

NeoFontEditor

Introduction

NeoFontEditor is a simple program that allows fonts to be created or modified for the AlphaSmart Neo. It reads and writes Smart Applet files that contain font data.

Disclaimer

NeoFontEditor is available free for use. It contains no warranty nor support. Neither the author nor Renaissance Learning may be held responsible for any damage or problems that may occur as a result of using this software.

Requirements

The NeoFontEditor is compatible with Intel and PPC computers running Mac OS X 10.4 or 10.5.

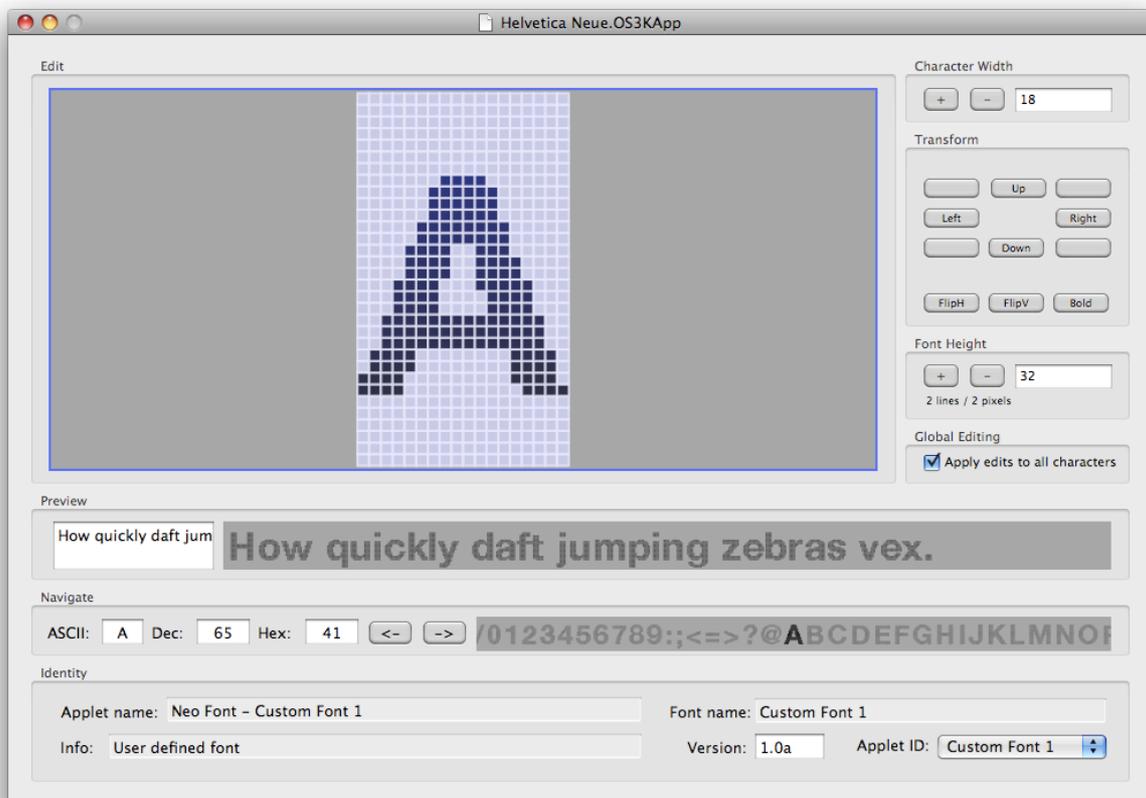
AlphaSmart Manger 2 and a compatible Neo device is needed to use the fonts.

Getting Started

The editor provides simple point-and-click editing of the bit-mapped fonts that are used by the AlphaSmart Neo. The editor supports undo (⌘Z) and redo (⌘⇧Z), making it easy to experiment.

The editor works directly on Smart Applet files that contain font data, such as the fonts that were supplied with AlphaSmart Manager. When starting, the editor will create a blank font, but existing font files such as those distributed with AlphaSmart Manager can be opened using the 'Open' menu command (⌘O).

The following is an example of the main editor window showing a font that was converted from the Mac's standard Helvetica typeface:



Each font opens in a new window, which is divided in to eight editing panels:

Edit

This contains a bit map showing the currently selected character. Click and drag the mouse on the bit map to toggle individual pixels on or off.

Character Width

This sets the width of the current character, or all characters if 'Global Editing' is enabled.

Transform

This applies one of a number of transforms to the current character, or all characters if 'Global Editing' is enabled. The character(s) can be moved, reflected or emboldened.

Font Height

Sets the height of *all* characters in the font. The panel shows the number of lines of text that will be displayed on a Neo / Neo2 and the number of pixels (empty space) that will be left at the bottom edge of the Neo's screen when using this font.

Global Editing

When the global editing tick box is selected some types of editing change will be applied to all characters in the font.

Preview

Allows a preview of the current font to be displayed. Click on a character in the preview graphic to open it in the Edit pane.

Navigate

Allows selection of the character being edited. The character can be entered by typing a letter in the 'ASCII' box, or appropriate numbers in the 'Dec' (decimal) and 'Hex' (Hexadecimal) boxes. Clicking on the adjacent text display jumps to that indicated character, allowing fast paging through the full character set.

