Guide to the Charmap application

for version 0.2

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This manual is for Charmap (version 0.2), a powerful character map. Copyright © 2004 Christopher Culver

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Acknowledgements

Charmap was inspired by Noah Levitt’s gucharmmap (http://gucharmmap.sourceforge.net/), a character map for the GNOME desktop. As developer of Charmap, I can only hope to succeed in implementing all the features of gucharmmap.

Charmap was my first application and I am grateful to the GNUstep developer community for the enthusiastic help it provided, especially Alex Malmberg (improvements to charmap’s Unicode support), Helge Hess (various conversions in the Inspector) and Greg Casamento (UI improvements).
1 News

1.1 Noteworthy changes in version ‘0.2’

- Displays more Unicode data in the Inspector
- Unicode-positions not assigned are grayed-out.
- More documentation

1.2 Noteworthy changes in version ‘0.1’

- Font selection
- Will show definition of CJK ideograph in the Inspector if Unihan.txt is in the directory Charmap is launched from.
- Documentation
Chapter 2: Installing Charmap

2 Installing Charmap

2.0.1 Required software

You need to have the GNUstep core libraries installed in order to compile and use Charmap. The core packages are, at a minimum:

- gnustep-make
- gnustep-base
- gnustep-gui
- gnustep-back


2.0.2 CJK Support

In order to view CJK information (at this time this means the definition of a CJK ideograph), you must have the file Unihan.txt in the same directory that Charmap is launched from. Unihan.txt can be obtained from:

http://www.unicode.org/Public/UNIDATA/Unihan.zip

Unihan.txt is a hefty file, 25MB when uncompressed. I’d like to keep Charmap lightweight so this file is not included with the source.

2.0.3 Build and Install

Steps to build:

make && make install
3 Using Charmap

3.1 Main Window

Charmap’s main window consists of four parts.

3.1.1 Blocks Browser

The Blocks Browser (top left) provides a selection of Unicode blocks.

3.1.2 Character Map Matrix

The Character Map Matrix (top right) shows all characters in the Unicode block selected. Cells that are grayed-out represent positions not yet assigned a character in Unicode.

Selecting a character and double-clicking it will place it in the selection field (bottom left).
3.1.3 Selection Field

The Selection Field holds all characters selected from the Character Map Matrix as well as any directly typed in by the user.

3.1.4 Copy Button

Clicking the Copy button (bottom right) will copy the text in the selection to the pasteboard.

3.2 Character Inspector

The Character Inspector, accessible from the menu item “Inspector...” provides detailed information on the character currently selected in the Character Map Matrix.

- Name
  The name of the character as presented in the Unicode standard version 4.0.

- Alias
  The name of the character as presented in the Unicode standard version 1.0.

- Unicode Category
  The category of the character, such as “Letter, Uppercase” or “Mark, Non-spacing”.

- Canonical Decomposition
  When a precomposed character is selected, shows how the same character can be constructed using a base and added combining characters.

- Various Useful Representations
  Numerical representations of a Unicode character that might be used when the character can not be directly typed.
  - UTF-8: The character as a series of 8-bit hexadecimal values.
- Octal-escaped UTF-8: The character as a series of 8-bit octal values.
- Decimal entity reference: The representation of the character which can be used in HTML and XML.
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