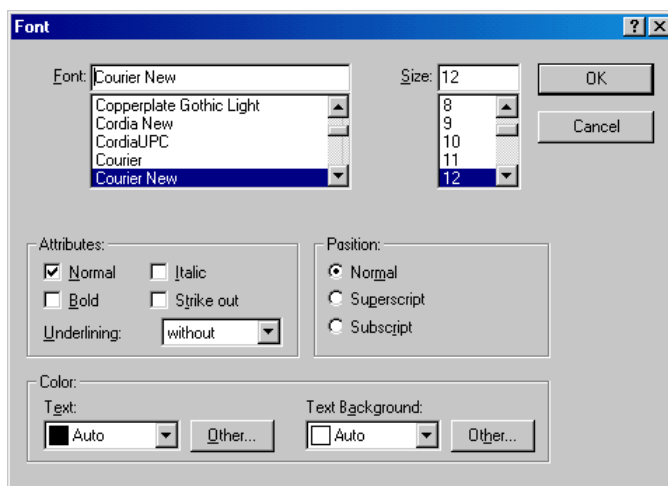
Defines from which style this new style should inherit the properties.

Style Type

The style can be of type Paragraph or Character. A Paragraph based style can only be set for the whole paragraph in contrast to a Character based style. A Character based style can be set for a single character or parts of a paragraph.

Font...

This button opens a dialog box. The font dialog box contains all available fonts and point sizes for the currently selected printer. Font attributes and values for subscript and superscript can also be set.



The dialog consists of font, font size and three groups of controls: Attributes, Position and color.

"Attributes"

This group of controls is used to set the following attributes:

- Bold
- Italic

- Strike out. Draws a horizontal line across the characters.
- Normal. Removes the above mentioned attributes.

"Position"

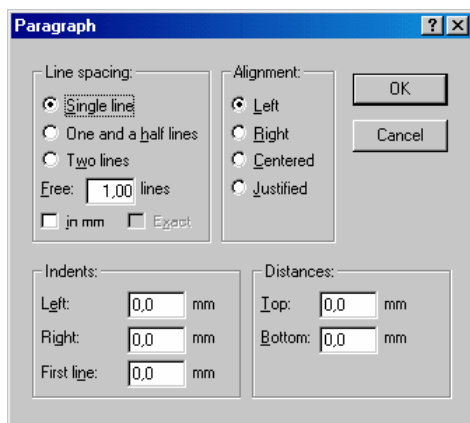
- Normal. The horizontal position is normal.
- Superscript. When this option is set, an extra field is enabled, giving you the possibility to exactly set the new height above the text line in points.
- Subscript. When this option is set, an extra field is enabled, giving you the possibility to exactly set the new height below the text line in points.

"Color"

- Text. The text list box is used to set the color of the text. The list box contains the system's standard colors.
- Other. The button "other" opens the standard color dialog with a larger selection of colors.
- The Text Background list box is used to set the background color of the text. The list box contains the system's standard colors.

Paragraph...

The attributes are line spacing, alignment, indents and the distance to the previous and the following paragraphs. All values are set in millimeters; the value for line spacing can be set either in millimeters or as a multiple of the font size.



Line spacing

- Single line. The distance between two consecutive lines is exactly the text height.
- One and a half lines.
- Two lines.
- Free. Give the number of free lines below the selected paragraph.
- In mm

Alignment

There are four options for setting the alignment of the paragraph:

- Left
- Center
- Right
- Justified

Indents

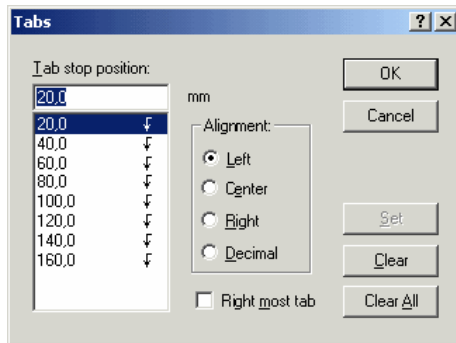
Indents can be set in mm for left, right and first line

Distance

Distance makes it possible to set the distance in mm from the text to top and to bottom

8.6.5 Tabs...

This menu item opens a dialog box, which can be used to set tabular stops for all currently selected paragraphs.



8.7 The Table Menu

8.7.1 Insert...

The menu Table/Insert menu contains following sub-menu items:

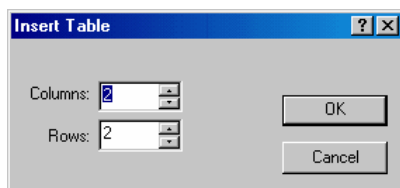
- Table...
- Column to the Left
- Column to the Right
- Row above
- Row below

8.7.1.1 Table...

Command Key: None

Available: When a source document is opened

This menu item inserts a table at current insert position; by open a dialog box giving the user the option to chose number of rows and columns. The dialog box contains four controls:



Columns

Enter the number of columns for the table by typing a numeric value or use your arrow key (up/down) to get your value. The default value for a new table is 2 columns.

Rows

Enter the number of row for the table by typing a numeric value or use your arrow key(up/down) to get your

value. The default value for a new table is 2 rows.

OK

Insert a table at current insertion point, with the settings according to the dialog box.

Cancel

Cancel the operation.

8.7.1.2 Column to the left

Command Key: None

Available: When a source document is opened

Insert a column to the right of the insertion point.

8.7.1.3 Column to the right

Command Key: None

Available: When a source document is opened

Insert a column to the left of the insertion point.

8.7.1.4 Row above

Command Key: None

Available: When a source document is opened

Insert a row above the current insertion point.

8.7.1.5 Row below

Command Key: None

Available: When a source document is opened

Insert a row below the current insertion point.

8.7.2 Delete

The menu item Table/Delete contains following sub-menu items:

- Table
- Columns
- Rows

8.7.2.1 Table

Command Key: None

Available: When the insertion position is inside a table

It is possible to delete a table when the insertion point is inside the table. This menu item deletes the whole table including all of the table's paragraphs.

8.7.2.2 Columns

Command Key: None

Available: When the insertion position is inside a table

Delete the column where the insertion point is.

8.7.2.3 Rows

Command Key: None

Available: When the insertion position is inside a table

Delete the row where the insertion point is.

8.7.3 Select

The menu item Table/Select contains following sub-menu items:

- Table
- Row
- Cell

8.7.3.1 Table

Command Key: None

Available: When the insertion position is inside a table

This command selects the whole table.

8.7.3.2 Row

Command Key: None

Available: When the insertion position is inside a table

This command selects the entire row.

8.7.3.3 Cell

Command Key: None

Available: When the insertion position is inside a table

This command selects the cell where the insertion point is.

8.7.4 Gridlines

Command Key: None

Available: When a source document is opened

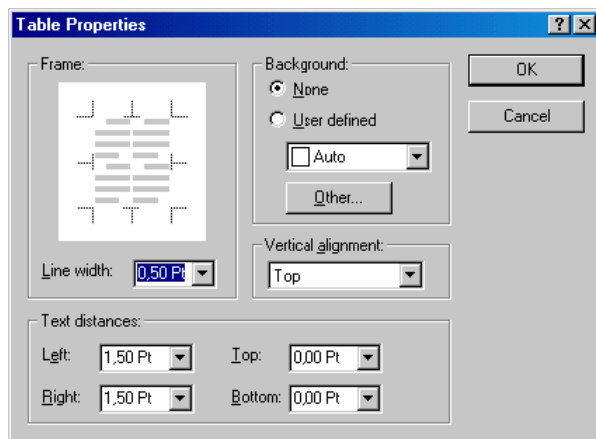
This command will activate grid lines for all tables.

8.7.5 Properties...

Command Key: None

Available: When a group of table cells is selected

This menu item opens a dialog box for setting the properties for the selected table.



The dialog box contains four groups of controls:

Frame

The frame group consists of two controls, one image control, displaying the frame layout, and one list box containing the selectable line widths for each framing line. The frame image control displays the number of selected cells. This means that if you have selected the whole table, the frame image control will display all horizontal and vertical lines in the table.

Click on one of the lines in the image control and move to the line width control in order to set the width for currently selected line. To set the width for only one cell you must select only that cell before you enter this dialog.

Background

The Background group contains several controls for setting the background of the table. Note that affected number of cells depends on how many cells you have selected before you entered the dialog.

Vertical Alignment

Chose the appropriate alignment.

Text distance

This group of controls defines the distance from the cell frame to the text inside the cell. The left, top, right and bottom distances can be defined individually. All values are in points.

8.8 The Document Options Menu

8.8.1 Document Properties...

Command Key: None

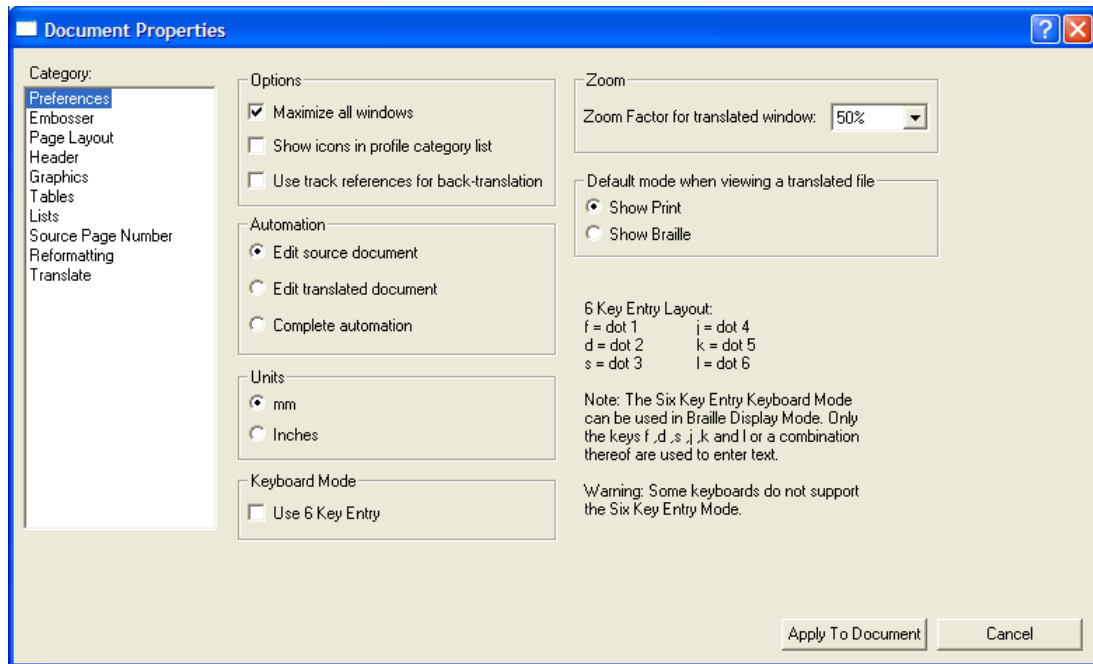
Available: Always when a document is opened

The Document Properties will be displayed in a tabbed dialog box, showing preferences for the currently

active document.

Because of the complexity of all options, the dialog box is built up with a category list on the left hand side to view the corresponding category controls on the right hand side. The main Dialog for the profiles contains following pages:

- Preferences – Preferences for the WinBraille application.
- Embosser – Contains the embosser connected to the profile and some embosser specific options.
- Page Layout – Page size for the translated document (the Braille document) and margins.
- Header – Header and footer for the Braille document.
- Graphics - How to treat images.



All menu items in the Document Options menu affect only the currently opened document, in opposite to the items in the Profile menu. You use these options when you only want to change the behavior in prior to embossing or translating the current document, since no changes will be stored to the profile or template.

All dialogs accessed from the Document Options menu are also available from the Profile menu, with the exception of the Change Profile dialog. The only difference between the dialogs in the Document Options menu and the dialogs in the Profile menu is that the Document Options' dialogs have a button "Apply To Document" while the Profile's dialogs have an "Update Profile" or "Update Template" button (where appropriate).

Please refer to the corresponding menu item in the Profile menu for further information.

8.8.2 Braille Format...

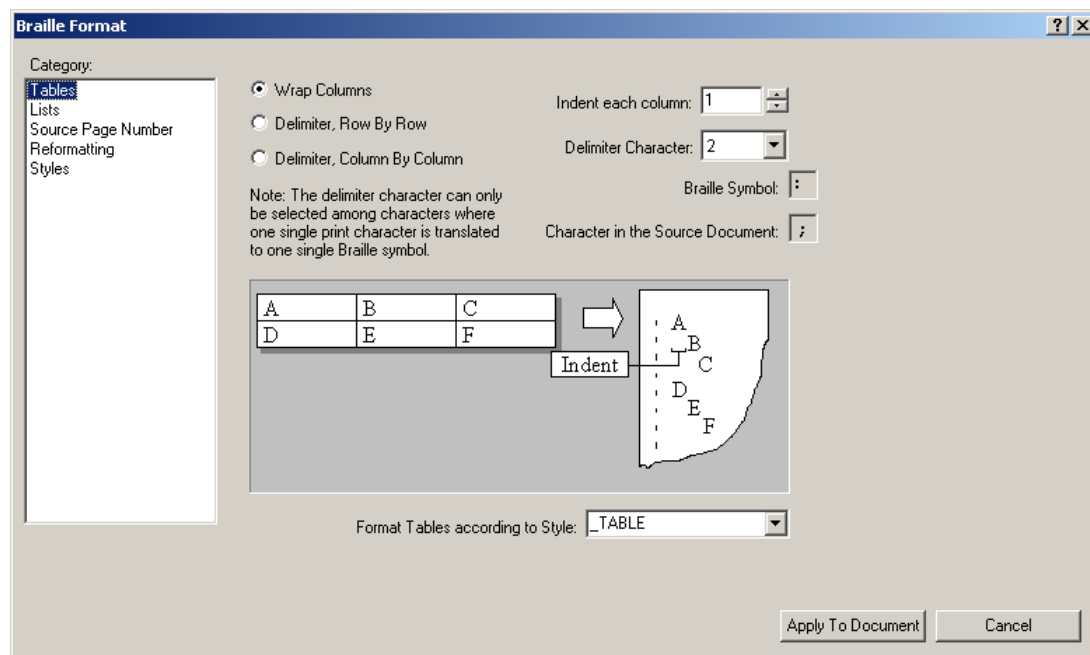
Command Key: None

Available: In the professional edition, when a source document is opened

The Braille Format will be displayed for the active document. Because of the complexity of all options, the dialog box is built up with a category list on the left hand side to view the corresponding category controls on the right hand side. All settings contain options applicable for the whole document. The five pages in the

dialog correspond to the Template dialog found in the Profile menu. The difference between the pages in the Braille Format dialog and the pages in the Template dialog is that the Braille Format's dialog has a button "Apply To Document" while the Template's dialog has an "Update Template" button. The Braille Format dialog contains the following pages:

- Tables – How to convert tables in the document.
- Lists – How to treat bulleted and numbered lists in the document.
- Page number – Options for defining source page number in the Braille document.
- Reformatting – How to treat page breaks and empty lines in the Braille document.
- Styles – A list box with all styles in the document's template.



Please refer to the Manage Templates... menu item in the Profile menu for further information.

8.8.3 Braille Style Format...

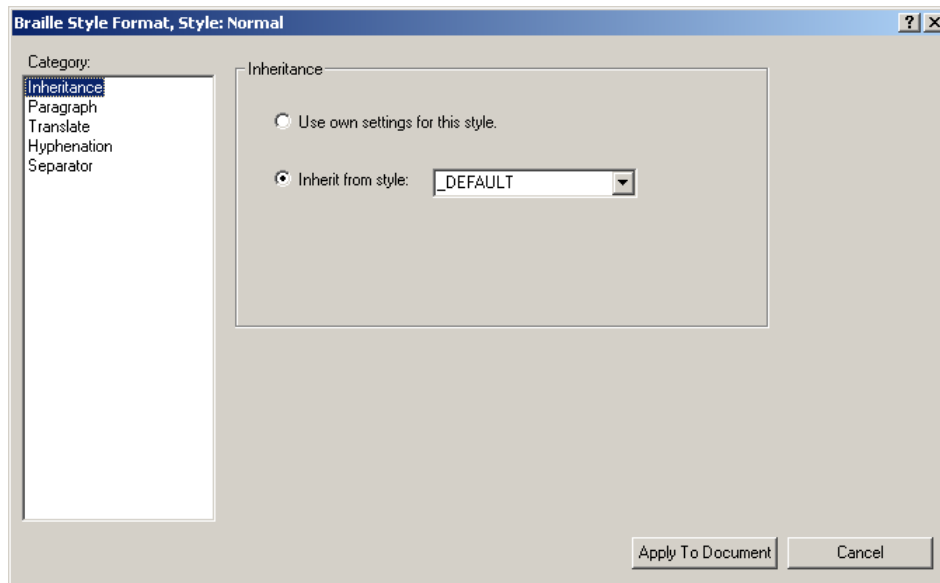
Command Key: None

Available: In the professional edition, when a source document is opened

The Braille Style Format options will be displayed for the active style. Because of the complexity of all options, the dialog box is built up with a category list on the left hand side to view the corresponding category controls on the right hand side. The active style is the style that is currently selected. If More than one style is selected, WinBraille will display the settings for the style _DEFAULT. The four pages in the dialog correspond to the Style sub dialog in the Template dialog found in the Profile menu. The difference between the pages in the Braille Style Format dialog and the pages in the Template Style dialog is that the Braille Style Format's dialog has a button "Apply To Document" while the Template's dialog has an "Update Template" button. The Braille Style Format... menu item opens the same dialog as you open from the item Document Options / Braille Format / Styles / [selected style] / Modify Braille Style. The Braille Style Format dialog contains the following pages:

- Inheritance – Either select "Use own settings for this style", or select another style to inherit formats from.
- Paragraph – Format for paragraph alignment and indentation, distance to previous and next paragraph, line spacing, how to handle white space and tabular markers, whether attributes like bold, italic and underline, shall be translated, and if adjacent lines shall be concatenated.

- Translate – Translation rules and list of exceptions.
- Separator – Format of paragraph separator. A paragraph separator is a line of Braille cells that separates the paragraph from the previous or next paragraph.



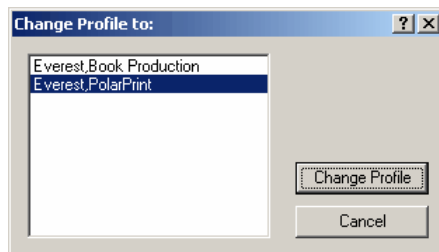
Please refer to the Manage Templates... menu item in the Profile menu for further information.

8.8.4 Change Profile...

Command Key: None

Available: Always when a source document is opened

Change profile for an active document. It is possible to change profile for an active document if more than one profile exist in the system.



8.8.5 Shortcuts

Command Key: None

Available: In the professional edition, when a document is opened

The Shortcuts menu is a submenu with direct links (shortcuts) to the following pages in the Document Properties, Braille Format, and Braille Style Format dialogs:

- Preferences
- Embosser
- Page Layout
- Header
- Graphics

- Tables
- Lists
- Source Page number
- Reformatting
- Paragraph
- Translate
- Hyphenation
- Separator

All shortcuts are available for the source document. Only the Preferences, Embosser, and Header shortcuts are available for the translated document.

8.9 The Braille Menu

8.9.1 Translate

Command Key: Ctrl + T

Available: When a source document is opened

The translate command translates the active source document to Braille according to the settings in the current template. WinBraille displays a dialog box with information about the translation during the translation. After the translation is finished, a new document will be displayed with the result of the translation.

8.9.2 Exceptions...

Command Key: None

Available: When a source document is opened

The Exception dialog is an excellent way of building your own exception list. The exception list is a list of words that should not be converted according to the active translation File. The list displays the word and its alternative translation.

Scroll bars

This control has a tab stop, so it is possible to move to this control by using your TAB key. When this control is active, you can scroll up or down using the up and down keys in order to examine the complete exception list.

Exception

The dialog contains an exception control that displays the current selected word in your document. This field will be empty if no word is selected. If you would like to add a new word, just delete the current word and type a new word in the field.

Translation

Translation is the field for how you would like your word to be translated. The default translation is the translation according to the active translation File.

Braille

The Braille control displays the translation into Braille. This field cannot be changed. The Braille format is according to the selected Braille table in the currently active translation file. The field displays an image of the Braille cells, and can thus not be read with a Braille display.

Context

The context group of controls defines how the translation engine should treat the word during the translation.

You can select either "Word" context or "Symbol or Syllable" context. In the "Word" context, translation is performed according to the exception only if the translated symbol is a single word, separated with white space or punctuation marks from other words in the sentence. In the "Symbol or Syllable" context, translation is performed according to the exception even if the translated symbol is part of a word or a single symbol.

Add

When pressing the Add button, the word and corresponding translation will be added to your list.

Remove

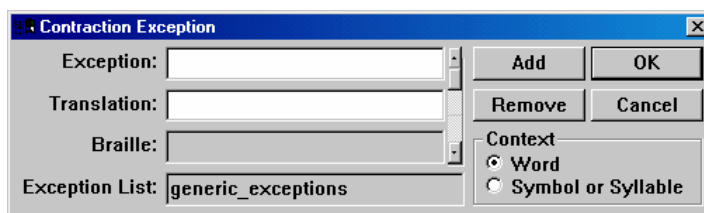
Delete the current word from the exception list.

OK

Close the dialog and accept all changes you have made to the exception list.

Cancel

Cancel all changes you have made to your exception list and close the dialog.

