

HEXpert for Windows Contents

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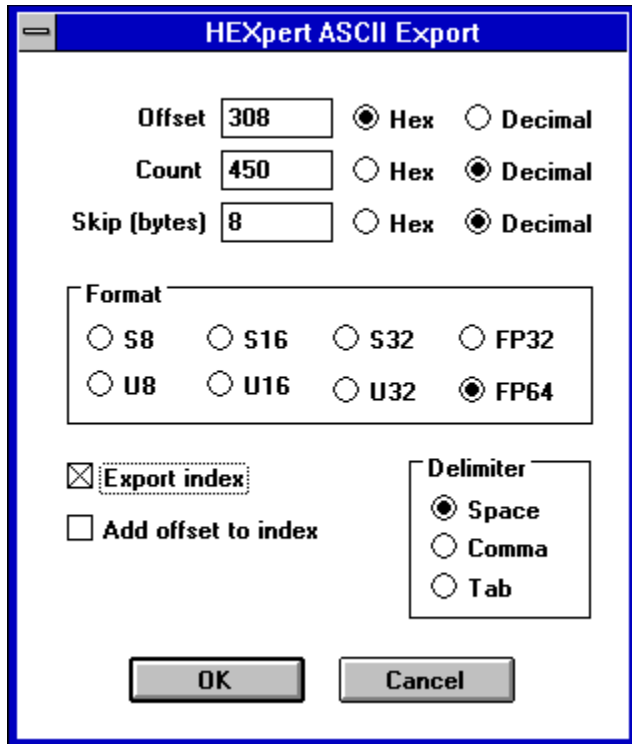
Description of the numeric format windows.

Status line

Description of items on the status line.

Export ASCII Dialog Box

The Export ASCII dialog box allows the user to specify the criteria for exporting a data array as an ASCII file, with the data values arranged in columns.



Export ASCII Dialog Box

The **offset** is the address of the start of the data array. Use the radio buttons to the right to specify the format of the offset, either in hex or decimal. Note that the offset will be filled in by default with the current cursor offset in the file.

The **count** is the number of data elements (not bytes) to be exported. Use the radio buttons to the right to specify the format of the count, either in hex or decimal.

The **skip** is the number of bytes between each data element. This is useful if the data is interleaved with other information. If the array elements are consecutive, the skip value would be zero. Use the radio buttons to the right to specify the format of the skip, either in hex or decimal.

The **format** options specify the data type of the data elements.

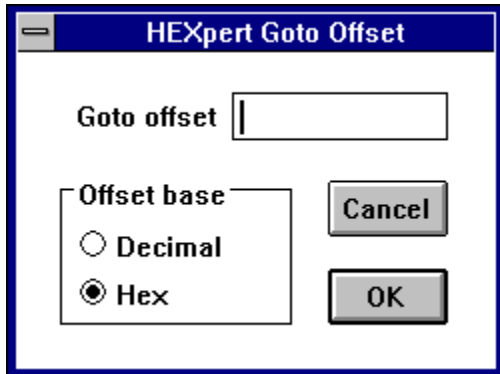
The **Export index** check box, if selected, will preclude each data item in the ASCII file with its index number, starting with zero. If the **Add offset** check box is selected, the indices will be the offset of each data element.

The **Delimiter** options adds the selected delimiter between columns. For a single column export, this is not used. Multiple column exports are possible by specifying a previous export file when the file name is requested. The [Export File dialog box](#) will be displayed, allowing several options to be chosen.

Choosing Append Side-by-Side will create an ASCII file with the new data column appended to the right of the previous column(s).

Goto Dialog Box

The goto dialog box allows the user to enter an offset into the file in either hexadecimal or decimal format. Select the radio button next to the appropriate format for the offset which is entered.



Search Dialog Box

The search dialog box allows the user to enter text or numbers to be searched for within the file.

The image shows a 'Search' dialog box with the following elements:

- Text to Find:** An empty text input field.
- Scope:** Radio buttons for 'Global' (selected) and 'Selected'.
- Direction:** Radio buttons for 'Forward' (selected) and 'Backward'.
- Origin:** Radio buttons for 'From Cursor' and 'Entire Scope' (selected).
- Format:** Radio buttons for 'S8', 'S16', 'S32', 'FP32', 'Hex', 'U8', 'U16', 'U32', 'FP64', and 'ASCII' (selected).
- ASCII Case Sensitive:** A checkbox that is currently unchecked.
- Buttons:** 'Cancel' and 'OK' buttons.

