World Time Zones Display © 1995-1996, John M.Howells

Main Window
Menu
Time Zone Select
Time Zone Detail
Time Zone Detail (No DST)
Windows 95
Registration

The program works on both Windows NT from version 3.51 and on Windows 95.

The examples here show the displays when Windows NT 3.51 is running.

Please Note: The program displays the Time Zone Information from the Windows Registry on the assumption that it is applicable to all the years from 1901 to 2099, an assumption that is unlikely ever to be correct. The information for any particular year in a Time Zone should therefore not be relied upon, and corroboration should be sought.
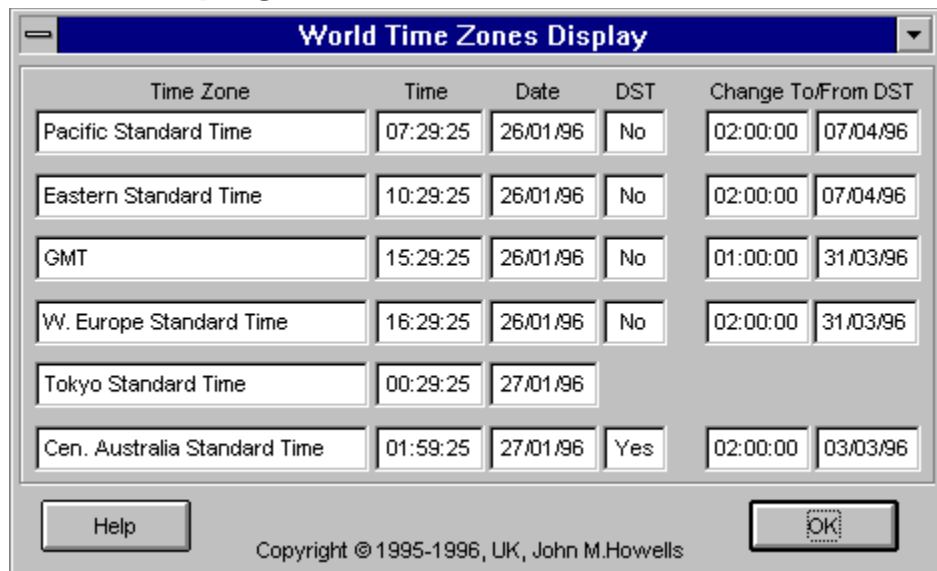
Change comments invisible to the (usual?) reader of the help file. If the user selects this page from the Full Text Search option he or she will be immediately shunted to the contents page! Good, innit?

95-01-12   Corrected some upper cases of time to Time.

95-01-17   Changed contents page title and added copyright

95-01-21   Added missing 'Main Window' to Search strings

95-04-19   Changed help file for Windows 95 by changing references such as "Windows NT Registry" to just "Windows Registry", and Shareware Registration for version 1.03, and specific Windows 95 page.

95-04-27   Added a macro to this topic to jump to the Contents page if the user tried to read this in the new Windows NT 3.51 or Windows 95 help system.

95-04-27   Changed all the 12 point text to 13 point so that it displays properly when the new Help system's Options/Font menu item is used to select Small or Large, as otherwise it appears *VERY* small in the display.

95-05-23   Removed a duplicate 'in the in the' from the Windows 95 text, and changed 'startup' to just 'start'.

95-07-16   Added a note about the NT 3.51 changes, and updated the bitmaps to reflect the new NT 3.51 displays.

95-10-14   Added the menu page after moving Use Saved Position to menu and adding a Force 24-Hour option.

95-12-03   Changed to allow for all buttons being deleted from main display.

95-12-06   Indicated that all double-clicks are using the left mouse button.

95-12-14   Added popups to main window, menu, and selection dialog.

95-12-29   Moved to Visual C++ 4 version of program.

95-12-31   Deleted the reference to CTL3D32.DLL from the Registration page, as this is no longer relevant when the Visual C++ 4 package builds the program.

96-01-01   Changed the copyright messages to include 1996.

96-01-25   Slight changes so that references to NT 3.5x become NT 3.51, as program does not run on NT 3.50.