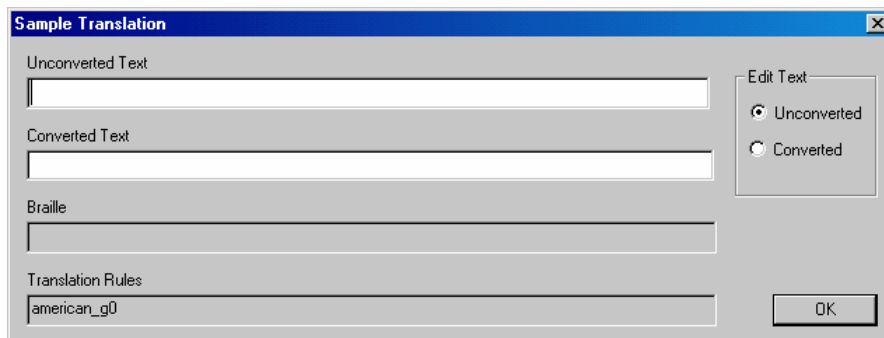


8.9.3 Sample Translation...

Command Key: None

Available: In the professional edition, when a source document is opened

The Sample Translation menu item opens a dialog box where you can type and translate any sentence in real time. The translation is performed during the typing of the sentence.



The dialog has several fields and some radio button:

Unconverted Text

This field will be filled with the selected text if any. Type any word or sentence in order to examine the translated result in the field "Converted Text".

Translated Text

This field will display the result of the translated text in Text mode.

Braille

This field will display the result of the translated text in Braille mode.

Edit Text

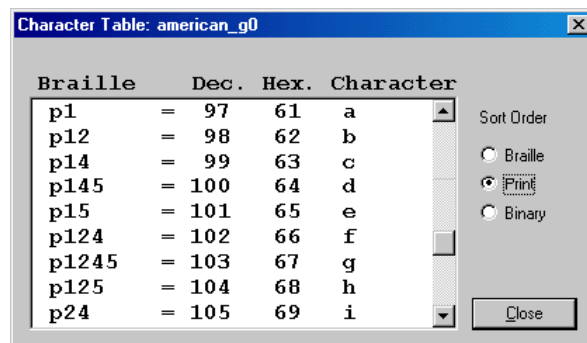
The "Edit Text" group box has two radio buttons. Select "Unconverted" if you want to type source text and see the translation. Select "Converted" if you want to type translated text and see the result as Braille.

8.9.4 Character Table...

Command Key: None

Available: In the professional edition, when a source document is opened

The Character Table displays the character table in the currently active translation file.



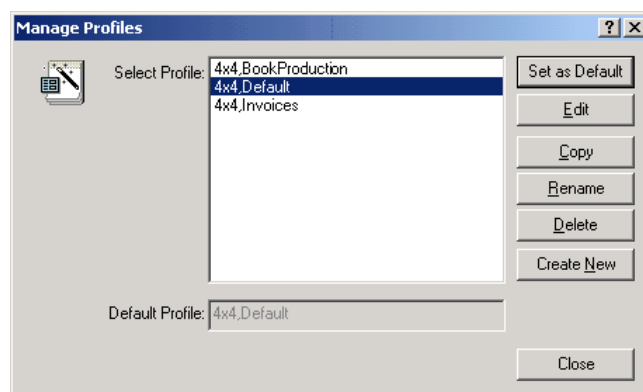
8.10 The Profile Menu

8.10.1 Manage Profiles...

Command Key: None

Available: Always

This command opens the "Manage Profiles" dialog. The purpose with this dialog is maintenance of all profiles in the WinBraille system. The dialog contains a list box with all profiles in the system, an array of buttons, which operates on selected profile, and an information field, displaying the default profile. Note that all changes in the profile will not affect documents that are already opened in the editor.



Select Profile

The "Select Profile" control contains all Profiles in the system. The Profile name is built up in two parts: The Embosser name and a descriptive part of the profile to give the user a hint of the usage of the profile. The

naming convention is important when several profiles exist in the system.

Set As Default

The "Set As Default" button will automatically set the selected profile to the default profile in the system. This profile will be used when translating documents from other applications.

Edit

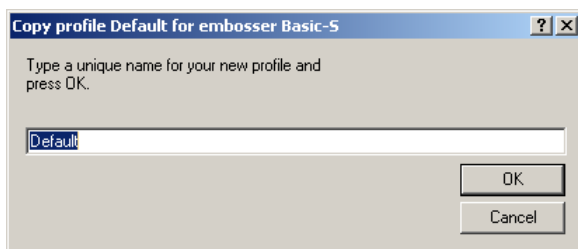
The **Edit** button opens a dialog box with all settings for the profile. For more information see [Preferences](#).

Copy

The **Copy** button opens a dialog box for copying the selected profile. The Layout depends on if Professional or Standard Edition is enabled.

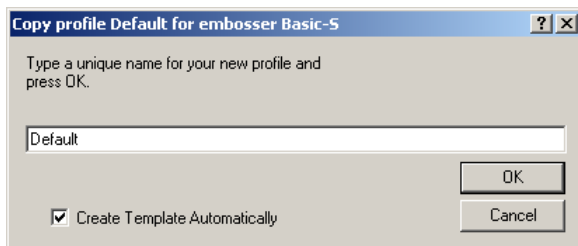
Standard Edition

The dialog contains a field for entering the new profile's name. Type a new name and press OK to create the new profile or press Cancel to close the dialog.

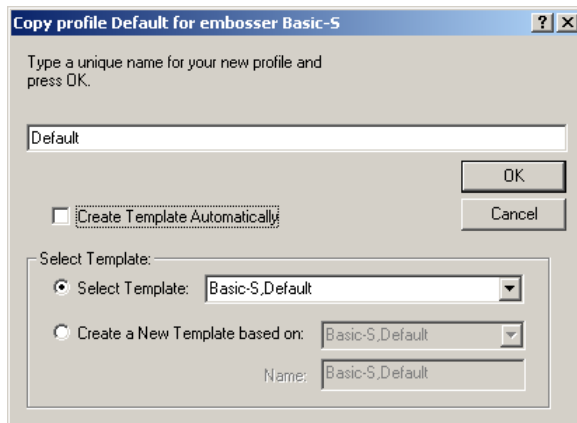


Professional Edition

The dialog contains a field for entering the new profile's name and a check box "Create Template automatically". When "Create Template automatically" is checked, WinBraille will automatically create a Braille formatting template with the same name as the Profile.



If the check box "Create Template automatically" is not checked, a group of controls are displayed for manual creating or selecting of templates.

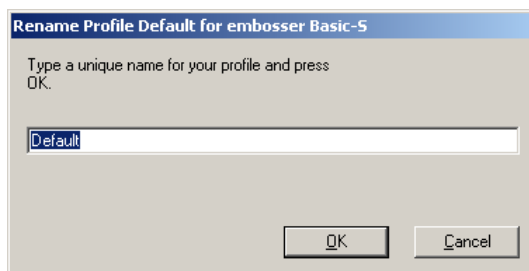


Rename Profile

The **Rename** button opens a dialog box for renaming selected profile. The Layout depends on if Professional or Standard Edition is enabled.

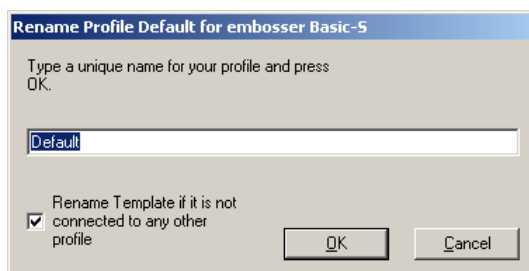
Standard Edition

The dialog contains a field for entering the new profile's name. Type a new name and press OK to rename the profile or press Cancel to close the dialog.



Professional Edition

The dialog contains a field for entering the profile's name and a check box "Rename Template if it is not connected to any other profile". When the check box is checked, WinBraille will automatically rename the template if it is not connected to any other profile.

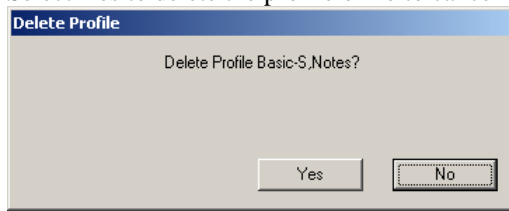


Delete Profile

The **Delete** button deletes the currently selected profile. A message box will appear if the user presses the "Delete" button with an extra message about the deletion. This is done to minimize the risk of deleting the wrong profile. A profile that is deleted cannot be restored. WinBraille will prevent the user from deleting all profiles from the system. The Layout depends on if Professional or Standard Edition is enabled.

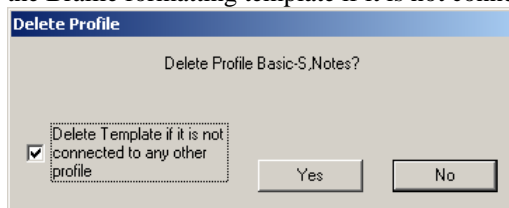
Standard Edition

Select Yes to delete the profile or no to cancel the operation.



Professional Edition

The dialog contains a field for entering the new profile's name and a check box "Delete Template if it is not connected to any other profile". When the check box is checked, WinBraille will automatically delete the Braille formatting template if it is not connected to any other profile.



8.10.1.1 Edit Profile

The **Edit** and the **Copy** buttons on the dialog "Manage Profile" will (after an additional step for **Copy**), open a dialog box with all setting for the profile. Because of the complexity of all options, the dialog box is built up with a category list on the left hand side and the corresponding controls on the right hand side. The main Dialog for the profiles contains the following pages:

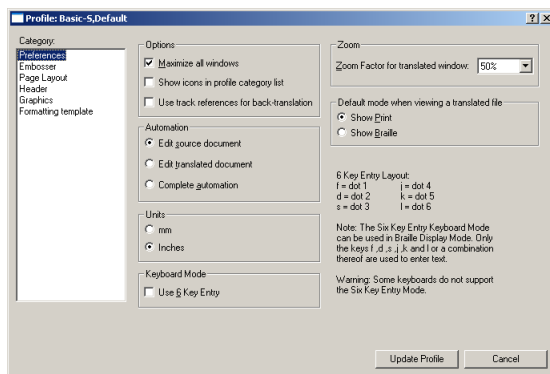
- Preferences – Preferences for the WinBraille Editor.
- Embosser – Contains the name of the Embosser connected to the profile and some embosser specific options.
- Page layout – Page size for the translated document (Braille Document) and margins.
- Header – Header and footer for the Braille document.
- Graphics - How to treat images.
- Format – The name of a template file containing all formatting options for translating a document to Braille.

To navigate between the pages the user can use CTRL + TAB to move to the next page and CTR + SHIFT + TAB to navigate to previous page.

8.10.1.1.1 Preferences

The Preferences page displays all settings that affect the behavior of WinBraille.

Setting	Default Value	Info and Options
Options	Maximize all Windows	Follow Windows Standard
Automation	Edit source document	Edit Source Document = View source document, WinBraille as stand alone editor Edit Translated Document = View translated and formatted braille document Complete Automation = invisible in the background
Units	mm (millimetres)	
Keyboard Mode	Standard	Standard = qwerty-keyboard Use 6 key entry = braille keyboard. The keys S, D, F, J, K and L together form the Braille cell.
Zoom	50%	
Default mode when viewing a translated file	Show Print	Show print = normal characters in translated window Show braille = braille characters in translated window



Maximize all windows

When maximize all windows is checked, all new source windows will be created as maximized windows. The translated window is always maximized.

Automation

The group box "Automation" has three choices:

- Edit source document - When printing from another application, WinBraille will display the source text in the source window without translating the text.
- Edit translated document – When printing from another application, WinBraille will translate the source text and only display the translated text in the translated window. It is not possible to edit the source text because this window is not available.
- Complete automation – When printing from another application, WinBraille will work in the background and translate the text according to the default profile and send the text directly to the embosser.

Default mode when viewing a translated text

This group box has two options for viewing the translated text:

- Show Print – The text is displayed with ordinary characters. This option should be used if the user has a

Braille display or cannot read the Braille directly.

- Show Braille – This mode will display the translated text in Braille with dots on the screen. Note that the characters are not mapped to the ANSI character set. This mode is not useful when using a Braille display.

Zoom factor for translated document

The zoom factor for viewing the translated document could be set with this list box.

Units

This control is used to present option units in either mm or inch.

Keyboard Mode

The keyboard mode group box has a check box called "Use 6 Key Entry". When this mode is activated, only the keys f, d, s, j, k and l can be used to enter Braille characters. Every key corresponds to one dot position in the Braille cell. To produce one Braille cell, the user must press one up to 6 of these keys at the same time in order to get the correct Braille cell. This mode is independent of the viewing mode. Note that not all keyboards on the market support the functionality to press several keys at the same time.

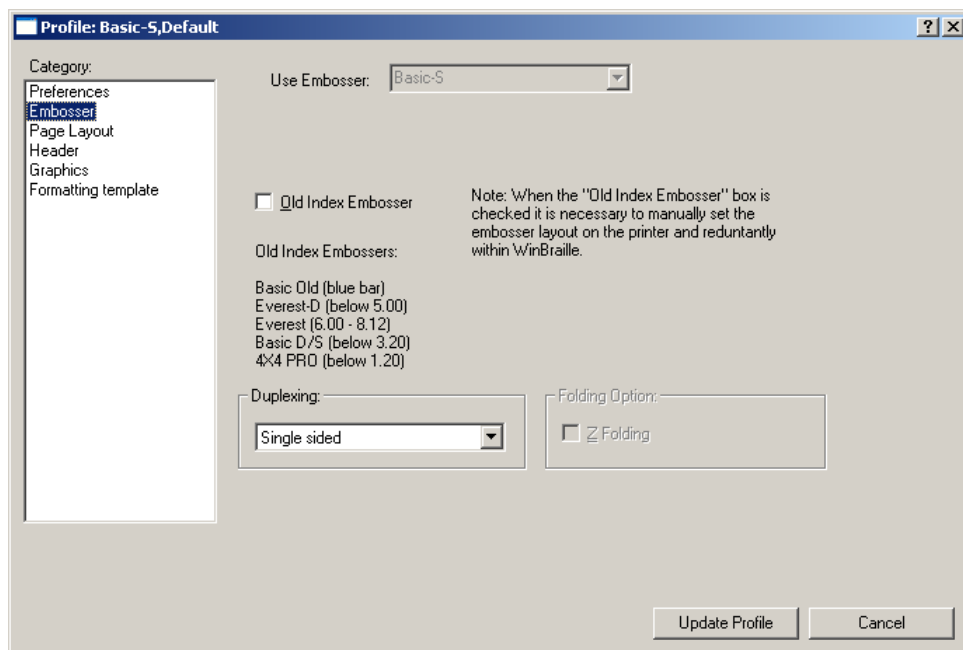
The definition of the position numbers in the dot cell is defined below together with corresponding keyboard key.

Key	Comment
F	Dot 1, Upper left dot.
D	Dot 2, Middle left dot.
S	Dot 3, Lower left dot.
J	Dot 4, Upper right dot.
K	Dot 5, Middle right dot.
L	Dot 6, Lower right dot.

8.10.1.1.2 Embosser

The Embosser page displays which embosser the Braille document will be sent to and some embosser specific options.

[Embosser Overview see.](#)



Use Embosser

This read-only list box displays the embosser for the profile. It is not possible to change embosser for the profile when working with the profile from the Manage Profile menu. To use another embosser go back to Manage Profiles and create a new one. When a document is opened, it is possible to reselect another embosser for that document.

Old Index Embosser

Old Index Embossers do not support all of the functionality that WinBraille can offer. When this check box is activated, no extra information regarding page size and special printing options is transferred to the Embosser. Therefore the user must set all these options directly from the front panel of the Embosser (or use special software for sending this information to the embosser). The following Index Embossers are treated as Old Embossers:

- Basic Old (blue bar)
- Everest-D (below 5.00)
- Everest (6.00 - 8.12)
- Basic D/S (below 3.20)
- 4X4 PRO (below 1.20)

For the above-mentioned Embossers, the check box "Old Index Embossers" must be checked. The following older embossers are not supported: Order a new embosser right from the web! <http://www.indexBraille.com>

- | | |
|-----------------------|-------------------------|
| • Index 3.7 (84-85) - | Not possible to upgrade |
| • Advanced (87-89) - | Not possible to upgrade |
| • Classic (88-93) - | Not possible to upgrade |
| • Domino (89-90) - | Not possible to upgrade |

Duplexing

The contents of the duplexing list box depends on the type of Embosser:

Embosser	Contents in the list box
Basic-S	Single sided
Basic-D	Double Sided, Single Sided
Everest	Double Sided, Single Sided
4x4 Pro	Double Sided, Single Sided, 4 Side Stitch

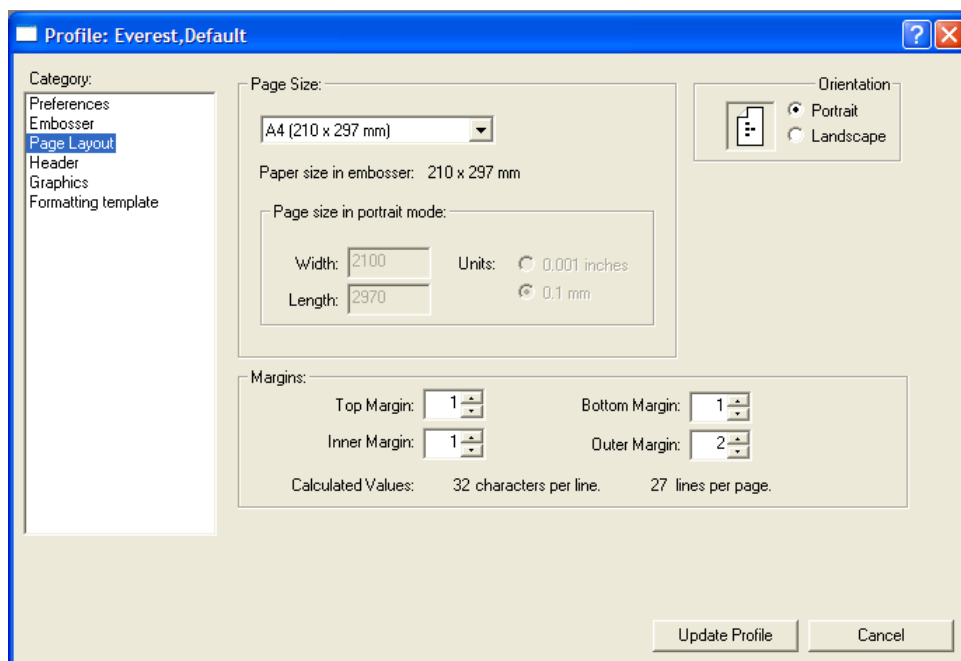
Z-folding

The Z-folding option is only available for the for Basic-D embossers. In this mode, the pages are printed in an order that minimize the work to stitch the pack of paper after the printout. The only thing you need to do before you stitch is to rip off the strip of punched holes and separate each page at the perforation. There is no need to rearrange the paper pack.

8.10.1.1.3 Page Layout

This Page contains three groups of controls for the Braille document: Margins, Page size and Orientation.

[Page layout overview see.](#)



Top Margin

Top margin defines the number of empty lines before the main text. Note that top margin = 0 means that there is no header available. To make room for the header line, enter a top margin of at least 1.

Bottom Margin

Bottom margin defines the number of empty lines after the main text down to the lower edge of the page. Note that bottom margin = 0 means that there is no footer available. To make room for the footer line, enter a bottom margin of at least 1.

Inner margin

The inner margin is the distance from the binding edge of the paper to the text.

Outer margin

The outer margin is the distance from the outer edge of the paper to the text.

Page size

The page size group box contains several controls for defining the correct Braille page size. The first control in the TAB order is the list box "Page Size" with several predefined sizes. The last item in the list is "Custom Paper", which will enable some extra controls for defining width and length of the page.

Width, Length and Units

Width and length of the paper size can be displayed either in tenth of millimetres or in thousands of inches. These fields are only available if you have selected the custom paper size.

Orientation

The orientation option is not always enabled. Some papers are too large to be inserted in the landscape orientation.

8.10.1.1.4 Header

The Header page contains several groups of controls for defining the header and footer.

[Header overview see.](#)

The header and footer fields are grouped in two groups. One group defines the header and footer for "Odd pages" and the other group defines the header and footer for "Even pages". Both groups of controls have fields for left, center and right adjusted text. The two groups of controls are identical. It is possible to define text in either of the left, center or right fields. Overwriting will occur if the size of the combined text is greater than the maximum characters per line.

Begin Page numbering on Braille Page

This control defines the first page where header and footer are embossed.

Start Numbering With

This control defines the page number of the first page with an embossed header or footer.

Format Header and Footer according to Style

The header and footer text can be formatted according to style `_DEFAULT` or `_HEADER`. (The style `_HEADER` is only available if it has been defined in the profile's template. This field cannot be changed if `_DEFAULT` is the only available style).

Codes for page number, date and time

Several special codes are defined in order to create special text strings. All codes have the syntax `%x`, where `x` is a special character defined below:

`%b` = Braille Page number

The `%b` is substituted with the current Braille page

`%s` = Source page number

The `%s` is substituted with the current source page number

`%u` = Source Sub Pages

The `%u` is substituted with current source sub page. When a source page is translated into several Braille page, this code will produce a consecutive character, starting with "a" for every new Braille page that belong

to a specific source page. If you enter "%s %u" and translate one source page into four Braille pages, the pages will be numbered: 1 a, 1 b 1c and 1d.

%d = Date and Time Format

The %d is substituted with current date and time. The control "Date and Time..." defines the format.