There are several groups of radio buttons which affect the type of search to be performed. These are:

Scope - Currently only a global search is allowed. Selection of text is planned for a future version.

Direction - This selects which direction to perform the search from the cursor (or from the beginning or end of the file if Origin is set to Entire Scope).

Origin - This selects where to start the search, either from the cursor, or over the entire scope of the search.

Format - Select the format, which the text you entered represents.

ASCII Case Sensitive - The box, when checked will do a case-sensitive search, when searching with an ASCII format.

Replace Dialog Box

The replace dialog box allows the user to enter text or numbers to be searched for within the file, and replaced with new text or numbers.

The image shows a 'Replace' dialog box with the following elements:

- Text to Replace:** An empty text input field.
- New Text:** An empty text input field.
- Scope:** Radio buttons for 'Global' (selected) and 'Selected'.
- Direction:** Radio buttons for 'Forward' (selected) and 'Backward'.
- Origin:** Radio buttons for 'From Cursor' and 'Entire Scope' (selected).
- Format:** Radio buttons for 'S8', 'S16', 'S32', 'FP32', 'Hex', 'U8', 'U16', 'U32', 'FP64', and 'ASCII' (selected).
- ASCII Case Sensitive:** An unchecked checkbox.
- Prompt to Replace:** A checked checkbox.
- Buttons:** 'Cancel' and 'OK' buttons.

There are several groups of radio buttons which affect the type of search & replace to be performed. These are:

Scope - Currently only a global search is allowed. Selection of text is planned for a future version.

Direction - This selects which direction to perform the search from the cursor (or from the beginning or end of the file if Origin is set to Entire Scope).

Origin - This selects where to start the search, either from the cursor, or over the entire scope of the search.

Format - Select the format, which the text you entered represents.

ASCII Case Sensitive - The box, when checked will do a case-sensitive search, when searching with an ASCII format.

Prompt to Replace - When this box is checked, the program will ask the user to verify replacing each instance found.

Format Windows

S8	-128	S16	-1664	S32	-1878001280	FP32	-2.8394e-29
U8	128	U16	63872	U32	2416966016	FP64	2.77492e-305

Sample format windows

The format window displays the data at the current cursor location in eight different numeric formats. The numeric value at the current cursor location can also be modified by selecting the desired format window and editing the current value or entering a new value.

The eight formats are:

S8

U8

S16

U16

S32

U32

FP32

FP64

Keyboard Commands

File

<u>Open</u>	F3
<u>Save</u>	F2
<u>Save As</u>	
<u>Export Binary to ASCII</u>	Alt+E
<u>Exit</u>	Alt+X

Edit

<u>Insert</u>	INS
<u>Delete</u>	DEL
<u>Toggle Edit Mode</u>	Alt+M
<u>Fixed length</u>	Alt+L
<u>Goto Offset</u>	Alt+G

Search

<u>Search</u>	Alt+S
<u>Search & Replace</u>	Alt+R
<u>Search Next</u>	Alt+N

Main Edit Window

<u>Right</u>	
<u>Left</u>	
<u>Up</u>	
<u>Down</u>	
<u>Tab</u>	Tab
<u>Backspace</u>	
<u>Page Up</u>	PgUp
<u>Page Down</u>	PgDn
<u>Begin File</u>	Ctrl+PgUp
<u>End File</u>	Ctrl+PgDn

Format Windows

<u>Right</u>	
<u>Left</u>	
<u>Tab</u>	Tab
<u>Backspace</u>	
<u>Enter</u>	
<u>Escape</u>	ESC

