

# Klock

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## Introduction

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# Klock - A clock with a K

A multifunction timing thingy, where some [but not necessary all] of the functions are useful.

The multifunction timing thingy is split into many Thingy-ma-bobs - Fuzzy Time, World Klock, Countdown, Timer, Event, Reminder, Memo, Conversion, Sticky Notes & Clipboard Monitor.

Kevin scott

Klock

A Help gubbins for the time thingy. A Clock with a K. Build 104

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2.5.0.104



The source can be downloaded from - [Klock Source](#)

please contact me at [Here](#)

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## Welcome

# Welcome To Klock

Kevin scott

Klock

A Help gubbins for the time thingy. A Clock with a K. Build 104

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## About

### About Klock

Klock - a clock with a k.

A multifunction timing thingy, where some [but not necessary all] of the things are useful.

The multifunction timing thingy is split into many things;

Fuzzy Time, World Klock, Countdown, Timer, Reminder, Friends, Events, Memo, Conversion, Biorhythms, Sticky Notes & Clipboard Monitor.

Also, the time can be displayed in several ways - text, digital, analogue and binary klocks,

Klock currently consists of over 14,000 lines of Lazarus [Free Pascal] code . Klock serves as a vehicle by which I learn and tinker with programming. Previous versions of Klock have existed in VB.net, Python and Free Basic - and may again.

The program starts and finishes with a Splash Screen. This is really needed if a number of fonts are used. The starting of Klock lengthens with the number of fonts loaded.

### Fuzzy Time

Allows the current time to be displayed in a number of different formats.

The current time can also be spoken if desired, in the current format. This is configurable in user options.

### World Klock

This display a list of Time Zones and when selected will display the time in that time zone.

### Countdown

Implements a simple countdown timer [between 1 and 120 minutes].

The time for the countdown can be either entered directly or the up/down controls can be used. The timer can be paused during countdown and stopped before the end is reached. At the end of the countdown, either a sound can be played, a reminder displayed, a system command [system shut down or re-boot] or a external program can be run - or any combination of the four.

#### Timer

Implements a simple timer, with split time function.

The timer can be stopped, paused and resumed.

A split function allows for given time to be remembered.

#### Reminder

This enables for events to set up and notifications displayed to the user.

Today's date is default, but a future date can also be selected. A time can also be added to the reminder date. If no time is added, the reminder will fire at midnight. When the reminder is due either a sound can be played, a reminder displayed, a system command [system shut down or re-boot] or a external program can be run - or any combination of the four.

Note : Setting the time to 00:00, indicates midnight of the previous day so will not enable the set button. To set a reminder for midnight of today, disable the time and pick tomorrow's date. 00:00 indicates zero minutes into the present day.

#### Friends

This implements a simple friends [contacts] thingy.

The enables friends to be entered, edited and deleted.

Information of the friends can be included i.e. address, email and telephone contact details.

#### Event

Implements a reminder option.

The enables an event to be added, when the event nears, a prompt will be displayed. These prompts are set to 30, 10 and 5 days before the due date. This can be altered in user options as can the message themselves.

Different types of event can be added i.e. Birthday, Anniversary and motor - this will affect the displayed prompt.

The prompt can also be spoken if desired.

#### Memo

Implements a simple memo thingy.

This will allow memo's to be entered, edited, printed and saved. Any previously saved memos will be loaded into Klock on start-up. The memos can be optionally encrypted and only be displayed on demand.

#### Conversion

Implements a simple conversion screen.

This allows the conversion between various units of weight, distance and area etc.

#### Biorhythm

Implements a simple or enhanced Biorhythm chart.

The simple chart is for one person.

The enhanced chart allows the comparison of two people.

The dates of birth are held in user options and can be amended in the carts form.

## Sticky Notes

Implements a simple sticky Note thingy.

This allows for the creation of stick Notes, small independent windows that appear on the screen which can hold memo, reminders etc. Klock will keep track of the notes and re-display any active notes when Klock is first launched.

The button bar contains three buttons -

help - will display a simple help screen, depending upon the tab being currently viewed [not yet implemented].

Close - Quits the application.

Hide - Switches the application to the system area.

Also, a quick sticky note launch button.

When the program is running in the system area, the following options are available.

If hovered over, the current time will be displayed.

Right clicked on the icon will display a pop up menu.

This will allow the application to be restored, the application can be exited or e current time can be displayed.

If the application is in the task bar, any display messages

[i.e. a reminder becoming due] will be displayed in a notification window [as will errors etc.].

The status bar contains [after the time & date] the legend cns.

The c represents caps lock.

The n represents Num Lock.

The S represents Scroll Lock.

The letter will be upper case if the key is activated, otherwise lower case.

The application contains a Time Positions Screen. This allows the screen co-ordinates of the extra klocks to be manually amended. There is a bug [Windows feature?] where they can appear of screen i.e. where monitors are added or resolution is changed.

The application also contains a options screen [file / Options] which allows various options [over eighty] to be set.

NB: If the option is checked to start on windows start up, it only operates for the current user.

Program partially tested on Windows 7 & 10 [both 32 & 64 bit].

## Getting Started

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Klick on Klock.

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### System requirements

## System Requirements

Should just about work on any Microsoft Windows machine - if it can run the help, it should run Klock.

Klock has been tested on Windows 7, 10. [Does anybody use anything else, these days.]

Klock needs at least .NET 4.5, get from your favourite Microsoft site.

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### Getting help

## Getting Help

Press help to get this document.

Document also located in the application directory [both chm, html & pdf formats].

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### Thingy-ma-bobs

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There are separate thingy-ma-bobs for

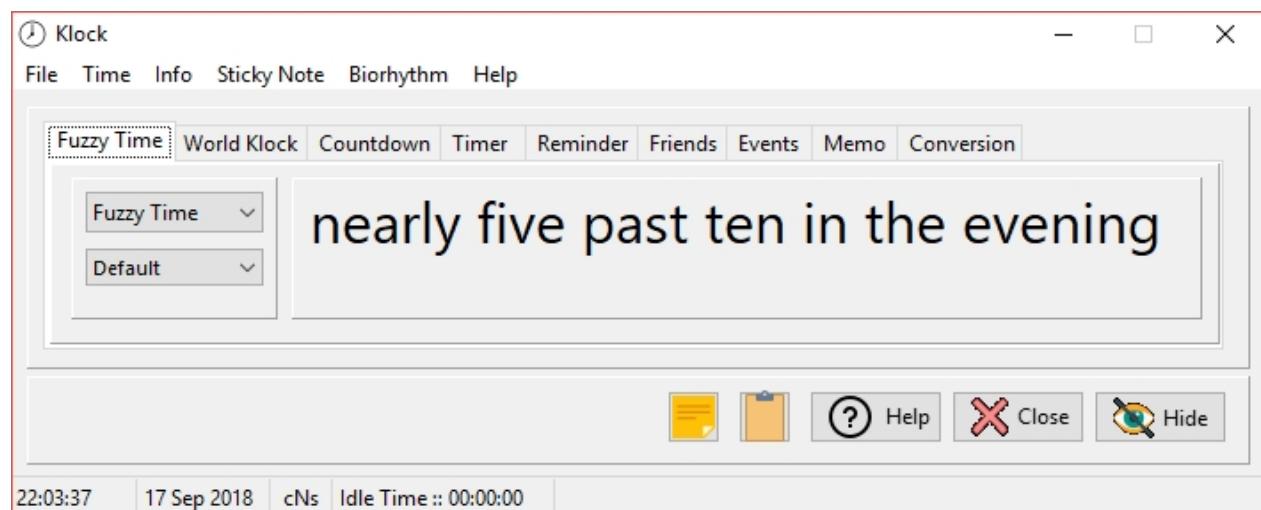
- Fuzzy Time
- World Klock

- Countdown
- Timer
- Reminder
- Friends
- Events
- Memo
- Conversion
- Clipboard Monitor

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## Fuzzy Time

### Fuzzy Time



Allows the current time to be displayed in a number of different formats.

The time can be displayed in various fonts.

NB : Not all of the fonts are usable - some are numerical only or missing the numerals.

The fonts are held within the Klock application directory. Klock does come with a number of fonts, but more can be added. When added a font, just drop the font in the directory and klock will load it next time it starts.

For the font to be used, two text files within the font directory need to be amended.

fontTypes.txt - This is a human friendly font named that is used in the drop down menus within klock.

fonrNames.txt - This is the actual font name used to load the font.

NB :: The text files must be updated when a new font is added to the directory and MUST match.

The time, in the current format, can be spoken. This is configured in user options. The text to speech uses Microsoft SAPI, if Klock ever becomes cross platform this will need to be changed.

System idle time can also be displayed in the status bar - this is enabled in the time options screens.

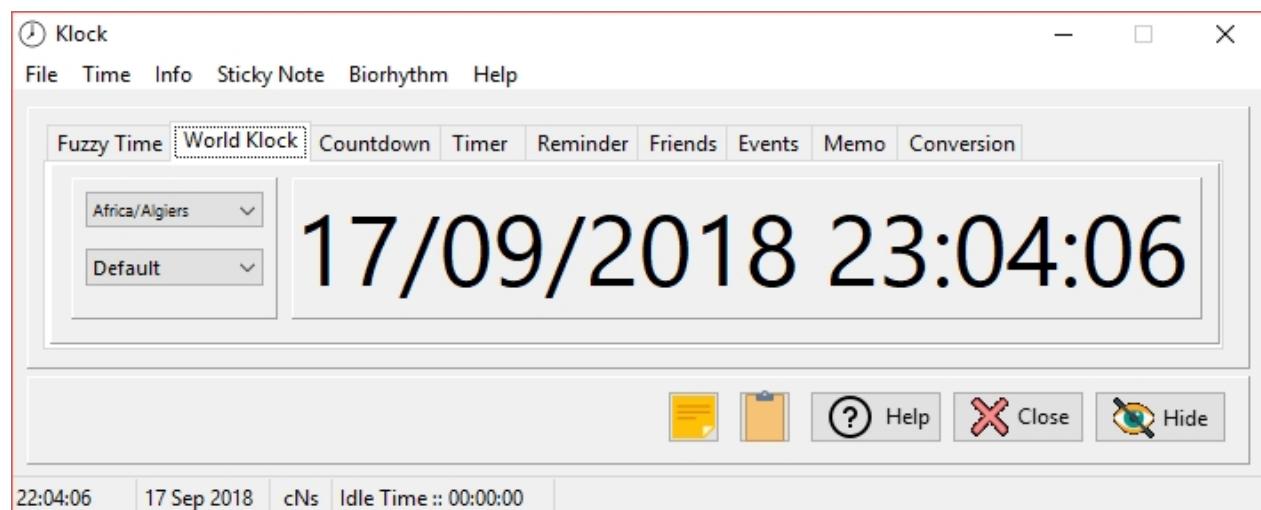
See Status Bar for details on the status bar information.

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## World Klock

### World Klock



Implements a simple World Klock thingy.

This displays a list of Time Zones and when selected will display the time in that time zone.

The time can be displayed in various fonts.

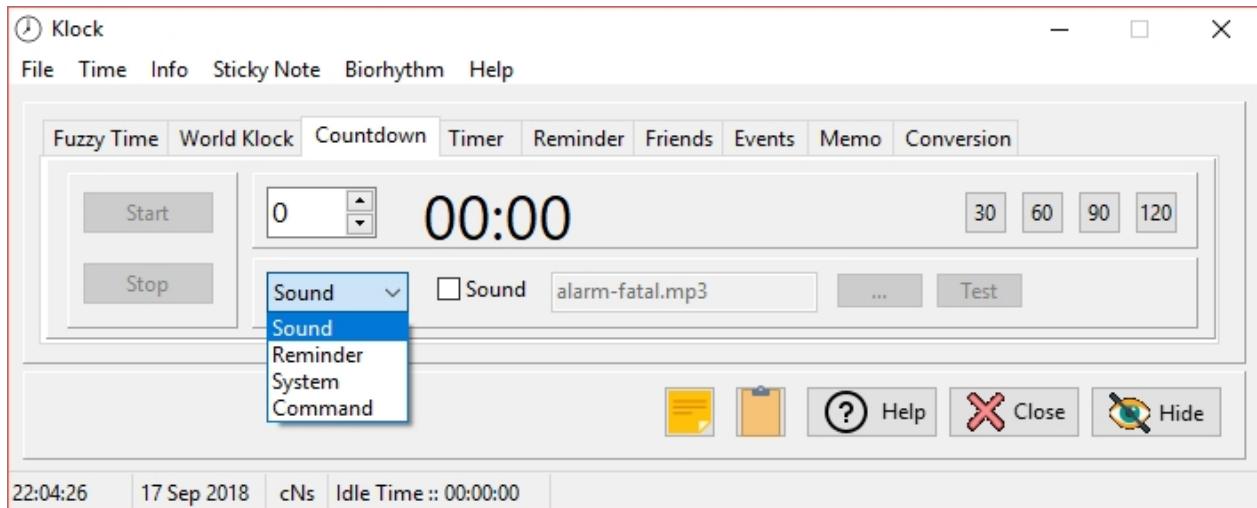
NB : Not all of the fonts are usable - some are numerical only or missing the numerals.

see notes about fonts in [Fuzzy Time](#).

See Status Bar for details on the status bar information.