Identity

This box specifies how the font is identified to AlphaSmart Manager and the Neo. Select an identity from the 'Applet ID' pop-up menu in the lower right.

The 'Applet Name' string is displayed in AlphaSmart Manager when adding the applet. The 'Font Name' string is displayed on the Neo when choosing the display font.

You can not load two fonts with the same identity (as selected from the pop-up menu) on to a single Neo. This is true regardless of the name of the font file on disk.

Converting Fonts from Mac OS X

The editor can convert many of the pre-installed fonts on a MacOSX computer to the Neo's format.

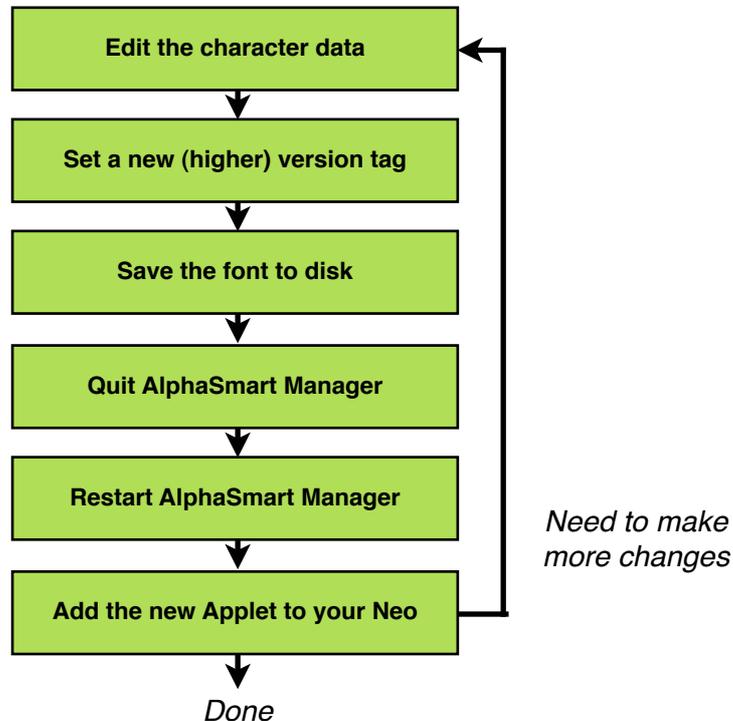
To convert a font, select "Copy System Font" from the Edit Menu (⌘T). This will display the standard font selection dialogue. Click on the name of a font family or typeface to load the selected font in to the editor. Note that the font size is ignored when converting (the editor will try to work out the optimum size to fit the currently configured 'Font Height' setting).

Note that most MacOS fonts are not designed for the small bitmap area used by the Neo, and the conversions typically need a large font height for good results.

Font Version Tags and Loading Fonts on to a Neo

AlphaSmart Manager will refuse to load an Applet to the Neo if it thinks that it has already been downloaded. To make things even more difficult, AlphaSmart Manager will not recognise if an Applet has been changed unless the application is restarted.

The process for editing and previewing a font typically looks like this:



Version information is entered in the Identity pane of the editor. A version tag takes the following form:

`<major>.<minor>[revision]`

where `<major>` is the major version number, `<minor>` is the minor version number and `[revision]` is an optional revision character. Typically you will use the `[revision]` letter to trick AlphaSmart Manager to load a font to test it, but omit the `[revision]` when releasing a font. As long you increase the version used, AlphaSmart Manager will replace any existing font on the Neo with the newly edited version.

Example version tags are:

1.2a	first attempt at testing a new version of a font
1.2b	a second version
1.3	the final (release) 1.3 version string

If you need to install an a font with an older version number you must first remove the newer font from your Neo by using AlphaSmart Manager.

Getting Help

If you need additional help using the software, find a problem that should be corrected, or have an idea as to how to improve the font editor, contact either the Flickr AlphaSmart group or the author:

<http://www.flickr.com/groups/alphasmart>
<http://www.alquanto.com/>
<mailto:neo@alquanto.com>

The Flickr discussion group
Downloads for the fonts and editor
Email contact at Alquanto

Distribution

The NeoFontEditor may be freely distributed for non-commercial use, provided:

- that no modifications are made to the NeoFontEditor software
- this documentation is included with the distribution
- no fee is levied, neither for the distribution nor use of the software

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Appendix: Applet ID Numbers

Each applet loaded on to a Neo is identified by an ID number from 0x0001 to 0xffff. No two applets can be loaded on to a Neo if they share same ID number.

The ranges of Applet IDs number that are being used for the Fonts are:

Range	Usage
7100 - 716f	Used for the Flickr group published fonts
7170 - 717f	Used for the 16 font IDs that can be written by the editor
7180 - 718f	Reserved for future use

By default, the editor only allows the 16 IDs from 0x7170 to 0x717f to be used. These and the font names are selected automatically by using the 'Applet ID' pop-up menu in the lower right-hand corner of the screen.

If you would add a font to the Flickr group archive being distributed from <http://www.alquanto.com>, please email your request to neo@alquanto.com. This is to (try to) ensure that the Flickr font IDs are guaranteed not to conflict with each other nor with other applets that might be loaded on to the Neo.