User's Guide

Warp Factor 7

OnScreen/2 the File Manager and viewer for OS/2, DOS & Win32

Warp Factor 7

Warranty

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Support

The only form of support available for **OnScreen/2** at the moment is via Email or surface mail to the author. You may also telephone at 353-1-4937616 generally between the hours of 6pm-11pm GMT, although I can't guarantee to be in. I expect to get a CompuServe account soon and support will also be available there.

Email and surface mail information is provided below.

Availability

OnScreen/2 is normally available from the following sites hobbes.nmsu.edu:/os2/32bit/editors & ftp.cdrom.com:/os2/32bit/editors for the OS/2 version, garbo.uwasa.fi:/pc/fileutil for the DOS version and ftp.cica.indiana.edu:/pub/pc/win3/nt for Win32 version.

It may be available from other locations but the above will have the most recently released versions or bug fixes.

If you are a registered user you will be informed via email of bug fixes and new releases.

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1   Getting Started

1.1   Introduction

Welcome to OnScreen, a sophisticated fullscreen text and binary file viewer for the OS/2, DOS and Win32 operating systems running on IBM compatible PCs based on the 386 or higher CPUs.

OnScreen/2 displays files in a text window or fullscreen session and provides scrolling, positioning and filtering commands. The motivation behind **OnScreen/2** was to provide an identical (or as near as possible to) text mode file viewer for OS/2, DOS and Win32.

OnScreen/2 provides a powerful File Manager for selecting files which also provides basic file management functionality.

OnScreen/2 supports redirected input (i.e. piping).

1.2   Installation

OnScreen/2 installation could not be simpler, just change into the directory where you unzipped **OnScreen/2** to and run install.

If you executed the command **unzip os2_11or.zip** in A:\ then you would have a directory named **OnScreen/2** in A:\. Simply change to **A:** and type **install**.

If you are using PKUNZIP you will have to use the **-d** option otherwise the directory structure required by the installation program will not be created.

When installing the OS/2 or Win32 version you can install either the .DLL implementation or the non .DLL implementation. If you do not envisage installing any of the other Warp Factor 7 utilities (availability early 95) then installing the non .DLL version is most likely what you should do.

The installation program allows you to specify which directory to use for the **OnScreen/2** base files and the .DLL files. It also allows you to specify whether you want the .DLL version or not.

1.3   Compatibility

OnScreen/2 2.11 has been tested for compatibility with the following operating systems.

OS/2: Versions 2.0, 2.1, 2.11 and 3.0 Warp.

Windows NT: Version 3.5 only.

Windows 95: Final beta only.

DOS: Versions 5.0, 6.0, 6.21, 6.22.

1.4   Acknowledgements

Henk Den Adel for writing the original manual and for his continued testing and suggestions. Mitch Williams, Lionel B. Dyck and Norris Counch for Beta testing. Kevin Scally for the fabulous Warp Factor 7 logo.

Borland International for their C++ compilers, DOS Extenders and Brief editor.

1.5   Feature list

- Case-sensitive/insensitive regular expression and plain text searches.
- Horizontal scrolling 10 chars at a time.
- Page up & down.
- Go to top or bottom of file.
- Go to a specific line.
- Go to previous or next file.
- Load OS/2, MAC & Unix text files and binary files.
- Supports redirected stdin.
- Command help with ? or F1. (os.hlp must be in same dir as os.exe)
- Toggleable sound.
- Toggleable tab expansion.
- User configurable tab size.
- Customisable colours.
- Configuration saving.
- Quick file select using keys 1 to 9.
- 32bit versions for OS/2, DOS and Windows NT.
- Selection list for loaded files.
- Remove file from loaded list.
- Run with no arguments brings up file selection browser.
- Run with one argument which is a directory brings up file selection browser.
- Line editor with history recall for input on bottom status line.
- Bookmarks.
- Multiple top line display formats.
- Hex mode.
- Bright background colours.
- Display of text with layout information.
- User definable styles, including syntax highlighting.
- Invoke editor. (Including PM or Win32 apps)
- Display output of filter rather than file contents.
- Enhanced file selection browser with edit, copy, rename, delete, move, sort, change directory, make directory and set file matching pattern.
- Search in HEX mode.
- Go to offset in HEX mode.