## Countdown

# Countdown



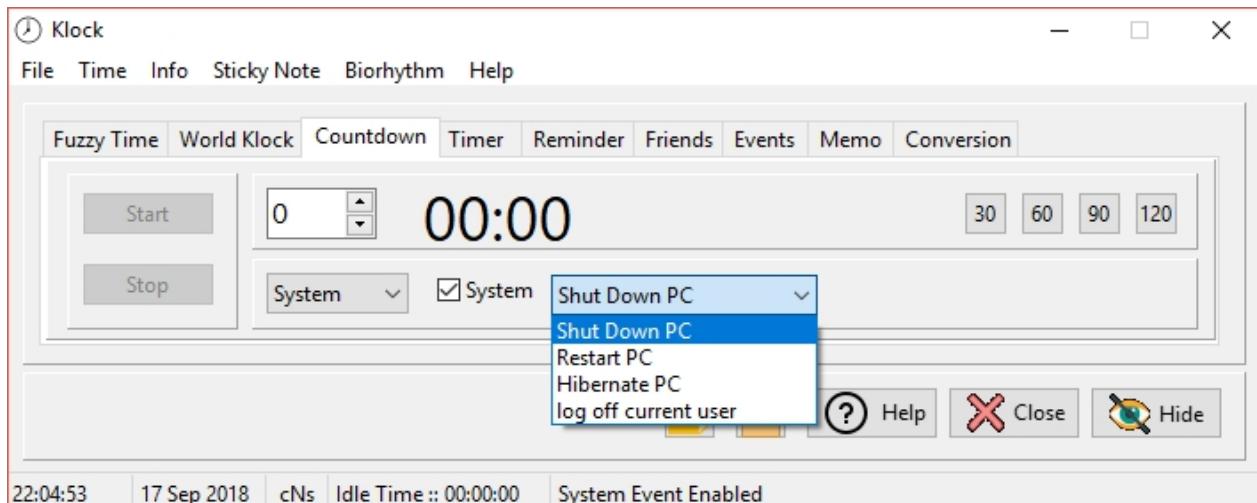
Implements a simple countdown timer thingy [between 1 and 90 minutes].

The time for the countdown can be either entered directly or the up/down controls can be used.

The timer can be paused during countdown and stopped before the end is reached.

At the end of the countdown, the following can be selected :-

- A Sound can be played.
- A Reminder can be displayed.
- A System command can be run [System Shut Down, System Re-Start, Log Off current user or the selectable GUI].
- A External Command can be run.



System command menu.

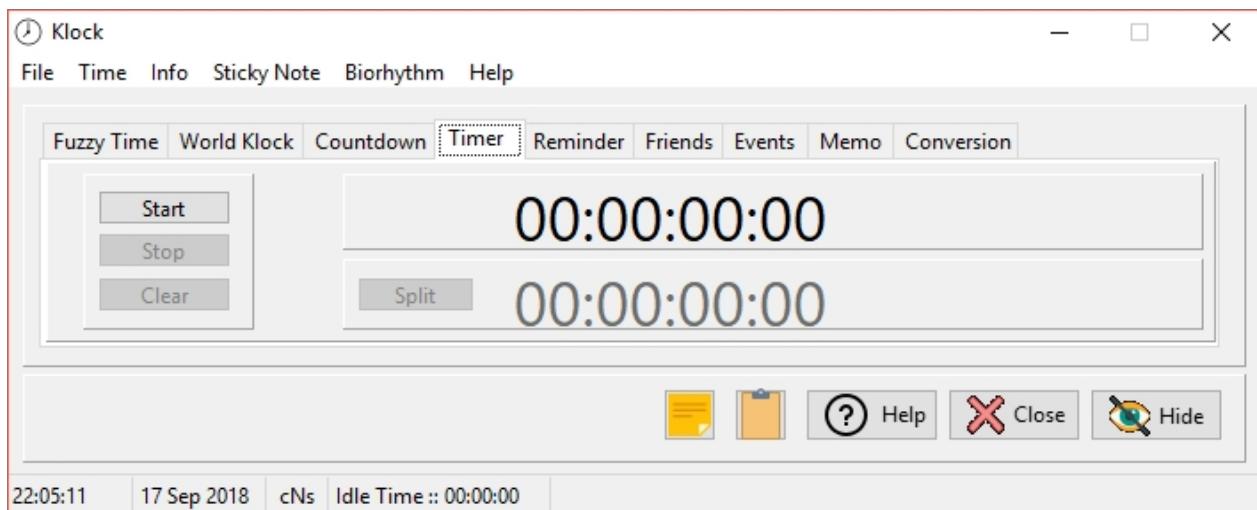
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## Timer

### Timer



Implements a simple timer thingy, with split time function.

The timer can be stopped, paused and resumed.

A split function allows for a given time to be remembered.

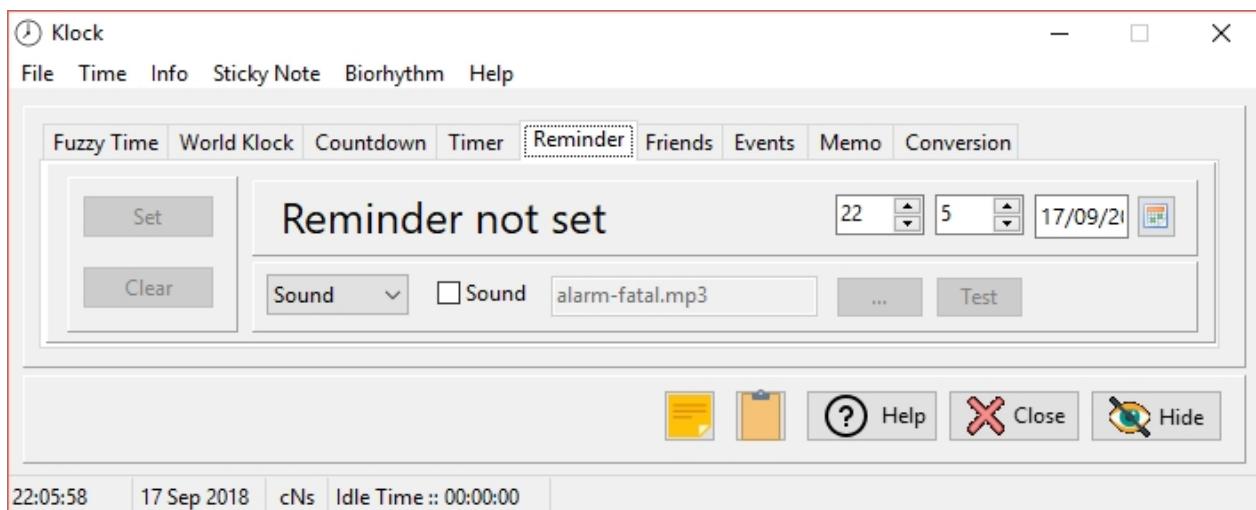
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## Reminder

### Reminder

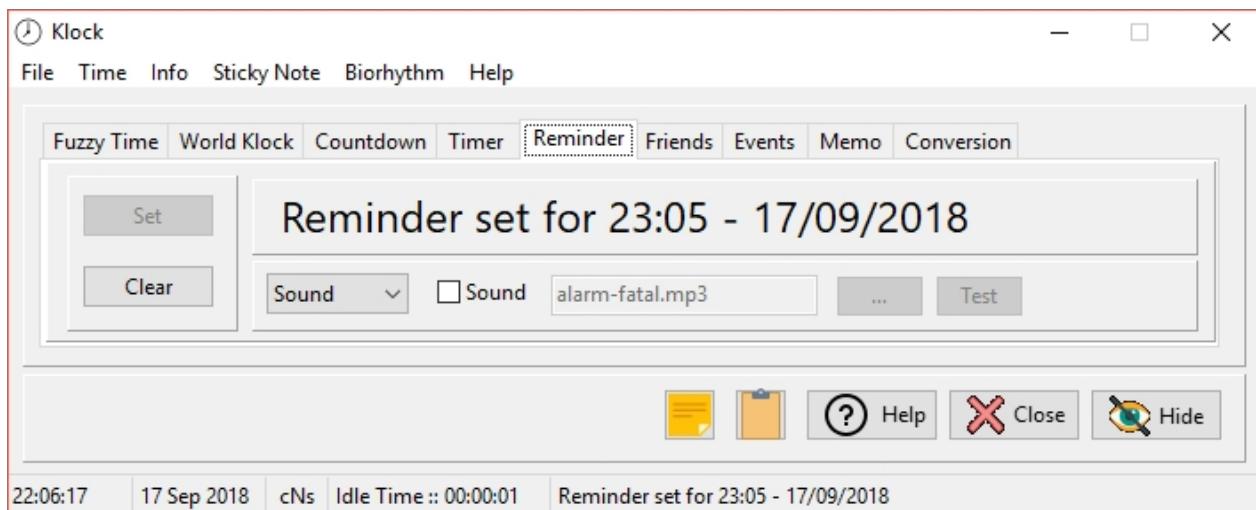


Implements a simple Events database thingy.

This enables for events to set up and notifications displayed to the user.

Today's date is default, but a future date can also be selected. A time can also be added to the reminder date. If no date is added, the reminder will fire at midnight. When the reminder is due either a sound can be played, a reminder displayed, a system command [system shut down or re-boot] or a external program can be run - or any combination of the four.

Note : Setting the time to 00:00, indicates midnight of the previous day so will not enable the set button. To set a reminder for midnight of today, disable the time and pick tomorrow's date. 00:00 indicates zero minutes into the present day.

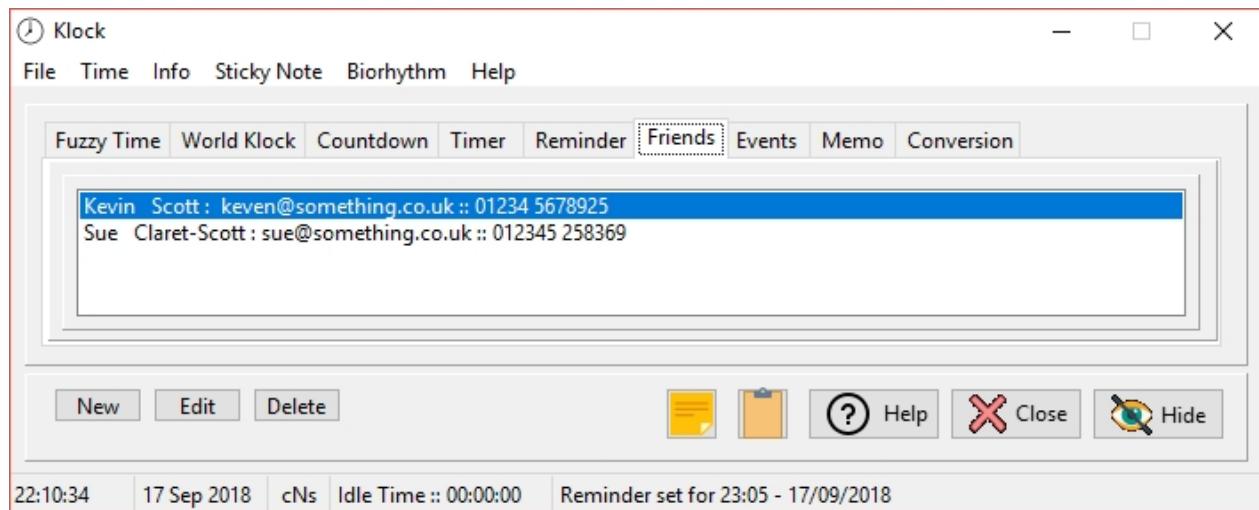


For the options when reminder finished - see [Countdown](#).

## Friends

### Friends

## Klock



This implements a simple friends [contacts] thingy.

The enables friends to be entered, edited and deleted.

Information of the friends can be included i.e. address, email and telephone contact details

When New is clicked the following form is displayed -

The screenshot shows a Windows-style dialog box titled "frmFriendsInput". The form contains the following fields:

- First Name:** Text box (highlighted with a blue border)
- Middle Name:** Text box
- Last Name:** Text box
- Email:** Text box
- Telephone Number:** Text box
- Address:**
  - No.: Text box
  - City:** Text box
  - Line 1:** Text box
  - Post Code:** Text box
  - Line 2:** Text box
  - County:** Text box
  - Country:** Text box
- Home Page:** Text box
- Date Of Birth:** Text box (with a calendar icon showing "15")
- Add to Events:** Check box (unchecked)
- Notes:** Text area (with scroll bars)

At the bottom of the dialog are two buttons: "OK" and "Cancel".

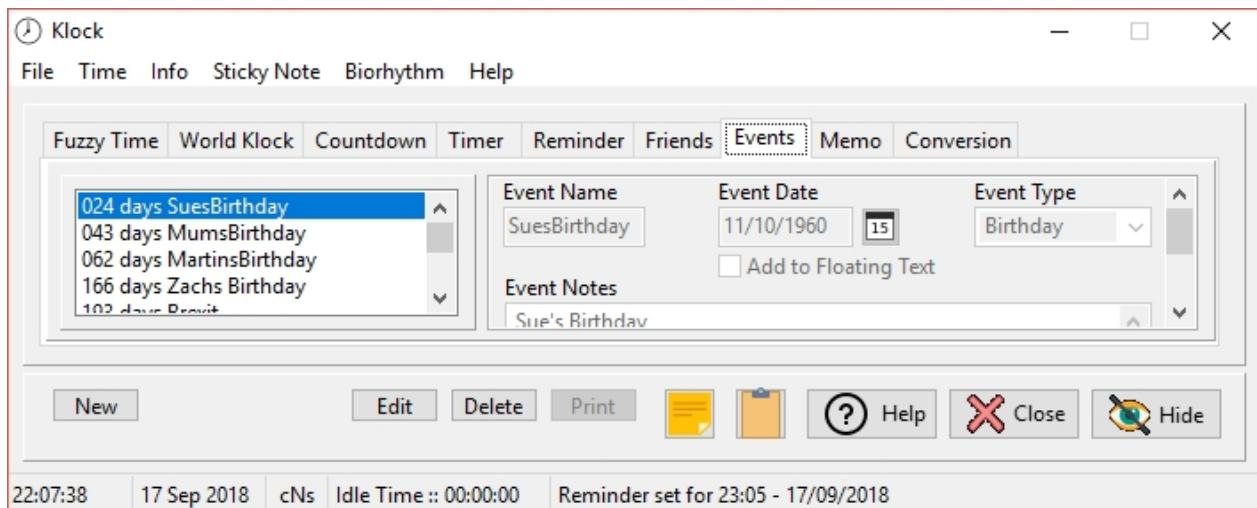
When the data has been entered, press OK to save the data or cancel to abort the save.

Pressing Edit will display the same for, except all the boxes are editable - so the data can be amended.