Date and Time Format

%a

Abbreviated weekday name

%A

Full weekday name

%b

Abbreviated month name

%B

Full month name

%c

Date and time representation appropriate for locale

%d

Day of month as decimal number (01 - 31)

%H

Hour in 24-hour format (00 - 23)

%I

Hour in 12-hour format (01 - 12)

%j

Day of year as decimal number (001 - 366)

%m

Month as decimal number (01 - 12)

%M

Minute as decimal number (00 - 59)

%p

Current locale's A.M./P.M. indicator for 12-hour clock

%S

Second as decimal number (00 - 59)

%U

Week of year as decimal number, with Sunday as first day of week (00 - 53)

%w

Weekday as decimal number (0 - 6; Sunday is 0)

%W

Week of year as decimal number, with Monday as first day of week (00 - 53)

%x

Date representation for current locale

%X

Time representation for current locale

%y

Year without century, as decimal number (00 - 99)

%Y

Year with century, as decimal number

%z, %Z

Time-zone name or abbreviation; no characters if time zone is unknown

%%

Percent sign

#

The # flag may prefix any formatting code. In that case, the meaning of the format code is changed as follows.

%#a, %#A, %#b, %#B, %#p, %#X, %#z, %#Z, %#%: # flag is ignored.

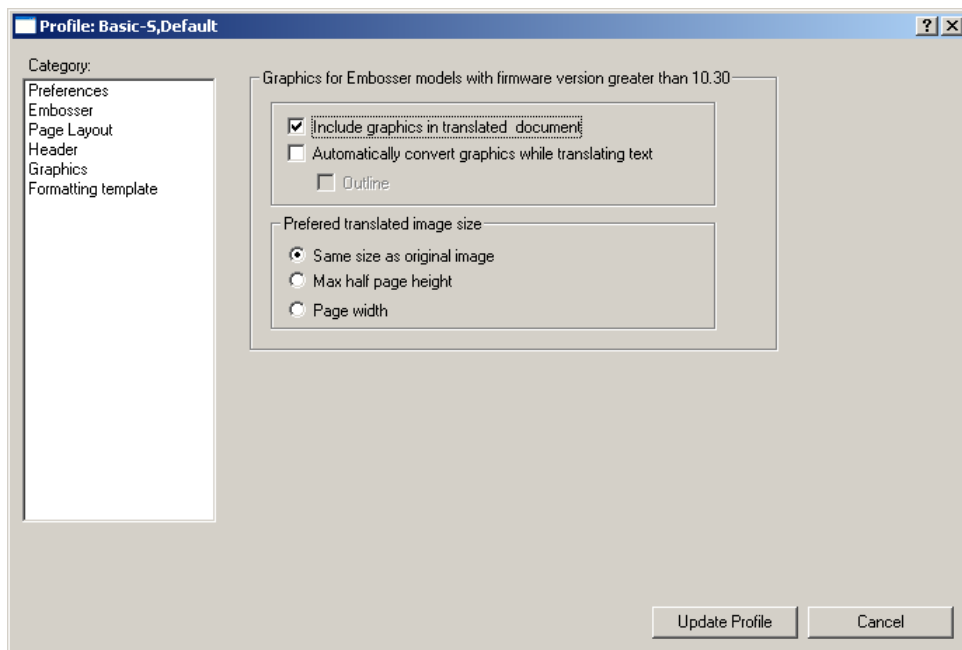
%#c: Long date and time representation, appropriate for current locale. For example: "Tuesday, March 14, 1995, 12:41:29".

%#x: Long date representation, appropriate to current locale. For example: "Tuesday, March 14, 1995".

%#d, %#H, %#l, %#j, %#m, %#M, %#S, %#U, %#w, %#W, %#y, %#Y: Remove leading zeros (if any).

8.10.1.1.5 Graphics

The Graphics page contains a few controls for the usage of graphics:



Include Graphics in Translated document

Graphics can be included or excluded depending on this choice.

Automatically convert graphics while translating text

You should always convert manually the first time you include a new graphic image. Once you have seen how the translation works you can check the automatic conversion.

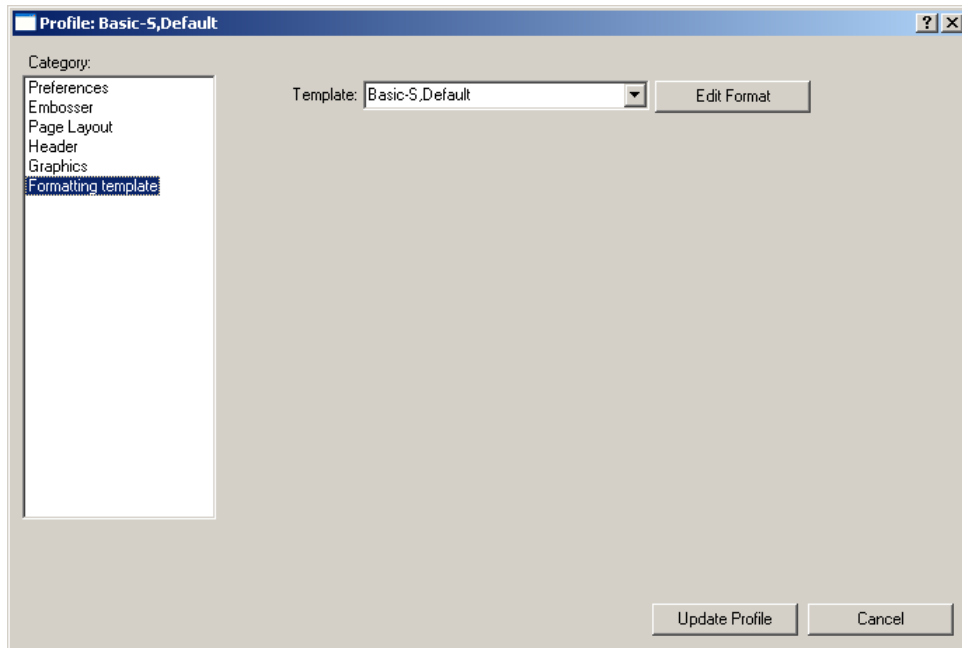
Preferred Translated Image Size

There are three possible choices for the preferred image translation:

- Same size as the original
- Max half page height
- Page width

8.10.1.1.6 Format

The Formatting template page contains a list box for connecting a template to the profile, and an edit button for edit or modify the contents of the template file. This category is displayed only in Professional Edition.



The format page is where you tell WinBraille which Template you want to use as a template for the Braille translation when you use this Profile, as well as when a new document is created using this Profile.

Template

Select one of the available Templates from the drop-down menu. Templates are installed during the Index Custom Installation. You can also create your own templates by saving a document as a Template.

Edit Format

The selected Template's Braille formats can be edited directly from the Profile. Note that this will change the settings in the Template, and not in the Profile. The Template file can be referenced from more than one Profile. If you change such a template, all Profiles that reference this template will create documents with the same Braille layout.

See [Manage Templates](#) for details.

8.10.2 Shortcuts

Command Key: None
Available: Always

The Shortcuts menu is a submenu with direct links (shortcuts) to the following pages in the Manage Profiles and Manage Templates dialogs:

[Preferences](#)

[Embosser](#)

[Page Layout](#)

[Header](#)

[Graphics](#)

[Tables](#)

[Lists](#)

[Source Page number](#)

[Reformatting](#)

[Paragraph \(Only in Professional Edition\)](#)

[Translate](#)

[Hyphenation \(Only in Professional Edition\)](#)

[Separator \(Only in Professional Edition\)](#)

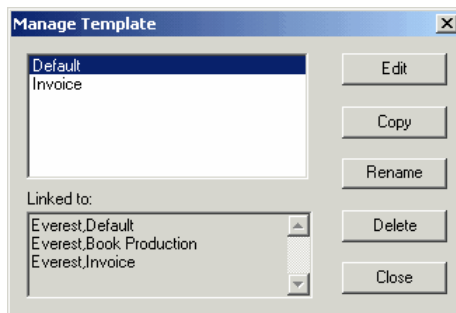
8.10.3 Manage Templates...

Command Key: None

Available: In the professional edition

This command opens the "Manage Templates" dialog. The purpose with this dialog is to maintain all templates in the WinBraille system. The dialog contains a list box with all templates in the system, an array of buttons that operates on the selected template and an information field displaying the profiles where the template is used.

Normally you should not delete a template that is linked to a profile. If a template is linked to a profile, delete that profile or reselect another template for that profile before you delete the template.

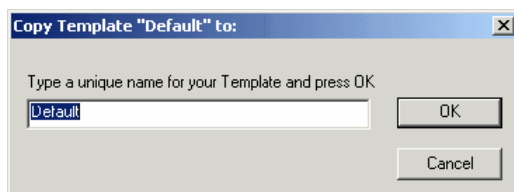


Edit

The Edit button opens a tabbed dialog box with the Braille format for the template.

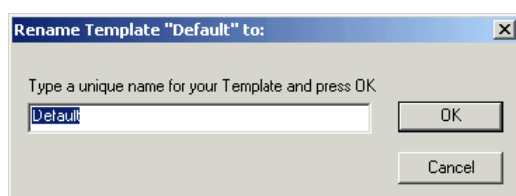
Copy

The "Copy" button opens a dialog box for copying the selected template. The dialog contains a field for entering the new template's name. Type a new name and press OK to create the new template, or press Cancel to close the dialog.



Rename

The "Rename" button opens a dialog box for renaming the selected template. The dialog contains a field for entering the template's new name. Type a new name and press OK to rename the currently selected template, or press Cancel to close the dialog.



Delete

The "Delete" button deletes the currently selected template. A message box will appear if the user presses the "Delete" button, with an extra message about the deletion. This is done to minimize the risk of deleting the wrong template. A template that is deleted can not be restored. WinBraille will prevent the user from deleting all templates from the system.

8.10.3.1 Edit Format

When pressing the "Edit Format" button on the page "Format" a tabbed dialog box will be displayed with all setting for the selected template. Because of the complexity of all options, the dialog box is built up with a category list on the left hand side and the corresponding controls on the right hand side. All the setting in the first tabbed dialog contains options applicable for the whole document. The main Dialog for the template contains the following pages:

- Tables – How to convert tables in the document.
- Lists – How to treat bulleted and numbered lists in the document.
- Source Page number – Options for defining source page number in the Braille document.
- Reformatting – How to treat page breaks and empty lines in the Braille document.
- Styles – A list box with all styles in the template.

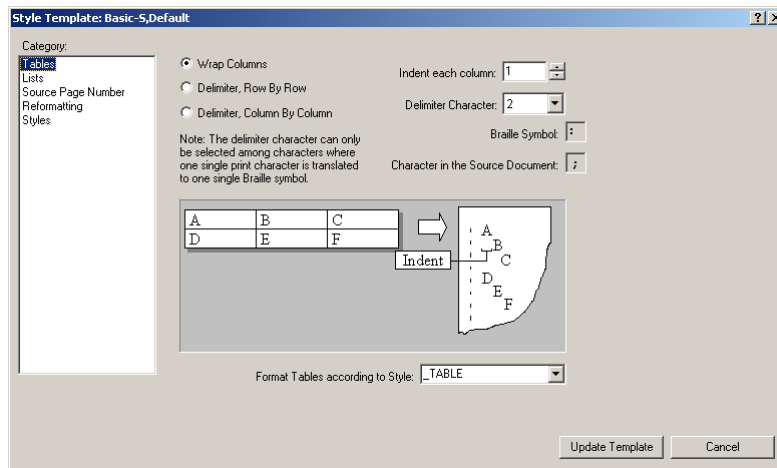
8.10.3.1.1 Tables

Table Overview

Setting	Default Value	Info and Options
Wrap Column	Indent each column 1 (default)	
Delimiter, Row by Row	Minimum column width "1" Delimiter Character "2"	
Delimiter, Column by Column	Minimum column width "1" Delimiter Character "3"	

The Tables page defines how to format tables in the document. Select one of three methods:

- Wrap Columns – Each column on a row will be wrapped down to a new line and indented by a number of characters. The indentation is given by the control "Indent each column".
- Delimiter, Row by Row - The table will have the same layout as the original table, except that a delimiter symbol separates each cell. The delimiter symbol is given by the control "Delimiter Character". The control "Delimiter Character" is the next control in the TAB order.
- Delimiter, Column by Column - The table is "rotated" 90 degrees. This means that the first column will be the first row, the second column will be the second row and so on. A delimiter symbol will separate each cell. The delimiter symbol is given by the control "Delimiter Character".



Indent each column

Each column on a row will be wrapped down to a new line and indented by a number of characters. The indentation is given by this control.

Minimum Column width

WinBraille will try to decrease the column width until it will fit on the page. If the width for all columns reaches the minimum width, WinBraille will split the column into several parts.

Delimiter Character

Choose a delimiter character to separate each cell in the table.

Braille Symbol

This field displays the delimiter character as a Braille symbol.

Character in the Source Document

This field displays as information the equivalent delimiter character as it would be entered in the source document. (The character given in the "Delimiter Character" field is the character in the translated document as it is embossed on the embosser).

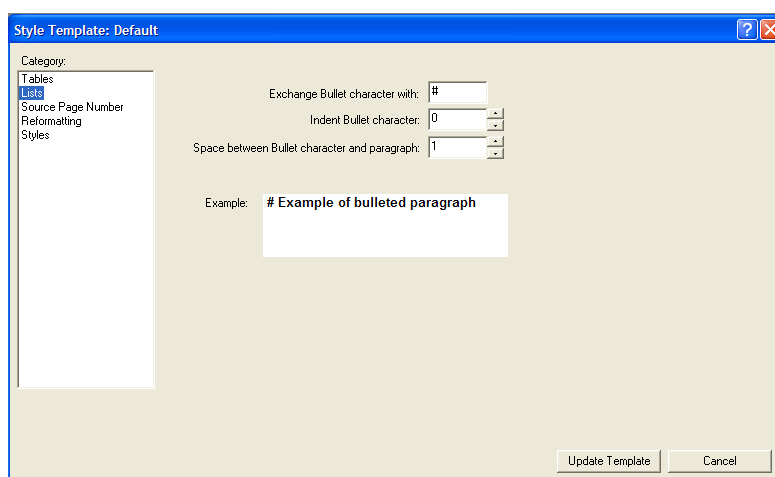
Format Tables according to Style

This list box is used to select the Style of the text in the table.

8.10.3.1.2 Lists

The List page contains options for converting bulleted lists.

Setting	Default Value	Info and Options
Exchange Bullets characters with	#	
Indent Bullet characters	Number of characters 0 (default)	
Space between bullet character and paragraph	1 (default)	



Exchange Bullet character with

The First control is "Exchange Bullet character with". This list box contains all possible characters available for substituting the bullet character.

Indent Bullet character with

The distance between the left margin and the bullet character is defined with this control.

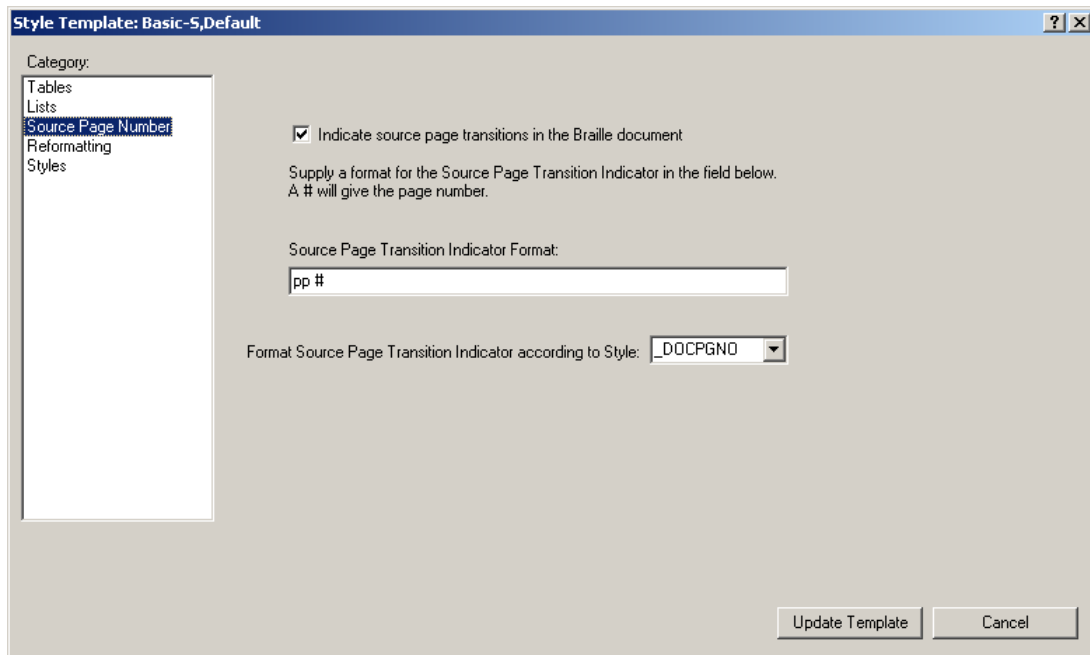
Space between the Bullet character and paragraph

This control defines the distance between the bullet character and the paragraph. The next control is called "Example" and will display an example of how WinBraille will convert a bulleted paragraph using the defined settings.

8.10.3.1.3 Source Page number

The Page number selection will produce a text line in the Braille document, indicating where every source page ends. This function can be combined with header information, which gives total control of the relation between a Braille page and a source page.

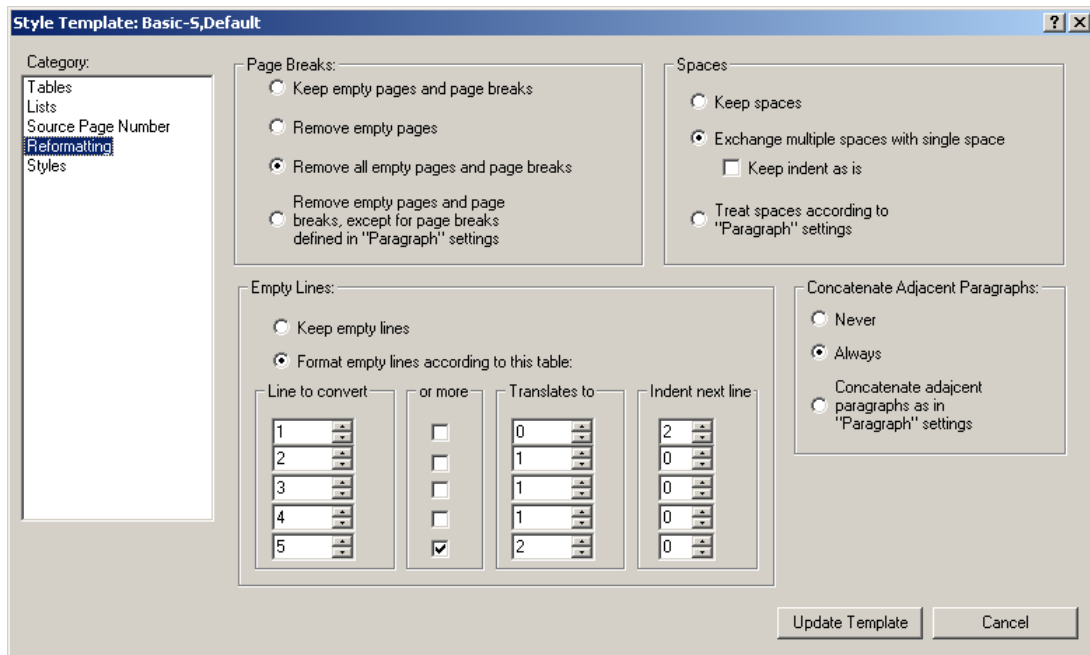
Setting	Default Value	Info and Options
Indicate page translation in the Braille document	Default = not tagged	When tagged the pp# (Printed Page Number) is embossed on a separate line in the braille document



8.10.3.1.4 Reformatting

The Reformatting page contains 2 groups of controls. The first group of controls handles how to treat page breaks and the other group how to treat empty line.

Setting	Default Value	Info and Options
Page Breaks	Remove all empty pages and page brakes	1. Keep empty pages and page breaks 2. Remove empty pages 3. Remove all empty pages and page breaks 4. Remove empty pages and page breaks, except for page breaks defined in "Style/ Paragraph" settings
Space	Exchange multiple space with single space	1. Keep spaces 2. Exchange multiple spaces with single spaces 3. Treat spaces according to "Style/ Paragraph" settings
Empty Lines	1. Keep empty lines 2. Format empty lines according to this table	User defined table defining how to convert empty lines
Concatenate Adjacent Paragraphs	1. Never (default tagged) 2. Always 3. Concatenate adjacent paragraphs as in "Style/Paragraph" settings	1. Never, the formatting in paragraph setting will be processed 2. The translated braille text will be compressed, no extra spaces, empty lines etc. 3. The translated braille in the style defined in "Style/ Paragraph" will be compressed, other not



Page Breaks

This group of controls handles how to treat page breaks.

- Keep empty pages and page breaks – All empty pages and manually inserted page breaks are maintained.
- Remove empty pages – Empty pages are removed, but manually inserted page breaks are not removed.
- Remove empty pages and page breaks – All empty pages and manually inserted page breaks are removed.
- Remove empty pages and page breaks, except for page breaks defined in "Paragraph" settings. - In Professional Edition, page breaks could be set for a style. This option will remove page breaks and empty pages for all styles where the option "Insert page break before paragraph" is not set.

Empty Lines

The two first controls in this group handle how to treat empty lines. The first "Keep empty lines" will keep the original formatting and leave all empty lines.

The option "Format empty lines according to this table:" will enable an array of controls for defining an algorithm for handling empty lines. The array is built up with 5 rows. Each row of controls forms a Rule on how to treat empty lines.

The two first controls on the row are "Line to convert" and "or more". They define together how many empty lines the rule will be applied to.