1.6   Future stuff

- Faster regular expression searching.
- Option to use standard OS/2, DOS or NT wildcards.
- Background file loading.
- File tagging in the File Manager.
- Invoke any command on tagged file set.
- User specified key bindings.
- Text with layout recognize ANSI Escape sequences.
- Cross file bookmarks.
- Printing support including Postscript.

2   Using OnScreen

2.1   Starting OnScreen

2.1.1 Command line syntax

You may start **OnScreen/2** with or without parameters. The general syntax is as follows:-

os [switches] [filespec...]

Switches comprise one or more / characters followed by option letters or numbers. (eg. /help)

The following switches are available in this release.

```
/help                 displays the list of switches
/ignorestdin          causes OnScreen/2 to ignore redirected
                      stdin
/raw style            disables filter for specified style
/search regexp|plain  set searches to regular expression or plain
                      text
/textwithlayout on|off  turn textwithlayout on or off
/highbit on|off       turn highbit filter on or off
```

A hyphen (-) may be used in place of the /. The environment
variable

SWITCHCHAR can be set to the list of characters that will be
accepted as switch characters. (eg. SET SWITCHCHAR=/-$)

Filespec may be one or more filenames which may contain wildcards.
OnScreen/2 uses a regular expression pattern matcher for the
wildcards and therefore does not conform to the standard OS/2, DOS
or Win32 command shell wildcards.

OnScreen/2 wildcards are as follows:-

```
*       Match zero or more occurrences of any character.
.       Match the period/fullstop character.
?       Match a single occurence of any character.
[az]    Match a single occurence of specified characters.
[a-z]   Match a single occurence of specified range of characters.
```

For example the wildcard file specification **xxx.[qa]*.xyz** will match
files beginning with **xxx.** followed by a **q** or an **a** and zero of more
occurrences of any character followed by **.xyz**.

If **OnScreen/2** is started without any command line parameters or with
a single parameter which is the name of a directory it will bring up
the File Manager.

2.1.2 Redirection/piping

OnScreen/2 is capable of acting as a command line filter. An example
of this is:-

[C:\]**dir c:\ /s | os**

There are some restrictions in the current release. With this
release **OnScreen/2** has to read the entire output before it will
display anything. This means that until the command which is
generating the output has completed you will not be able to view the
output with OnScreen. This restriction will be lifted in a future
release.

2.2   Exiting OnScreen

There are three different ways to exit from OnScreen.

The Alt+Q command clears the screen and then returns to the prompt.
The Q and X commands also perform the same function. The Alt+Q
function works in both the file viewer and the File Manager. The Q
and X commands only work in the file viewer.

The Alt+A command returns to the prompt clearing the last line on
the screen but otherwise leaving the display exactly as it was. The
Ctrl+X and ESC commands also perform the same function but only work

in the file viewer and the ESC command only quits if there are no
files are loaded.

The Alt+X key combination restores the screen to the display you had
before OnScreen/2 was run and then returns to the prompt. It works
in both the file viewer and the File Manager.

2.3   File Viewer

2.3.1 Commands

You control the **OnScreen/2** File Viewer by pressing keys or
combinations of keys which correspond to the **OnScreen/2** File Viewer
commands. Some commands have more than one key combination
associated with them, e.g. Next File = Alt+N or Ctrl+PgDn.

The key combinations associated with specific commands are pre-
programmed into the **OnScreen/2** File Viewer and cannot be changed at
this time. This restriction will be lifted in a future release.