Pressing Delete will remove the Friend - a warning is displayed.

## Events

### Events



Implements a reminder option thingy.

This allows for events with a due date to be added and Klock will track the interval and when this falls between pre-set limits a prompt will be displayed to the user. The re-set day interval are set to 30, 10 and 5 days, but can be altered in the user options.

The event can be of several types - Birthday, anniversary [wedding] and motor. The prompt will then be customised according to the type.

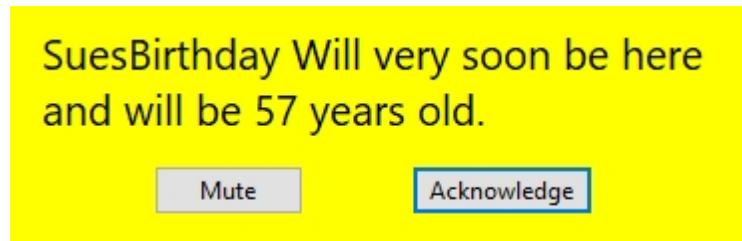
If the event is of type Birthday, the due date should use the birth year - the prompt will then include how old the person is.

If the event is of type Anniversary, Klock will assume Wedding Anniversary, the due date should use the year of the marriage - the prompt will then include what type of wedding anniversary it is.

All other type should use the year of the event. i.e. future year.

To add a new event, click on new and enter the details.

a example on an event.



Mute the event will clear the event, but it will be displayed again on the next cycle.

Acknowledge the event will clear the event and it will not be displayed until it hits the next aged band.

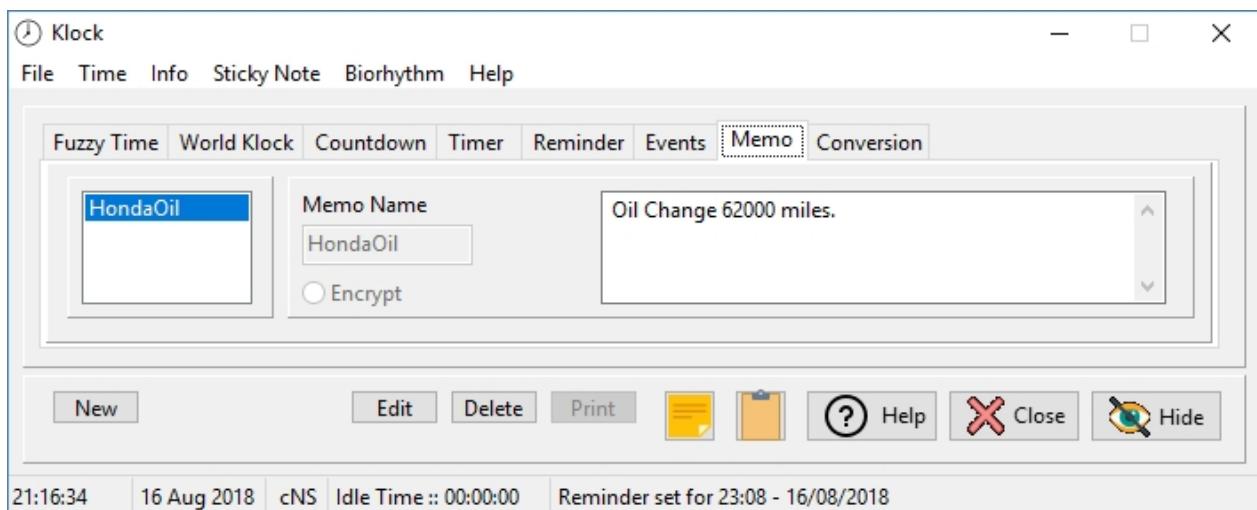
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## Memo

### Memo

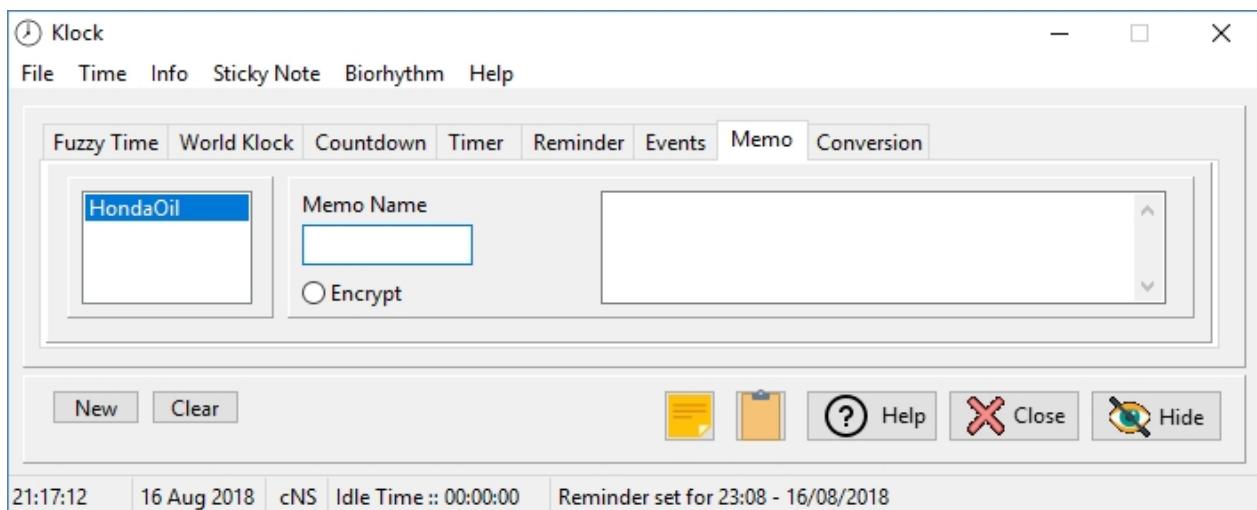
## Klock



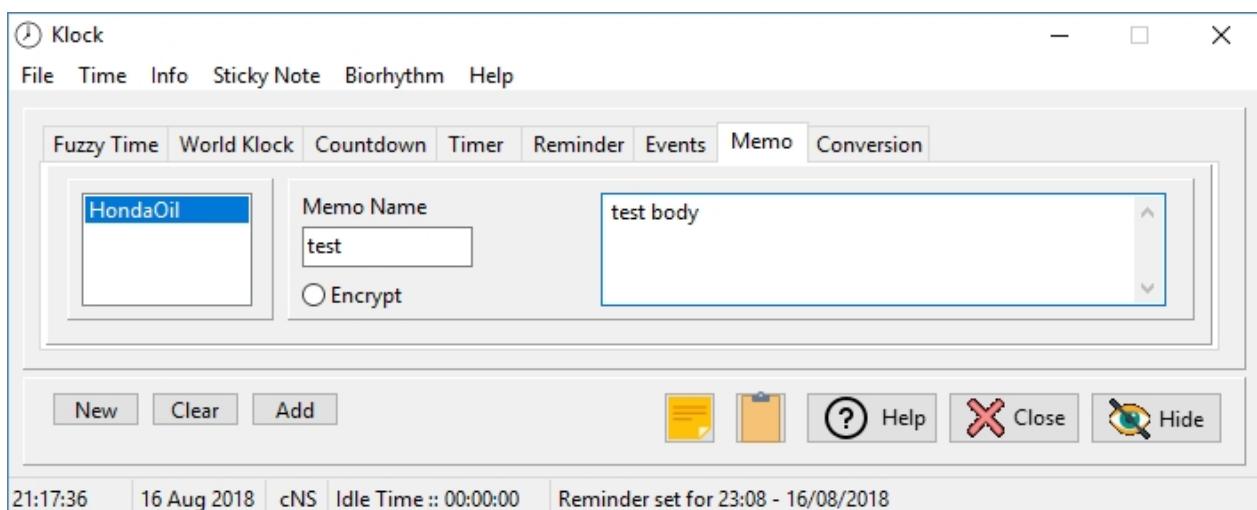
Implements a simple memo thingy, with split time function.

This will allow memo's to be entered, edited, printed and saved. Any previously saved memos will be loaded into Klock on start-up. The memos can be optionally encrypted and only be displayed on demand.

To add a new memo, click on New.



Enter Memo name and the body text, also select if the memo should be encrypted or not. The add button will appear when there is text in both name and body.



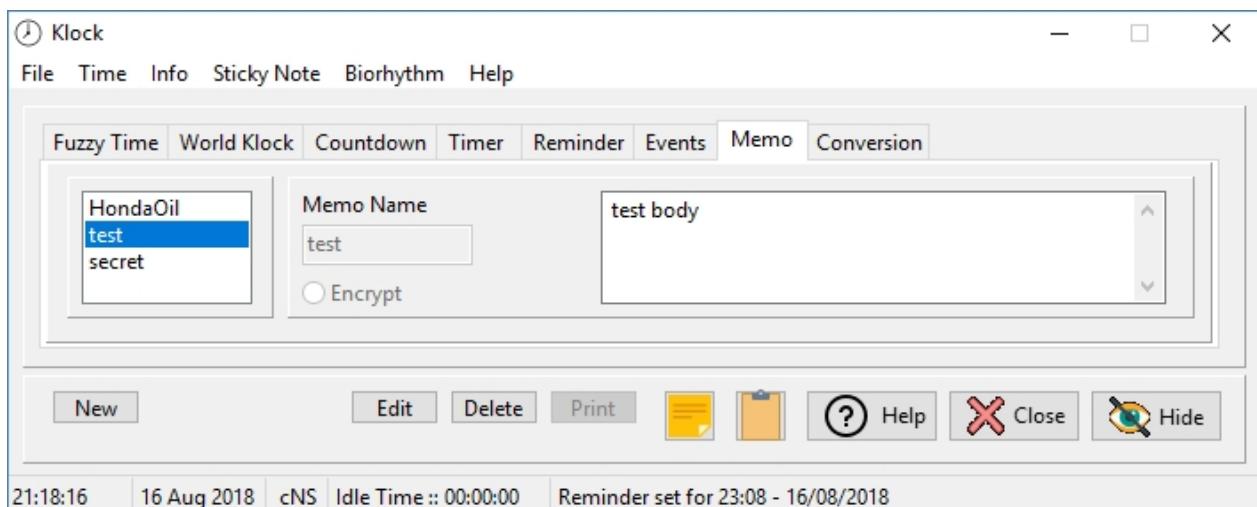
Once a memo has been entered and is visible in the list on the left, it can then be then be edited, deleted and printed.

Edit - allows the body and encryption mode to be amended - but not the name. Editing an encrypted memo, will allow the original memo body text to be viewed until the Save button is selected.

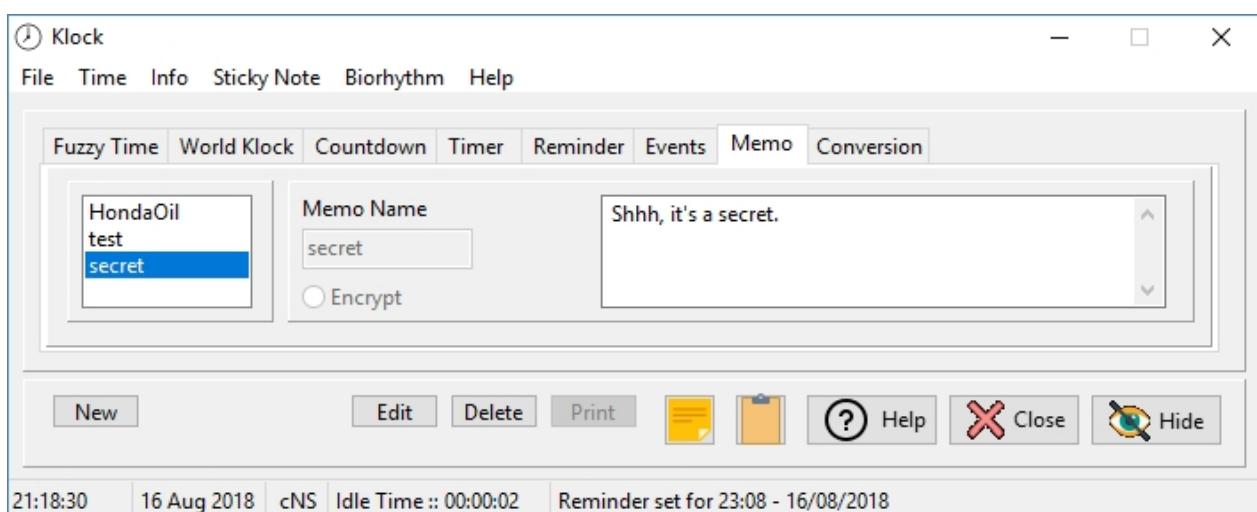
Delete - allows the memo to be deleted.

Print - allows the memo to be printed [Not yet implemented].

A plain memo.



A Encrypted memo.

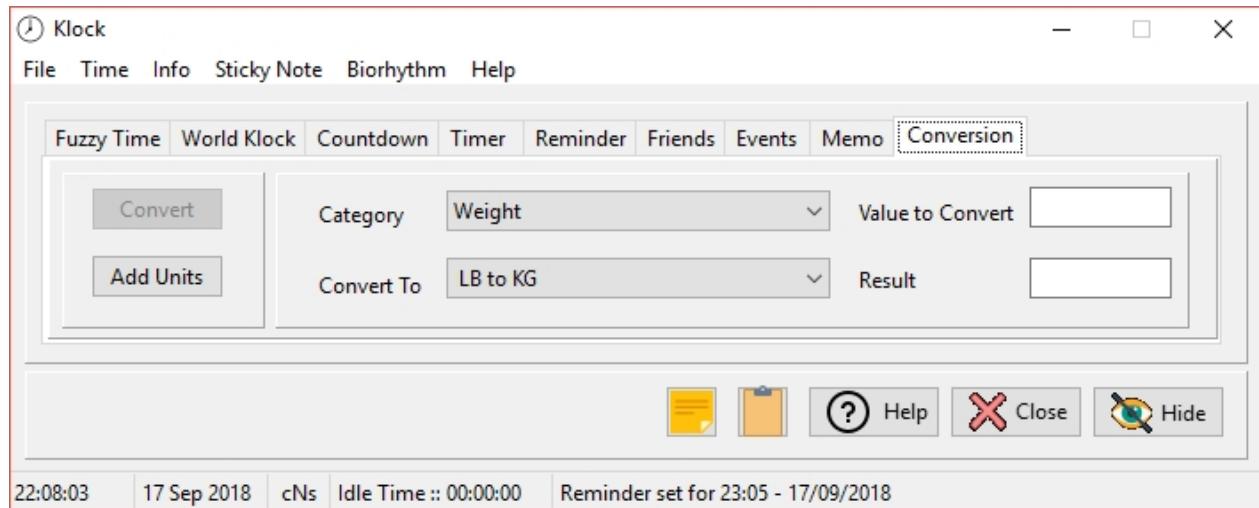


Clicking on the Decrypt button will display the original memo body text fro 30 seconds before reverting to the secret message.

