Ewan help file

Read me first!
Frequently asked questions (FAQ)
Support, trademarks, copyrights and other legal stuff
Version history

General topics

- **The sitelist**
- **Configurations**

- **About the keyboard**
- **Creating keyboard redefinition files**
- **Creating input remapping files**

- **Mouse and mouse buttons**
- **Using the clipboard**
- **Using the scroll back**
- **Syntax of command line arguments**

- **Telnet support**
- **VT100 emulation**

Dialogs

- **New site**
- **Sitelist "Open configuration"**
- **Screen options**

Enjoy!

The latest version should be available 24 hrs a day, 7 days a week from:
http://www.lysator.liu.se/~zander/ewan.html If you like WWW
ftp.lysator.liu.se /pub/msdos/windows If you prefer FTP

I would like to thank all the people out there who send me great, constructive feedback.
And Borland for creating the most inspiring compiler of them all: Borland Pascal.

Peter Zander <zander@lysator.liu.se>

Before you start

EWAN is a winsock 1.1 compatible application. To be able to use a winsock application you need a TCP/IP stack. If you use Windows for Workgroups you can use the free TCP/IP add on available from ftp.microsoft.com. If you use Win 3.1 there is a number of commercially available TCP/IP stacks. You can also try the shareware Trumpet winsock. Future versions (Windows95) of Windows will probably also be bundled with a winsock compatible TCP/IP stack, as does current versions of MS Windows NT.

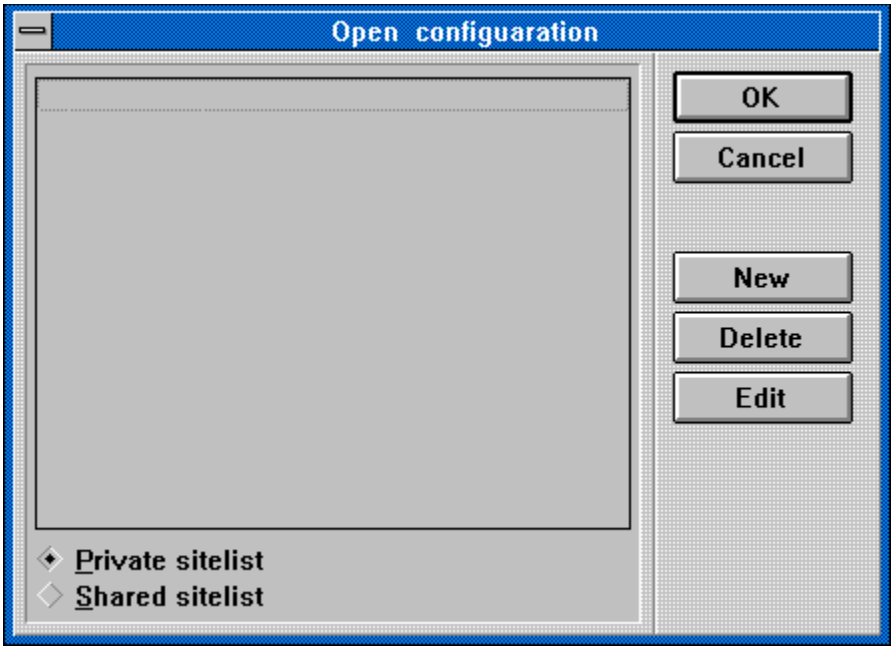
FTP Software is distributing a "winsock.dll" update for their TCP/IP stack. This DLL will not let you use this program unless their TCP/IP stack is already installed on your machine.

Rumour says the NCSA winsock does not support the asynchronous winsock APIs. This would make EWAN impossible to run if true. Don't take my word for it since I have never tested it, but it you run into problems with their stack this might be the problem.

Novell's winsock needs the file "NOVASYNC.EXE" to work with Ewan and other winsock programs that use the asynchronous winsock API.

First start-up

First a dialog with stored site names will be shown. Since this is the first time you run Ewan, it will be empty.



Click *New*. Enter information about the first site and click *OK*. Try to connect by double clicking the entry in the list box, or highlight it and press Enter (or click "OK").

Reporting emulation bugs

If you find some strange behaviour, screens that look wrong, capture the part of the session with **File/Open capture file**, make the operation that makes the error show, Close the capture file with **File/Close capture file**, and mail it (MIME or UUEncoded) to <zander@lysator.liu.se>.