2.3.2 Text with layout information

OnScreen/2 can display files containing text with layout
information. Files with layout information contain special
characters that direct **OnScreen/2** to display subsequent characters
in a different colour. This User's Guide contains these special
characters. If you are viewing this guide using **OnScreen/2** you can
press **L** now to toggle text with layout information off so you can
see these characters.

Two methods of controlling the colour of the text are supported.

UNIX(tm) nroff style and Wordstar(tm) style.

nroff uses the following format:-

    _<BKSPACE><CHARACTER>   Display character in
                                           underlined colour.

    <CHARACTER><BKSPACE><CHARACTER>   Display character in
                                           bold Colour.

Wordstar(tm) uses the following format:-

    ^B text ^B   Display text in bold colour.

    ^S text ^S   Display text in underlined
                                      colour.

^B^S text ^S^B   Display text in bold and
                                      underlined colour.

The text with layout option can be toggled with the L command, it
can also be set on a per file-type basis by creating a style with
the text with layout option either **ON** or **OFF** in the os.set settings
file.

2.3.3 Tab Expansion

When Tab expansion is enabled **OnScreen/2** will display the correct
number of spaces for each Tab character it encounters. The default
Tab size is 3, but this can be changed with the Tab and Shift+Tab
commands. The Tab size can also be set on a per file-type basis by
creating a style with a specific Tab size in the os.set settings
file.

2.3.4 Hex Mode

Hex mode displays the file in a format similar to the debug command. When switching between text mode and hex mode an attempt to retain the same positioning is made, but this is not always perfect. Hex mode can be toggled with the H command, it can also be set on a per file-type basis by creating a style with hex mode either **ON** or **OFF** in the os.set settings file.

2.3.5 Hi-bit filter

The high-bit filter strips the high-bit from all characters above ASCII 127. It also handles the 0x8D character as a carriage-return thereby allowing easy viewing of Wordstar(tm) files. The high-bit filter can be toggled with the . command. It can also be set on a per file-type basis by creating a style with the high-bit filter either **ON** or **OFF** in the os.set settings file.

2.3.6 Bookmarks

You can set a bookmark with the **Alt+0..9** commands. You can go to a previously set bookmark with the **Alt+G** command followed by the digit representing the bookmark you wish to jump to.

If you drop a bookmark that you had already set elsewhere then it will be reset to the new location. If you wish to clear a bookmark simply go to it and then set it again, this will clear it.

2.3.7 Memory usage

OnScreen/2 normally only keeps one file loaded at a time (ie. the one you're looking at), this helps reduce memory usage. The **K** command toggles between keeping all the files you have looked at loaded and just loading the one you are currently viewing.

Obviously keeping all files loaded speeds up switching between multiple loaded files but it also uses lots more memory. The default is to only keep the currently viewed file loaded.

2.3.8Searching

OnScreen/2 provides for searches which can be case-sensitive and case-insensitive and may be either forwards or backwards as you require. **OnScreen/2** also provides for regular expression searches. Regular expressions are a powerful way of expressing a pattern that a search will match.

With regular expressions you can specify searches such as the following:-

d[ie]*lay

This will find text where it begins with a **d** followed by an **i** or an **e** and zero or more occurrences of any character followed by **lay**. This will find words such as **delay** and **display**.

Unlike typical UNIX based applications OnScreen's regular expressions are capable of being case-sensitive or case-insensitive.

For a case-sensitive search use the **S**, **Alt+S** or **/** commands, and for case-insensitive searches use the **F**, **Alt+F** or **** commands. The **Alt+F** and **Alt+S** commands search backwards.

OnScreen/2 starts searches either from the line the current selection is on, or from the top of the file if there is no selection active. You can clear the current selection with the **C** command.

The **A** and **Ctrl+L** commands repeat the previous search. All the parameters of the previous search are preserved with the exception of the setting of the regular expression toggle, which can be toggled on and off between repeat searches.