The default password and time out period are selectable in user options.

## Conversion

# Conversion



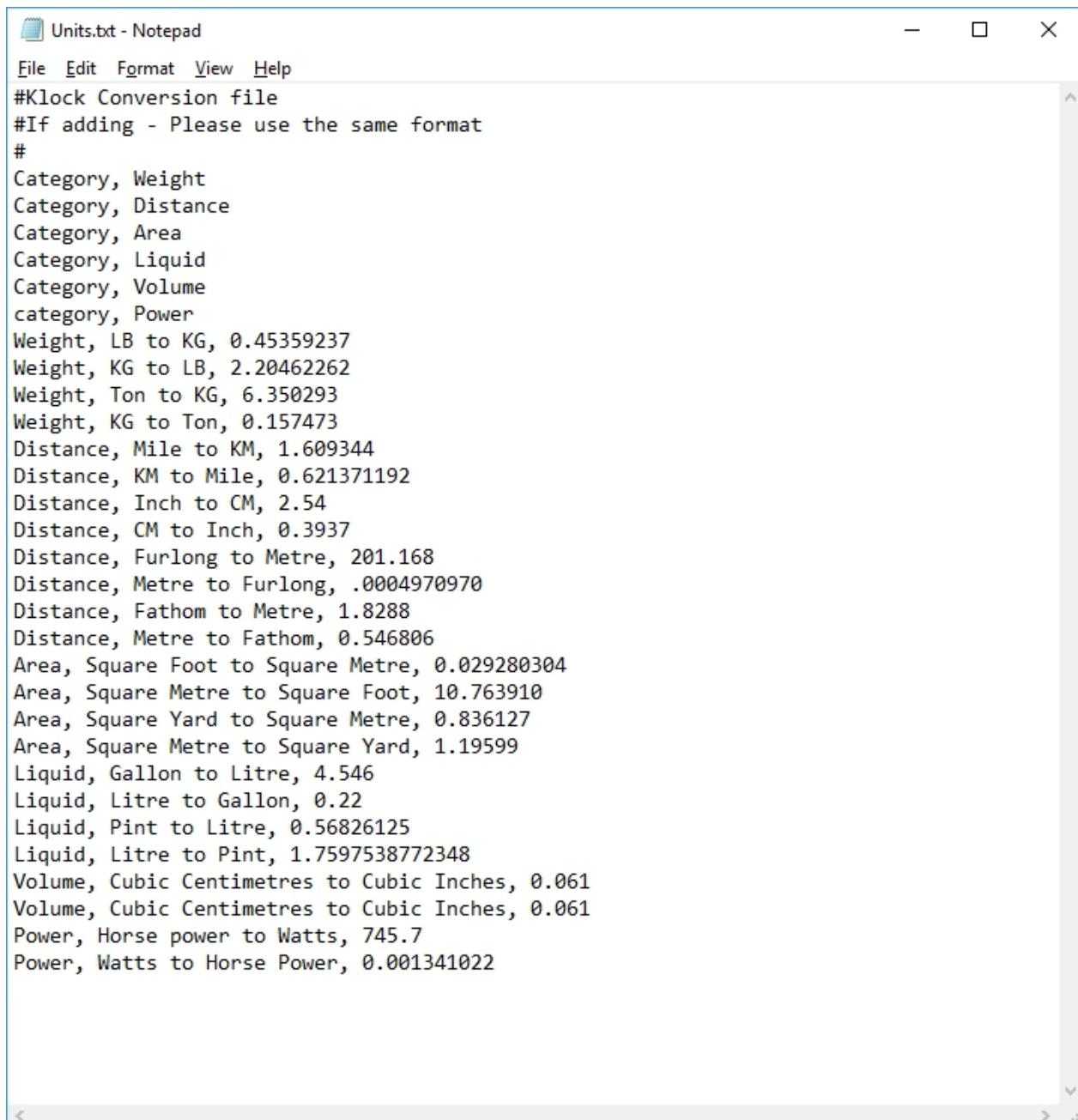
Implements a simple Conversion thingy.

Chose the desired category - Weight, Distance, area, Liquid or Volume.  
Then choose the required conversion i.e. LB to KG to convert pounds to Kilograms.  
Enter the value to convert. If this numerical, then the convert button will be enabled.  
Click on Convert to carry out the conversion.

The Categories, Units etc. are held in a simple text file, which will be created if it does not exist in the users data area [same as options file].

This file is loaded into notepad if the Add Units buttons is clicked - this allows for more conversion to be added.

Note - the format of the text file must be adhered to.



The screenshot shows a Windows Notepad window with the title 'Units.txt - Notepad'. The window contains a list of conversion factors, likely for a software called Klock. The list includes categories like Weight, Distance, Area, Liquid, Volume, and Power, along with specific conversion ratios. The text is as follows:

```

File Edit Format View Help
#Klock Conversion file
#If adding - Please use the same format
#
Category, Weight
Category, Distance
Category, Area
Category, Liquid
Category, Volume
category, Power
Weight, LB to KG, 0.45359237
Weight, KG to LB, 2.20462262
Weight, Ton to KG, 6.350293
Weight, KG to Ton, 0.157473
Distance, Mile to KM, 1.609344
Distance, KM to Mile, 0.621371192
Distance, Inch to CM, 2.54
Distance, CM to Inch, 0.3937
Distance, Furlong to Metre, 201.168
Distance, Metre to Furlong, .0004970970
Distance, Fathom to Metre, 1.8288
Distance, Metre to Fathom, 0.546806
Area, Square Foot to Square Metre, 0.029280304
Area, Square Metre to Square Foot, 10.763910
Area, Square Yard to Square Metre, 0.836127
Area, Square Metre to Square Yard, 1.19599
Liquid, Gallon to Litre, 4.546
Liquid, Litre to Gallon, 0.22
Liquid, Pint to Litre, 0.56826125
Liquid, Litre to Pint, 1.7597538772348
Volume, Cubic Centimetres to Cubic Inches, 0.061
Volume, Cubic Centimetres to Cubic Inches, 0.061
Power, Horse power to Watts, 745.7
Power, Watts to Horse Power, 0.001341022

```

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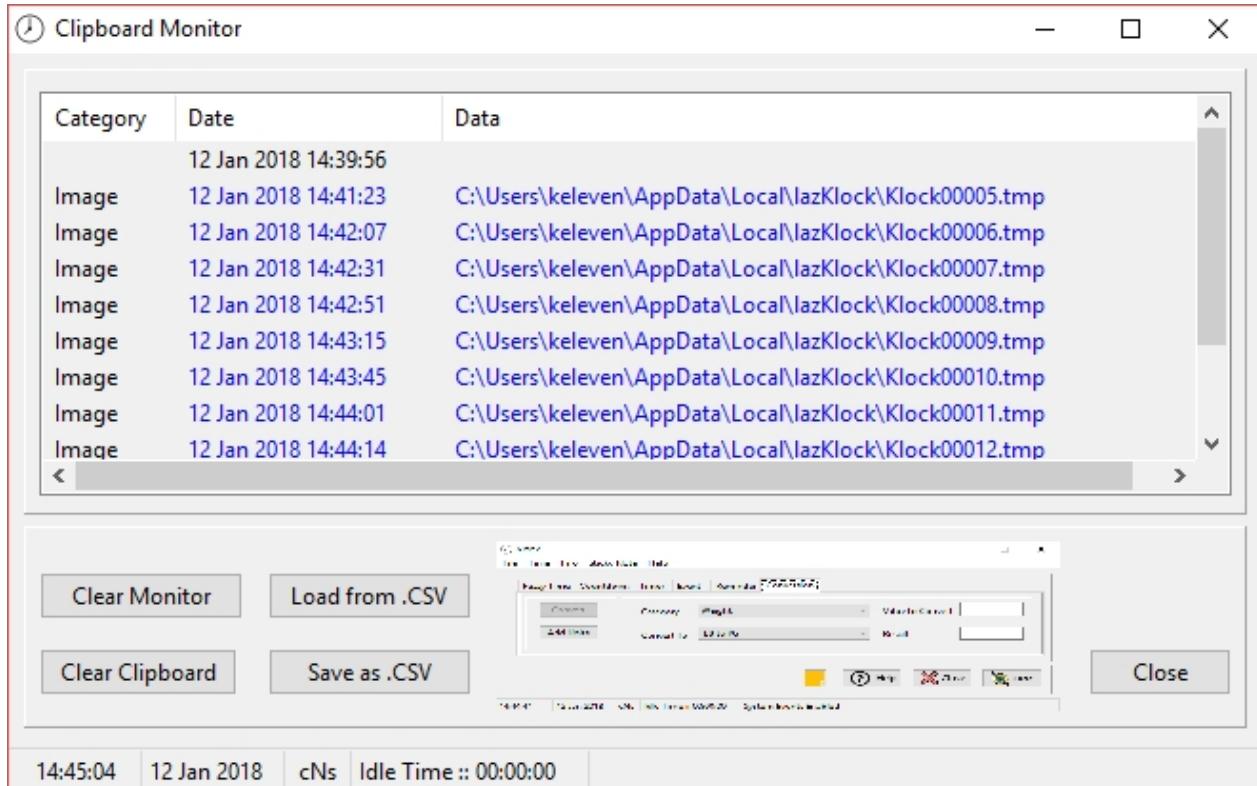
## Clipboard Monitor

# Clipboard Monitor

Implements a simple Clipboard Monitor Thingy.

There is not a klock tab for the clipboard monitor, when enabled in options / Global, the below form will be

displayed whenever anything is copied to the clipboard.



The Clipboard manager remembers all things copied to the clipboard, remembers the history of the clipboard.

The options are thus.

- Clear Clipboard - clears the system clipboard.
- Close - Closes the clipboard, but not stop the clipboard monitor.
- Save - Save the clipboard history to a file [Not yet implemented].
- Load - Loads the clipboard history from a file [Not yet implemented].

Once something has been copied back to the clipboard it can then be pasted into any open application.

Selecting a row with the mouse copied the data to the clipboard.

The clipboard history can be either save as CSV or Binary format, this is selected in user options. If saved as CSV format the file can be edited [amended] easily. In CSV format multiple commas should be okay but line endings could cause a problems. In Binary mode, the file can not be easily edited so should be more secure. Also, in Binary mode multiple commas and line ending are handled better.

NOTE : there seems to be an issue with saving images to the clipboard, the clipboard does not know where the image came from i.e. no file location. This means there is a problem retrieving the image from the clipboard history. One solution is to make a temporary copy of the image for late retrieval. The temporary image is saved in the user applications directory within the users data area. Also the image is saved in the .jpg format at the moment, will change when I can determine a way on detecting the format of the original image :-)

When Klock starts it scans all such tmp files and deletes all older than 10 days.

## Menu

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There are separate Menus for

- File
- Time
- Info
- Sticky Note
- Help

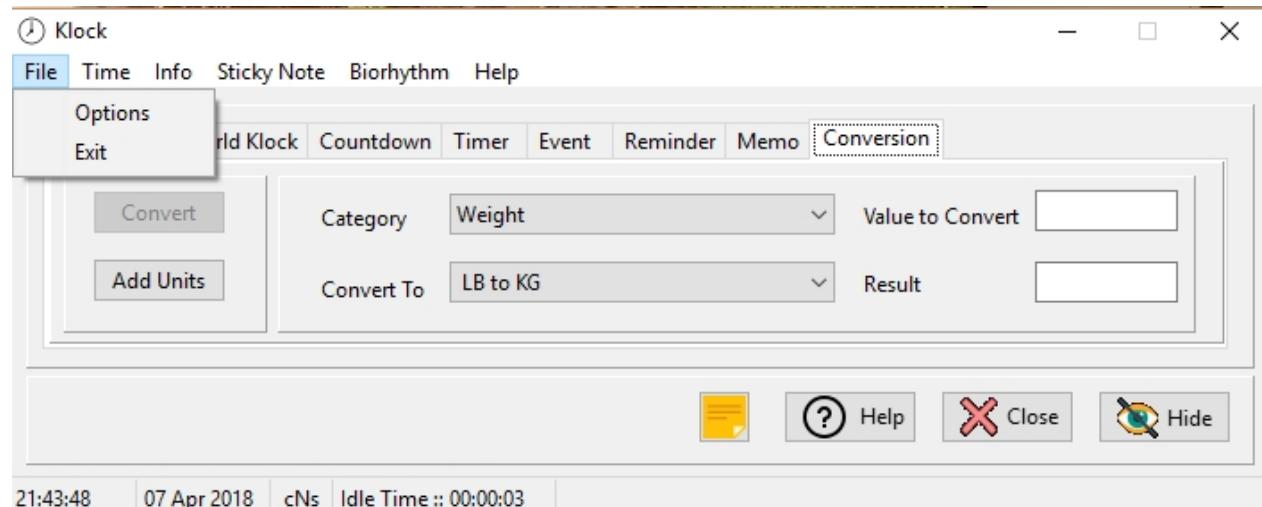
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## File

### File



Allows selection of

- Exit - exist Klock.
- Options - loads the options screen.

