

**UW (Unix Windows) for Windows**  
**Version 1.0 Copyright ©1991 Russell Poffenberger**

**Index**

Overview

Window

File

Edit

Setup

Dial

Keys

UW

Fonts

Help

## Overview

UW is the Unix Windows package that allows an IBM PC compatible computer to open up to seven separate login sessions on a UNIX computer or workstation using a single serial port. This is most useful when utilizing a modem for serial communications with a UNIX host.

This program was inspired by the UWPC package by Rhys Weatherley, who adapted it from the UW package originally available on Apple Macintosh® computers.

There are two modes of operation. The first mode, known as protocol 0 is basically a simple terminal emulation mode that allows initial connection to the UNIX host. Once logged in to the UNIX host, a companion program is run that then negotiates the next level, protocol 1. It is this protocol that then multiplexes the single serial port/modem connection to allow up to 7 terminal sessions on the remote host.

There are 2 ways to switch between windows. One is to select a different window, giving it the input focus. The second is to hold down the ALT key, and press the number of the window to make active.

## Window

There are several window operations that are supported. Refer to the Windows 3.0 Users Guide for specific information.

### Moving.

You may move the window anywhere on the screen.

### Sizing.

You may change the window size as you wish. By default, the window size is 80 columns by 24 rows of characters. Grabbing the window frame and dragging it will re-size the window accordingly. Uwwin will snap back to the largest size that fits the character size correctly. Note that this does not change the setting that the UNIX host thinks is the window size. You must change this manually. Typical command would be "stty rows n" or "stty columns n" where 'n' is the new row/column size accordingly. The title bar of the window will reflect the current screen size to assist you in setting up the UNIX tty parameters correctly.

Failure to set the size correctly on the UNIX host may result in unpredictable behavior, particularly when paging programs (like more or less), or editors are used.

### Minimize.

The "minimize" function will reduce the window to an icon on the desktop. During this time, it is still active and receiving input from the host. Upon restoration to normal size, the characters that were output and still exist in the window will be shown.

### Maximize.

The "maximize" function will set the window to the full size of the screen, scaled back to the nearest even character size. The actual size depends on the specific resolution and fonts. The sizing constraints listed in the "sizing" section above apply here.

### Close

Selecting "Close" from the main windows menu will attempt to do the right thing. If in protocol 0, then the program will terminate, dropping the DTR line, which if the modem is configured correctly, will hangup the line.

If selected from window 2-7 in protocol 1, then the specific window is closed, just as iff the UW "kill" command were selected. If selected from window 1 in protocol 1, then all child windows are closed, the protocol is exited, and the program terminates, dropping DTR. This should be used with caution. It is always best to "kill" window 1 to exit the UW protocol, then logout completely before closing the application.

## **File**

This menu item has several file related functions. From here, you may open or save communication profiles. You may also exit the program.

Open

Save

Save As

Exit

## **Edit**

This menu is the interface to the Windows clipboard. You may select text in UW window by pressing and dragging the left mouse button. Selected text is highlighted using the inverse of the foreground color. If the selected text crosses to the right of a carriage return in the text, then the remainder of the entire line is highlighted. You may also highlight sections of text in the history region as well. Clicking the left mouse button, or more incoming text, will clear the selected region.

Once a desired region is selected, you may use the "Copy", or "Copy then Paste" functions to transfer the region to the clipboard.

If any valid text exists in the clipboard, then you may use "Paste".

Copy

Paste

Copy then Paste

## Setup

This menu item is used to select various setups such as communication, emulation, and modem parameters.

Comm

Modem

Emulation

## **Help**

Select this help facility or bring up an "About" dialog box..

## Dial

This menu item is used to invoke the dialer, or to force a hangup.

Number

Hangup



## Keys

This menu is used to select either Function key or special key mapping dialogs.

Function

Mappings

## **Function**

Selecting this menu item will bring up a dialog box allowing you to program custom strings for the function keys (F1 - F10). Use the radio buttons to select which function key to program. The current text is displayed and may be edited. To save the text for that key, press the Save button. You **MUST** save the text for each key or it will be lost. When finished, press "OK".

## **Mappings**

Selecting this menu will bring up a dialog allowing you to select from default keyboard mappings. Currently, the only one defined is for the backspace key. If the corresponding box is checked, then the Del code (0x7f) is sent when the backspace key is pressed.