OnScreen/2 will scroll the display up, down, left or right as necessary to bring the matching text into view. Only the matching text will be highlighted not the entire line.

2.3.9 Invoking a shell

You can invoke a shell by using the **Alt+O** command. This will take you to the current default shell for the operating system for which **OnScreen/2** has been compiled. You may execute any command you normally would at this shell with the exception of TSR's. You may find that in a DOS environment you have too little memory to do any serious work within this shell.

Use the EXIT command to return to OnScreen.

NB: TSR's do not affect the OS/2 or Win32 environments.

2.3.10 Video mode support

OnScreen/2 supports whatever text mode you happend to be in. It does not have any built in facility to change text mode. You can change it with the mode command or a utility which may have been supplied with your video card.

Windows NT allows you to change the number of rows and columns of windowed sessions. It is not recommended that you change these settings while you are running OnScreen. It is also not recommended that you switch to fullscreen if you are using settings that would not be supported there.

OnScreen/2 cannot operate in less than 80 column mode.

2.3.11 Invoking an editor

The **Alt+E** command invokes an editor on the current file. The editor must be set in the os.set file. A default editor can be assigned by defining a style from which all others inherit. SubStyles can prevent editing by setting the editor to blank.

eg. Editor =>

2.3.12 Status Lines

The top and bottom lines of the display are status lines. The top line provides status information relating to the file currently being viewed.

The bottom status line displays the name of the program, the release version and the operating system it was compiled for. It also displays the copyright message and any error messages as well as serving as a location for menu type selection and line editing. On the far right it shows the current time in 12 hour format. The environment variable TZ must be set for the time to be displayed correctly. (eg. SET TZ=GMT)

There are 3 distinct formats for the top status line. They can be cycled through with the Alt+Z command.

Format 1.

```
--------------------------------------------------------------------------------
        47 |        1024 | +  10 | 12-12-1994 | 12:34pm |*c:\readme
--------------------------------------------------------------------------------
     1             2        3           4          5      6     7
```

1. Line number at top of display

2. Total number of lines in file

3. The current left column offset

4. The date the file was last modified

5. The time the file was last modified

6. An asterisk indicates that the file has been modified

7. The path and name of the displayed file

Format 2.

```
--------------------------------------------------------------------------------
        47 |         18% | +  10 | 12-12-1994 | 12:34pm |*c:\readme
--------------------------------------------------------------------------------
     1             2        3           4          5      6     7
```

8. Line number at top of display

9. Percentage from the beginning of the file

10. The current left column offset

11. The date the file was last modified

12. The time the file was last modified

13. An asterisk indicates that the file has been modified

14. The path and name of the displayed file

Format 3.

```
--------------------------------------------------------------------------------
02-04-1994 | 12:34pm |       48290 |         134 |*c:\readme
--------------------------------------------------------------------------------
     1          2             3            4      5     6
```