Keyboard

The only keys redefined by this program are:

In "Scroll Lock" mode, unshifted:

End	Brings you to the end of the scroll back buffer and resets "Scroll lock"
PageUp	Set scroll lock and start viewing one page up.
PageDown	Set scroll lock and start viewing one page down.

Unshifted:

Scroll Lock	Toggle scroll lock
Arrows	If scroll lock is on it will move you around in buffer, otherwise it will send arrow key sequences for current emulation.

and cannot be altered by keymaps or DLLs.

All keys on the keyboard (except for the keys listed above) can be redefined using keyboard redefinition files that can be associated with each configuration.

Cut and paste is not defined as Ctrl-C and Ctrl-V as they is used by many programs like GNU Emacs.

Redefining keys

Most keys on the keyboard are possible to redefine. They can be made to send a character or sequence of characters.

The "keymap editor" accessed from the menu **Options/Edit keymap files** can create and edit keymap files.

In the configuration dialog **Options/Configuration.../Keyboard...**, files with the ".KEY" extension will be shown in the list box. If the first line is a comment (that is: the first character on the line is a semicolon ";") it is showed in the list box with the filename.

Lines in .KEY files should look like this:
[Shift keys] Virtual_keycode string_to_send

Shift keys are one or more of:

A	Alt
C	Control
S	Shift
E	Extended keycode

Virtual_keycode
is the value of windows virtual key code for the key, or the name as used by the SDK.

string_to_send
is the character(s) to be sent when the key is pressed. Leading and tailing quotations are removed if present. The string can contain escaped characters.

Extended keycodes are used to differentiate between different keys with the same function, like the normal "Return" key and the "Enter" key on the numerical keypad. Both return VK_RETURN, but the key on the numerical keypad is a extended key.
The grey Insert, Home, PgUp, Del, End and PgDn on a 102 key keyboard is also extended keys.
The "Keyboard sampler" function in the keymap editor will detect if a extended key is pressed.

Example:
[SC] vk_insert "Insert ^G was ^G pressed"

See also the bundled .KEY files.

Virtual key code names

vk_0
vk_1
vk_2
vk_3
vk_4
vk_5
vk_6
vk_7
vk_8
vk_9
vk_a
vk_add
vk_b
vk_back
vk_c
vk_cancel
vk_capital
vk_clear
vk_control
vk_d
vk_decimal
vk_delete
vk_divide
vk_down
vk_e
vk_end
vk_escape
vk_execute
vk_f
vk_f1
vk_f10
vk_f11
vk_f12
vk_f13
vk_f14
vk_f15
vk_f16
vk_f17
vk_f18
vk_f19
vk_f2
vk_f20
vk_f21
vk_f22
vk_f23
vk_f24
vk_f3
vk_f4
vk_f5
vk_f6
vk_f7
vk_f8
vk_f9

vk_g
vk_h
vk_help
vk_home
vk_i
vk_insert
vk_j
vk_k
vk_l
vk_lbutton
vk_left
vk_m
vk_mbutton
vk_menu
vk_multiply
vk_n
vk_next
vk_numlock
vk_numpad0
vk_numpad1
vk_numpad2
vk_numpad3
vk_numpad4
vk_numpad5
vk_numpad6
vk_numpad7
vk_numpad8
vk_numpad9
vk_o
vk_p
vk_pause
vk_print
vk_prior
vk_q
vk_r
vk_rbutton
vk_return
vk_right
vk_s
vk_scroll
vk_select
vk_separator
vk_shift
vk_snapshot
vk_space
vk_subtract
vk_t
vk_tab
vk_u
vk_up
vk_v
vk_w
vk_x
vk_y
vk_z

Input filter

The input filter will translate incoming characters.

Files with the ".ICM" extension will be shown in the list box. If the first line is a comment (that is: the first character on the line is a semicolon ";") it is showed in the list box with the filename.

Each non comment line is considered a input translation and should look like this:
Character_to_be_remapped [tab|SPC]* New_character

Both Character_to_be_remapped and New_character can be escaped.

To translate the character ";" (semicolon) to a "^" the line would look like this:
```
\;      \^
```

Mouse and mouse buttons

Marking a block

To mark a block of text, press and hold down the left mouse button. If the cursor is dragged outside the Windows boundaries the viewport will start to scroll.

See also:
Copy/Paste

Bringing up the popup menu

If you click the right mouse button, anywhere within the client area a popup version of the main menu will show. This is how you access the menu when the main menu is disabled in the dialog **Options/Configuration/Screen...**.