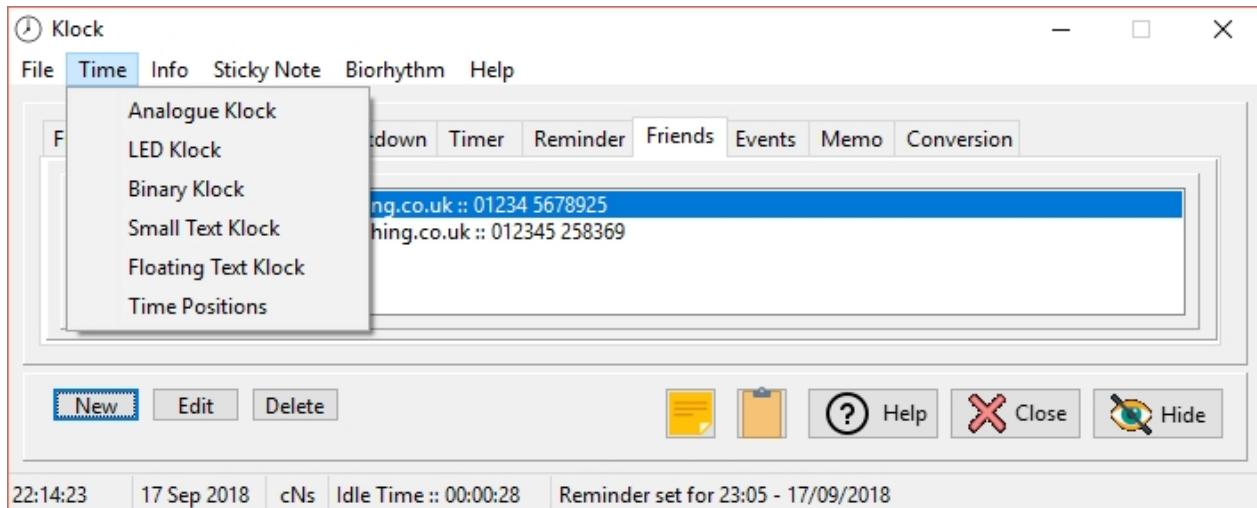
---

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## Time

### Time



Allows selection of

- Analogue Klock - display a Analogue Klock [Time & Date] in a separate window, the moving main Klock to the system tray.
- LED Klock - displays a LED Klock in a separate window, moving the main Klock to the system tray.
- Binary Klock - displays a Binary Klock in a separate window, moving the main Klock to the system tray.
- Small Text Klock - display a Text Klock [Time] in a separate window, moving the main Klock to the system tray.
- Floating text Klock - displays the current time only as an apparent floating text string.
- The application contains a Time Positions Screen. This allows the screen co-ordinates of the extra klocks to be manually amended. There is a bug [Windows feature?] where they can appear of screen i.e. where monitors are added or resolution is changed

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### [Analogue Klock](#)

### Analogue Klock



Selecting the Analogue Klock option from the Time menu, display the above Analogue Klock.

Right clicking on the Analogue Klock, brings up a context menu.



This will allow the Analogue Klock to be exited to the main klock [main Klock is loaded], or the About screen can be loaded.

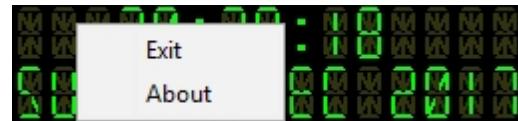
## LED Klock

## Analogue Klock



Selecting the LED Klock option from the Time menu, display the above LED Klock.

Right clicking on the LED Klock, brings up a context menu.



This will allow the LED Klock to be exited to the main klock [main Klock is loaded], or the About screen can be loaded.

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## **Binary Klock**

## Big Text Klock

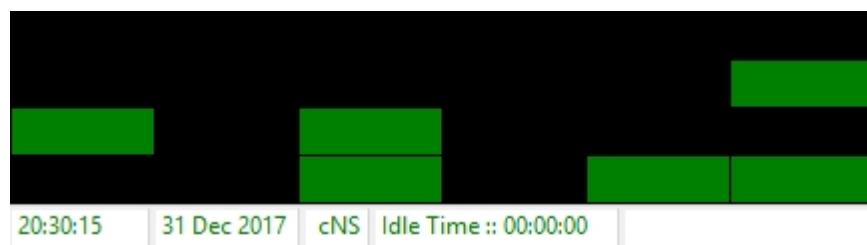
Selecting the Binary Klock option from the Time menu, display the above Binary Klock.

The Binary klock has two modes - BCD or True Binary. This is set in user options

Binary Coded Decimal - takes each two digit number [hours, minutes & seconds] and codes them as two binary string.

True Binary - takes each two digit number [hours, minutes & seconds] and codes them as a single binary string

### BCD Klock

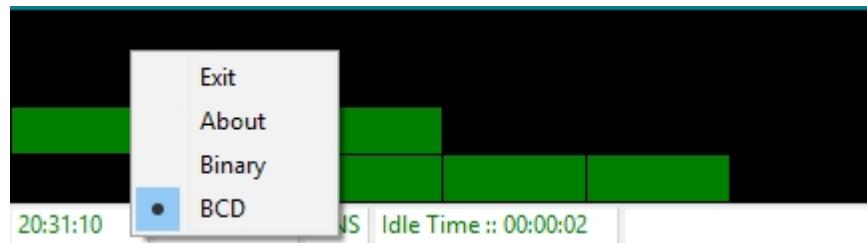


### True Binary Klock



See Status Bar for details on the status bar information.

Right clicking on the Binary Klock, brings up a context menu.



This will allow the LED Klock to be exited to the main klock [main Klock is loaded], the About screen can be loaded or the Klock can be toggled between Binary and BCD displays.

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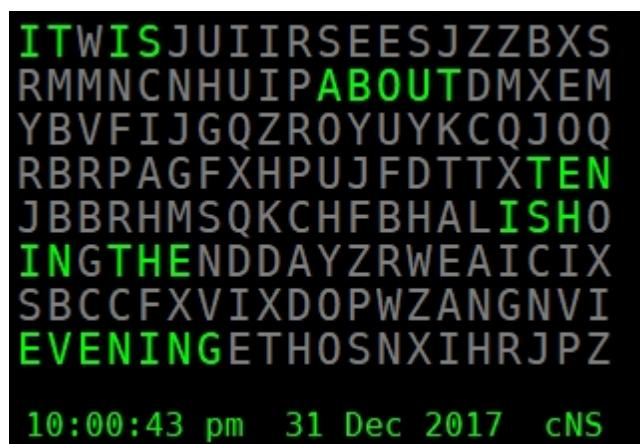
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## **Small Text Klock**

## Small Text Klock

Selecting the Small Text Klock option from the Time menu, display the above Small Text Klock.



See Status Bar for details on the status bar information.

Right clicking on the Big text Klock, brings up a context menu.



This will allow the Small Text Klock to be exited to the main klock [main Klock is loaded], the About screen can be loaded or the Klock can be toggled between transparent or solid.

Clicking the transparent option.




---

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## Floating Text Klock

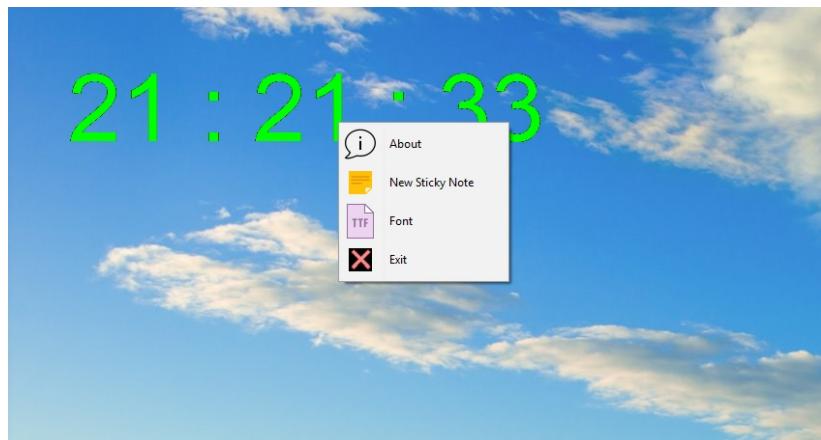
### Floating Text Klock



The Floating Text Klock

The Floating Text Klock by default, change in user options, takes the time format and font from the main Klock. But the font can be changed from within the floating Klock.

This will allow the Floating Text Klock to be exited to the main klock [main Klock is loaded], the About screen can be loaded, the font be cahnged or the Klock can be toggled between transparent or solid.



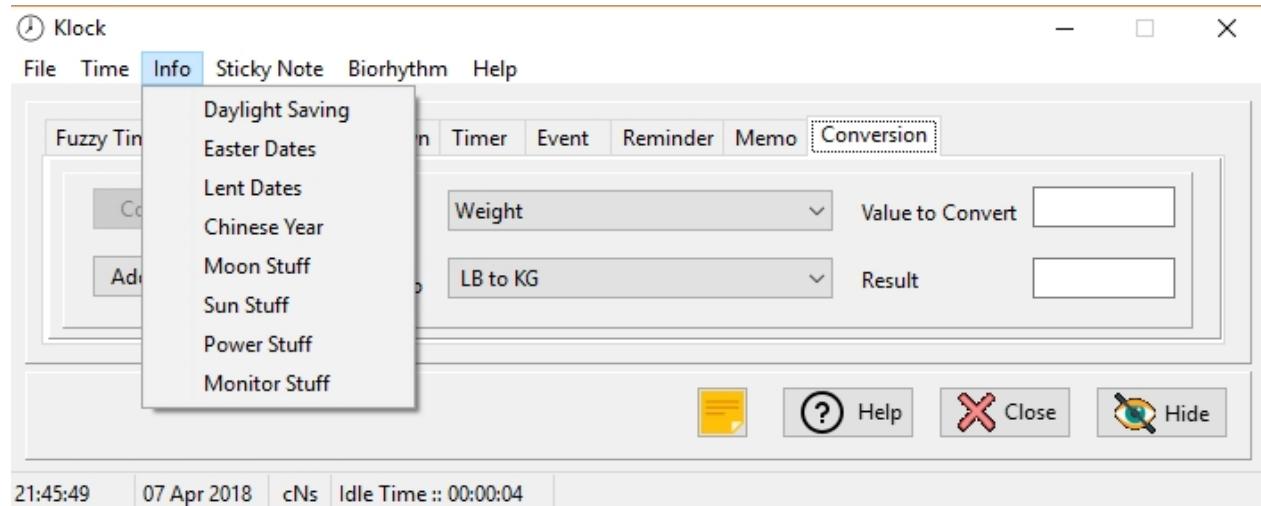

---

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---

## Info

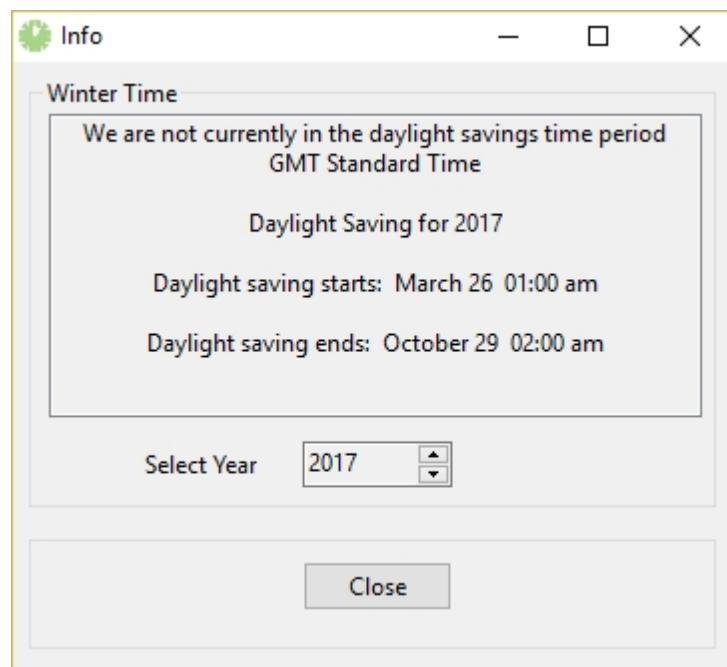
### Info



This allows the selection of

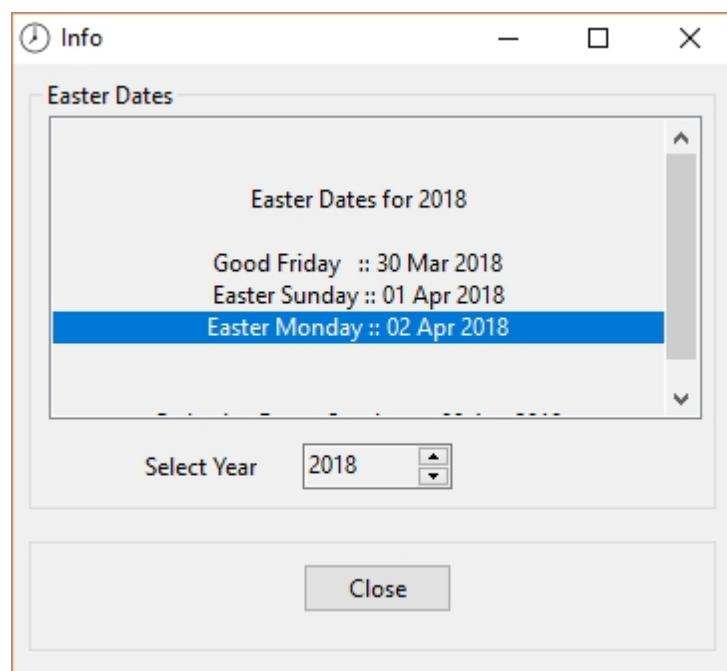
- Daylight Saving
- Easter Dates
- Lent Dates
- Chinese Year
- Moon Stuff
- Sun Stuff
- Power Stuff

On Daylight Saving, Easter, Lent Dates and Chinese Year the year can be changed. This allows the daylight saving, Easter and lent Dates to be displayed for any year.