15. The date the file was last modified

16. The time the file was last modified

17. Total number of lines in file

18. Line number at top of display

19.An asterisk indicates that the file has been modified

20.The path and name of the displayed file

2.3.13Command Keys

Key	Function
.	Toggle highbit filter on/off
-, Ctrl+-	Dump current file
*	Refresh file
1..9	Quick select files 1 to 9
A, Ctrl+L	Search again. Preserves parameters of previous search.
B	Bring up buffer list
C	Clear current selection
D	Toggle external filter on/off
F, \	Case insensitive search forwards from the current position.
G	Go to line number
H	Toggle hex display mode on/off
K	Toggle keep files loaded on/off
L	Toggle text with layout on/off
O	Toggles warning beeps on/off
R	Toggle regular expressions on/off for searches.
S, /	Case sensitive search forwards from the current position.
W	Toggle word break
X, Q	Quit clearing screen
Left Arrow	Scroll right ten characters
Right Arrow	Scroll left ten characters
Up Arrow	Scroll the file down on line
Down Arrow	Scroll the file up one line
Ctrl+Left Arrow	Scroll the file left to column 0
PageUp	Scroll up one page
PageDown, Enter, Space	Scroll down one page
Home	Go to the top of the file
End	Go to the bottom of the file
ESC, Ctrl+X	Quit leaving display as is
Alt+0..9	Drop a bookmark
Alt+E	Invoke editor
Alt+F	Case insensitive search backwards from the current position.
Alt+G	Go to book mark
Alt+O	Go to shell
Alt+S	Case sensitive search backwards from the current position.
Alt+V, +	Bring up File Manager
Alt+X	Quit restoring screen
Alt+Z	Change top line display format
Ctrl+PageUp, Alt+P	Previous File
Ctrl+PageDown, Alt+N	Next File
F1	View users guide (os.man)
Shift+F1	View users guide (os.inf, OS/2 only)
?	Display keys help
F2	Change foreground text colour
Shift+F2	Change background text colour
F3	Change foreground selected text colour
Shift+F3	Change background selected text colour
F4	Change foreground status line text colour
Shift+F4	Change background status line text colour
F5	Change the BOLD text colour
F6	Change the UNDERLINED text colour
F7	Change the BOLD+UNDERLINED text colour
Tab	Increase the Tab width
Shift+Tab	Decrease the Tab width
Ctrl+Tab	Toggle Tab expansion on/off
Ctrl+F	Display full file name on status line
Ctrl+S	Save current settings

2.4   Buffer list

2.4.1Commands

You control the **OnScreen/2** Buffer List by pressing keys or combinations of keys which correspond to the **OnScreen/2** Buffer List commands.

The key combinations associated with specific commands are pre-programmed into the **OnScreen/2** Buffer List and cannot be changed at this time.

2.4.2Command Keys

Key	Function
Up Arrow	Move up one file
Down Arrow	Move down one file
Enter	Select current file
Escape	Return back to previously viewed file

2.5   Line Editor

2.5.1Command keys

Key	Function
Up Arrow	Select previous item from the history.
Down Arrow	Select next item from the history.
Left Arrow	Move one character to the left
Right Arrow	Move one character to the right
Home	Move to beginning of line
End	Move to end of line
Backspace	Delete character preceding cursor
Del	Delete character under cursor
Enter	Finished editing
Escape	Cancel operation

The line editor provides for history recall of previously entered text. This feature is not always enabled, but when it is you can recall previously entered text by pressing the up arrow key.

After moving up in the history you can move back down again by using the down arrow key. The number of elements a history can hold is only limited by available memory.

2.6   File Manager

2.6.1 Commands

You control the **OnScreen/2** File Manager by pressing keys or combinations of keys which correspond to the **OnScreen/2** File Manager commands.

The key combinations associated with specific commands are pre-programmed into the **OnScreen/2** File Manager and cannot be changed at this time.

2.6.2 Command Keys

```
Key                     Function
Up Arrow                Move up one file
Down Arrow              Move down one file
Left Arrow              Move one column to the left
Right Arrow             Move one column to the right
Home                    Move to top left. If already at top left then
                        move to first file
End                     Move to bottom right. If already at bottom
                        right then move to last file
Tab                     Move to next matching file
Backspace               Move to previously matching file
Enter                   Select current file
Escape                  Return to previously viewed file or quit
Ctrl+A..Z               Change current disk
/                       Bring up File Manager menu
Alt+A                   Quit leaving the screen as it is
Alt+C                   Copy the currently selected file
Alt+D                   Delete the currently selected file
Alt+E                   Edit the currently selected file
Alt+F                   Change filespec filter
Alt+H                   Change directory
Alt+K                   Make directory
Alt+M                   Move the currently selected file
Alt+Q                   Quit clearing the screen
Alt+R                   Rename the currently selected file
Alt+S                   Sort directory listing
Alt+V                   View the currently selected file
Alt+X                   Quit restoring the screen
Space                   Toggle the file tag. (not yet available)
```

The File Manager provides for quick file and directory selection by allowing you to type in a prefix for the file you are trying to select.