The third control defines how many lines this rule should be converted to. A "0" means that the line(s) should be removed. The fourth control defines how many characters the next line should be indented.

When all controls are filled with data the algorithm might look like this:

Line to convert = 1, Or more = Not marked, Translates to = 0, Indent next line = 0.

Line to convert = 2, Or more = Not marked, Translates to = 1, Indent next line = 0.

Line to convert = 3, Or more = Marked, Translates to = 1, Indent next line = 1.

In plain text the rules are:

1 empty line should be removed.

2 empty lines should be converted to 1 empty line.

3 empty lines or more should be converted to 1 empty line and the first line of text after the empty lines should be indented 1 character.

Spaces

The Space group has three possible options: "Keep original spaces", "Exchange multiple spaces with single space" and "Treat spaces according to "Paragraph" settings". When "Exchange multiple spaces with single space" is selected, an extra check box for leaving the indents is enabled. The "Treat spaces according to "Paragraph" settings" is only enabled for Professional Edition. If this option is selected the settings for each style will be used during the translation.

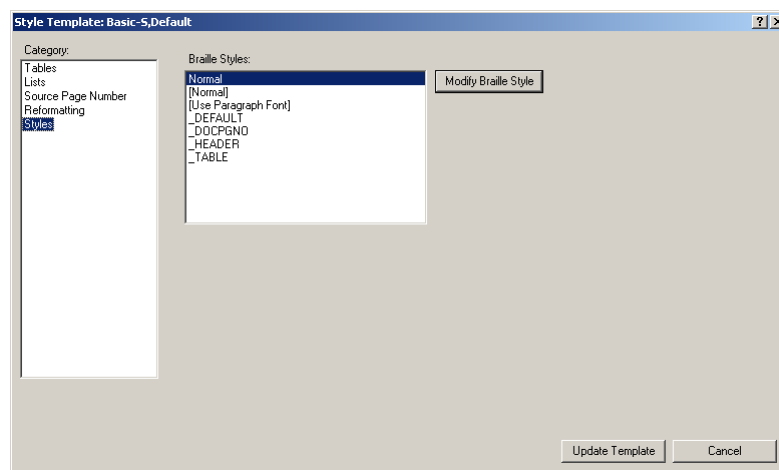
Concatenate adjacent paragraphs

The group concatenate adjacent paragraphs removes CR LF between two consecutive paragraphs. the tree available options are:

- Newer - Even if this function has been set for several styles, this option will override that behaviour.
- Always - Even if this function has been set for several styles, this option will override that behaviour.
- Concatenate adjacent paragraphs according to paragraph settings. Only consecutive paragraphs of the same style will be concatenated. see example below

8.10.3.1.5 Styles

The Styles Page contains a list box with all styles in the template and a button "Modify Braille Style".



Braille Styles

This list box contains all available Braille styles in the template. Three predefined styles are always available in the template.

- _DEFAULT – this is the default style for styles not defined in the template.
- _TABLE – This style should be used to format all text in all tables in the document.
- _DOCPGNO – This style should be used to set the format for Source Page Number in the Braille document.

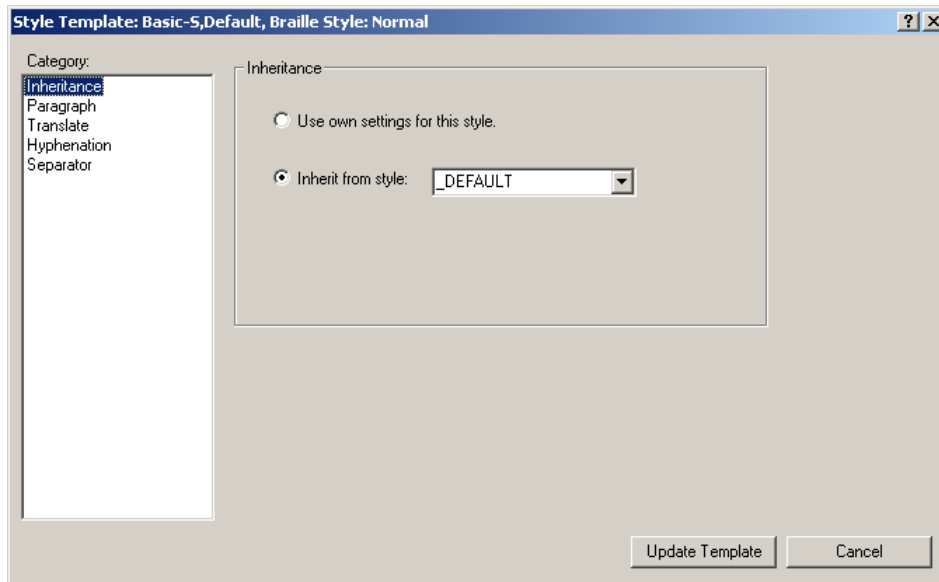
A fourth style, _HEADER, can be created for formatting text in the header and the footer. The text in the header and the footer will be formatted according to the _DEFAULT style if _HEADER is not available.

Modify Braille Style

The button "Modify Braille Style" opens a tabbed dialog box with all options for each Braille style.

8.10.3.1.5.1 Inheritance

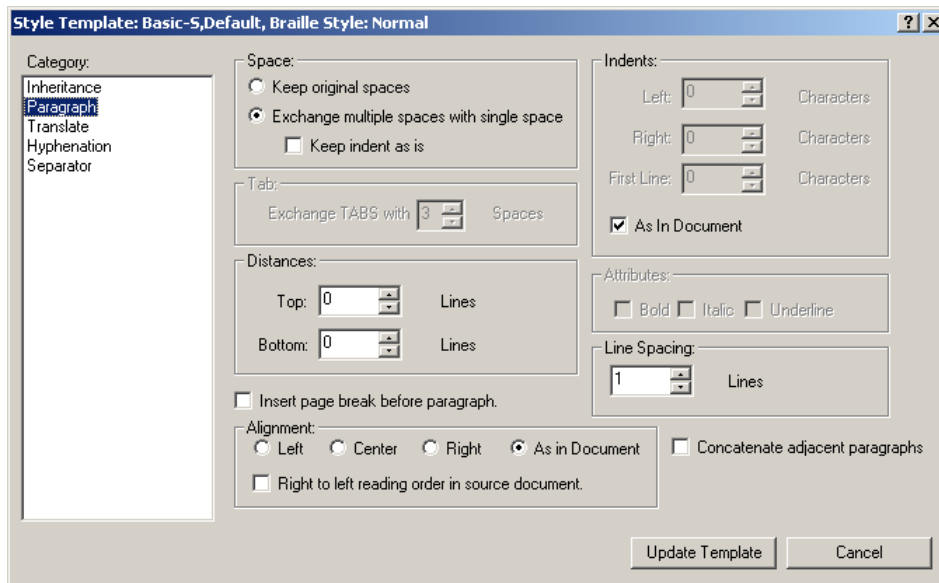
The tabbed dialog box for displaying all options possible to set for a Braille Style displays always the "Inheritance" page first. This page has two radio buttons. You can select whether the style should have its own settings or if it should inherit the settings from another style. If "Inherit from style" is enabled, a list box with all styles in the template that have own settings is displayed. In this case all other pages are disabled and it is not possible to move to these pages. To enable the pages the user must chose "Use own settings for this style". This category is displayed only in Professional Edition.



8.10.3.1.5.2 Paragraph

The Paragraph page contains eight groups of controls. These eight groups form together the main format of the paragraph.

Space	1. Keep original spaces 2. Exchange multiple spaces with single space (default tagged) 2.1 Keep indents as is	
Indents	1. Left = 0 Characters 2. Right = 0 Characters 3. First line = 0 Characters 4. As in document (not tagged)	
Tab	(not active)	This function exchange the TAB sign with a defined number of spaces
Distance (Only Professional)	1. Top = 0 lines 2. Bottom = 0 Lines	This function defines the distance above and below the paragraph with this style.
Attribute	Bold, Italic, Underline (default = not tagged)	This function is only supported in american_g2.ibk. When tagged prefix and suffix will mark the attribute.
Insert page break before paragraph (Only Professional)	(not active)	Places the paragraph with this style at the beginning of next page. Typically used with "Header 1" to force them to start on the beginning of a new page.
Line Spacing	1 Lines	
Alignment	Left	Alignment of the style Standard = Complete document Professional = Connected to each style
Concatenated adjacent paragraphs	(not active)	This function will delete all formatting from the original document, will override other formatting settings. Standard = Never use it Professional = Use it when for example bead text is strange formatted in original document



Space

The Space group has two possible options: "Keep original spaces" or "Exchange multiple spaces with single space". When "Exchange multiple spaces with single space" is selected, an extra check box for leaving the indents is enabled.

Tabs

The Tab group contains of a control for substituting the tabulator symbol to one or more spaces.

Distances

The "Distances" group contains two controls for defining the number of empty lines above and below the paragraph. The two controls are "Top" and "Bottom". All values are measured in lines. When converting two consecutive paragraphs, the distance between the two paragraphs is calculated by taking the maximum value of the bottom distance for the previous paragraph and the top distance for the next paragraph.

Indents

It is possible to set the indents on the left and right side of the paragraph. The first line in the paragraph can have a special indent called "First Line". An extra check box called "As In Document" will convert the indents in the source document from millimetres to multiples of the Braille character width.

Attributes

The attributes "Bold", "Italic" and "Underline" can be converted to special prefixes and suffixes around words that have any of these attributes. The "Attributes" controls are only enabled if rules for handling these attributes are defined in the translation file.

Line Spacing

The line spacing value is measured in multiples of the height of the Braille cell (in units of whole lines).

Alignment

There are four options for setting the alignment of the paragraph:

- Left – Left adjust the paragraph.
- Center – Center the paragraph.
- Right – Right adjust the paragraph.
- As in Document – Adjust the paragraph as it is in the source document.

Concatenate adjacent lines

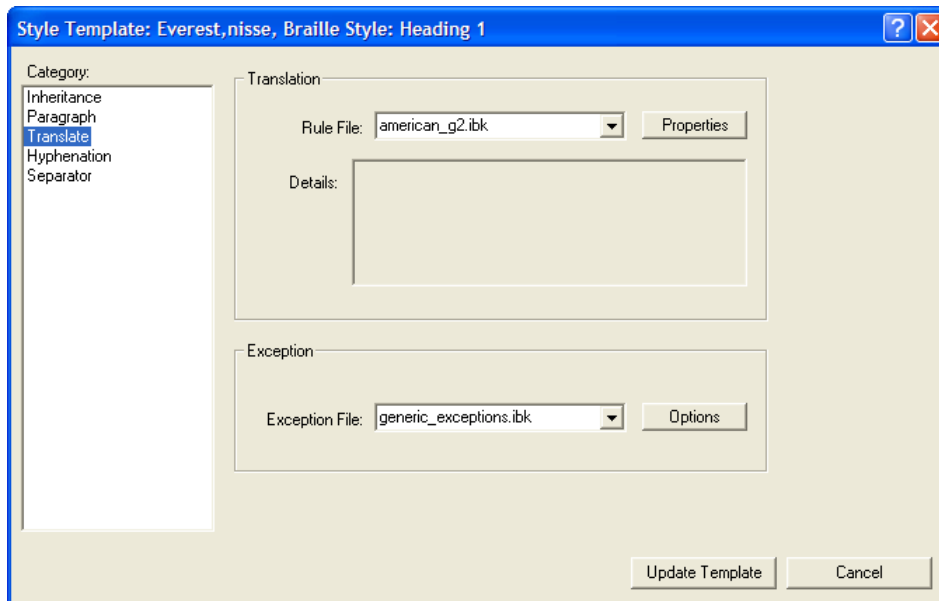
This option will remove all line feeds during the translation. This option will "compress" the Braille output.

Insert page breaks before paragraphs

This item will insert a page break before the paragraph which will guarantee that the first paragraph will start on a new page.

8.10.3.1.5.3 Translate

The "Translation" page is one of the core pages in the system. The Page contains two groups of controls, the Translation and the Exception groups.

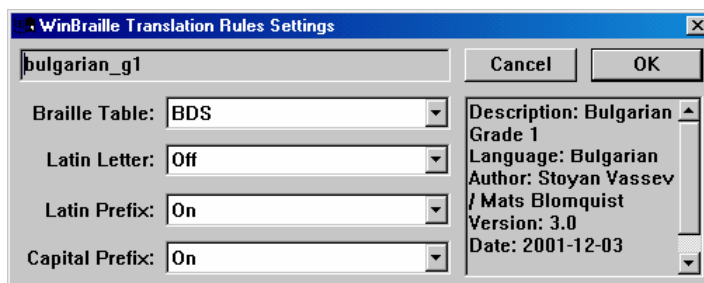


Translation

This group of controls has a list box with all installed rule files in the system. Directly when the user selects a translation file, the "Details" field will be updated with information regarding the selected translation file.

Properties

The "Properties" button is a button that opens a dialog box with properties for the selected translation file. This button is only enabled for rule files that have this feature. Properties vary depending on what features can be changed in the rules. The example below shows the properties for a Bulgarian translation file.



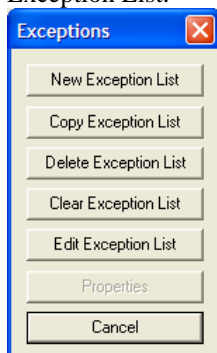
Exception File

The exception file is a file that contains a list with all words, phrases, and symbols that should not be

translated according to the selected translation file.

Options

Use the "Options" button to open a dialog box with five selections: New, Copy, Delete, Clear and Edit Exception List.



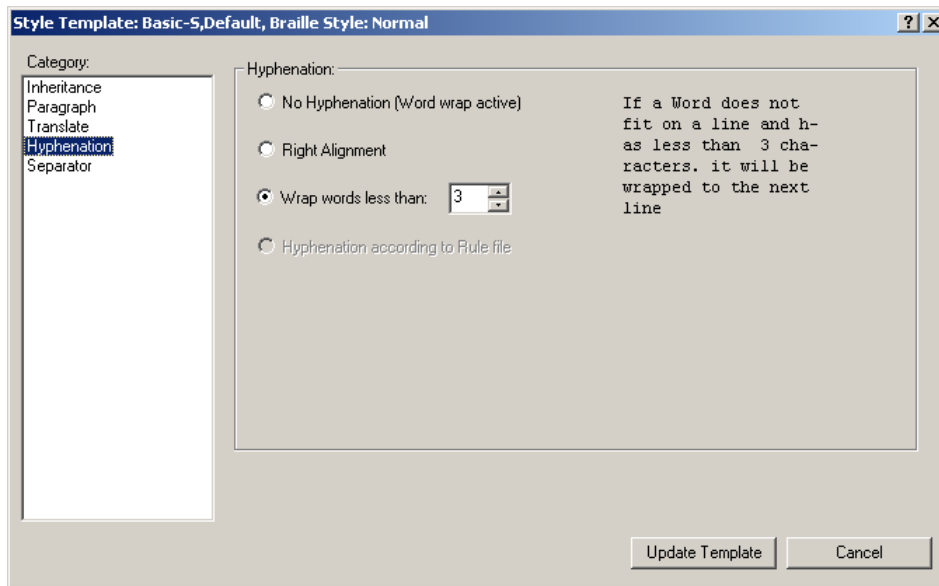
The button is only available for those exceptions list that has such a support. See [Manage exceptions](#) for details on how to handle the exception lists.

8.10.3.1.5.4 Hyphenation

The Hyphenation page has four options available:

- No Hyphenation - Words that do not fit on the line will be wrapped down to the next line.
- Right aligned - Splitting words so that the hyphen always will be located on the right most position.
- Wrap word less than - Like Right aligned except that it is possible to wrap word with a certain word length.
- Hyphenation according to translation file - A special translation file with the extension ".ibh" will take care of the hyphenation.

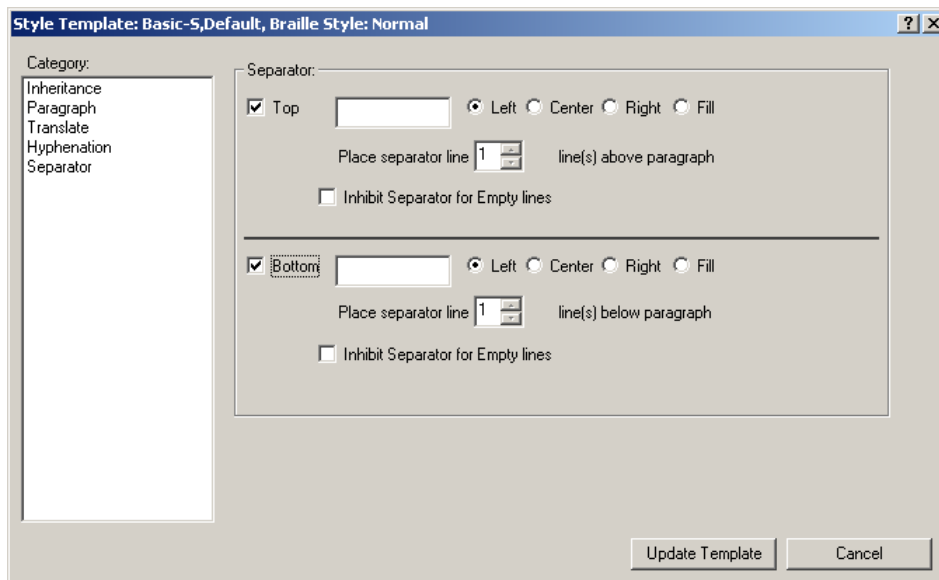
Setting	Default Value	Info and Options
Hyphenation	1. No Hyphenation (Word wrap active) 2. Right Alignment 3. Wrap words less than X characters 4. Hyphenation according to rulefile	Alternative 4 is only selectable when the hyphenation is defined in used Rule file



8.10.3.1.5.5 Separator

The "Separator" page contains two check boxes for defining a separator line above and below the paragraph.

Setting	Default Value	Info and Options
Top	Default = Not tagged	Insert the defined separator line above the paragraph
Bottom	Default = Not tagged	Insert the defined separator line below the paragraph



The two check boxes are "Top" and "Bottom". When the Top check box is enabled, a set of six controls is

enabled for defining the separator line. There are two identical sets for both the "Top" and "Bottom" check box.

Top

When the "Top" check box is checked, seven more controls are enabled. The next control in the TAB order is a field where the user can define a text for the separator line. The next four controls are radio buttons for defining the position and appearance of the text. The buttons are:

- Left – Left adjust the text
- Center – Center the text
- Right – Right adjust the text
- Fill – Fill the whole line with a multiple of the text

Place Separator Line

The "Place Separator Line" is a spin box control for placing the text a distance above the paragraph. The unit is in Lines.

Inhibit separator for empty lines

Sometimes you enter an empty line after a paragraph with a separator. Then you can mark this control so you don't need to mark all those empty lines with a style that does not contain a separator line.

Bottom

When the "Bottom" check box is checked, seven more controls are enabled. The next control in the TAB order is a field where the user can define a text for the separator line. The next four controls are radio buttons for defining the position and appearance of the text. The buttons are:

- Left – Left adjust the text
- Center – Center the text
- Right – Right adjust the text
- Fill – Fill the whole line with a multiple of the text

Place Separator Line

The "Place Separator Line" is a spin box control for placing the text a distance below the paragraph. The unit is in Lines.

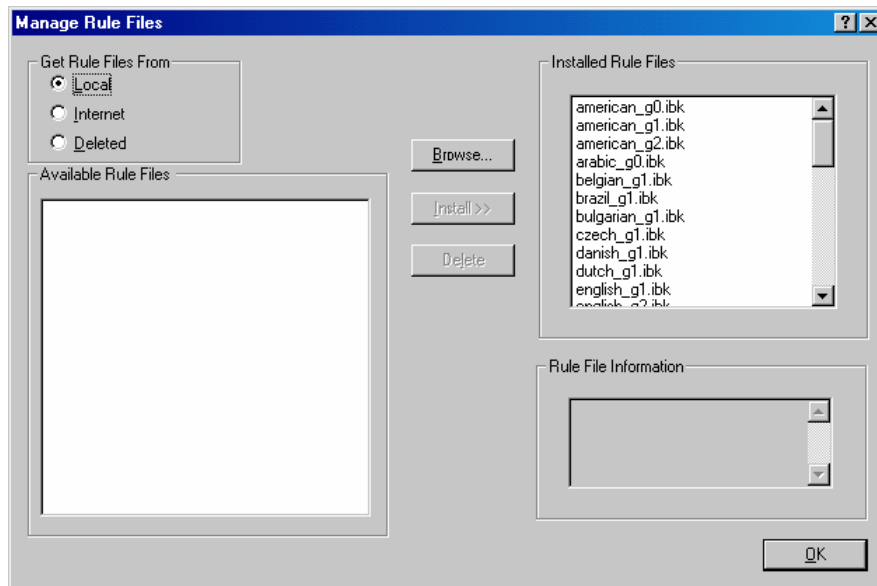
Inhibit separator for empty lines

Sometimes you enter an empty line after a paragraph with a separator. Then you can mark this control so you don't need to mark all those empty lines with a style that does not contain a separator line.

8.10.4 Manage Rule Files...

Command Key: None
Available: Always

The command "Manage Rule Files..." opens a dialog for adding and removing rule files in WinBraille.



The dialog contains four groups of controls and three "multifunction" buttons for managing the rule files. The groups are called "Get Rule File From", "Installed Rule Files", "Available Rule Files" and "Rule File Information". The "multifunction" buttons change title and function depending on the situation.