Copy/Paste

To copy a part off the screen, mark it with the mouse. While marking the scrolling of the window is disabled, but you can make it scroll by dragging the cursor outside the window.
To copy it to the clipboard choose **Edit/Copy** from the menu or press *Ctrl-Ins*.
To paste, press *Shift-Ins*.

Cut and paste is not accessed as Ctrl-C and Ctrl-V as they is used by many programs like GNU Emacs.

Scroll back

The scroll back is a bit different from other terminal programs. If you press *Scroll lock* it will prevent further scrolling of the screen. But the screen will still be updated, so if the lower part of your screen show the "real" screen and the upper shows the scroll back the lower part might change while you browse through the scroll back.
To make the terminal work as usual press *End* or *Scroll Lock*.

Se also:
Using the keyboard

Command line arguments

A site name and port can now be given at start-up. The syntax is:

ewan [-c configuration_name] host port
or
ewan [-c configuration_name] host:port
or
ewan [-c configuration_name] telnet://host.name.here:port[/ignored]

"Host" refers to an IP address (like 192.165.120.133) or a host name (hobbe.rydnet.lysator.liu.se).
If an IP number is supplied, no DNS-lookup is made.

Port is the port number or the service name.
If a port number is not given "Telnet" is assumed and translated to a port number using the file "services".

Example: To connect to my.server.net using the configuration "*default*" on port 1020, the command line would look like this:

```
ewan -c *default* my.server.net 1020
```

Telnet

The Telnet layer is invisible in this implementation. It has support for local echo, NAWS and emulation negotiation.

- **NAWS**
  Abbreviation for "Negotiate About Window Size". Defined in RFC-1073. Only newer Telnet daemons support this. If it does not seem to work on your system, talk with your system administrator or install a newer version of the telnetd.
  Negotiated at start-up by the remote side or by Ewan if the window is resized.

- **Local echo**
  Usually requested by the host at start-up.

- **Emulation negotiation**
  Supported by most Telnet daemons. Negotiation is most likely to occur on start-up on a request from the host. Defined in RFC-1091.

Screen options

- **Columns**
  The number of columns on the emulated screen. Max value: 132

- **Lines**
  The number of lines on the emulated screen. Max value: 5000

- **Lines in scroll back**
  The number of lines stored in memory. The screen is the last lines of the scroll back so if the screen becomes larger than the scroll back, the numbers of lines in the scroll back will increase to be able to store at least one screen.

Show:

- **Windows caption**
  The topmost part of all normal Windows, containing the system menu and name of the window.

- **Menu**
  The normal Windows menu below the caption.

- **Vertical scrollbar**
  This scrollbar is used to move around in the scroll back buffer. Under no circumstance is the emulated screen larger than the window, so there will never be "ordinary" scroll bars to view different parts of the active screen.

- **Status line**
  The grey bar at the bottom of the window.

Resize:

- **Screen** (Was "Fixed font size")
  If checked, the screen will resize as a result of resize the window. The font size is not altered. If the remote Telnet deamon support NAWS, the host is informed of the new screen size.

- **Font** (Was "Fixed srcreen size")
  If checked, the font is resized when the window is resized to try to fill the new area of the screen with an emulated screen size as set in rows/columns. The emulated screen size is not altered. This is useful if the remote side always expect the screen to be of a particular size (i.e. 80x24).

Site list

Buttons:

- **New**
  Create a new configuration. Brings up the same dialog as the menu **File/New...**

- **Edit**
  Edit the selected configuration. Brings up the same dialog as the menu **File/New...** with the information from the selected site in the list.

- **Delete**
  Deletes the selected site/configuration.

You can choose from two site lists in the **File/Open...** dialog.
The list box will change when you press the radio buttons "Private sitelist" and "Shared sitelist". The directories to hold these lists can be defined under **Options/Directories...**.

To open a connection without saving it to the sitelist, choose "New" from the file menu, enter the information and press OK. Press Alt-C to connect. If you want to add this setup to the sitelist choose **Save** from the **File** menu.

Each sitelist entry is associated with a configuration that controls the behaviour of the program and its emulation.

To save a sitelist entry with its configuration use **File/Save**.

Frequently Asked Questions (FAQ)

CTL3DV2.DLL

It will fail to load if it is found in any other directory than Windows/system.
Remove it from all other directories!
If you run in a network and is uncertain what your Windows directory is, start a DOS shell and type "set"<enter> The variable "**windir**" points to the Windows directory.

FONTS

EWAN will try to maximise the font size to fit in the current window using defined emulated "screen size" if Resize font option is set.