96-01-25   Changed examples using main dialog to include the update that gives 1996-1996 as the copyright, and changed to refer to the third and fourth entries as having a PM indicator, as that was the case when the dialog was taken!

Main Window

This is the main display for the program.

Note, that the program relies on the Time Zone Information in the Windows Registry to determine the data for any Time Zone displayed, so that an incorrectly reported change is as likely to be due to errors in that data as anything within the immediate purview of this program.

World Time Zones Display					
Time Zone	Time	Date	DST	Change To/From DST	
Pacific Standard Time	07:29:25	26/01/96	No	02:00:00	07/04/96
Eastern Standard Time	10:29:25	26/01/96	No	02:00:00	07/04/96
GMT	15:29:25	26/01/96	No	01:00:00	31/03/96
W. Europe Standard Time	16:29:25	26/01/96	No	02:00:00	31/03/96
Tokyo Standard Time	00:29:25	27/01/96			
Cen. Australia Standard Time	01:59:25	27/01/96	Yes	02:00:00	03/03/96

Help   Copyright © 1995-1996, UK, John M.Howells   OK

This shows the main Window with a Time Zone selected for each entry.

Time Zone Display

The display for the entry across each row shows the name in the Windows Registry of the Standard Time in the selected Time Zone, together with the current time and date in that Time Zone.

By default the first entry will display the information for the Local Time Zone if no other Time Zone is selected.

For a Time Zone that uses Daylight Saving Time (DST) the display for the entry also shows whether the Time Zone is currently using DST, and the time and date, in that Time Zone, of the next change to or from DST. This will be from Standard Time to DST if Standard Time is currently in operation (**No** in the DST Window), or from DST to Standard Time if DST is currently in operation (**Yes** in the DST Window).
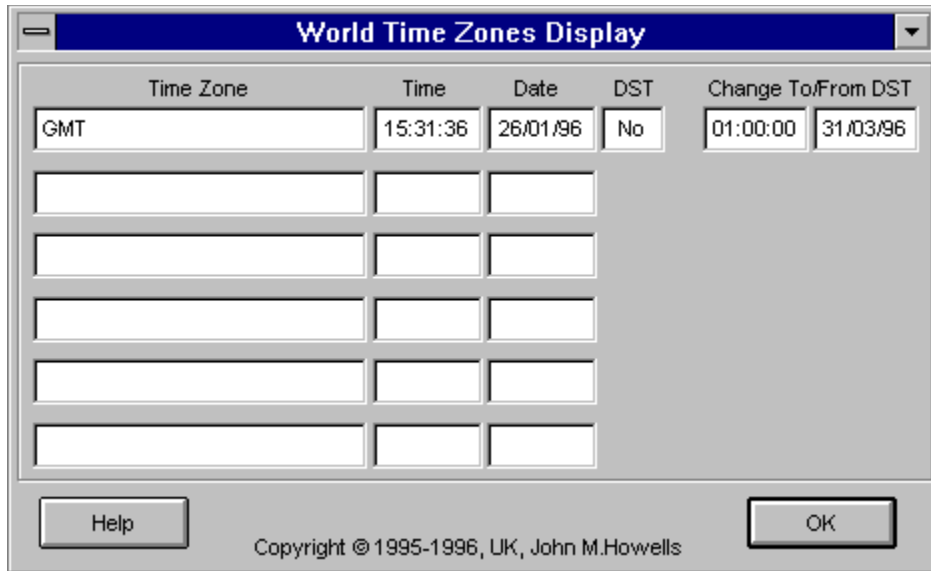
For a Time Zone that does not use DST the items associated with DST (those other than the Time Zone name and the current date and time) are blanked out.

Time and Date display Format

The times and dates use the defaults for the language selected for the system from the International settings of the Control Panel. If the language is changed while the program is running the display will continue to show the original format until the program is stopped and restarted.

Initial Display

This shows the main Window when the program is started for the first time (or after all the user selected entries have been cleared), with the first entry displaying the Time Zone Information for the Local Time Zone and all the other entries empty.

Time Zone Selection

Double-clicking with the left mouse button on one of the left hand column of Windows, used to show a Time Zone name, opens a Dialog Box that allows the user to select which Time Zone should be displayed in that entry (see Time Zone Select). The user can select from any Time Zone entry stored under the Time Zones key in the Windows Registry.