- When "Get Rule Files From Local" is selected the buttons are: "Browse", "Install" and "Delete".
- When "Get Rule Files From Internet" is selected the buttons are: "Connect", "Install" and "Delete".
- When "Get Rule Files From Deleted" is selected the buttons are: "Restore" and "Delete".

Group box "Get Rule Files From"

WinBraille offers three different ways of getting the rule files into WinBraille: From a local hard drive or network, from Internet, or from WinBraille's built-in "Rule File Recycle Bin".

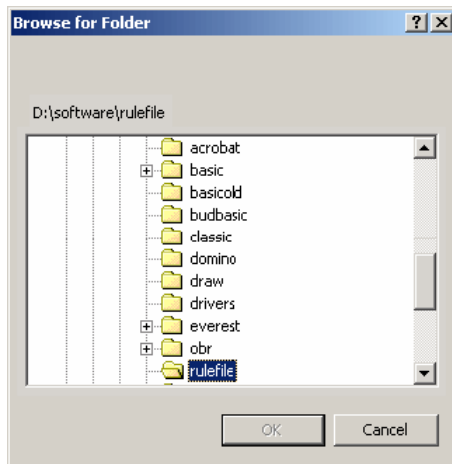
The first group of controls is called "Get Rule Files From". The group contains three radio buttons for selecting the location of the translation file source.

Local

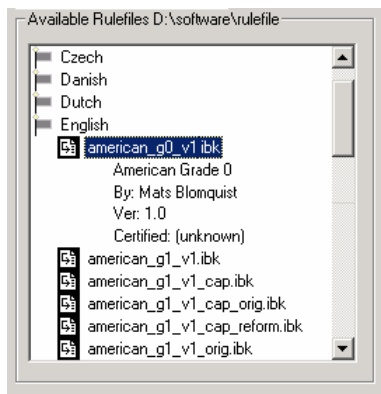
The "Local" radio button enables the user to browse for a folder where the rule files are located. When this radio button is checked, the next button in the TAB order is the "Browse" button.

The option "Local" is normally used to get rule files from the Index CD. A directory on the CD contains all available rule files. Insert the CD into the CD drive before pressing the "Browse" button if you are going to copy rule files from the CD.

When the CD is inserted and the user presses the "Browse" button, WinBraille will scan the CD in order to search for rule files. If WinBraille detects a directory with rule files, the "Browse" dialog will be displayed with the translation file directory already selected. The OK button on the Browse dialog will in this case be enabled. WinBraille enables the OK button only if there exist rule files in the selected directory.



After selecting OK in the "Browse" dialog, WinBraille will sort available rule files by language and display these files in a tree in the "Available Rule Files" window.



The (+) key on the numeric keyboard will expand the selected language in the "Available Rule Files" window to make all rule files for that language visible. Every language can also be expanded for displaying important information about the translation file.

When the translation file is selected, the "Install" button will be enabled. This will also be the next control in the TAB order.

Internet

This radio button enables the user to get rule files from Index home page. This option is recommended if an Internet connection exists because Index home page is always updated with the latest rule files.

When this radio button is checked, the next button in the TAB order is the "Connect" button.

When the "Connect" button is pressed, an information message is displayed that a connection is going to be established to Internet in order to get all available rule files from Index home page.

WinBraille will download a list with all rule files and display these in the "Available Rule Files from Internet" control.

The (+) key on the numeric keyboard will expand the selected language in the "Available Rule Files From Internet" window to make all rule files for that language visible. Every language can also be expanded for displaying important information about the translation file.

When the translation file is selected, the "Install" button will be enabled. This will also be the next control in the TAB order.

Deleted

This radio button enables the user to restore rule files from WinBraille's built-in "Rule File Recycle Bin".

Available Rule Files From Rule File Recycle Bin

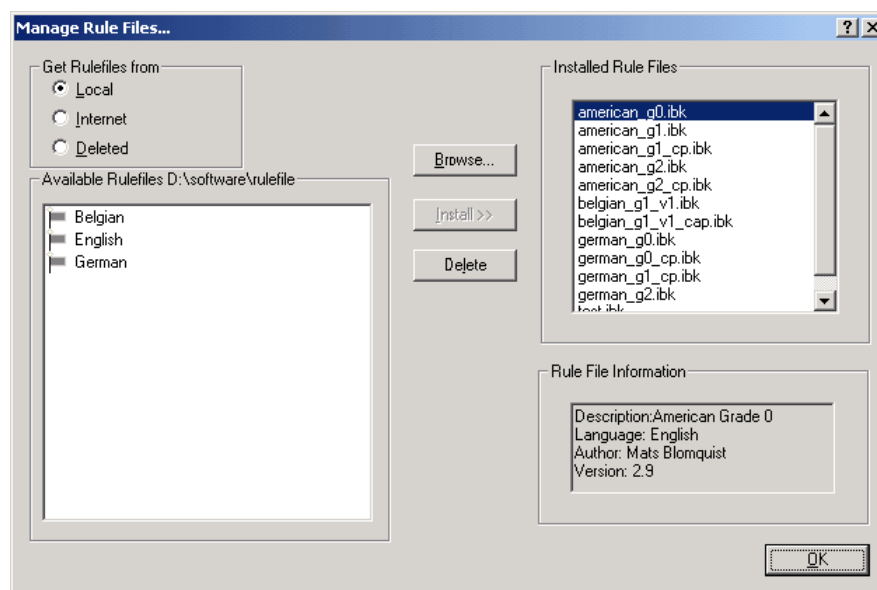
The next control in the TAB order is "Available Rule Files From Rule File Recycle Bin". This field contains all deleted rule files.

Installed Rule Files

The "Installed Rule Files" control displays all installed rule files in WinBraille. When selecting a translation file, the "Rule File Information" control will display information about the selected translation file. The "Rule File Information" control is the next control in the TAB order.

Delete a rule file

To delete an installed translation file, the user must use the TAB key from the "Installed Rule File" to "Rule File Information" in order to read what kind of translation file it is, and after that TAB to the "Delete" button. Deleted rule files are stored in the "Rulefile Recycle Bin". These rule files are possible to restore after an accidental deletion.



8.10.5 Manage Exceptions

Command Key: None

Available: In the professional edition

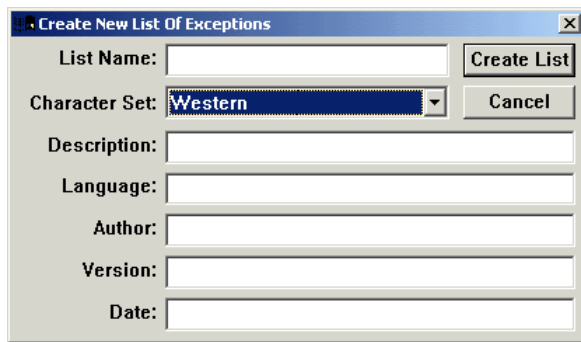
This menu item pop-ups a list of menus: New Exception List, Copy Exception List, Delete Exception List, Clear Exception List, and Edit Exception List.

New Exception List

The Menu "New Exception List" opens a dialog that has six edit fields, one list box and two buttons.

- List Name - The list name is the unique name that identifies the list.
- Character Set - The list box contains all character sets that are possible to use for the list.
- Description - A description of the content of the list.
- Language - Language for the list.
- Author - The name of the author.
- Version - Version of the list.

- Date - Current date.



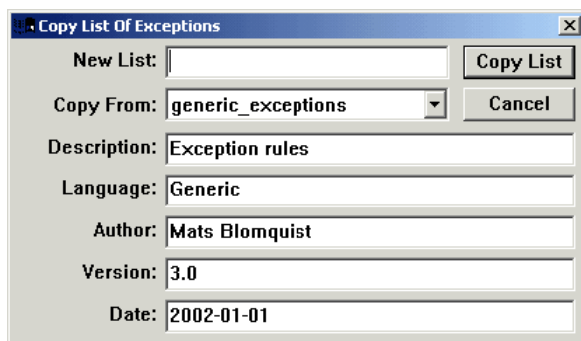
The "Create New List Of Exceptions" dialog box contains the following fields and controls:

- List Name:** A text input field.
- Character Set:** A dropdown menu with "Western" selected.
- Description:** A text input field.
- Language:** A text input field.
- Author:** A text input field.
- Version:** A text input field.
- Date:** A text input field.
- Buttons:** "Create List" and "Cancel".

Copy Exception List

The Dialog "Copy Exception List" is almost identical to the dialog "New Exception List" except for the List Box "Copy From".

- New List - The name of the copy.
- Copy From - The name of the original list.
- Description - A description of the content of the list.
- Language - Language for the list.
- Author - The name of the author.
- Version - Version of the list.
- Date - Current date.



The "Copy List Of Exceptions" dialog box contains the following fields and controls:

- New List:** A text input field.
- Copy From:** A dropdown menu with "generic_exceptions" selected.
- Description:** A text input field containing "Exception rules".
- Language:** A text input field containing "Generic".
- Author:** A text input field containing "Mats Blomquist".
- Version:** A text input field containing "3.0".
- Date:** A text input field containing "2002-01-01".
- Buttons:** "Copy List" and "Cancel".

Delete Exception List

This dialog is used to delete an exception list permanently from the system. A deleted exception list can not be restored.



The "Delete List Of Exceptions" dialog box contains the following fields and controls:

- Exception List:** A dropdown menu with "generic_exceptions" selected.
- Buttons:** "Cancel" and "Delete List".

Clear Exception List

This dialog is used to completely remove the contents of an exception list.



The "Clear List Of Exceptions" dialog box contains the following fields and controls:

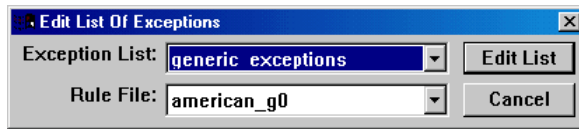
- Exception List:** A dropdown menu with "generic_exceptions" selected.
- Buttons:** "Cancel" and "Clear List".

Edit Exception List

The Menu "Edit Exception List" opens a dialog that has two list boxes and two buttons.

Exception List - The name of the list that is going to be edited.

Rule File – Select a translation file to get proper character coding. The exception list does not contain any information about the character coding. Every exception list is used together with a translation file. To be able to edit the content in the exception list properly, you must supply the correct translation file. (For example, use a Greek translation file to get Greek letters if you are going to edit an exception list with Greek words, and use a Russian translation file to get Russian letters if you are going to edit an exception list with Russian words).



8.11 The Window Menu

8.11.1 Tile Horizontal

Command Key: None

Available: When a document is opened

Tiles MDI child windows so that one window appears above another.

8.11.2 Tile Vertical

Command Key: None

Available: When a document is opened

Tiles MDI child windows so that one window appears beside another.

8.11.3 Cascade

Command Key: None

Available: When a document is opened

Cascades MDI child windows.

8.11.4 Arrange Icons

Command Key: None

Available: When a document is opened

Place minimized documents, cluttered in the WinBraille client area, at the bottom left corner.

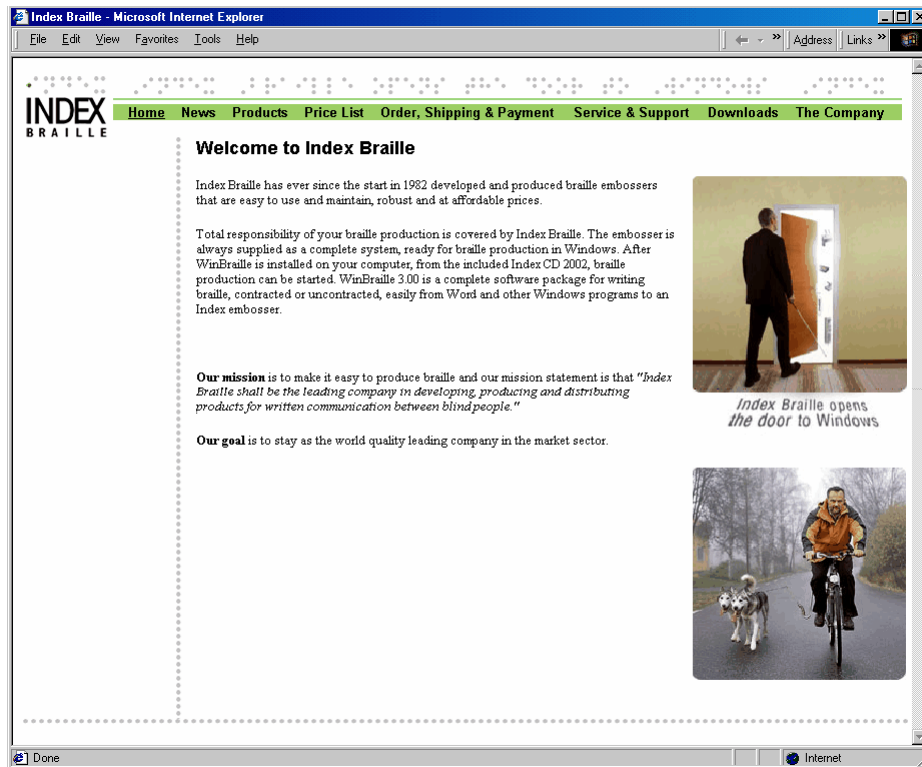
8.12 The Internet Menu

8.12.1 Index Home Page

Command Key: None

Available: Always

This menu item opens the Index home page if the computer is connected to the Internet.



8.12.2 Check for Upgrades

Command Key: None

Available: When no documents are opened

This menu item will check Index site for upgrades if the computer is connected to the Internet. The following message will be displayed if you have the latest version of WinBraille:

If a newer version exists, you will be prompted to download the new version. Information about the upgrade is shown in a dialog. You can also see how large the upgrade is, so you can decide whether your Internet connection is fast enough to download the upgrade in a reasonable time. WinBraille will close, upgrade, and restart if you press the Yes button.

8.12.3 Software Performance Report

Command Key: None

Available: Always

This menu item creates a Feedback Form with information about your computer, embosser and WinBraille. You can send this form directly to Index Braille if you have an Internet connection.

8.13 The Tools Menu

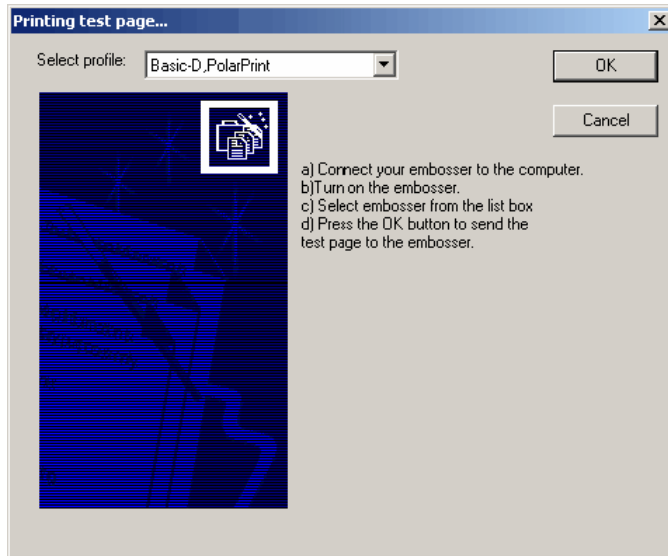
8.13.1 Emboss Test page

Command Key: None

Available: Always

The Print Test page dialog is invoked during the installation of WinBraille. The feature is useful for

verifying that the embosser and WinBraille have been installed correctly. The menu is always available in the Tools menu. The Page that will be printed contains no Braille information. Only a pattern of dots will be printed.



8.13.2 Edit Rule File...

Command Key: None
Available: In the professional edition

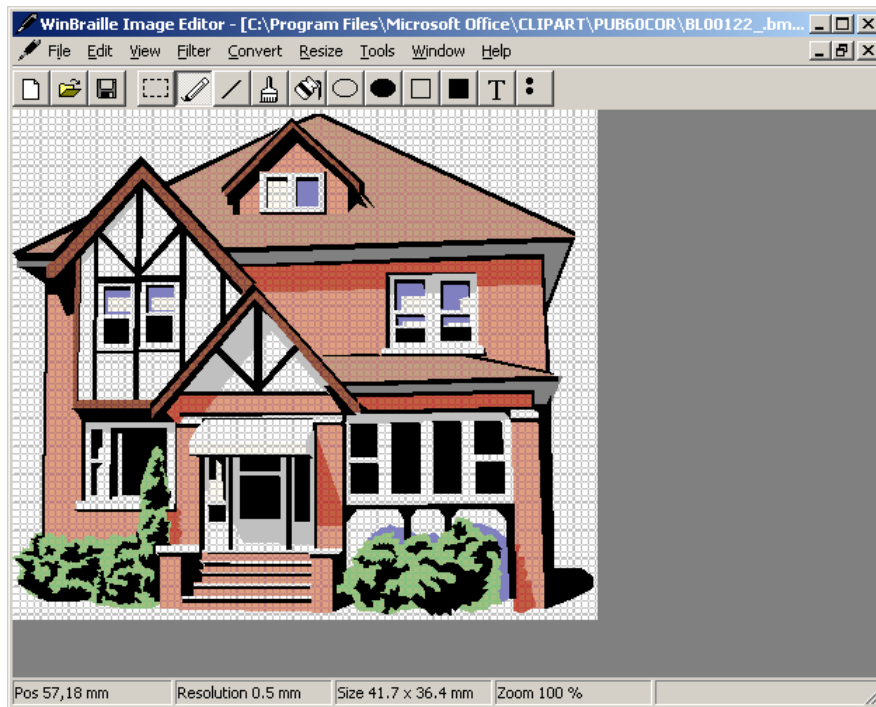
Opens the program Index Rule File Editor. Use the program to create or modify rule files. See the Tools chapter for more information.



8.13.3 Image Editor...

Command Key: None
Available: Always

Opens the program Image Editor. See the Tools chapter for more information.

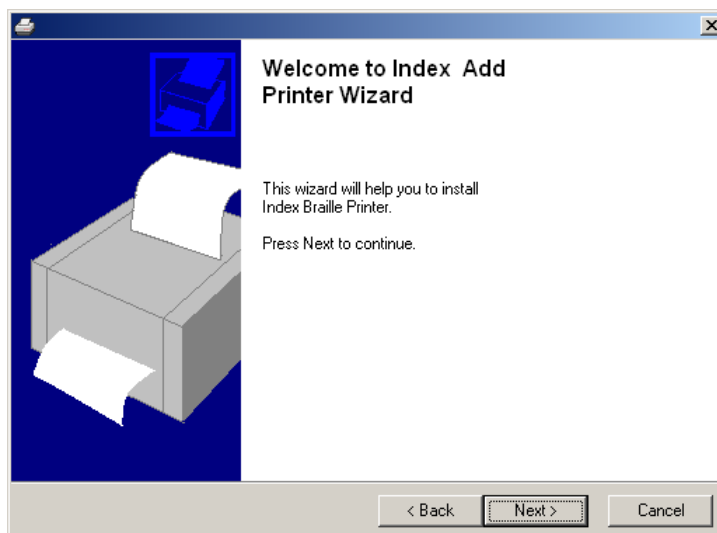


8.13.4 Index Add Printer Wizard...

Command Key: None

Available: In the professional edition when no documents are opened

Opens the Index Add Printer Wizard. Use the wizard to install more embossers. The wizard is also a part of the installation of WinBraille. See the Tools chapter for more information.

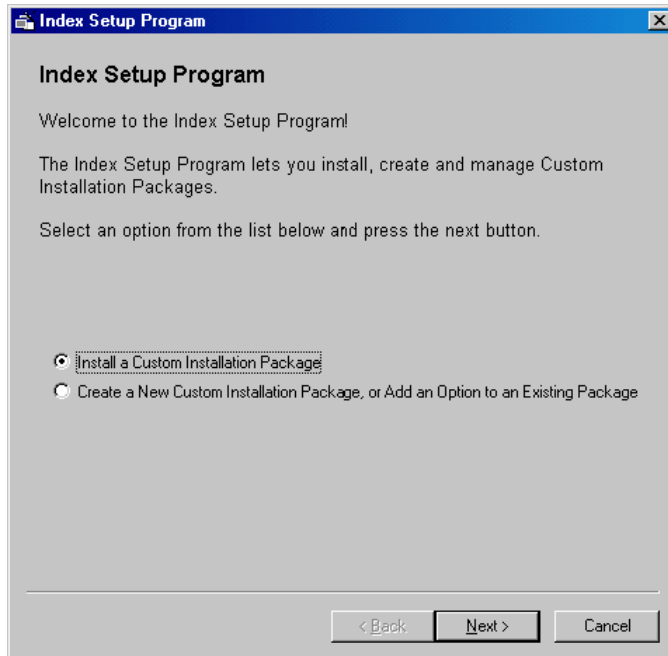


8.13.5 Index Setup...

Command Key: None

Available: In the professional edition when no documents are opened

Opens the Index Setup program. Use the program to install or create an Index Custom Package. The program is also a part of the installation of WinBraille. See the Tools chapter for more information.



8.13.6 Language...

Command Key: None

Available: In the professional edition when no documents are opened

Opens the WinBraille Language Setup Tool. Use the tool to change language of menus, dialog and messages. See the Tools chapter for more information.



8.13.7 Macro

The macro functions can be used to record and play mouse and keyboard events. The following functions are available to manage macros:

- Record
- Stop
- Play
- Open
- Save

8.13.7.1 Record

Command Key: F7

Available: In the professional edition when a document is opened

Press the F7 key to start recording mouse and keyboard events.

8.13.7.2 Stop

Command Key: Ctrl + Break

Available: In the professional edition when a macro is playing

Press the CTRL and BREAK keys to stop recording mouse and keyboard events.

8.13.7.3 Play

Command Key: F8

Available: In the professional edition when a macro is opened or has been recorded

Press F8 to play the recorded mouse and keyboard events.