To make fonts smaller:
Choose a larger emulated screen (Like 130 columns 40 rows)
Make the window smaller.
To make fonts bigger:
Choose a smaller emulated screen (Like 40 columns 10 rows)
Make the window bigger.
Remove window space consuming things like menus, scroll bars, caption and status bar.

Note that not all fonts can be resized. If you have chosen a font that is fixed sized, the emulated screen can become larger than the desktop. This will make bottom and right parts of the screen disappear. Choose a sizeable font or reduce emulated screen width.

Only fixed pitch fonts like "Courier New" can be used. Other fonts would make the text on the screen unreadable.

THE WINDOW SIZE CHANGE EVERY TIME I START EWAN

The look of the window and screen is defined by the configuration that is currently in use.
The configuration *defualt* is loaded and realized on startup if the command line argument '-c' is not given. If a site from the sitelist is opened, the configuration associated with this site will be loaded.

To make EWAN look the same each time you connect to a site, do this:

If desired, create a new configuration using **Options/Edit configurations...**.
Create the sitelist entry using "New" in the open sitelist dialog. Select a configuration for the site.
Connect to the site. Choose the desired fonts and screen options in **Options/Current: Configuration...**.
Resize and position the window. Execute **File/Save** in the menu. The site options an associated configuration will be stored.
All sitelist entries using this configuration will look and feel the same from now on.

In the future just select this configuration for new sites to reuse the settings.

TELNET TERMINAL NEGOTIATION

Is now supported.
On UNIX machines it seems to be a custom not to follow terminal naming as defined in RFC 1340.
Therefore I have made it possible to change the name reported to the remote computer. You can alter this name in **Options/Current: Configuration/Emulation options...**.
The predefined configuration "UNIX" makes the VT100 emulation report "vt100" as the emulation.

The default name for VT100 is "DEC-VT100" as stated in RFC 1340.

USING EWAN AS A MOSAIC BROWSER

For Mosaic use this setup in mosaic.ini:

[Viewers]
telnet="c:*full**path**here*\ewan.exe"

Connecting to multiple hosts

Just start the program again and a second instance of the program will start.

EWAN is not a MDI application. This is a design decision. If you have any good arguments for using MDI, please mail it to me. Here are some problems with MDI:

It will look strange if new windows is started from external browsers.
It will not save much memory. The size of the scrollback is more important.
MDI will limit where you can put the windows on the screen.

TAB

Tabs now work correctly.
In some environments the remote computer (like UNIX) might expand TABs to SPCs.
In Unix something like "stty TAB0" or "stty tabs" (depending of flavour of UNIX, there are probably UNIX systems on which neither of these will work.) will end TAB expansion.

Legal stuff

EWAN is freeware. For more details see the legal notice.

If you use EWAN and want to support the development you can buy email support for it at a cost of $495 (USD) per year. I encourage companies, government and other organisations to pay. My address and SWIFT bankcode is:

Zandata, Peter Zander
Rydsvägen 258A:21
582 51 LINKÖPING, Sweden

By banks SWIFT code: NBBKSESS
Account#: 3021 46 08964
Nordbanken
105 71 Stockholm, Sweden

My phone#: +46-13-17 66 08

and supply the name of the organisation, a contact, address, phone number, email address in an email to: zander@lysator.liu.se
Site information (size, #users, client and server hardware and software) would be of help too.

If possible use SWIFT payments and add the name of a contact with the payment. SWIFT is a co-operation between the bigger banks of the world to make international payments cheaper and more efficient. If you need a invoice, offer or other written paperwork: send me a email.
Cheques should be bank-cheques.

Om du befinner dig i Sverige så är det billigare och smidigare att sätta in 3500 SEK på postgiro **46 00 99-5.** Skriv i kommentarsfältet att det gäller support på EWAN och samma information som ovan.

History

Ver 1.052 Jan. 17 1995 ewan1052.zip

Just a bugfix with improved emulation and keyboad support.