For example if you are trying to select the file **custinv.cpp** you could type **cus** and this will move the file selection bar to the first file with the prefix **cus**.

The Tab and Backspace keys move you forwards and backwards respectively. Holding down the shift key puts you in directory select mode as opposed to file select mode.

3   Configuration

OnScreen's configuration can be controlled from the keyboard or from the os.set file. The preferred method is to use the os.set file as this is the way all **OnScreen/2** settings will be stored in the future.

If you are viewing a file for which a style applies and make changes to **OnScreen/2** settings using the command keys, you are only affecting that style. The bottom status line will indicate that a change has been made to a style as against a global change.

Changes made to a style using the command keys are not permanent. These changes are lost once the **OnScreen/2** session is terminated. You will have to edit the os.set file to affect those changes permanently.

Future releases of **OnScreen/2** will store global or style specific changes to the os.set file and the os.ini file will be removed.

3.1   Styles

The os.set file allows for the specification of one or more user defined styles which can be associated with specific file extensions. Comments in a set file begin with a ; and end at eol.

```
Style name (extensions list) [inherited styles]
{
BackGndColour        => Green
}


eg.
Style C++ (.cpp .cxx .hxx .hpp) Default, C
{
Reserved        => private
                => catch
SingleLineComment    => //
}
```

This declares a style called C++ which is associated with files with the extensions .cpp .cxx .hxx .hpp and inherits from the styles **Default** and **C**. A style does not have to inherit from other styles.

The extensions list can also be a single *, which indicates that this is a default style which will apply to all files which have either no extension or an extension for which a specific style has not been defined. If you specify this default style it should appear as the first style in the os.set file.

See the supplied os.set file for complete examples.

3.2   Configurable items

```
BackGndColour          The background colour of the default text
BoldColour             The foreground colour of bold text
BoldUnderlineColour    The foreground colour of bold+underlined text
CaseConvert            Convert keywords to the case used in the os.set
                       file
CaseSensitive          Specify language case sensitivity
CloseComment           The ending for a multiline comment
ClosePreprocessor      The ending for a preprocessor command
CommentColour          The foreground colour of comment text
CommentColumn          The starting column for single line comments
                       (0=none)
DisplayMode            The display mode, either TEXT or HEX
Editor                 The editor for this file type. (eg. b2.exe)
Escape                 The character which precedes a string delimiter
                       within a string
ExpandTabs             Expand tabs, either ON or OFF
ExternalFilter         View the contents of the file through this
                       filter.
ForeGndColour          The foreground colour of the default text
HighBitFilter          Highbit filter, either ON or OFF
IdentColour            The foreground colour of identifiers
LineContinuation       The line continuation character for the
                       preprocessor
NumberColour           The foreground colour of numbers
NumberPrefix           Prefixes which begin a valid number
OpenComment            The beginning of a multiline comment
OpenPreprocessor       The beginning of a preprocessor statement
PreprocessorColour     The foreground colour of preprocessor
                       statements
Reserved               A reserved keyword
ReservedColour         The foreground colour of reserved keywords
SelectedBackGndColour  The background colour of select text
SelectedForeGndColour  The foreground colour of selected text
SingleLineComment      The beginning of a single line comment
Symbols                Characters which are to recognized as symbols
SymbolsColour          The foreground colour of symbols
Strings                The characters which enclose strings
StringColour           The foreground colour of strings
TabWidth               The width of a tab
TextWithLayout         Text with layout, either ON or OFF
TopLineFormat          The format to use for the top status line, 1 2
                       or 3
UnderlineColour        The foreground colour of underlined text
```

3.3   Colours

Black, Blue, Green, Cyan, Red, Magenta, Brown, LightGray, DarkGray,
LightBlue, LightGreen, LightCyan, LightRed, LightMagenta, Yellow and
White.