8.13.7.4 Open

Command Key: None

Available: In the professional edition

The Open menu item opens a macro function with recorded mouse and keyboard events.

8.13.7.5 Save

Command Key: None

Available: In the professional edition when a macro has been recorded

The Save menu item saves mouse and keyboard events to a macro function.

8.13.8 Application Components

Command Key: None
Available: In the professional edition

Install..

Install the Office and/or Adobe Acrobat Macros.

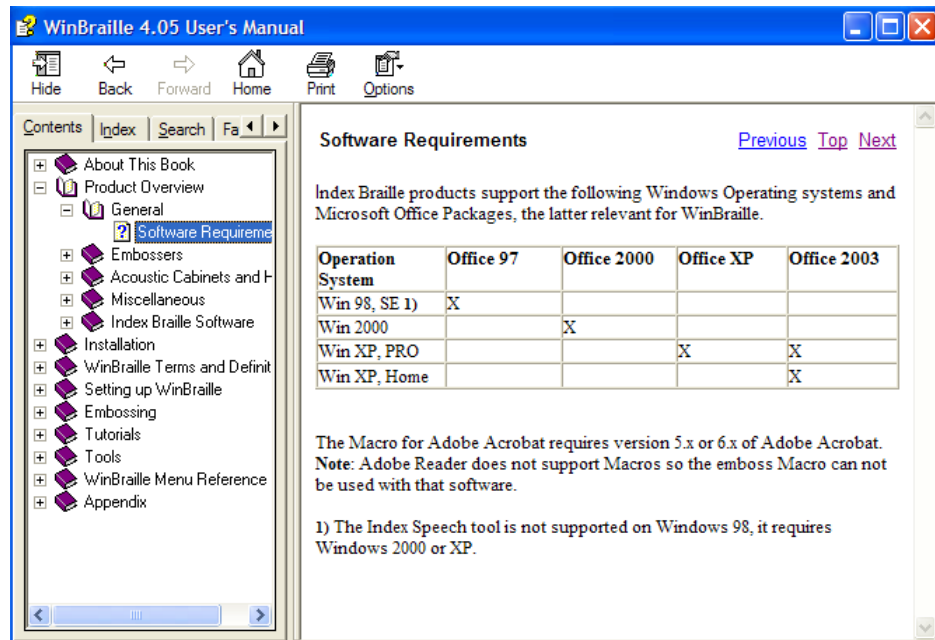
Uninstall..

Uninstall the Office and/or Adobe Acrobat Macros.

8.14 The Help Menu

8.14.1 Help Topics

Select Help Topics to open up the WinBraille help:



Use the Content menu, the index or the search feature to find the help you require.

8.14.2 About WinBraille...

Select About WinBraille to receive detailed information about the WinBraille version. This may be requested when you talk with Index Support.

8.15 Key mapping

8.15.1 Function Keys

F1	Opens the WinBraille Help File at the Contents topic
F7	Record Macro
F8	Play Macro
ALT + F4	Close WinBraille.

8.15.2 Movement Keys

DEL	Deletes selected text.
END	Moves the caret to the end of the line.
HOME	Moves the caret to the beginning of the line.
PAGEUP	Scrolls the height of the current client area upwards and moves the caret to the same screen position.
PAGEDOWN	Scrolls the height of the current client area downwards and moves the caret to the same screen position
(Left Arrow)	Moves the caret one character to the left.
(Right Arrow)	Moves the caret one character to the right.
(Up Arrow)	Moves the caret one line up.
(Down Arrow)	Moves the caret one line down.
CTRL+(Left Arrow)	Moves the caret to the beginning of the current word.
CTRL+(Right Arrow)	Move the caret to the beginning of the next word.
CTRL+HOME	Move the caret to start of text.
CTRL+END	Moves the caret to end of text.

8.15.3 Control Keys

CTRL + A	Select all text.
CTRL + B	Emboss the document.
CTRL + C	Copies selected text to the clipboard.
CTRL + D	Opens the font dialog for changing the font of the selected text.
CTRL + E	Center the text.
CTRL + F	Open the built-in "Find" dialog for searching for text in the document.
CTRL + G	Executes the Edit Goto Page command to move the caret to a specific page
CTRL + H	Open the built-in "Search and replace" dialog for searching and replacing text in the document.
CTRL + I	Open the dialog "Manage Profile".
CTRL + L	Left adjust the text.
CTRL + N	Executes the File New command to create a new, empty edit window
CTRL + O	Executes the File Open command to open an existing file
CTRL + P	Executes the File Print command to print the file showing in the current window
CTRL + Q	Quit the program.
CTRL + R	Right adjust the text.
CTRL + S	Executes the File Save command to save the current file to disk
CTRL + T	Executes the Translate command to translate the source text into Braille.
CTRL + V	Inserts text from the clipboard.
CTRL + F2	Insert translated text at current input position.
CTRL + W	translate the text in the clipboard and paste it in at current input position.
CTRL + X	Copies selected text to the clipboard and deletes the selection.
CTRL + Y	Redo the last operation.
CTRL + Z	Undo the last operation.
CTRL+ENTER	Inserts a new page.

CTRL+(-)	Inserts an end-of-line hyphen.
CTRL+INS	Copies selected text to the clipboard.
CTRL+(Backspace)	Deletes the previous word.
SHIFT+ENTER	Creates a line feed.
SHIFT+DEL	Copies selected text to the clipboard and deletes the selection.
SHIFT+INS	Inserts text from the clipboard.
CTRL+SHIFT+(Space)	Insert a non-breaking space.
CTRL + F4	Close the active document.
CTRL + TAB	Switch between pages in a property sheet.
CTRL + F6	Activate next document.
CTRL + BREAK	Stop Macro recording.

9 Translation File Reference

9.1 Introduction

The goal with the WinBraille system is to make a seamless printing process of Braille documents from a word processor or other application to the Index Braille Embosser. This usually involves text translation to suit the specific needs in producing Braille. Since different translation rules apply for different languages and different grades of contractions, the WinBraille system provides the tools to manage and edit contraction rule files.

The structure of the rule files is adapted to suit editing of text in foreign languages as well as using a Braille display to read and edit the rule files. Features are:

- Foreign language support.
- Defining displayed characters to suit reading text appeared on the screen with a Braille display with any kind of Text to Braille character coding.
- Plain text formats. No graphical user interface or strange file formats.

The rules are defined in a source file in plain text format. This file usually has the prefix ".txt", since it is a plain text file. To speed up the text conversion process, WinBraille uses a binary format of the rules. This binary format is created with a built-in compiler in the WinBraille Rule File Editor. The resulting binary file has the prefix ".ibk". The text file is embedded within the binary file and is automatically extracted when the binary file is opened in the WinBraille Rule File Editor. Thus there is no need to keep the source file after compilation.

9.2 WinBraille Contraction Rules

The contraction rules are defined in a script language, SLIB (Script Language for Index Braille). The language does not contain any predefined symbols that can be used in the creation of the rules. All symbols must therefore be defined in prior to usage, thus the first part of the file contains symbol definitions. These definitions include for example a header, definitions of STARTOFPARAGRAPH and NEWLINE, number prefix and capital prefix, both single capital prefix and multi-capital prefix. Other types of prefixes can be defined as well, as for example an escape prefix to resolve ambiguities. Other definitions are the lists of symbols used in the rules, as for example the list of capitals, the list of figures, the punctuation marks used, and eventually the letters that correspond to the figures in Braille.

The list rule definition defines how the contraction rules shall treat the symbols in the list. Example: To determine if a multi-capital prefix has to be inserted, define a list rule that searches for two letters from the list of capitals.

The second part of the file contains the rules. These can further be divided into inserting rules and replacing rules. This part also contains a Braille table and eventually a table for duplicate characters. Duplicate characters are characters that use a Braille symbol already occupied by another character according to the Braille table. The duplicate character table was necessary in WinBraille 2.xx, but is obsolete in WinBraille 3.xx and 4.xx, since all duplicate characters can be defined directly in the rules.

9.3 Conventions

All text in the SLIB language is defined between quotation marks, example: "a", "x", "?", "copyright". A Braille symbol is defined with the lower case letter p and a list of dots, example: The Braille symbol for the letter "a" is p1. A full cell is typed as p123456. A space, i.e. an empty cell, is thus defined as p. No space is allowed after the p and before the dot numbers. At least one space must be inserted between two Braille symbols, example: The text string "abc" is typed as the Braille symbols p1 p12 p14.

The dots in a Braille cell are numbered:

```

1    4
2    5
3    6

```

Since the quotation mark " is used to delimit text, the quotation mark itself must be proceeded with the escape character "\" to be recognized as a quotation mark. Example: The text string # "κ is typed as "# \"κ". Since the backslash character "\" is used as an escape character, the backslash itself must be typed twice to be recognized as a backslash character. Example: The string #\\κ is typed as "#\\κ". Any ASCII character can be defined with its decimal or hexadecimal value with "\\dnnn" or "\\hxx", respectively, where nnn is the decimal value and xx is the hexadecimal value.

The "<" symbol marks the start of a contraction rule, and the ">" symbol marks the end of a rule. Some predefined identifiers can not be used as user defined symbols. These are: attribute, braille, brailletable, charset, default, define, depend, equivalence, extern, include, interface, list, listrule, param, password, state, gstate, lstate, istate, and the obsolete identifier ascii. Since the small letter p is used to define Braille symbols, no user-defined symbol can start with the small letter p followed by a number.

A hyphen ("-") in the first column marks a comment. A definition can be extended to the next line by inserting a "+"-sign in the first column, example:

```

list lowerletter_a_to_j_list = ["a", "b", "c", "d", "e",
+                               "f", "g", "h", "i", "j"]

```

9.4 Translation File (Rule File) Structure

9.4.1 Sections

The translation file (rule file) can contain the following sections, in specified order:

- Header
- Includes
- Definitions
- Rules

9.4.2 The Header Section

The very first lines in the translation file should be a header with information about the file content. The header is read by WinBraille and the information is used to inform the user about the translation file content and to categorize the rules in language groups to ease the rule management. The header must start at the first position in the first line of the file, and the first two characters must be the characters "-=", for WinBraille to be able to recognize the header information. The header should have the following format:

```

=====
-Description: A description of the type of rules in the file
-Language: The language the rules are meant to be used for (ex: English)
-Author: The author of the file content
-Version: Version number (ex: 1.0)
-Date: Last editing date (ex: 2000-09-12)
=====

```

The language tag is mandatory for WinBraille to be able to classify the rules in a language group. The description, author and date tags are highly recommended. Other tags are optional. User tags are allowed, as for example an information tag (-Info) for extra information.

9.4.3 Variables

Up to nine variables can be defined and used in the rules. The variables are typed as @1 to @9. They are local to each translation file, but their values will be maintained from one translation to the next, as long as the translation is performed with the same translation file. Examples are given in the sections "The Interface Definitions" and "The Contraction Rules: ...".

9.4.4 Includes

Files can be nested with an include statement, example:

```
include definitions.txt
```

The files can be nested in an unlimited number of levels, and they can contain an unlimited number of include statements. The include statement can be placed anywhere in the file, as long as it is alone on a single line.

9.4.5 The Definitions Section

The definitions section contains the following sub-sections:

- Predefined definitions
- Symbol definitions
- Character set definition
- Password definition
- Default character definition
- Attribute definitions
- State definitions
- Interface definitions
- Parameter definition
- External function definition
- Dependent file definition
- List definitions
- List rule definitions
- Character equivalence definitions

There is no specific restriction in the order of the definitions, except that all used identifiers must have been defined before they can be used. That implies that lists must be defined before the equivalence definitions and the list rule definitions, states must be defined before the interface definitions, the parameter definition, and the external function definition, and the predefined definitions should come first, since these definitions are used in many of the other definition statements.

9.4.6 The Define Statement

The predefined identifier define can be used to define common used symbol strings. Example:

```
define one = "one"  
define space = " "  
define symbol = firstcharacter, restcharacters  
define numberprefix = p3456  
define copyright = p14 p135 p1234 p13456 p1235 p24 p1245 p125 p2345
```

9.4.7 The Predefined Definitions

Some predefined strings and Braille constants are used by the WinBraille Contraction Rule Engine for start-of-line, end-of-line, and other text features. Alias definitions for these constants can be used in the translation file to make the rule definitions more readable. The recommended aliases and their corresponding strings and Braille constants can be included in the translation file with these lines of code:

```
- Text and Paragraph Markers
define STARTOFFPARAGRAPH = "\d027\d001"
define ENDOFFPARAGRAPH   = "\d027\d002"
define ENDOFTEXT         = "\d027\d003"

- Escapes for Empty Lines
define EMPTYLINE0        = "\d027\d016"
define EMPTYLINE1        = "\d027\d017"
define EMPTYLINE2        = "\d027\d018"
define EMPTYLINE3        = "\d027\d019"

- Text Attribute Prefix and Postfix
define BOLD_ON            = "\d027\d064"
define BOLD_OFF           = "\d027\d065"
define ITALIC_ON          = "\d027\d066"
define ITALIC_OFF         = "\d027\d067"
define UNDERLINE_ON      = "\d027\d068"
define UNDERLINE_OFF     = "\d027\d069"

- Non-Printable Characters
define TAB                = "\d009"
define NEWLINE            = "\d010"
define NEWPAGE            = "\d012"

- Braille Escapes
define BRL_NEWLINE        = p7 p17
define BRL_NEWPAGE        = p7 p27
define BRL_p7             = p7 p7

- Default Values
define ORIGINAL_TEXT      = "\d027"
define EMPTY              = ""
define FULL_CELL          = p123456
define SPACE              = " "

- Dependent Files Update Flag
define UPDATE             = 1

- Text Attribute Flags
define BOLD                = 1
define ITALIC              = 2
define UNDERLINE          = 4

- Translation
define TRANSLATION         = 769
define TRANSLATION_ON      = 768
define TRANSLATION_OFF     = 769

- Source
define SOURCE              = 770
define SOURCE_PRINT        = 768
define SOURCE_BRAILLE      = 770

- Braille Tables
define BRAILLETABLE        = 792
define CUSTOMBRAILLE       = 768
define MITBRAILLE          = 776
define EUROBRAILLE         = 784
```

```

- Character Sets
define ANSI_CHARSET           = 0
define GREEK_CHARSET          = 161
define CHINESEBIG5_CHARSET    = 136
define TURKISH_CHARSET        = 162
define ARABIC_CHARSET         = 178
define BALTIC_CHARSET         = 186
define RUSSIAN_CHARSET        = 204
define HEBREW_CHARSET         = 177
define THAI_CHARSET           = 222
define EE_CHARSET             = 238

```

The constants `STARTOFPARAGRAPH`, `ENDOFPARAGRAPH` and `ENDOFTEXT` can be used to recognize the start and the end of the paragraph and the end of the text to be translated.

`EMPTYLINE0`, `EMPTYLINE1`, `EMPTYLINE2` and `EMPTYLINE3` recognize zero, one, two, or three empty lines between paragraphs. These constants were used in SLIB version 2.xx, but, since text formatting is performed in WinBraille and no longer covered by the SLIB contraction rules, these constants will hardly ever be used in any current or future contraction rules.

`BOLD_ON`, `BOLD_OFF`, `ITALIC_ON`, `ITALIC_OFF`, `UNDERLINE_ON` and `UNDERLINE_OFF` are used in contraction rules when these attributes can be marked in Braille. Attribute rules must be defined if any of the attributes `BOLD`, `ITALIC` or `UNDERLINE` is defined, see the SLIB command attribute. `TAB`, `NEWLINE` and `NEWPAGE` are aliases for the tabulator character, the new line marker and the new page marker respectively. These constants are used in the tabulator, new line and new page rules. The `BRL_NEWLINE` and `BRL_NEWPAGE` constants are the corresponding Braille symbols for the new line and new page markers. The new line and new page rules must be defined for the translation process to work properly. Normally the new line and the new page markers are not translated, but kept as they are, as this example shows:

```

< ; NEWLINE ; ; BRL_NEWLINE ; NEWLINE >
< ; NEWPAGE ; ; BRL_NEWPAGE ; NEWPAGE >

```

The alias `BRL_p7` is used to define the seventh dot Braille symbol. Since the seventh dot Braille symbol is used as an "escape" for the Braille constants, the seventh dot Braille symbol itself must be typed twice to be recognized as a seventh dot Braille symbol. (This is not used in the current version of WinBraille, though, since eight-dot Braille is not implemented).

The values `ORIGINAL_TEXT`, `EMPTY`, `FULL_CELL` or `SPACE` can be used in a default statement, see the SLIB command default.

The constant `UPDATE` is used if dependent files are defined and they should be updated when a new version of the contraction rules is loaded from the internet, see the SLIB command `depend`.

The text attributes `BOLD`, `ITALIC` and `UNDERLINE` are used in attribute statements. The attribute statement, if used, enables the attributes selection in WinBraille, see the SLIB command attribute.

The `TRANSLATION` state definitions `TRANSLATION_ON` and `TRANSLATION_OFF` can be used in `istate` and `interface` definitions to give the user an option to select whether translation should be performed or not, see the SLIB commands `istate` and `interface`.

The `SOURCE` state definitions `SOURCE_PRINT` and `SOURCE_BRAILLE` can be used in `istate` and `interface` definitions to give the user an option to tell the translation engine whether the source text to be translated is in black print, with a normal Windows font, or in Braille, typed with the proprietary Index Braille font. See the SLIB commands `istate` and `interface`.

The Braille table definitions `BRAILLETABLE`, `CUSTOMBRAILLE`, `MITBRAILLE` and `EUROBRAILLE` can be used in a `brailletable` statement to define the default Braille table or in an `istate` statement if more than one Braille table is available for the contraction rules, see the SLIB commands `brailletable` and `istate`.

The character sets ANSI_CHARSET (character set for most western European languages), GREEK_CHARSET, etc. are used in a charset statement to define the proper character set for the translation rules, see the SLIB command charset.

9.4.8 The Symbol Definitions

Some often used symbols, as for example the number prefix and capital prefix symbols, can be defined as new identifiers with the predefined keyword define, in the same way as the definitions above. Note that these definitions have no meaning to the WinBraille Contraction Rule Engine other than just a simple method to make it easier to later define the contraction rules and to make the rules more readable.

Example:

```
- Prefixes for text.
- Number prefix
define NP_text      = "#"
- Capital prefix
define CP_text      = "'"
- Multi-capital prefix
define MCP_text     = "''"
```

And the corresponding Braille prefixes:

```
- Prefixes for Braille.
- Number prefix
define NP_Braille   = p3456
- Capital prefix
define CP_Braille   = p6
- Multi-capital prefix
define MCP_Braille  = p6 p6
```

It is convenient to declare all frequently used constants, as for example state variable values for the state declaration. Note that the hyphen ("-") is used in the left most column to mark a comment.

9.4.9 The Character Set Definition

Since the source file is a standard text file, there must be a way for the WinBraille Rule File Editor to recognize the language and the character set to use, to be able to show the proper characters on the screen. The character set is thus declared with the predefined keyword charset as:

```
charset <character set>
```

Example:

```
charset 0
```

To ease the character set definition, any of the predefined character set constants can be used as alias for the numerical value:

```
charset ANSI_CHARSET
```

Note: The text string ANSI_CHARSET must have been defined with the line "define ANSI_CHARSET = 0" before it can be referenced in a "charset" definition.

9.4.10 The Password Definition

The source file can be protected with a password. The Rule File Editor will not extract the source code from a protected binary translation file unless the password is entered correctly. Password declaration example:

```
password = "drowssap"
```


9.4.11 Default Character Definition

If none of the translation file's translation rules apply, the translation engine will act with a default behavior. The default behavior is defined with the default statement. The default statement has the following syntax:

```
default = <default character>
```

The default character can either be a string with one character, a Braille symbol, an empty string, or the escape character "\d027", or any of the predefined symbols ORIGINAL_TEXT, EMPTY, FULL_CELL or SPACE. The escape character will use the source text character as the translated character. The empty string will not translate the source text at all.

Example:

```
default = "?"
```

9.4.12 The Attribute Definitions

The `attribute` statement will enable WinBraille's attribute check boxes Bold, Italic and Underline. If any of these boxes is enabled, a corresponding rule must be defined in the translation file. If no such rule is defined in the translation file, the corresponding attribute check box should not be enabled. If any of the check boxes is marked, the corresponding text attribute in the source document will be translated to Braille. The statement syntax is:

```
attribute = <attribute constant>
```

Where attribute constant is one of the predefined constants BOLD, ITALIC or UNDERLINE. More than one attribute statement can be defined, example:

```
attribute = BOLD
attribute = ITALIC
```

The corresponding rules must handle the symbols BOLD_ON, BOLD_OFF, ITALIC_ON, ITALIC_OFF, UNDERLINE_ON and UNDERLINE_OFF, example:

```
< ; BOLD_ON ; ; p45 >
< ; BOLD_OFF ; ; p6 >
```

9.4.13 States

9.4.13.1 The State Definitions

The contraction rule engine in WinBraille version 3.xx can handle state information. A state is for example if capital prefix should be used or whether the text mode (or "state") is "bold letters are currently typed". Four conceptually different types of states exist, user defined states, declared with a state declaration, local states, declared with an `lstate` declaration, global states, declared with a `gstate` declaration, and internal, or interface states, declared with an `istate` declaration.

States are declared with any of the state declaration `state`, `lstate`, `gstate` or `istate`, followed by a state variable name, an equal sign, and a list of state alternatives, enclosed with brackets, and separated with commas:

```
lstate STATENAME = [ALTERNATIVE1, ALTERNATIVE2, ALTERNATIVE3]
```

The first alternatives, ALTERNATIVE1 in the example above, is always the default state, and must have value 0 for user defined states (or 256, 512 or 768 for global states, local states and interface states respectively).