Signed 8-bit integer

Unsigned 8-bit integer

Signed 16-bit integer

Unsigned 16-bit integer

Signed 32-bit integer

Unsigned 32-bit integer

32-bit floating point

64-bit floating point

Main Edit Window

0004a0	9c0080f90f90747c	b300e854068b8430	E·H·æct! ·õT❖iã0
0004b0	00898573018a9d7c	01e85d0626f78428	·èàs@è¥! @õ l#8&ã<
0004c0	0040007579ebf20b	c97508c7857101ff	·@·uyó2ó [w l ãq@·
0004d0	ffeb403c4274193c	447505e823fceb10	·ð@<Bt↓< Du&#^"ð>
0004e0	80fc51742e80fc10	74290ae47536eb4e	Ç^Qt.Ç^" t>@Eu6óN
0004f0	b300881e2801e808	06c7842b000000c7	·ê▲<@õ❖ ❖ ã+···
000500	846f010000c78471	010000c785050000	äo@·· lãq @·· lã&··
000510	0deb2be839072ea1	39080ae47403e91a	Jó+õ9·.i 9@õ&t♥@>
000520	fce912fc50b80300	cd1058ba9b06803e	"@†^P³♥· =>X ç&Ç>
000530	2801017403ba6d06	b409cd21ebd58d36	<@õ&t♥ m& †@=?ó fi6
000540	e70303360c0156c6	0477b300e8b20583	rw♥6♀@U † ❖w ·õ&ã
000550	bd71010075088b84	2b0089857301f784	uq@·u❖iã +·èàs@&ã
000560	280000205e7503c6	0464e9b3fb466174	<···^u♥† ❖d@ √Fat
000570	616c206578697421	2057696e646f7773	al·exit! ·Windows
000580	2063616e6e6f7420	6265207377617070	·cannot· be·swapp
000590	6564206261636b20	0d0a244972726563	ed·back· J@õ&Irrec
0005a0	6f76657261626c65	206572726f722e20	overable ·error··
0005b0	43616e6e6f742073	746172742057696e	Cannot·s tart·Win
0005c0	646f77732e0d0a24	0000000000000000	dows·J@õ& ······

Sample Main Edit Window

The main edit window has three columns of information. The leftmost column shows the offset for each line of data. The center column displays the data in hexadecimal format. The right column displays the ASCII equivalent of the data in the IBM-PC character set. In HEX mode, typing the characters 0-9,A-F will enter new hex values, overwriting the data at the current cursor location. The corresponding ASCII character will also be updated. Each hex character must be entered as pairs of digits. In ASCII mode, any character typed overwrites the ASCII character at the current cursor location. The corresponding hex value will also be updated.

Open a new file.

Save the current file, using the current file name.

Save the current file, prompting for a file name.

Exit the program.

Insert a byte at the current cursor location.

Delete a byte at the current cursor location.

Toggle between hex and ASCII input mode.

Toggle between fixed length and variable length file mode.

Go to a given offset in the file.

Search for data.

Search for data and replace with new data.

Find/Replace next item.

Move cursor right one byte.

Move cursor left one byte.

Move cursor up one line.

Move cursor down one line.

Move to first edit window.

Move cursor left one byte.

Move up one page in the file.

Move down one page in the file.

Move to beginning of file.

Move to end of file.

Move cursor right one character.

Move cursor left one character.

Move to next edit field.

Delete character to left.

Replace hex data with modified numeric value from edit field.

Return to main window.

Menus

File

Commands pertaining to loading or saving files.

Edit

Commands for editing the file.

Search

Commands for searching or searching and replacing data.

Help

Commands for further information about the program.

File Menu

Open - Opens a file for editing. A dialog box will be displayed, allowing the user to select the drive, path, and file name. Upon startup, this dialog box will be displayed automatically, if no file is specified on the command line.

Save - Saves the current file using the current drive, path, and file name. If the user attempts to exit the program without saving a modified file, a dialog box will be displayed, giving the user a chance to save the file.

Save As - This will display a dialog box allowing the user to select a new drive, path, or file name, and saves the current file using the new designation. The current drive, path, and file name is changed.

Export binary to ASCII - Allows the user to export data from the binary file to an ASCII file. The export function will convert the data from one of the numeric formats to ASCII. The Export ASCII Export ASCII dialog box dialog box will be displayed allowing the user to specify how the data will be exported. This is handy for exporting arrays of numbers.

Exit - Exits the program. If the current file is modified, a dialog box will be displayed, giving the user a chance to save the file.

Edit Menu

Insert - Selecting this option or pressing the Insert key will insert a single byte with value 00 hex at the cursor location. Variable length file mode must be selected.

Delete - Selecting this option or pressing the Delete key will delete a single byte at the cursor location. Variable length file mode must be selected.

Toggle Edit Mode - This toggles the edit mode between HEX and ASCII. With the focus set on the main edit window, characters typed on the keyboard will replace text at the current cursor location.

Fixed Length - Selecting the option toggles between FIXED length file mode and variable length file mode. A check mark next to this option indicates that FIXED length mode is selected.

Goto Offset - This option opens the [goto dialog box](#), which allows the user to go to a given offset in either hexadecimal or decimal.

Export File Dialog Box

The export file dialog box is displayed when the selected file for ASCII export already exists. It presents options to allow appending or replacing the data.



Append side-by-side will add the exported data column to the right of the previous data column(s).

Append below will add the data at the end of the file, extending the existing column(s) in the file.

Replace will delete the old data and replace it with the new data column.

Cancel will stop the export operation.