The selection in each entry will be stored in the Windows Registry separately for each user, and the last set of selections for the current user will be restored when the program next starts, unless a previously selected Time Zone has been deleted, in which case the associated entry will be blank.

Time Zone Detail

Double-clicking with the left mouse button on one of the windows showing the Date or (when DST is in use) one of the windows showing the time and date of the next change to or from DST allows the user to select more detail about the possible time and date of changes to and from Daylight Saving Time (DST), depending on whether or not DST applies in a Time Zone (see Time Zone Detail for those Time Zones which use DST and Time Zone Detail (No DST) for those Time Zones which do not)..

Menu

On Windows NT the menu, as shown below, appears when the mouse is clicked in the system menu box at the top left of the main display Window. On Windows 95 the menu is obtained by right-clicking anywhere in the title bar.

The 'Use Saved Position' and 'Force 24-hour Clock' items are described below.

The remaining items are standard Windows options, except that on Windows 95 the 'Switch To...' item does not appear.

Use Saved Position

When the 'Use Saved Position' menu item is checked, which is the initial default, the program will restore to its last position when it starts. However, if that position would result in the top left corner of the main Window being within 100 pixels of the right hand side or the bottom of the screen the display will be centred.

When the 'Use Saved Position' menu item is not checked the display will start in the centre of the screen.

When the program closes it will save the current position in the Windows Registry separately for each user.

Force 24-hour Clock

When the 'Force 24-hour Clock' menu item is checked, which is the initial default, the program will use a 24-hour display for the clock regardless of the format selected by the user from the Control Panel. Note that this option can affect the display even if the Control Panel has a 24-hour clock selected, as the exact format, particularly whether the time has a leading zero for the hours, depends on the default 24-hour clock format for the local Time Zone.

When the 'Force 24-hour Clock' menu item is not checked the displayed times will use the format selected from the Control Panel, except that if a 12-hour format is in use the AM/PM indicator appears as a small `*´ (without the quotes) for displayed times at and after 12:00 midday, as shown below in the third and fourth time zones. The AM/PM indicator may appear to the right or left of the time, as defined by the Control Panel.

World Time Zones Display

Time Zone	Time	Date	DST	Change To/From DST	
Pacific Standard Time	7:33:54	26/01/96	No	02:00:00	07/04/96
Eastern Standard Time	10:33:54	26/01/96	No	02:00:00	07/04/96
GMT	3:33:54*	26/01/96	No	01:00:00	31/03/96
W. Europe Standard Time	4:33:54*	26/01/96	No	02:00:00	31/03/96
Tokyo Standard Time	12:33:54	27/01/96			
Cen. Australia Standard Time	2:03:54	27/01/96	Yes	02:00:00	03/03/96

Help   OK

This option only affects the running clock displays. The times of changes to or from Daylight Saving Time, both in the main Window and the Detail display, always use a 24-hour clock.

When the program closes it will save the 'Force 24-hour Clock' flag in the Windows Registry separately for each user.

Daylight Saving Time (DST)

The achieving of more evening daylight, usually in the Summer, by setting the time ahead of Standard Time, usually by one hour, though at least in the Netherlands Daylight Saving Time was once set two hours ahead.

Gregorian Calendar

Originally authorized by the Council of Trent (at Trento Italy) under Pope Paul III in 1545 and introduced by Pope Gregory XIII in 1582, which defines only a century that is divisible by 400 as a leap year. It corrects a small error in the Julian Calendar due to the difference in the average year of 365.25 days assumed by that calendar and the true figure of 365.242199 days, which resulted in an annual error of 11 minutes 14 seconds, or seven days in 1000 years, or 11 days by the time the Gregorian Calendar was first introduced. However, the introduction was only gradual, being introduced to France, Italy, Luxembourg, Portugal and Spain in 1582, to Belgium and to most of the German Roman Catholic states and parts of the Netherlands by 1584, Switzerland started in 1583 but did not finish until 1812, it was introduced to Denmark and most of the German Protestant states in 1699 and 1700, to the United Kingdom in 1752 (when Thursday the 14th September followed Wednesday the 2nd September), to Japan in 1873, to the Soviet Union in 1918, and to Greece in 1923.