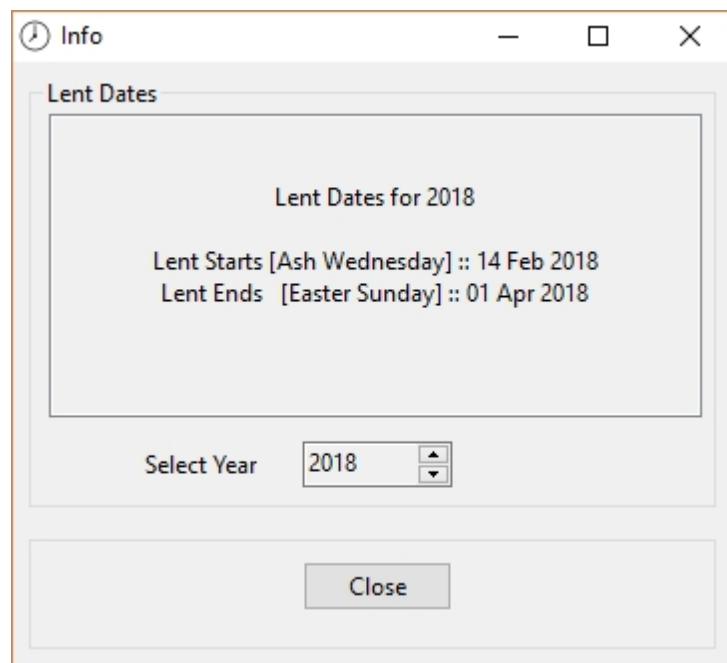
Select Year

Daylight Saving Information



Select Year

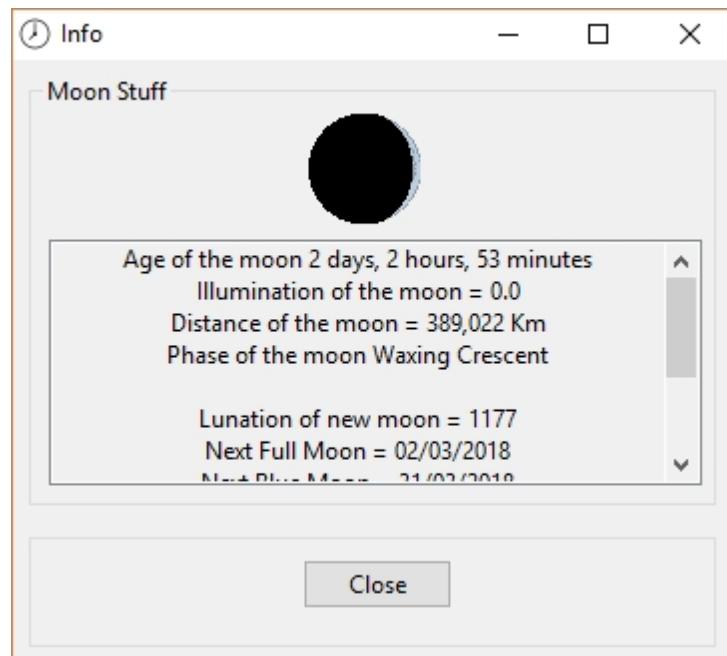
Easter Dates



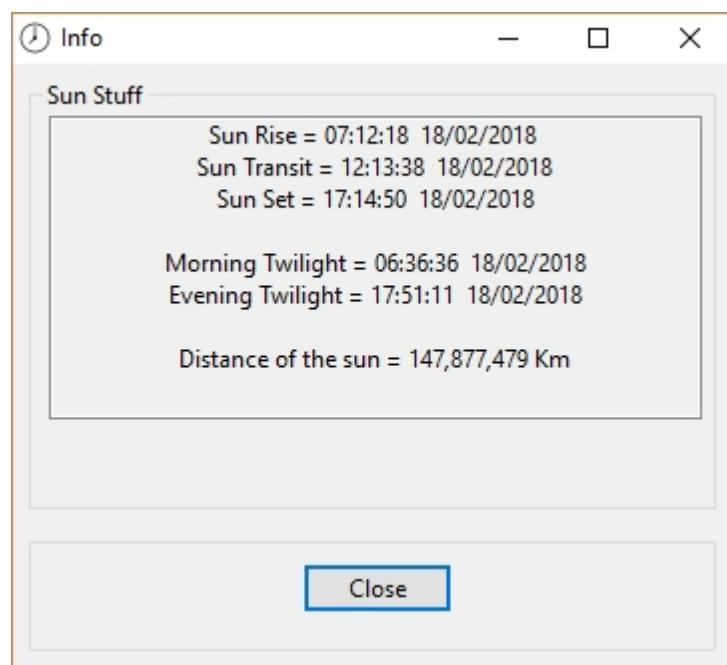
Lent Dates



Chinese year

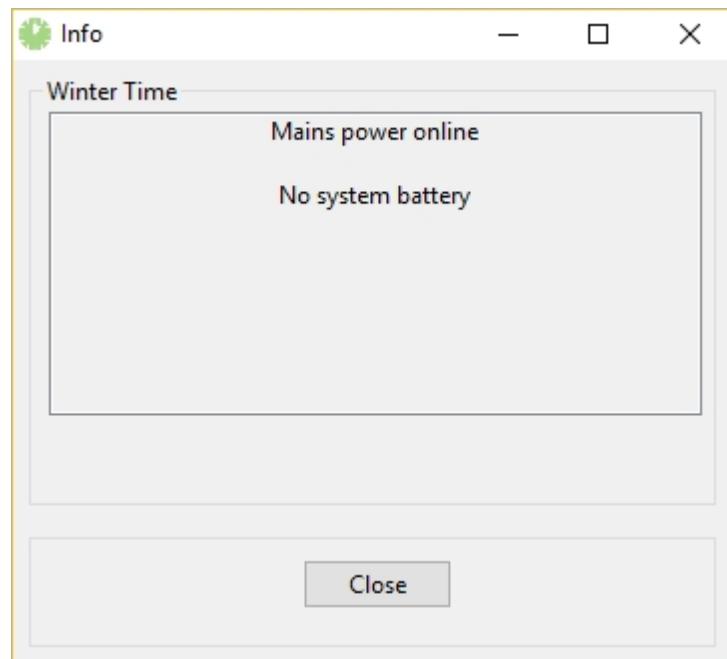


Moon stuff

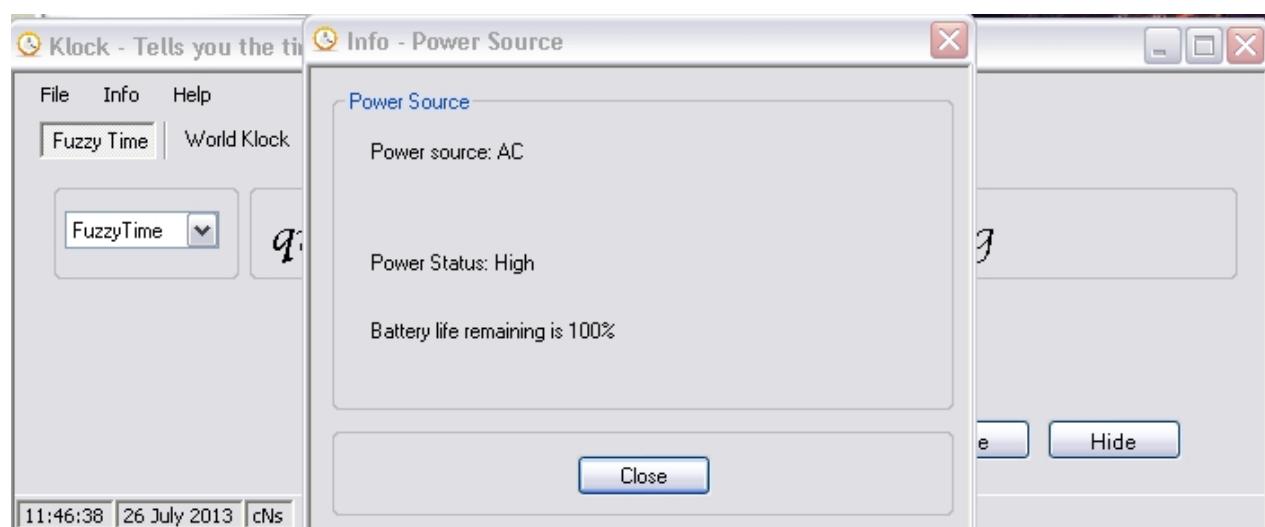


Sun Stuff

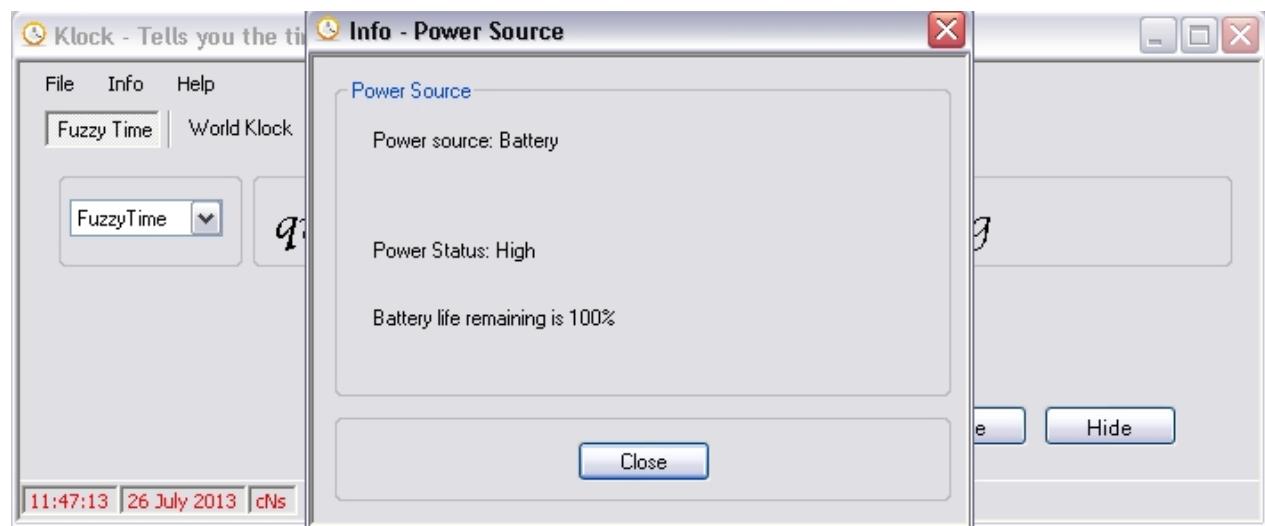
## Klock



Power Source information [PC running on mains]

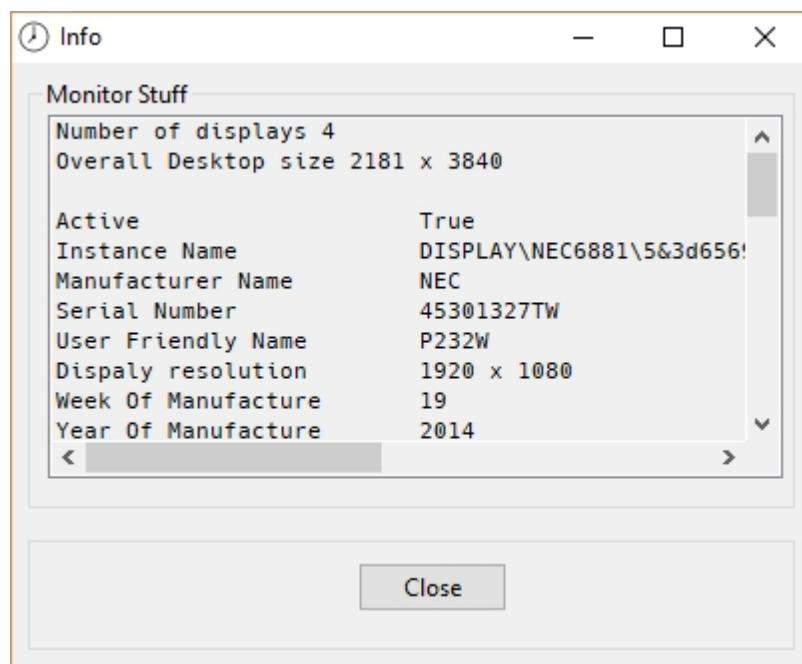


Power Source Information [laptop running on mains]



Power Source Information [laptop running on battery]

note : red colour of time & date on main form.



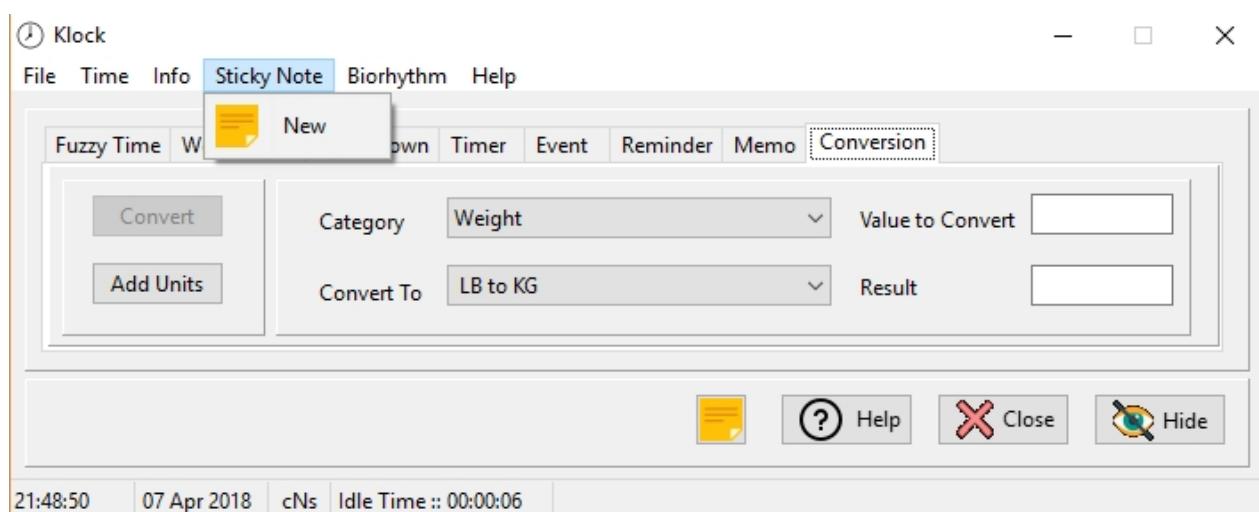
Display information about all monitors connected to the PC.