The states can be used in interface declarations, extern declarations or parameter declarations, see description of respective section below. The states can also be used in the rules, as the examples below demonstrate:

Different rules can be applied depending on the value of the state, as shown in the example below. The first rule will be applied only if the GRADE is GRADE2.

```
<(GRADE=GRADE2) ; "this" ; ; "!" >
<(GRADE=GRADE1) ; "this" ; ; "this" >
```

The next example shows how two states can be combined. The rule will only apply if both BRAILLE is SWEDISH and AMBIGUITY is SPACE.

```
<(BRAILLE=SWEDISH,AMBIGUITY=SPACE); "½" ;digit; p3456 p1 p34 p3456 p12 p
; "#1/#2" >
```

The two rules below demonstrate how the state can be changed dynamically. Letter prefix mode will be "ON" if a "<" character is typed, and "Off" when a ">" is typed.

```
< ; "<" ; ; (LETTERPREFIX=LETTERPREFIXON)>
< ; ">" ; ; (LETTERPREFIX=LETTERPREFIXOFF)>
```

Two states can be set at once, as the following example demonstrates:

```
< ; "α" ; ; (LETTERPREFIX=LETTERPREFIXOFF, NUMBERPREFIX=NUMBERPREFIXOFF)>
```

9.4.13.2 The User Defined State

User defined states are used when it is important to exactly know the values of the state alternatives, as for example when the same state variable is declared in many rule files.

Example:

```
define GRADE0 = 0
define GRADE1 = 4
define GRADE2 = 8
define GRADE3 = 12
state GRADE = [GRADE0, GRADE1, GRADE2, GRADE3]
```

Note that the state alternatives are defined with the define declaration. The state itself is defined through the state declaration. There are some rules that must be followed when the state values are defined: The first alternative must be zero, the second must be a power of 2 (1, 2, 4, 8, 16, 32, 64 or 128), the third, fourth etc. must be a multiple of the second, no alternative can have a higher value than 255, and all state alternatives for all user defined states must be unique numbers.

The user defined state is a global state, in the sense that if the same state is declared in many rule files, they will have the same values.

9.4.13.3 The Global State

The global state is used when the value of the state should be maintained from one translation to the next. The different state alternatives are not declared with a define statement, as the user defined state alternatives. The SLIB system will set the values automatically. It is therefore important that, if the same state is used in many rule files, the global state variables must be declared in the same order in all rule files. Declaration example:

```
gstate GRADE = [GRADE0, GRADE1, GRADE2]
```

9.4.13.4 The Local State

The local state is declared as the global state, but its value is local to a single translation. Declaration example:

```
lstate GRADE = [GRADE0, GRADE1, GRADE2]
```

9.4.13.5 The Internal, or Interface State

The interface state can only be set in an interface declaration, nowhere else, specifically not in a rule declaration. Both the state variable name and the state alternatives must be declared in prior to usage, since the interface state controls internal behavior of the WinBraille contraction rule engine, and thus all interface declarations must have values also known by the contraction engine. The constants TRANSLATION, TRANSLATION_ON, TRANSLATION_OFF, SOURCE, SOURCE_PRINT, SOURCE_BRAILLE,

BRAILLETABLE, CUSTOMBRAILLE, MITBRAILLE and EUROBRALLE can be used in an interface state declaration. (These constants are defined in the predefined definitions section).

Declaration example:

```
istate BRAILLETABLE = [CUSTOMBRAILLE, MITBRAILLE, EUROBRALLE]
```

The alternatives must be in consecutive order.

The BRAILLETABLE state values control the Braille table used for the translation to Braille. The Braille table defined in the translation file will be used when BRAILLETABLE = CUSTOMBRAILLE, The American Braille table will be used if the value is MITBRAILLE, and the European Braille table will be used if the value is EUROBRALLE.

See the [Interface Definitions](#) on how to use the interface state definitions to control the translation behavior.

9.4.14 Interface

9.4.14.1 The Interface Definitions

An interface definition makes it possible to set parameters for the translation from within WinBraille. Different translations can be performed for different styles with the same rule files defined, but with different parameter settings. The interface is defined with an interface statement. Two types of interfaces can be defined, interfaces based on state variables and interfaces with variables.

9.4.14.2 State Interface

A state interface statement has the following syntax:

```
interface STATEVARIABLE = "Title text" ["Alternative 1", "Alternative 2" ...]
```

A state declaration (state, gstate, lstate or istate) for the STATEVARIABLE state variable must precede the state interface declaration. The state interface will appear as a list box selection in WinBraille. The "Title text" is a descriptive title for the list box. The alternatives enclosed within brackets are the list box alternatives. The first alternative corresponds to the first state variable value alternative, the second alternative corresponds to the second state variable value alternative, and so on. Example:

```
gstate CAPITALPREFIX = [CAPITALPREFIXON, CAPITALPREFIXOFF]
interface CAPITALPREFIX = "Capital Prefix:" ["On", "Off"]
```

9.4.14.3 Variable Interface

A variable interface statement has the following syntax:

```
interface @n = "Title text"
```

Where @n is one of the variables @1 to @9. The variable interface will appear as an edit field in WinBraille. The "Title text" is a descriptive title for the edit field. Example:

```
interface @9 = "Capital Prefix:"
```

9.4.14.4 Interface Declaration Example

Let us create an interface for the following user selections:

- Capital Prefix: On or Off
- Braille Table selection, with three options: A Bulgarian Braille table, defined with braille statements, an American Braille table, and a European Braille table.
- An option to select whether to perform a translation or not.
- An option to select whether the source is in Braille or typed with printable characters.
- An option to select a specific character for the bullet symbol

We need to create a state variable for the capital prefix selection:

```
gstate CAPITALPREFIX = [CAPITALPREFIXON, CAPITALPREFIXOFF]
```

The Braille table options, the translation options, and the source options must be declared as `istate` declarations. (The constants are defined in the predefined definitions section).

```
istate BRAILLETABLE = [CUSTOMBRAILLE, MITBRAILLE, EUROBRAILLE]
istate TRANSLATION = [TRANSLATION_ON, TRANSLATION_OFF]
istate SOURCE = [SOURCE_PRINT, SOURCE_BRAILLE]
```

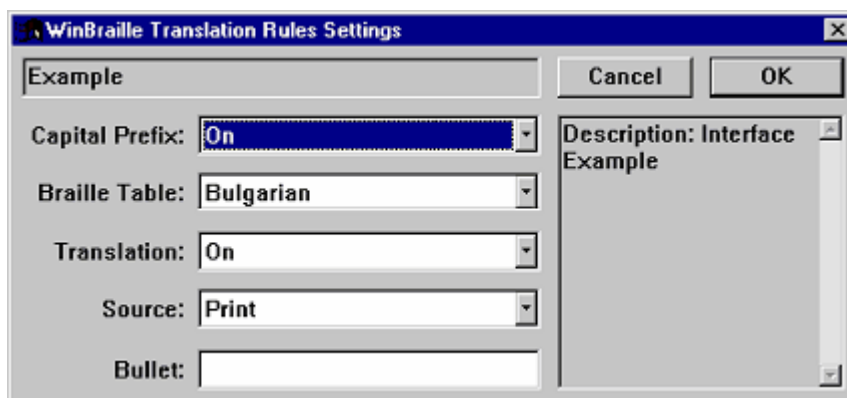
The interface proper is defined with the interface keyword:

```
interface CAPITALPREFIX = "Capital Prefix:" ["On", "Off"]
interface BRAILLETABLE = "Braille Table:" ["Bulgarian", "American",
"European"]
interface TRANSLATION = "Translation:" ["On", "Off"]
interface SOURCE = "Source:" ["Print", "Braille"]
```

The bullet symbol interface is declared as:

```
interface @9 = "Bullet:"
```

The variable `@9` is then used in the rules whenever the bullet symbol is referenced. The interface will look like:



9.4.15 External Rules

9.4.15.1 External Translation Rules

Externally defined contraction rules can be applied if the rules are defined in a Windows 32-bit DLL and the translation can be performed with a single function call. Three SLIB statements are involved in the definition of the external rules: `param`, `extern` and `depend`.

9.4.15.2 The Parameter Definition

The `param` statement defines parameter values for the externally defined function's parameter. The syntax is:

```
param STATEVARIABLE = [ALTERNATIVE1, ALTERNATIVE2, ...]
```

A declaration of the state variable `STATEVARIABLE` must precede the `param` statement. Only one parameter definition can be defined in each translation file.

9.4.15.3 The External Function Definition

The `extern` statement defines the external function proper. The syntax is:

```
extern = "external dll", "function name", method, parameter(s)
```

The first string is the name of the external DLL, example: `"bm.dll"`. The second string is the name of the function, as it should be called from Windows, example: `"_BmTranslate@20"`. Method is an ordinal number indicating how to call the function and number and types of the parameters. Currently one method exists,

with ordinal 1. Parameter(s) is one or more parameters, depending on the method. Method 1 defines one parameter, defined as a state variable, see the example below. The calling convention for method 1 is, as defined as a C code function declaration:

```
HRESULT function (UINT nMode, LPCSTR lpszIn, UINT nBufferSize,
                  LPSTR lpszBuffer, UINT *pActualSize);
```

nMode is the parameter in the extern declaration, lpszIn is the text string to be converted, nBufferSize is the size of the out buffer, lpszBuffer is the text out buffer for the translated text, and pActualSize contains the actual number of converted characters in the out buffer. The return value is S_OK on success and E_FAIL on error.

9.4.15.4 The Dependent File Definition

If the external function needs support from dependent files, these can be embedded in the binary .ibk translation file with depend statements. The syntax is:

```
depend = "dependent file"
```

or

```
depend = UPDATE, "dependent file"
```

The file will normally not be extracted from the .ibk-file if it already exists when the .ibk-file is updated. Use the second form of the depend statement if the dependent file should be extracted from the .ibk-file when the .ibk-file is updated.

Example:

```
define GRADE0 = 0
define GRADE1 = 1
define GRADE2 = 2
state GRADE = [GRADE0, GRADE1, GRADE2]
interface GRADE = "Grade: " ["Grade 0", "Grade 1", "Grade 2"]
param GRADE = [1, 2, 3]
extern = "bm.dll" "_BmTranslate@20", 1, GRADE
depend = UPDATE, "bm.ini"
depend = "bm.lex"
```

9.4.16 Lists

9.4.16.1 The List Definitions

Many rules apply to sets of symbols, as for example the capital prefix rule, which applies to capital characters, or rules that maintain number prefix, where the symbol set should contain the symbols that maintain number prefix.

To be able to create a rule that applies to a symbol set, a list of symbols is defined in a list definition. (This list can not be used in a contraction rule directly. The list must first be applied to a list rule, to define how the list should be treated in the contraction rules, see "The List Rule Definitions". The list rule can then be used in the contraction rule definition).

Commonly used lists are:

- the list of upper case letters,
- the list of lower case letters,
- the figures,
- a list of the symbols that maintain number prefix,
- a list of the symbols that maintain capital prefix,
- the list of spaces,
- the list of punctuation marks,
- the list of symbols that can appear in an empty line,
- the list of the characters that correspond to the figures. (Usually the letters a to j, but, in for example Greek, also the corresponding Greek letters. If no capital prefix is used, this list must also contain the upper case letters A to J). This list is used in the rule that breaks a number in case one of the letters a to j

follows immediately after the number.

The example below is taken from the American grade two translation file, with rules for number and capital prefix:

```
list lowerletter_list = ["a", "b", "c", "d", "e", "f", "g", "h", "i", "j", "k",
+                        "l", "m", "n", "o", "p", "q", "r", "s", "t", "u", "v",
+                        "w", "x", "y", "z", "š", "æ", "à", "á", "â", "ã", "ä",
+                        "å", "æ", "ç", "è", "é", "ê", "ë", "ì", "í", "î", "ï",
+                        "ð", "ñ", "ò", "ó", "ô", "õ", "ö", "ø", "ù", "ú",
+                        "û", "ü", "ý", "þ", "ÿ", "ß"]
list upperletter_list = ["A", "B", "C", "D", "E", "F", "G", "H", "I", "J", "K",
+                        "L", "M", "N", "O", "P", "Q", "R", "S", "T", "U", "V",
+                        "W", "X", "Y", "Z", "Š", "Æ", "À", "Á", "Â", "Ã", "Ä",
+                        "Å", "Æ", "Ç", "È", "É", "Ê", "Ë", "Ì", "Í", "Î", "Ï",
+                        "Ð", "Ñ", "Ò", "Ó", "Ô", "Õ", "Ö", "Ø", "Ù", "Ú",
+                        "Û", "Ü", "Ý", "Þ"]
list digit_list         = ["1", "2", "3", "4", "5", "6", "7", "8", "9", "0"]
list letter_list        = [upperletter_list, lowerletter_list]

list lowerletter_a_to_j_list = ["a", "b", "c", "d", "e",
+                               "f", "g", "h", "i", "j"]
list maintain_NP_list = [",", ":", ";", "-", "/"]
list maintain_CP_list = [maintain_NP_list]
list space_list = [" ", TAB, STARTOFPARAGRAPH]
list end_list = [ENDOFPARAGRAPH, ENDOFTEXT, NEWLINE, NEWPAGE]
list pm_list = [space_list, ",", ":", ";", "!", "?", end_list]
list empty_line_list = [TAB, " ", end_list]
```

Note:

- A list is defined with the keyword list and the brackets "[" and "]".
- The symbols in a list are strings enclosed within quotation marks, and separated with a comma.
- A "+" sign is used in the left most column to extend a line to the next line.
- A previous list definition can appear in a list definition (as in letter_list, pm_list, and empty_line_list).
- The punctuation mark list (pm_list) contains the end_list. This is because a word at the end of a line should be treated as if a punctuation mark follows.

9.4.16.2 The List Rule Definitions

A list can not be used in a contraction rule directly. The list must first be applied to a list rule, to define how the list elements should be treated in the contraction rules. This is done with the keyword listrule.

The syntax is:

```
listrule <name> = <list>:<method>
```

<name> is the assigned list rule name. The list rule applies to the list <list> (previously defined). <method> defines how the elements in the list should be treated in the contraction rules:

Method	Meaning
*	Zero or any number of symbols from the list.
n#	Exactly n elements from the list, where n is a decimal number.
n*	At least n elements from the list. Example: :1* means at least one element.
*!	Zero or any number of the same symbol from the list.
n!	Exactly n of the same element from the list.
n*!	At least n of the same element from the list.

Example:

```
listrule lowerletter = lowerletter_list:1#
listrule upperletter = upperletter_list:1#
listrule upperletters = upperletter_list:2#
listrule letter = letter_list:1#
listrule digit = digit_list:1#
listrule lowerletter_a_to_j = lowerletter_a_to_j_list:1#
```

```

listrule maintain_NP = maintain_NP_list:1*
listrule maintain_CP = maintain_CP_list:1*
listrule space = space_list:1#
listrule pm = pm_list:1#
listrule empty_line = empty_line_list:*

```

Note: A list can be used in more than one list rule definition, as in the list rules upperletter and upperletters.

9.4.16.3 The Character Equivalence Definitions

To avoid defining all text symbols in the contraction rules with both lower case and upper case characters, the equivalence keyword can be used to define the equivalence between two lists, as for example the lower case and the upper case lists. The equivalence does not apply to text symbols in lists, though.

The syntax is:

```
equivalence <original list> = <equivalent list>
```

Example:

```
equivalence lowerletter_list = upperletter_list
```

With this equivalence definition, only lower case letters need to be used to type letter symbols in the contraction rules. The drawback is that if it is important to differ between lower case and upper case letter, this can not be done with a letter symbol. (For example if a word with only capital letters should be contracted, but not if the same word is spelled with lower case letters). Since the equivalence does not apply to lists, this can be performed by defining a list containing the single word in question.

Example: Instead of using the word "ABBA" in the contraction rules, a list and a list rule can be defined:

```

list ABBA_list = ["ABBA"]
listrule ABBA = ABBA_list:1#

```

Now the defined identifier ABBA can be used in the contraction rule instead of the text symbol "ABBA", and no equivalence conversion will be performed.

9.4.17 Translation Rules

9.4.17.1 The Contraction Rules: Inserting Rules and Replacing Rules

The WinBraille contraction rules are of two different kinds: Inserting rules and replacing rules. Inserting rules are used to insert Braille symbols after, between or before characters (as for example number prefix). Replacing rules replace text with the Braille counterpart.

The contraction rule engine will first browse through the inserting rules, and if a matching rule is found that matches the current text in process, that insertion rule will be applied. The engine will then discontinue with the insertion rules and continue with the replacing rules. The first replacing rule that matches the text proper will then be applied, and the conversion process terminates. A jump to the next text to be processed is then performed. This does not necessarily need to be a single character, but as many characters as have been processed by the previously applied replacing rule.

All rules use the same syntax. Every rule is a tuple (usually a quintuple, i.e. a tuple with five elements) delimited between "<" and ">". The elements in the tuple are delimited with semi-colon, ";". The first three elements in the tuple are the text context. The fourth is the contracted Braille symbols and the fifth is the corresponding contracted text.

The fifth element, the contracted text, or the fourth element, the Braille symbol, can be excluded, but not both, if a Braille table is supplied. If the fifth element is excluded, it will be derived from the Braille symbol and the Braille table. If the fourth element is excluded, it will be derived from the contracted text and the Braille table.

Consider the following example (from the American grade 0 rules):

```
< ; "a" ; ; p1 ; "a" >
```

This rule will replace all "a" in the original text with the Braille symbol p1, i.e. dot 1. The corresponding contracted text symbol is "a" (the fifth element in the tuple). The text proper, to be converted, is the second

element in the tuple. The first element is the context to the left of the text to be converted, and the third is the right context. Since, in grade 0, all "a"s should be converted to the same Braille symbol, no matter what the left and the right context is, these fields are empty.

Consider now some more examples (from the American grade 2 rules):

```
< ; "ar" ; ; p345 ; ">" >
```

In this case all letter groups "ar" will be converted to the Braille symbol p345, which, in MIT-coding is a ">" symbol. It is important to define the ">" symbol as the contracted text symbol so the proper Braille symbol (p345) can be read on a Braille display. To illustrate why this is important, consider the following rule:

```
< ; "1" ; ; p1 ; "1" >
```

This will look all right on the screen. Assume now that the Braille display uses MIT coding (i.e. American grade 0). In this coding, the figure 1 is expressed as dot 2, and not dot 1. This means that the person that reads the Braille display will read dot 2, while the Braille window in WinBraille will display a dot 1 symbol, but the contracted text window shows a "1". To read the proper symbol on the Braille display, we must define the rule as:

```
< ; "1" ; ; p1 ; "a" >
```

I.e. with an "a" as the contracted text symbol.

Let us now go back to the grade 2 example. Say that all letters "a" should be converted to Braille symbol p1, except for those words that contain "ar", where "ar" should be converted to the Braille symbol p345.

Suppose we write the rules:

```
< ; "a" ; ; p1 ; "a" >
< ; "ar" ; ; p345 ; ">" >
```

This will not work, however, since the first of the two rules is the first that will be encountered, i.e. all "a"s will be converted to the Braille symbol p1. When we thereafter come to the next rule, i.e. rule "ar", all "a"s have already been converted. For this to be in effect, we have to reorder the rules:

```
< ; "ar" ; ; p345 ; ">" >
< ; "a" ; ; p1 ; "a" >
```

Now we will first take all words with "ar" and convert "ar" to the Braille symbol p345. When this rule fails, i.e. when an "r" does not follow the "a". we will go to the next rule, i.e. the "a" rule.

But what will happen with for example the word "arrive"? In this word, "ar" should not be converted to the Braille symbol p345, but the "a" should be converted to Braille symbol p1 and the "r" should be converted to Braille symbol p1235. To solve this problem, we insert an exclusive rule for the word "arrive" before the "ar" rule:

```
< ; "a" ; "rrive"; p1 ; "a" >
< ; "ar" ; ; p345 ; ">" >
< ; "a" ; ; p1 ; "a" >
```

It is thus important to organize the rules in the proper order.

9.4.17.2 The Inserting Rules

Inserting rules are used to insert Braille symbols after, between or before characters. The second tuple element is thus empty. Example:

```
<digit ; ; lowerletter_a_to_j ; p56 ; ";" >
```

This rule resolves the ambiguity if one of the letters a to j follows a number. In this case a semi-colon (";", dots 5 and 6) will be inserted before the letter. The list rules digit and lowerletter_a_to_j must have been defined earlier.

Common inserting rules are the capital prefix rules and the number prefix rules. (The rules in the examples are not taken from any translation file. They are just given as examples. They can be copied and changed to suit specific needs).

Number Prefix Rules

```
<digit ; ; "." ; ; >
< ; ; "." digit ; NP_Braille ; NP_text >
<"." ; ; digit ; ; >
```



```

<digit      ;      ; digit      ;      ;      >
<digit maintain_NP; ; digit      ;      ;      >
<      ;      ; digit      ; NP_Braille      ; NP_text      >

```

If we analyze these rules, we see that:

- Rule 1: if a decimal point follows a digit, no number prefix will be inserted. This rule is needed because of rule 2.
- Rule 2: If a decimal point is followed by a digit, a number prefix is inserted before the decimal point.
- Rule 3: If a digit follows a decimal point, no number prefix will be inserted. This rule is needed as a result of rule 2, since the prefix has already been inserted.
- Rule 4: If a digit follows another digit, no number prefix is inserted. There is no need to insert a prefix after every digit.
- Rule 5: If one or more symbols that should maintain number prefix follow a digit, no prefix is inserted after these symbols, even if a digit follows.
- Rule 6: If a digit follows anything else, a number prefix is inserted.