Julian Calendar

Introduced to replace the Roman Republican calendar by Julius Caesar in 46 B.C (according to modern reckoning), in which each normal year is made up of 365 days, every fourth year having an extra day between February 23rd and 24th, giving 366 days. However, the small inaccuracy in the annual average of 365.25 days meant that an 11 day error had accumulated by the time the Gregorian Calendar was introduced in 1582.

Local Time Zone

The Time Zone currently selected by the Date/Time applet
in the Control Panel to define the computer's Time and Date.

Time Zone

A range of longitudes where a common Standard Time is used, suggested by Charles F.Dowd of Saratoga Springs, New York, in 1869, and first adopted by the U.S. and Canadian railroads in 1883.

Time Zone Information

Data in the Windows Registry holding the names of the Time Zones known to the system, the bias (offset) of each Time Zone with respect to UTC, and If Daylight Saving Time is used it contains the date and time for the start and end of Daylight Saving and the name for Daylight Saving Time.

UTC

Universal Coordinated Time (Universel Temps Coordonné in the original French) or Universal Time Convention, also previously known as GMT. The international definition for the measurement of time, that defines a standard against which all clocks can be measured.

Windows Registry

The Database that holds data defining the configuration of the system, its users, and their preferences. This program stores the name of each Time Zone selected by each user separately for that user.

Day-in-Month format

The usual format for the definition of the dates in the Time Zone Information in the Windows Registry for the transition to and from Daylight Saving Time, in which a date is stored as the M'th occurrence in the N'th month of a given day of the week. The 5th occurrence is used to indicate the last in the month..

Registration

Shareware

This program is Shareware. It can be distributed freely to anyone as long as the three components, the EXE, HLP and WRI files are distributed as a package. The latest version can be found as the TZONES.ZIP file in the WINSHARE forum on Compuserve.

You are allowed to use the program for up to 30 days for evaluation. If you wish to continue to use it after that time you should register the program by sending £5 (Five U.K. Pounds) or $8 (Eight U.S. Dollars) to the address below.

The program is complete when distributed as Shareware, and has no 'nag' screens to remind you to register, so you will receive nothing extra for your money when you do register, other than your own peace of mind and a receipt. The registration fee covers the current version and the next upgrade (e.g. from 1.3 to 1.4 or from 1.3 to 2.0, whichever comes first [note that all versions of 1.3x are covered by a single registration fee, so if the registration were to start with 1.3x the upgrade to 1.50 would be the next time a registration fee became due]), but again you are on your honour to respect this.

Please send the registration fee to:

Mr.J.M.Howells
9 Appley Close
Appley Bridge
Wigan
Lancashire
WN6 9HA
England

Please send cash in US Dollars or UK Pounds sterling, or a cheque in Pounds either drawn on a UK bank or a EuroCheque, or an International Money Order. Please do **not** send cheques denominated in any other currency than Pounds.

Please do not try and telephone to this address, but send any communication by post or by e-mail to user identity 100031,353 on Compuserve. This is also the identity for communication if you wish to register the program for use on a number of machines, or if you have any problems to report.

Time Zone Detail

This Window shows the detail of a <u>Time Zone</u> in which <u>Daylight Saving Time</u> (DST) applies.

It should be noted that the program displays the Time Zone Information from the Windows Registry on the assumption that it is applicable to all the years from 1901 to 2099, and that the Gregorian calendar applies to all those years, both assumptions that are unlikely ever to be correct. The information for any particular year in a Time Zone should therefore not be relied upon, and corroboration should be sought.

The display starts with the current year for the system. The **Now!** button returns the display to the current year, while the **<<** and **>>** buttons select previous (**<<**) or subsequent (**>>**) years to be displayed, allowing the display to be stepped back to 1901 or forward to 2099.

For each year the display shows the date and time of the changes to and from Daylight Saving Time (DST), and the name used for the two time periods. The display also shows the time in the Time Zone after each time change.

The first change shown will be the date of the earlier change in the year. This will usually be the change to DST in the Northern Hemisphere and to Standard Time in the Southern hemisphere. The second change shown will be for the other time period, usually to Standard Time in the Northern hemisphere and to DST in the Southern hemisphere.