---

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## Sticky Note

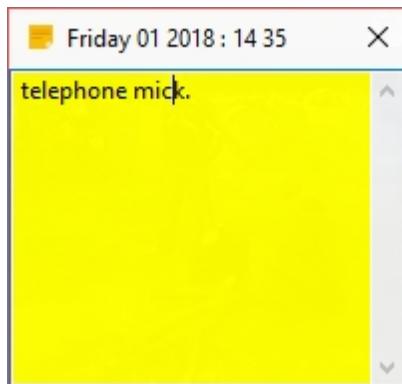
### Sticky Note



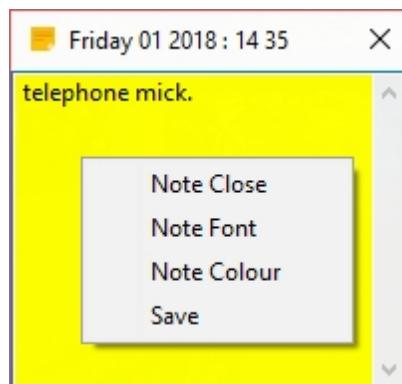
A Sticky Note can be created in either one of two ways.

- From the menu option.
- From the quick launch button on the lower main screen.

Both of these methods create the following -



The Note can further be customised by accessing the pop up menu, right click on the Sticky Note.



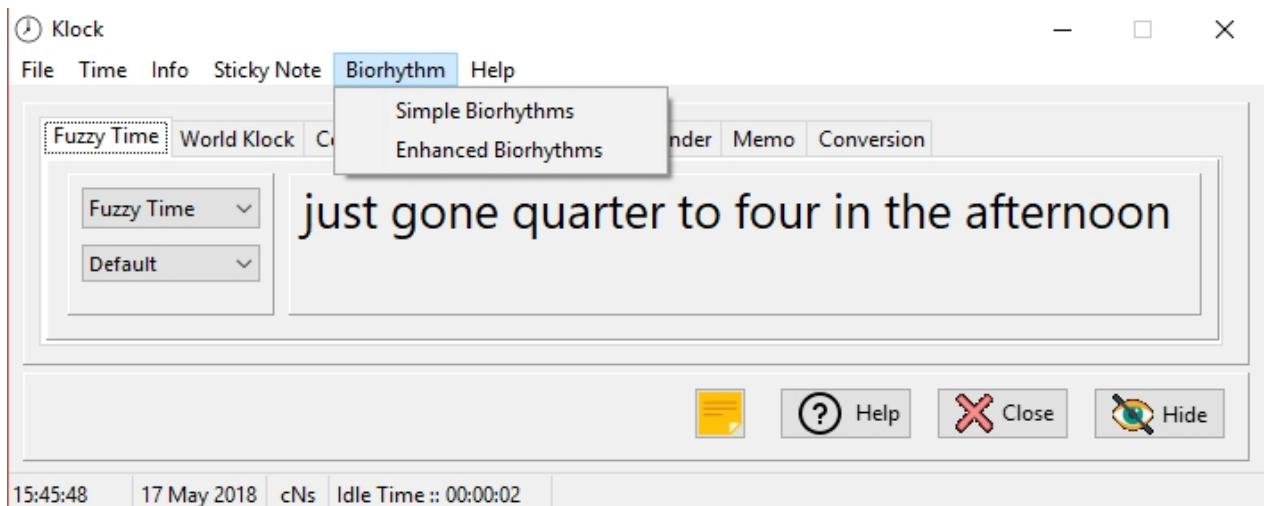
This gives the following options.

- Note Close - The closes the Sticky Note.
- Note Font - This changes the font for the complete Sticky note. The font colour is also amended using this option.
- Note Colour - This changes the background colour of the sticky Note.
- Note Save - This save the Sticky Note [in fact all visible Sticky notes] information to a data file.

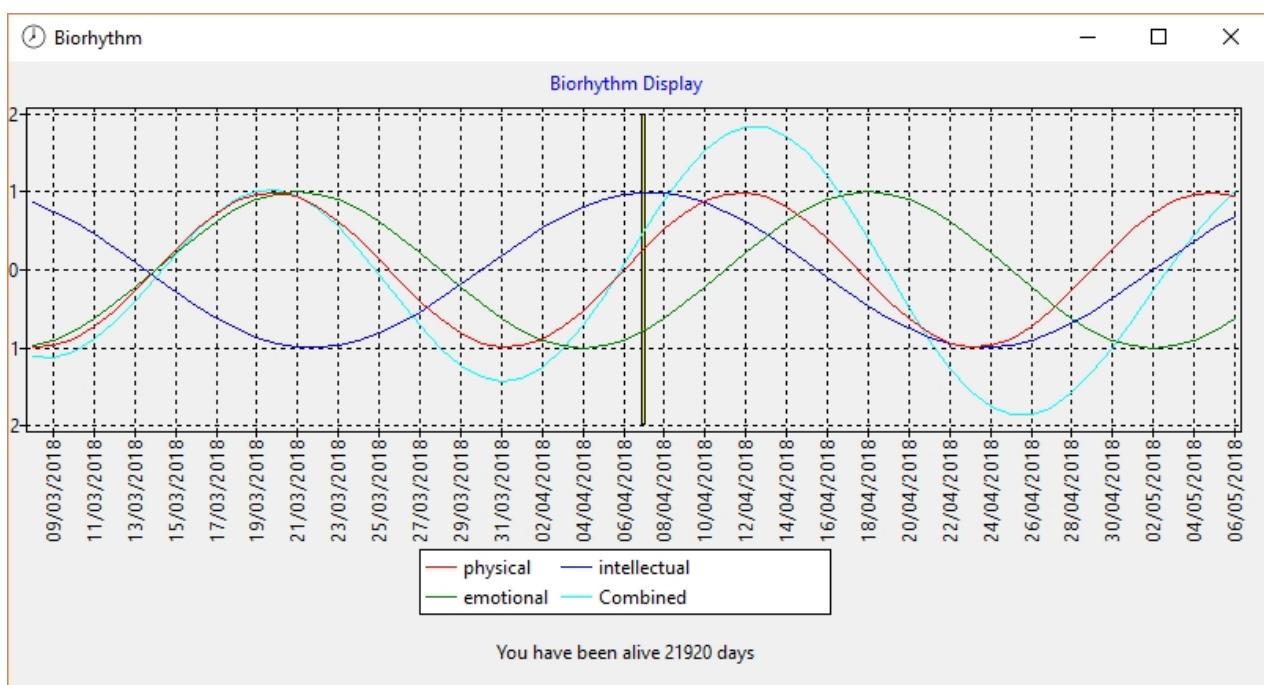
All visible Sticky Note information is saved to the data file every hour or when Klock closes, but can be forced by the above menu option. So when klock is first launched all active Stick Notes from the last session will be auto created.

Each active sticky Note will fade into the desktop, but will re-appear when the mouse moves across the Sticky Note.

## Biorhythm



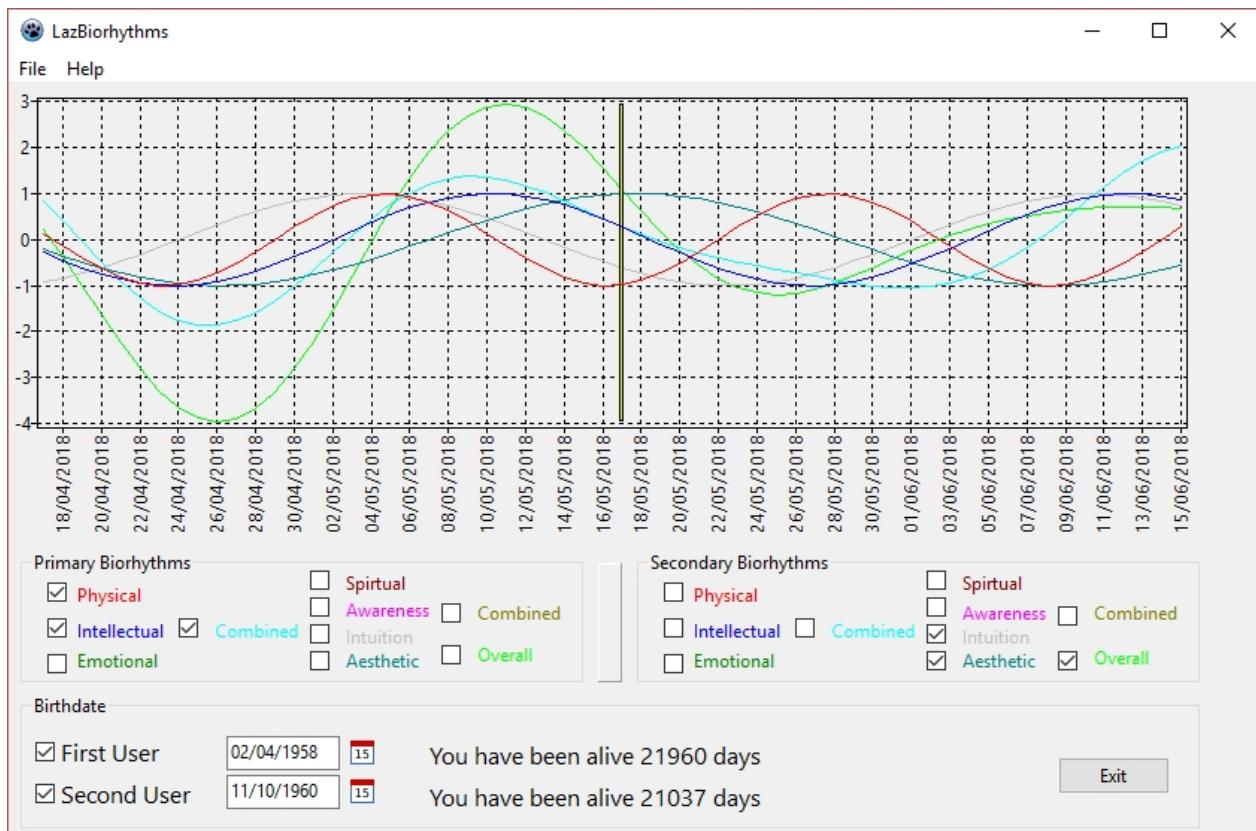
## Simple Biorhythm



Implements a simple Biorhythm chart.

The birth date is used from User Options [Sticky Notes, Memo, Monitor Sleeping and BirthDate].

## Enhanced Biorhythm



Implements a more enhanced Biorhythm Chart.

The Biorhythms of two people can be plotted and displayed.

A second set of curves can also be plotted [Spiritual, Awareness, Intuition & Aesthetic] along with the more regular curves [Physical, Intellectual & Emotional].

Both the primary and secondary plots can be combined into a single curve. All seven plots can be combined into an overall curve.

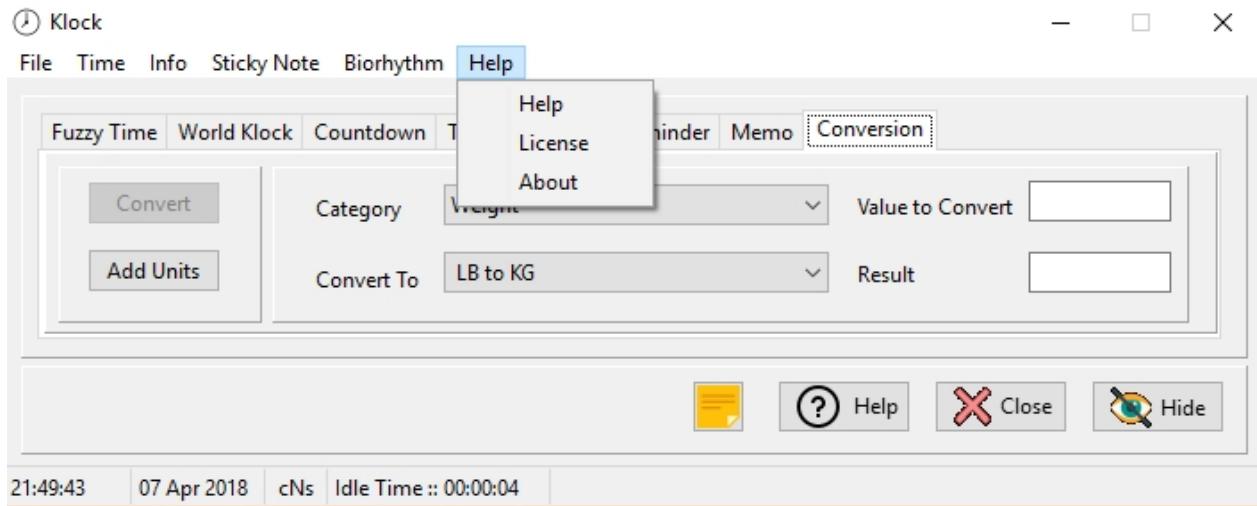
The total number of days alive is also displayed for each user.