Search Menu

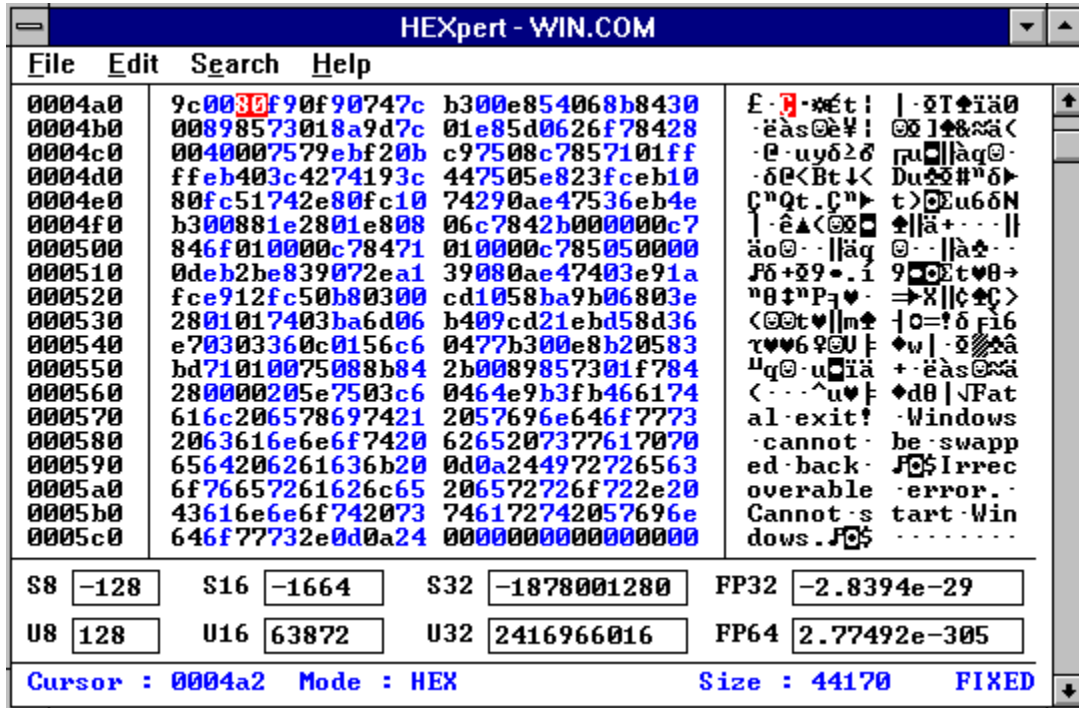
Search - This will display a search dialog box, which allows the user to enter text to be found within the file.

Search & Replace - This will display a search & replace dialog box, which allows the user to enter text to be found, and new text to replace the found text within the file.

Search Next - Selecting this will repeat the last search or search & replace action.

Overview

HEXpert is a powerful tool that allows the user to view and edit binary data in both hexadecimal and ASCII formats, as well as eight different numeric formats, including signed and unsigned integers and floating point. Instead of looking for the hex equivalent of a floating point number, the user can simply view the data in all formats simultaneously. HEXpert allows editing, searching, or replacing of the data in any of these formats. Additionally, HEXpert can insert and delete data. Files can be as large as 16 MBytes. HEXpert runs under Microsoft Windows 3.1.



The main window consists of three regions. The top area of the window is split into three columns. The first column is the offset in hex of each line of data. The second column is the hexadecimal representation of the data, 16 bytes per line. The third column displays the ASCII equivalent of the data. The middle region of the window contains the format windows. The format windows display the data, currently pointed to by the cursor, in various integer and floating point formats. The user can also change the data at the current location by editing one of the format windows, in integer or floating point. The bottom region of the window shows the current file status. The status consists of the current cursor location, the current key entry mode (HEX or ASCII), whether the file has been modified or not, the file size, and whether the file is FIXED length or not.

Help Menu

Contents - Displays the help contents.

About - Displays a dialog box showing the program name, program version, author, and copyright.

Status Line

```
Cursor : 0004a2  Mode : HEX          Size : 44170  FIXED  ↓
```

Sample status line

The status line consists of the current cursor location (hex), the current key entry mode (HEX or ASCII), whether the file has been modified or not, the file size, and whether the file is FIXED length or not.

Export binary array data to an ASCII file.

Formats

S8	Signed 8-bit integer.
U8	Unsigned 8-bit integer.
S16	Signed 16-bit integer.
U16	Unsigned 16-bit integer.
S32	Signed 32-bit integer.
U32	Unsigned 32-bit integer.
FP32	32-bit floating point.
FP64	64-bit floating point.