Dates for a Time Zone change are normally stored in the Windows Registry in '<u>day-in-month</u>' format. This display shows that format and also the true date after conversion to a normal calendar
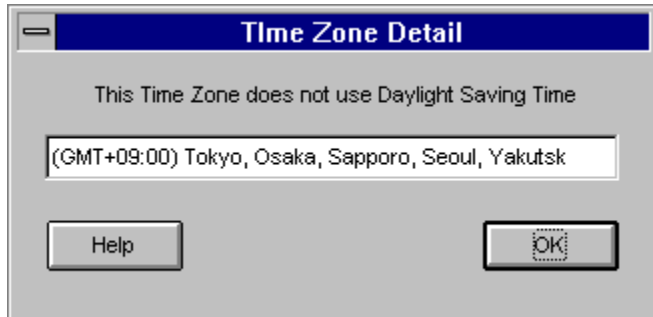
date for the year concerned.

The display also shows the data stored in the Windows Registry that usually shows the offset (bias) from GMT (UTC) and the places that use the Time Zone.

This Dialog Box will be cancelled if the time changes, or a new Time Zone is selected for the system from the Control Panel, while this Dialog Box is displayed.

Time Zone Detail (No DST)

This display is used for those <u>Time Zones</u> that do not use <u>Daylight Saving Time</u> (DST). It shows only the data stored in the <u>Windows Registry</u> that usually shows the offset (bias) from GMT (<u>UTC</u>) and the places that use the Time Zone.

```
┌─────────────────────────────────────────────────┐
│ ▬          TIme Zone Detail                      │
├─────────────────────────────────────────────────┤
│                                                   │
│    This Time Zone does not use Daylight Saving Time│
│                                                   │
│  ┌───────────────────────────────────────────┐  │
│  │ (GMT+09:00) Tokyo, Osaka, Sapporo, Seoul, Yakutsk │  │
│  └───────────────────────────────────────────┘  │
│                                                   │
│  ┌──────────┐                    ┌──────────┐    │
│  │   Help   │                    │   OK     │    │
│  └──────────┘                    └──────────┘    │
└─────────────────────────────────────────────────┘
```

This Dialog Box will be cancelled if the time changes while it is displayed, or if a new Time Zone is selected for the system from the Control Panel.
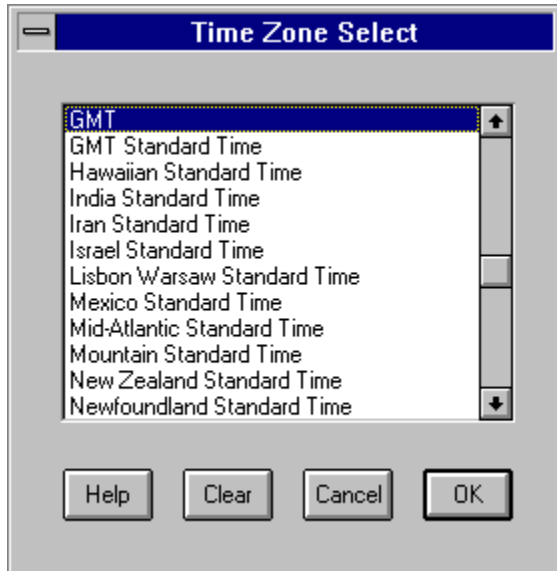
Time Zone Select

This Dialog Box allows the user to select which Time Zone is displayed for an entry in the main display. It is started by double-clicking with the left mouse button on a Window that displays a Time Zone name in the main display.

The Dialog Box shows a scrollable list of all the Time Zones known to the Windows Registry.

Time Zone currently selected.

When the entry in the main Window has a Time Zone selected the Dialog Box opens with the associated selection highlighted.

The **Cancel** button closes the Dialog Box without changing the current selection in the main Window.

The **Clear** button closes the Dialog Box and removes any display from the associated entry in the main Window, except for the first entry, for which the **Clear** button displays the information for the Local Time Zone.

The **OK** button closes the Dialog Box and displays the data in the associated entry in the main Window for whichever Time Zone is then highlighted.