Note that the order of the rules is important.

Capital Prefix Rules

```

<upperletter; ; upperletters lowerletter ;      ;      >
<      ; ; upperletters lowerletter ; CP_Braille ; CP_text      >
<      ; ; upperletter lowerletter ; CP_Braille ; CP_text      >
< ; ; upperletters maintain_CP lowerletter ; CP_Braille ; CP_text      >
< ; ; upperletter maintain_CP lowerletter ; CP_Braille ; CP_text      >
<upperletter; ; upperletter      ;      ;      >
<upperletter, maintain_CP; ; upperletter ;      ;      >
<      ; ; upperletters      MCP_Braille      ; MCP_text      >
<      ; ; upperletter      ; CP_Braille      ; CP_text      >

```

Analyzing these rules:

- Rule 1: If two capitals followed by a lower letter, follow a capital, no prefix is inserted. This is needed to prevent rule 2 to be activated in case more than two capitals are preceded by a lower letter.
- Rule 2: If two capitals proceed a lower letter, a single capital prefix is inserted before the two capitals, except when there are more than two capitals. The latter case will be handled by rule 1, and will thus never reach rule 2.
- Rule 3: If one capital proceed a lower letter, a single capital prefix is inserted before the capital. (This is the reason why a single capital prefix is inserted in rule 2 and not a multi-capital prefix).
- Rule 4: This rule is the same as rule 2, but there are symbols that maintain capital prefix before the lower letter.
- Rule 5: This rule is the same as rule 3, but there are symbols that maintain capital prefix before the lower letter.
- Rule 6: If a capital follows a capital, no prefix is inserted. (The cases when lower case letters follow a capital are taken care of in rules 1 to 3).
- Rule 7: If one or more symbols that should maintain capital prefix are inserted between capitals, no prefix should be inserted before the second capital.
- Rule 8: If two capitals follow, a multi-capital prefix is inserted.
- Rule 9: If one capital follows, a single-capital prefix is inserted.

The inserting rules end with an empty rule:

```

<      ;      ;      ;      ;      >

```

9.4.17.3 The Replacing Rules

Immediately following the inserting rules comes the replacing rules section. These rules do have a text symbol as the second element in the rule tuple.

Almost mandatory rules are the rules for end of page and end of line, the space rules and the tabulator rules:

End of page and end of line rules

```

<      ; NEWLINE      ; ; BRL_NEWLINE      ; NEWLINE      >
<      ; NEWPAGE      ; ; BRL_NEWPAGE      ; NEWPAGE      >

```

The first of these rules is the empty line rule. The last rule takes care of new page markers. If this rule is not included, no new page markers will be re-inserted in the translated text.

Space and Tabulator Rules

The task for the space rules is to maintain the space in the translated text

```
< " " ; " " ; ; p ; " " >
< TAB ; " " ; ; p ; " " >
```

After the space and tabulator rules, all other replacing rules will follow. It is thus important to organize the rules properly. All rules where the text in the second tuple element start with the same character should be grouped together, i.e. all rules should be in "alphabetical" order.

Example (from the American grade two rules): The pound sign ("£") should be an "l" (dots 1, 2 and 3) before a number, otherwise the "l" should be proceeded with a dot-4 Braille symbol (the "@"-sign if MIT coding is used). All "£" rules must thus be grouped together.

```
< ; "£" ; digit ; p123 ; "l" >
< ; "£" ; "." digit ; p123 ; "l" >
< ; "£" ; ; p4 p123 ; "@l" >
```

There are two rules worth to be mentioned: The rule for the backslash ("\") and the rule for the quotation mark (""): Since the backslash symbol is used as an "escape", we type backslash twice to define the backslash symbol:

```
< ; "\\ " ; ; p45 p34 ; "^/" >
```

The quotation mark is used to define text strings. The string "" would be too confusing for the WinBraille Contraction Rule Engine. Instead we use the "escape" symbol together with the "" symbol to define a single "" symbol: "\".

```
< ; "\" ; ; p236 ; "8" >
```

Rules that include list rules in the second tuple element

List rules are allowed in the second tuple element, the text proper, in SLIB version 3.xx rules. This will reflect the sorting order of the rules slightly. The rules shall still, as in the SLIB version 2.xx rules, be sorted "alphabetically", in the sense that all rules with the same first letter in the second element need to be grouped together to prevent the translation engine to search all rules at every translation occasion. A second rule tuple element that starts with a list rule can not follow this scheme, though. To prevent the translation engine to mish-mash the translation, these kinds of rules must be inserted either before all other replacing rules, or last in the list of replacing rules. If they are placed before all other rules, they will be validated before the rules that start with string symbols. If they are placed last among the rules, they will only be reached if no other "normal" rule has been matched.

9.4.17.4 Rule Order

A proposed rule order would be:

- Inserting Rules.
- Number prefix rules, letter prefix rules, rules to resolve ambiguities etc.
- Replacing Rules with a list rule first in the second element.
- Typically rules for double words and other rules that can not be specified otherwise.
- Replacing Rules with an escape character as the first character in the second element.
- The BOLD_ON, BOLD_OFF, ITALIC_ON, ITALIC_OFF, UNDERLINE_ON and UNDERLINE_OFF rules belong to this category.
- Replacing Rules with a non-printable character as the first character in the second element
- NEWLINE, NEWPAGE and TAB rules.
- Replacing Rules with a printable character as the first character in the second element.
- Space, symbol, character, and word rules belong to this category. All rules with the same first letter in the second rule tuple should be grouped together.
- Replacing Rules with a list rule first in the second element.
- Rules that will be validated if no other rules have been applied.

9.4.17.5 Control Translation Order for a Single Rule

The default order when a rule is tested is to first test the text proper, i.e. the second element, then test the right context, i.e. the third element, and lastly test the left context, i.e. the first element. The rule will pass if all tests pass. There might be circumstances when this order is not feasible. Inserting an order modifier immediately after the start-of-rule marker, "<", will reorder the tests. Available order modifiers are:

%LR	Modifier for inserting rules. Test the left context first, then the right context
%RL	Modifier for inserting rules. Test the right context first, then the left context
%LTR	Modifier for replacing rules. First test the left, then the text, and last the right context.
%TLR	Modifier for replacing rules. First test the text, then the left, and last the right context.
%TRL	Modifier for replacing rules. First test the text, then the right, and last the left context.

No other orders are possible, The text must be tested before the right context, since the translation engine must determine where the text ends before the right context can be tested.

Example:

```
<%TRL letter ; "and" ; "ers" ; p12346 ; "&" >
```

It is better to test the right context before the left in this example, since it is faster to check whether a string with three letters will pass or fail than testing for all elements in the list rule letter.

9.4.17.6 Using and Assigning Variables

The nine variables @1 to @9 can be assigned and used in the rules. Assignment is performed with curly brackets, "{" and "}". Entities assigned to a variable are enclosed within the brackets. More than one variable can be assigned in the rule. The left most group of bracket enclosed entities is assigned to variable @1, the second group is assigned to variable @2, and so on, see the examples below. A variable used in the first, second or third tuple element will be checked against the left context, the text proper or the right context respectively. A variable used in the fourth tuple element will be used as the translated text for the rule. The translated Braille symbols will be determined from the variable and the Braille table. The fifth element can not be defined if a variable is used in the fourth tuple element.

The example below shows how to assign a text string to a variable. The characters that will pass list rule letters will be assigned to variable @1. The variable will thereafter be checked against the left context. If the left context contains the same characters as the letter string after the hyphen in the text to be converted, the whole rule will pass. The hyphen and the letters will then be converted to an equal sign. Here it is important to check the second tuple element before the first to ensure that the variable has been assigned a proper text string before it is checked against the left context. The %TLR modifier is used for this purpose.

```
<%TLR @1 ; "-" {letters} ; pm ; "=" >
```

The next example shows how to assign two variables. The text "abc" will be assigned to variable @1, since this is the left most curly bracket enclosed group of entities. The text "xyz" will be assigned to variable @2, since this is the second curly bracket enclosed group of entities. The letters "abc" will be converted to "xyz" if this rule pass (i.e. if the text "abcxyz" exists).

```
< ; {"abc"} ; {"xyz"} ; @2 >
```

9.4.17.7 Recursive Translation

Variable content can be recursively translated with the symbol &n, where n is the variable index. Example: Suppose a variable interface has been declared for the variable @9 in the American grade 1 rules and the variable has been assigned the symbol "!" through the WinBraille interface. The first rule below will produce a "!" before each digit on the screen, and dots 2, 3, 4 and 6 in Braille. The second will produce a "6" before each digit on the screen, and dots 2, 3 and 5 in Braille, since a "!" will be converted to "6", with dots 2, 3 and 5 as a Braille symbol, if the American grade1 rules are applied.

```
< ; ; digit ; @9 >  
< ; ; digit ; &9 >
```

9.4.17.8 What happens during the conversion process?

Let us see how the conversion process is performed. Imagine we have replacing rules for numbers and the decimal point and the previously mentioned inserting rules for number prefix. Suppose we want to convert the text "3.14". First the inserting rules are applied between the beginning and the first figure "3". Here we will have a match with the last number prefix rule, i.e. the rule that inserts a number prefix (Braille symbol p3456, i.e. dots 3, 4, 5 and 6). The number prefix symbol will therefore be inserted into the translated text. We will now discontinue with the inserting rules and go to the replacing rules. The replacing rule for the figure "3" will be found, and thus the Braille symbol p14 will be inserted into the translated text. This terminates the conversion process. We now proceed with the inserting rules and try to apply them to the character pair "3" and ".". The first number prefix rule will match, so we just proceed with the replacing rules, where a match will be found for the decimal point. This will result in a Braille symbol p256 in the translated text. Next we take the inserting rules and try to apply them to the character pair "." and "1". A match will be found at the third number prefix rule, where after we discontinue the inserting rules and proceed with the replacing rules, where a match is found for the figure "1", which will result in a Braille symbol p1 in the translated text. Next we apply the inserting rules to the character pair "1" and "4". The fourth inserting rule will make a match, so we just proceed with the replacing rules and try to apply them to the figure "4". A match will be found, so the Braille symbol p145 will be inserted into the translated text. This will end the conversion of the number "3.14", and the resulting translated text will have these Braille symbols: p3456 p14 p256 p1 p145.

9.4.18 Tables

9.4.18.1 The Braille Table

Since there is not necessarily a one-to-one relation between unconverted text, translated text and Braille, there is a possibility to define a text to Braille and Braille to text table. This table is optional. If no Braille conversion table is defined, the table is automatically built from the rules, but if one Braille table entry is included, all entries must be included, i.e. the whole table. If more than one text symbol is converted to the same Braille symbol, this table tells the WinBraille Contraction Rule Engine which translated text symbol should be chosen for a specified Braille symbol. The syntax for a Braille table element is:

```
braille <braille symbol> = <text character>
```

The most common Braille coding is the American grade 0, i.e. the MIT coding:

```
braille p = " "
braille p1 = "a"
braille p2 = "1"
braille p3 = " ' "
braille p4 = "@"
braille p5 = "\"
braille p6 = ", "
braille p12 = "b"
braille p13 = "k"
braille p14 = "c"
braille p15 = "e"
braille p16 = "*"
braille p23 = "2"
braille p24 = "i"
braille p25 = "3"
braille p26 = "5"
braille p34 = "/"
braille p35 = "9"
braille p36 = "-"
braille p45 = "^"
braille p46 = "."
braille p56 = ";"
braille p123 = "l"
braille p124 = "f"
braille p125 = "h"
braille p126 = "<"
braille p134 = "m"
```

```

braille p135 = "o"
braille p136 = "u"
braille p145 = "d"
braille p146 = "%"
braille p156 = ":"
braille p234 = "s"
braille p235 = "6"
braille p236 = "8"
braille p245 = "j"
braille p246 = "["
braille p256 = "4"
braille p345 = ">"
braille p346 = "+"
braille p356 = "0"
braille p456 = "_"
braille p1234 = "p"
braille p1235 = "r"
braille p1236 = "v"
braille p1245 = "g"
braille p1246 = "$"
braille p1256 = "\\\"
braille p1345 = "n"
braille p1346 = "x"
braille p1356 = "z"
braille p1456 = "?"
braille p2345 = "t"
braille p2346 = "!"
braille p2356 = "7"
braille p2456 = "w"
braille p3456 = "#"
braille p12345 = "q"
braille p12346 = "&"
braille p12356 = "("
braille p12456 = "]"
braille p13456 = "y"
braille p23456 = ")"
braille p123456 = "="

```

Note: When the Braille conversion table is defined, The fifth tuple element is obsolete, since it can be derived from the Braille conversion table and the fourth tuple element (the Braille symbol). It is also possible to define the fifth tuple element and skip the fourth. (I.e. typing the translated print symbol, "the fifth element", in the fourth tuple position). The Braille symbol will in this case be constructed from the fifth element and the Braille table.

The Braille table is used (together with the duplicate character table and the fifth tuple element) to emboss from the translated text. When embossing from the Braille window, only the Braille symbols in the fourth tuple element are used. It is therefore of paramount importance that the symbols in the fourth tuple element and the elements in the Braille table coincide. If the American Braille code (MITBRAILLE) or the European code (EUROBRAILLE) are used, we can use a `brailletable` statement instead of defining all Braille symbols with 64 braille statements, example:

```
brailletable = MITBRAILLE
```

or

```
brailletable = EUROBRAILLE
```

9.4.18.2 The Duplicate Character Table

The duplicate character table is obsolete in SLIB version 3.xx, since it is internally derived from the Braille conversion table and the fifth rule tuple element, but it can be supplied for compatibility with earlier versions of the SLIB rules.

If more than one text symbol is converted to the same Braille symbol, the Braille table tells the WinBraille Contraction Rule Engine which translated text symbol should be chosen for a specified Braille symbol. The other duplicated character or characters can be defined in the duplicate character table. The syntax for a duplicate character table element is:

```
ascii <text character> = <braille symbol>
```

One example is when a national coding is used for the translated text symbols, and this coding does not contain the figures 0 to 9. We can then use the figures 0 to 9 as the translated text (the fifth tuple element) for the figures 0 to 9 in the unconverted text (i.e. the second tuple element). The duplicate character table would in this case contain the following symbols:

```
ascii "0" = p245
ascii "1" = p1
ascii "2" = p12
ascii "3" = p14
ascii "4" = p145
ascii "5" = p15
ascii "6" = p124
ascii "7" = p1245
ascii "8" = p125
ascii "9" = p24
```

The figure rules would then be:

```
<          ; "0"      ;      ; p245                ; "0"      >
<          ; "1"      ;      ; p1                  ; "1"      >
<          ; "2"      ;      ; p12                 ; "2"      >
<          ; "3"      ;      ; p14                 ; "3"      >
<          ; "4"      ;      ; p145                ; "4"      >
<          ; "5"      ;      ; p15                 ; "5"      >
<          ; "6"      ;      ; p124                ; "6"      >
<          ; "7"      ;      ; p1245               ; "7"      >
<          ; "8"      ;      ; p125                ; "8"      >
<          ; "9"      ;      ; p24                 ; "9"      >
```

This cannot be performed if the MIT coding is used, since the figures 0 to 9 are already occupied in the Braille table. In this case, we have to define the figure rules as:

```
<          ; "0"      ;      ; p245                ; "j"      >
<          ; "1"      ;      ; p1                  ; "a"      >
<          ; "2"      ;      ; p12                 ; "b"      >
<          ; "3"      ;      ; p14                 ; "c"      >
<          ; "4"      ;      ; p145                ; "d"      >
<          ; "5"      ;      ; p15                 ; "e"      >
<          ; "6"      ;      ; p124                ; "f"      >
<          ; "7"      ;      ; p1245               ; "g"      >
<          ; "8"      ;      ; p125                ; "h"      >
<          ; "9"      ;      ; p24                 ; "i"      >
```

Here we can not use the figures 0 to 9 as the translated text symbols, since the MIT coding does not code the figures in the same way as the letters a to j. (0 is coded as p2, 2 is coded as p23, 3 is coded as p25 and so on).

Another usage of this table can for example be for debugging purposes. We can for example omit the equivalence definition and include rules for the capital characters as well. We then let the fifth tuple element be the capital letters, and include these capital letters in the duplicate characters table.

10 Appendix

10.1 Default Profile Settings

The "Index Default Installation Package" contains the following default settings:

10.1.1 Index Default Installation 1

Category	Setting	Default Value
Preferences	Options	Maximize all Windows
	Automation	Edit source document
	Units	mm (millimeters)
	Keyboard Mode	Standard (not 6 key entry)
	Zoom	50%
	Default mode when viewing a translated file	Show Print
Embosser	Old Index Embosser	Not selected See on scree embosser model info
	Duplexing	Basic-S = Single sided Everest, Basic-D = Double sided 4X4 PRO = Saddle stitch binding
	Folding Option (Only Basic-D and 4Waves PRO)	Z-folding = off
Header	Odd pages	Right = %b
	Even Pages	Right = %b
	Begin Page Numbering on Braille page:	1
	Start Numbering With	1
	Format Header and Footer to Style	Header
	Most frequent values	%b = Braille Page Number %s = Source Page Number
Tables	Wrap Columns	Indent each column 1 (default)
	Delimiter, Row By Row	Character 2
	Delimiter, Column By Column	Character 2
	Format Tables According to Style	Table

10.1.2 Index Default Installation 2

Category	Setting	Default Value
Lists	Exchange Bullets characters with	#
	Indent Bullet character	0
	Space between bullet character and paragraph	1
Source Page Number	Indicate page transitions in the Braille document	Default = not tagged
Reformatting	Page Breaks	Remove all empty pages and page brakes
	Spaces	Exchange multiple spaces with single spaces

	Empty Lines	Format empty lines according to table
	Concatenate adjacent lines	Never
Graphics	Include Graphics in translated document	Default = off, graphics will be deleted during the translation to Braille.
	Preferred Translated Image size	Page Width
Paragraph	Space	Exchange multiple space with single space
	Indents	Left = 0 Character Right = 0 Character First Line = 0 Character
	Tab	(not active)
	Distance	Top = 0 Lines Bottom = 0 lines
	Attribute	(not active)
	Insert page break before paragraph	not tagged
	Line Spacing	1 Lines
	Alignment	left
	Concatenate adjacent paragraphs	not tagged
Translate	Translation	american_g2.ibk Translation of the text to Braille following American Grade 2 rules
	Exception	general_exceptions.ibk
Separator	Top	Not tagged
	Bottom	Not tagged
Hyphenation	Hyphenation	No Hyphenation (Word wrap active)

10.2 Custom Installation Packages

The following Custom Installation packages exist at the time of the release of this manual. Index default settings.

Name	Description
Index default settings	English Index default
Bo Jo Tveter 030321	Norwegian settings
German, Papenmeier	German settings
Polar Print, svenska profiler	Swedish settings
North american settings	American settings
Voice System (Versione Italiana)	Italian settings

Please verify on www.indexBraille.com if more custom installation packages have been released.

Index

- A -

- about this book** 1
 - about this book 2, 3
 - document conventions 2
 - name conventions 2
 - news 1
 - related documents 3
 - terminology 2

- B -

- braille translation**
 - braille translation 125, 19, 21, 98
 - capital prefix on/off 21
 - exception list 19, 98
 - get latest file www 125
 - rule file 19
 - select language 19

- C -

- custom Installation package** 23, 43, 44

- E -

- embossing** 27
 - embossing 25, 26, 28
 - from Excel 25
 - from Windows 26
 - from Word 25
 - graphics 28
 - using Duxbury files 27

- F -

- fotter**
 - braille page number 18
 - fotter 18

- G -

- graphics**
 - accepted Windows picture formats 5
 - editor instructions 132
 - graphics 132, 19, 28, 5
 - setup graphics 19
 - tutorials 28

- H -

- header**
 - braille page number 18
 - header 18

hypernation

- Index default 159

- I -

index setup

- create a custom Installation package 44
- index setup 43, 44
- install a custom installation package 43

internet

- internet 131
- software performance report 131

- M -

- macro** 11

- O -

operating systems 4

- DOS 4
- Windows versions 4

- P -

product overveiw 6

professional edition 15

- R -

rule file editor

- example how to use 66
- menu reference 59

- S -

setup

- automation modes 23
- braille page number 18
- braille translation 19
- custom installation package 23
- default settings 23
- graphics 19
- header 18
- hypbernation 19
- overview professional 15
- overview standard 15
- page layout 17
- personal settings 16

setup

- preferences 22
- professional 14
- rule file 19
- setup 14, 15, 16, 17, 18, 19, 22, 23
- setup embosser 16
- standard 14

software requirements 4

- adobe acrobat 4
- office packages 4
- serial communication 4

standard edition 15**support**

- support 6
- www.indexbraille.com 6

support of Index version 2 embossers 5

upgrade 7

upgrade from WB 2.xx 7

using templates 22

WinBraille 10, 11, 111, 12, 13, 19, 21, 22, 5, 7, 8

- T -**tools**

- add printer wizard 133
- drag and drop 69
- edit rule file 132
- embosser utility 69
- graphic editor instructions 132
- IbPrint - drag and drop 69
- image editor instructions 132
- tools 132, 133, 69

tutorials

- create a personal profile 38
- emboss graphics 28
- emboss multiple language 35
- tutorials 28, 35, 38, 41
- using profiles 41

- W -**WinBraille 7**

- adding network port 8
- default profiles 159
- distributed installation 24
- download www.indexbraille.com 12
- emboss a test page 13
- feature overview 5
- installation details 11
- installation overview 10
- installing 12
- project file 21
- setup graphics 19
- shortcuts 111
- starting WinBraille 12

Back Cover