Ver 1.05 Dec. 21 1994 ewan105.zip

Fixes some bugs in 1.04
Keymap editor
Less modal dialogs
Configurable pronter font
Font previews

Ver 1.04 Nov. 23 1994 ewan104.zip

Telnet NAWS (Negotiate About Window Size) support.
Fixed screen or font size
Resizeable scroll back size
Pass through print support
Print screen or scroll back
Load configuration from command line ("-c")
Keyboard user configurable
Translation table for incoming characters
Colours in the VT100 emulation is configurable
Optimised palette to get solid colours on palette devices

Ver 1.03 Aug. 21 1994 ewan103.zip

Fixes some stupid bugs
    Reported emulation name is saved in each configuration
    Scroll regions updated when emulated screen size changes
Ctrl-SPC sends NUL ("Set mark" in emacs)

Ver 1.02 Aug. 19 1994 ewan102.zip

Each sitelist entry has a unique configuration.
Blinking text is made red in the VT100 emulation.
Bold fonts size more accurately.
Bug in installation program fixed. Installation from floppy is now possible.
No DNS lookup is made if an IP number is supplied.
Bug in the Tenet emulation negotiation fixed. This fixes the local echo bug too, as well as the problems when connecting to certain hosts that require emulation negotiation.
Some support for line drawing character sets in VT100 emulation
ANSI emulation.

Ver 1.01 July 09 1994 ewan101.zip

Telnet emulation negotiation
Service name accepted as well as service number
More valid parameter formats

Less confusing font selection dialog
TABs behave correctly in the VT100 emulation
Behaviour at startup and disconnection user configurable
Install program.
Works better if run from other programs like NCSA Mosaic

Ver 1.0 June 15 1994 ewan10.zip

Memory leaks plugged
Total rewrite of display engine
    Now supports
        2^24 colours
        Attributes: Bold Italic Underline and Reverse
    Uses user-configurable colours (from Windows "Control panel")
    Auto scroll while selecting
    Fonts try to resize horizontally too
    Copy/Paste works as expected

Shared and private sitelist
Sitelist can be updated from opening dialog
More checks for incomplete program configuration
Ability to share DLLs over network
Version control of emulation DLLs
Can specify function keys combined with Ctrl and Alt to a total of 48 strings.
Most things get saved in configuration
IP numbers supported on command line
Terminal window will never cover status line
Popup menu (Main menu optional)
Caption, status line, in-window menu and vertical scrollbar are now optional.
Windows helpfile
CTL3D, 3D look, with Borland backgrounds
When possible, the window will try to resize to fit current font and screen size
A "LED" in the status line to indicate if a connection is established
Improved VT100 emulation
Errors with more detailed descriptions

Ver 0.1C May 03 1994 ewan1c.zip

Mostly a bug fix.
Added command line interpreter.
Active configuration name in the window caption.
From now on packaged using pkzip.

Ver 0.1B Apr. 28 1994 ewan1b.arj

Configurable function keys.
Capture file.

Ver 0.1A Apr. 25 1994 ewan1a.arj

First release.

Escaped strings and control characters

To be able to send special characters, Ewan uses the character '^' to specify a control character. To send char #1 or "Ctrl-A" you would type "^A" (Without the quotation marks).
A "\" (backslash) will make the next character to be taken literally. i.e. "\^"

Configurations

A configuration defines the behaviour and settings for a session. Each site in the sitelist can be associated with a configuration, and sessions initiated with command line parameters can specify what configuration to use with the -c flag (See command line arguments).

The current configuration is saved when **Files/Save** is selected along with the current sitelist entry.

New site dialog

Fields:

The first "Name" field is what you like to call the site with associated config. Like:
"My provider (ANSI)" or "Nemesis MUD"

"Network adress or host name" is the name or number of the computer to be connected to. Like 123.234.212.11 or my.providers.machine.name.com

"Service or port" is the name or # to connect to. The "Telnet" option will try to find the "telnet" service number in the file "services" provided by the TCP/IP stack. If "Custom" is checked the same can be done by entering "telnet" or "23" (the actual service # for telnet) in the edit box.

"Configuration" define how the different parts of the emulator will behave when connected to a site. Like what keymaps, colors and screen dimensions to use.

Legal notice

VT100 emulation

<table>
<tr><td>PF1</td><td>PF2</td><td>PF3</td><td>PF4</td></tr>
<tr><td>7</td><td>8</td><td>9</td><td rowspan="2">+</td></tr>
<tr><td>4</td><td>5</td><td>6</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td rowspan="2">Ret</td></tr>
<tr><td colspan="2">0</td><td>.</td></tr>
</table>

The numeric keypad supports both the vt100 nummeric and application modes.
As the comma ',' key on a VT100 keyboard is not present on a 101/102 key standard PC keyboard, it is simulated when Ctrl- + (plus) is pressed.

As the vt100 emulation redefine the unshifted numeric keypad, these keys cannot be redefined in a keymap file. Use Ctrl, Alt and/or Shift combinations if these keys need to be redefined. This is also true for the <- (backspace) key on the main keyboard ,Ctrl-backspace, Return/Enter keys and the arrow keys.