## **UW**

This menu item is used to select various commands related to the UW protocol, such as starting the protocol, creating new windows (sessions), killing windows, etc. The ALT-keystrokes provide a keyboard interface to these commands. These keystrokes are compatible with the DOS version.

<u>Quit</u>	<u>ALT-Q</u>
<u>Exit</u>	<u>ALT-E</u>
<u>Hangup</u>	<u>ALT-H</u>
<u>Break</u>	<u>ALT-B</u>
<u>Create</u>	<u>ALT-C</u>
<u>Remove</u>	<u>ALT-R</u>
<u>Init</u>	<u>ALT-I</u>
<u>Start UW</u>	<u>ALT-U</u>
<u>Upload</u>	<u>ALT-S</u>
<u>Download</u>	<u>ALT-O</u>

## Fonts

This menu presents a list of fonts available for use. The fonts are enumerated from all available fonts at startup, and when a "WM\_FONTCHANGE" message is received. This application only allows the use of fixed pitch fonts. At the end of the list of fonts is a menu item "Bold". When this is checked, then the selected font is displayed in **bold**.

## **Open File**

Selecting this function will open a dialog box allowing you to select a communications profile. You may navigate the directories until the desired file is found. You may double click the file to open it, or once the desired name is selected, push the OK button. The default extension for these files is ".uw".

## **Save File**

This menu function will save the current communication parameters to the profile file last opened, or selected in "Save As". If no previous file was selected, then this menu will function the same as the "Save As" function.

**Save As**

This function will present a file selection dialog box. The current communication parameters will be saved to the file selected. You may select an existing file, or enter a new file name. The suggested extension is ".uw".



**Exit**

Selecting this item will exit the program. If you are currently running in protocol 1, then you will be asked if it is OK to exit the UW protocol and quit.

**Copy**

This menu item is only highlighted if text is selected in the current window. Selecting it copies the selected text to the clipboard.

**Paste**

This menu item is only available if text exists in the clipboard. Selecting it causes the text in the clipboard to be sent to the com port as if it had been typed at the keyboard.

**Copy then Paste**

This menu item is only highlighted if text is selected in the current window. Selecting it copies the selected text to the clipboard, then performs a paste operation. This eliminates two separate edit steps for certain applications.

**Communications Setup**

Use this dialog box to setup various communications parameters such as baud rate, parity, data bits, stop bits, and flow control.

## **Modem Setup**

Use this dialog box to setup the modem initialization string

## **Emulation Setup**

This dialog box selects which terminal emulation to use. Two types are available. VT52, and ADM31. The use of ADM31 is recommended because it is more powerful than VT52, however, if your UNIX host does not support ADM31, then you must use VT52.

From within the main window (Command window if protocol 0 or window 1 if protocol 1), you can choose different default emulations for protocol 0 and protocol 1. These changes are noted in the win.ini file and are used next time you start UWWIN, and subsequent windows that are started use the appropriate emulation. From within any other window (windows 2-7), changes made are not saved, but only change the emulation currently in use for that window.

Note that this does not change the emulation that the host is using. Use the appropriate UNIX command for changing the tty emulation of the UW process.

## **Dial Number**

This dialog box is used to enter the number to dial, and also to start dialing the number. You may cancel the dial sequence by clicking on the Cancel button. You can save the number into the initialization by clicking on the Save button.



## **Hangup**

Selecting this menu item will force a hangup by first obtaining control of the modem using the Hayes® escape sequence "+++", then issuing "ATH0".

**Quit**

Selecting this menu item will exit the UW protocol (If applicable), then quit the application. The user is asked to confirm first.

**Exit**

Selecting this menu item will exit the UW protocol, and enter protocol 0;

## **Break**

This function will send a break to the host CPU.

**Create**

When in protocol 1, this function will create a new process on the UNIX host, and open a new window for the session.

**Remove**

This function will terminate the specific window session. If selected from window 1 (the main window), then ALL windows are exited, and protocol 0 is entered.

**Init**

Selecting this function will send the modem initialization string to the modem.

**Start**

This function will start the UW protocol by sending the string programmed in the "Setup | Initialization" dialog. This assumes the companion "uw" program has been installed on the UNIX host and is in the users path.



## **Upload**

This function is currently unimplemented.

## **Download**

This function is currently unimplemented.