The user can also highlight a Time Zone name and double-click on it with the left mouse button to close the Dialog Box and display the data for that Time Zone in the associated entry in the main Window.

No Time Zone currently selected.

When the associated entry in the main Window has no Time Zone selected the Dialog Box opens with no selection highlighted

Time Zone Select

Afghanistan Standard Time
Alaskan Standard Time
Arabian Standard Time
Atlantic Standard Time
AUS Central Standard Time
Azores Standard Time
Bangkok Standard Time
Canada Central Standard Time
Cen. Australia Standard Time
Central Asia Standard Time
Central Pacific Standard Time
Central Standard Time

Help   Clear   Cancel   OK

The **Cancel** and **Clear** buttons close the Dialog Box without selecting any Time Zone for display in the associated entry in the main Window.

If a Time Zone is selected, by clicking on it, the **OK** button closes the Dialog Box and displays the data for selected Time Zone in the associated entry in the main Window.

The user can also highlight a Time Zone name and double-click on it with the left mouse button to close the Dialog Box and display the data for that Time Zone in the associated entry in the main Window.

Storage of User selections.

The selections chosen with the **OK** or **Clear** buttons will be stored in the Windows Registry separately for each user, and the last set of selections for the current user will be restored when the program next starts.

Time Changes.

If the time changes while this Dialog Box is displayed, or a new Time Zone is selected for the system from the Control Panel, the Dialog Box will be cancelled with no change to the selected entry.

Windows 95

On Windows 95 the appearance is only slightly different from the Windows NT 3.51 examples shown in this file, the main change being that the title bar automatically acquires the standard Windows 95 appearance.

On Windows NT 3.51 a single name is used for:
 • the name of the <u>Time Zone</u> in the main display
 • the name in the <u>Time Zone Select</u> dialog list
 • the name of Standard time in the <u>Time Zone Detail</u> display

which is the name used for the Time Zone in the <u>Windows Registry</u>.

However, on Windows 95 two distinct names are used, one for:
 • the name of the Time Zone in the main display
 • the name in the Time Zone Select dialog list

which is the name used for the Time Zone in the Windows Registry, and a possibly different one for:
 • the name of Standard time in the Time Zone Detail display

which is extra data, not present in Windows NT 3.51, in the Windows 95 Registry.

click here with left mouse button and drag to move window. if
the Use Saved Position flag is enabled (see Menu) the window will
be restored to the new position when the program is next started

This displays the current date for the selected Time Zone

Double click here with the left mouse button to display detailed Daylight Saving Tme information for the selected Time Zone

This displays the current time in the selected Time Zone.

This is only displayed if Daylight Saving Time (DST) is used in the Time Zone selected, and indicates if DST currently applies.

Click here with the left mouse button to change
the state of the Force 24-Hour Clock flag.

This is only displayed if Daylight Saving Time (DST) is used in the Time Zone selected, and displays the date of the next change to or from Daylight Saving Time in the selected Time Zone.

Double click here with the left mouse button to display detailed Daylight Saving Tme information for the selected Time Zone

This is only displayed if Daylight Saving Time (DST) is used in the Time Zone selected, and displays the time of the next change to or from Daylight Saving Time in the selected Time Zone.

Double click here with the left mouse button to display detailed Daylight Saving Tme information for the selected Time Zone

click here to display the data for the next year

click here to restore the display to the current year for the system (*not* that of the time zone!)

click here to display the data for the previous year

Clicking on this button when a Time Zone name is highlighted displays the data for the selected Time Zone.

Clicking on this button when no Time Zone name is highlighted closes the Dialog without displaying any Time Zone data.

Clicking on this button cancels the selection dialog without making any change to the entry.

Clicking on this button clears the associated entry, except for the first entry which will then display the data for the local Time Zone.

This displays the name of the Time Zone selected.

Double click in this window with left mouse button
to select a time zone to display in this entry

when not highlighted a single left mouse click
will highlight a time zone and a double click will
select that time zone for display in the entry

when highlighted double-click here with the left
mouse button to display time zone in the entry

Click here with the left mouse button to display the system menu that allows the user to set the Force 24-Hour and Used Saved Position flags

On Windows 95 right click anywhere in title bar

Click here with the left mouse button to change
the state of the Use Saved Position flag