---

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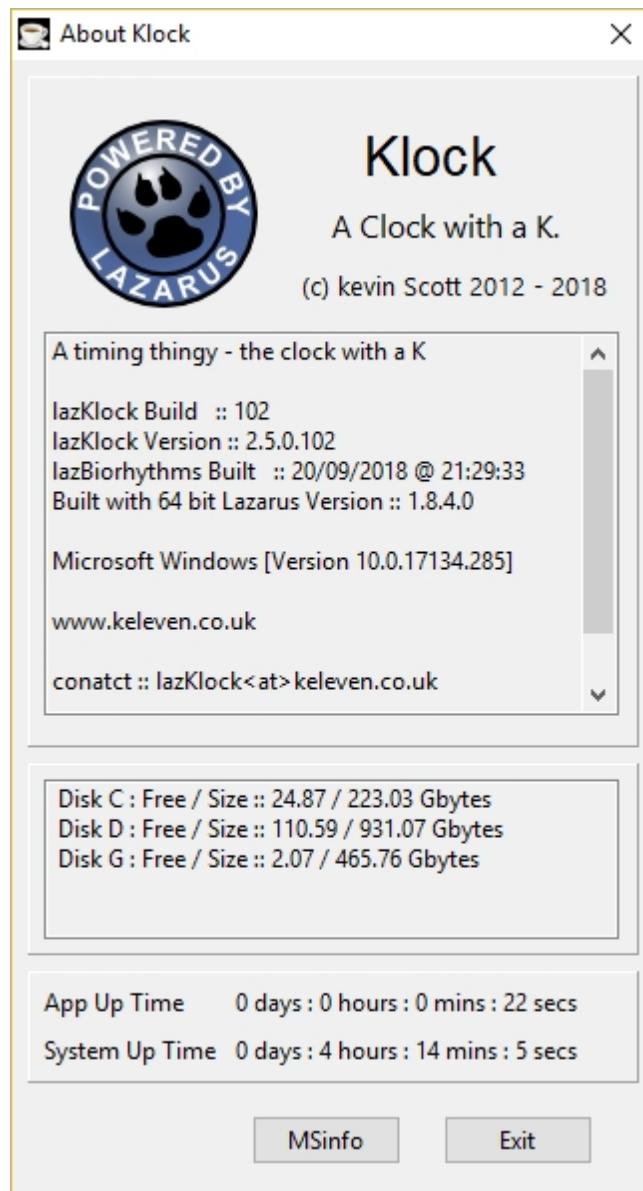
## Help

## Help



This allows the selection of

- Help - Loads this Help document
- Licence - loads the License information [GNU General Public License V3].
- About - Loads About application information i.e. application version.



---

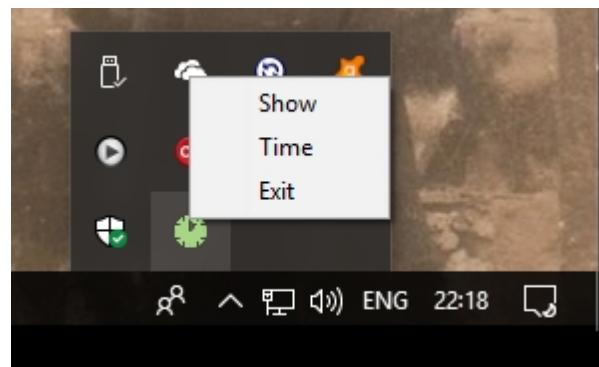
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## System Tray

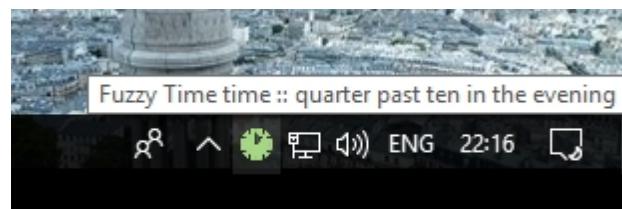
---

### System Tray

When the program is running in the system area, the following options are available.



If hovered over, the current time will be displayed. If two time formats are in use, only time one is used.



Right clicked on the icon will display a pop up menu.

- Show - Restore Klock
- Time - Toggle the display of time
- Exit - Close Klock.

If the application is in the task bar, any display messages [i.e. a reminder becoming due] will be displayed in a notification window [as will errors etc].

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## **Status bar**

### Status Bar



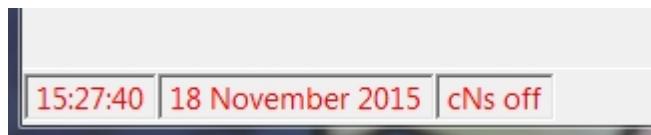
The status bar contains [after the the time & date] the legend cns.

The c represents Caps lock.

The n represents Num Lock.

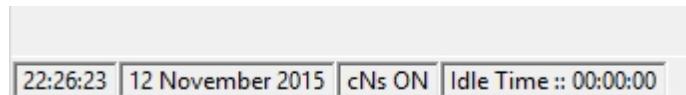
The S represents Scroll Lock.

The ON represents connected to the internet. A OFF would indicate disconnected from the internet.  
The letter will be upper case if the key is activated, otherwise lower case.



If the running PC [Laptop] is running on battery - the colour will turn to red.

If idles time is being displayed -




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## Options

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The application also contains a options screen [file / Options] which allows various options to be set.

Klock boasts over sixty options.

There are separate options for

- Global
- Time
- Other Klocks
- Sticky Notes, Memo and Monitor Sleeping
- Logging
- Archive

NB: If the option is checked to start on windows start up [in fact most user options], only operates for the current user.

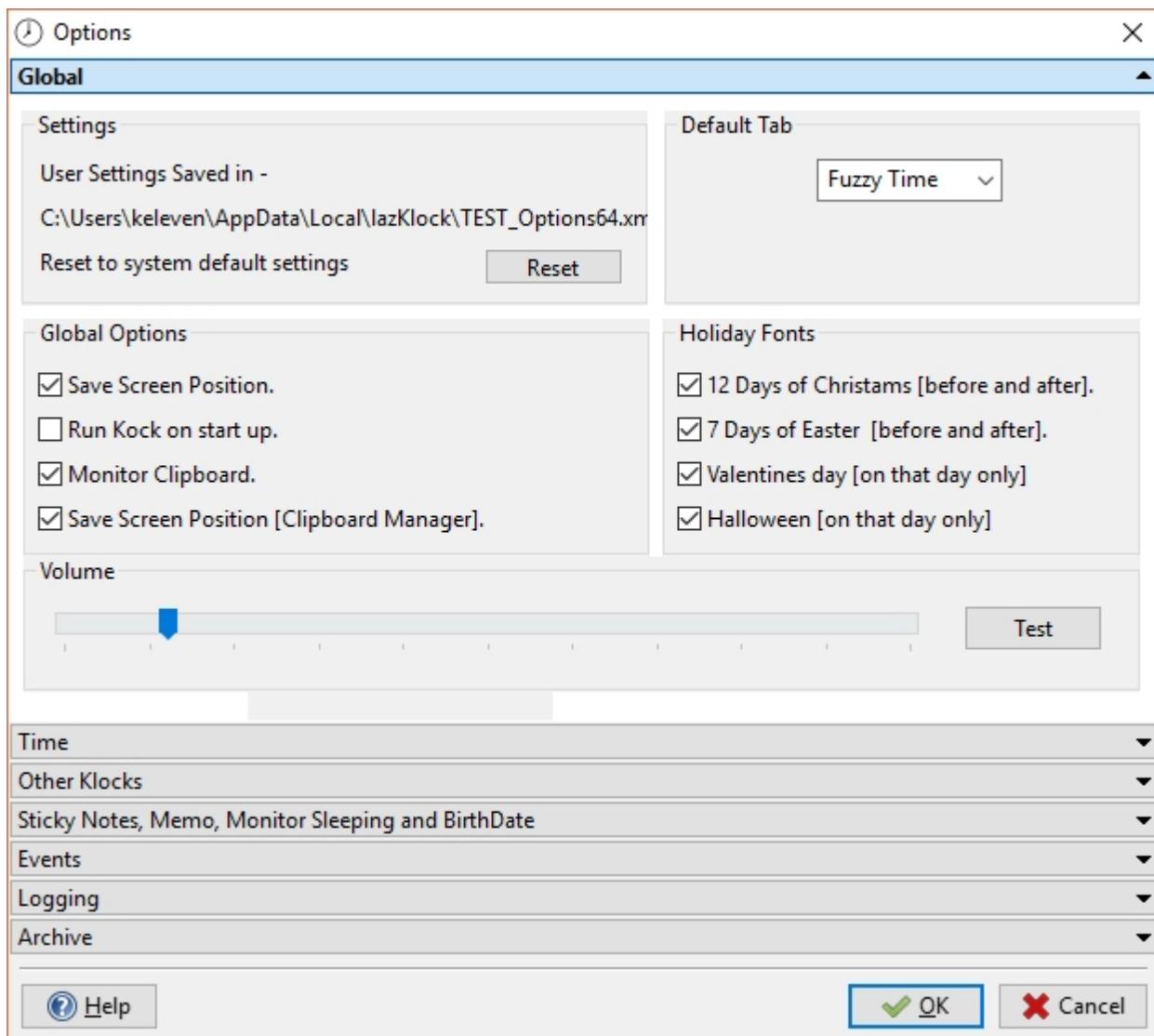
If upgrading from a newer version of Klock the new options should be added to the existing options..

---

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## Global

# Global



The global options are as follows.

## Settings

where the settings file reside - currently Options64.xml [or possibly Option32 for the 32 bit Klock]. This can be re-set to the default settings for the application.

## GlobalOptions

Allows klock to remember screen positions on exit.

Will run klock when windows first starts [current user only].

Allows Klock to start in a determined mode. Current modes are Klock, Analogue Klock, Small text Klock or Big text Klock.

## Default Tab

Allows Klock to start with a pre-determine tab.

## Holiday Fonts.

Allows Klock to use special fonts at certain time of the year.

## Volume

The volume of the sound klock makes.

Pressing OK will save the new settings.  
 Pressing cancel will not save any changes.

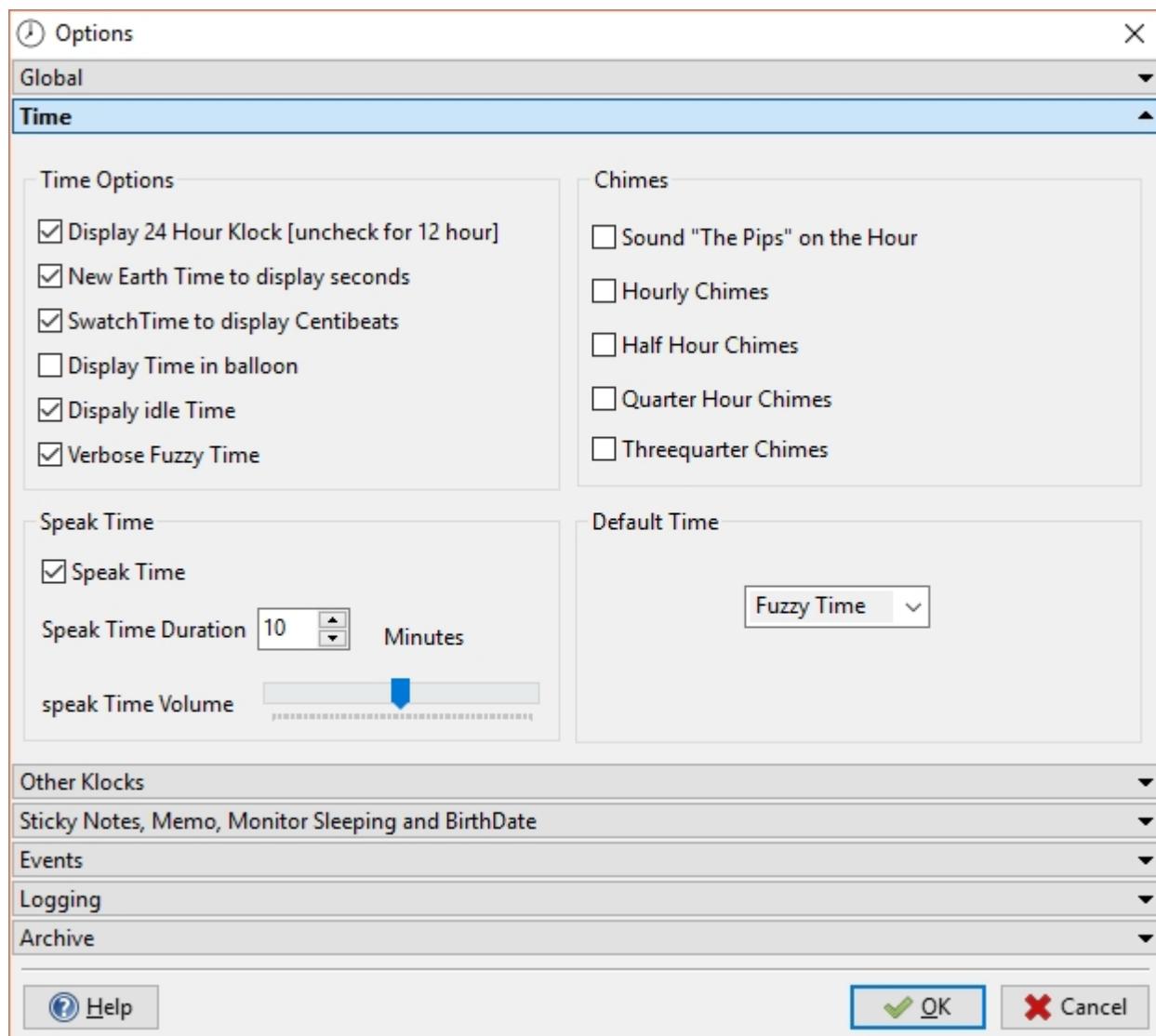
---

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## Time

### Time



The Time options are as follows.

## Settings

**Default Time**

The time that is first displayed when klock is started.

**Time Options**

## 12 / 24 Hour

The time in the system tray, time display 1 or time display 2 can all be set to display the time in either 12 or 24 hour format.

NB :: does not affect some of the time formats i.e. Hex time.

The system idle time can be displayed in the status bar.

**Chimes**

Klock can either sound the "pips" or chimes on the hour.

If chimes are chosen, chimes can also be selected for the quarter and half hours.

NB : can either have pips or chimes, not both.

**Speak Time**

Klock can be configured to speak the time and events prompts.

If selected, the volume and duration in minutes to speak the time.

Pressing OK will save the new settings.

Pressing cancel will not save any changes.

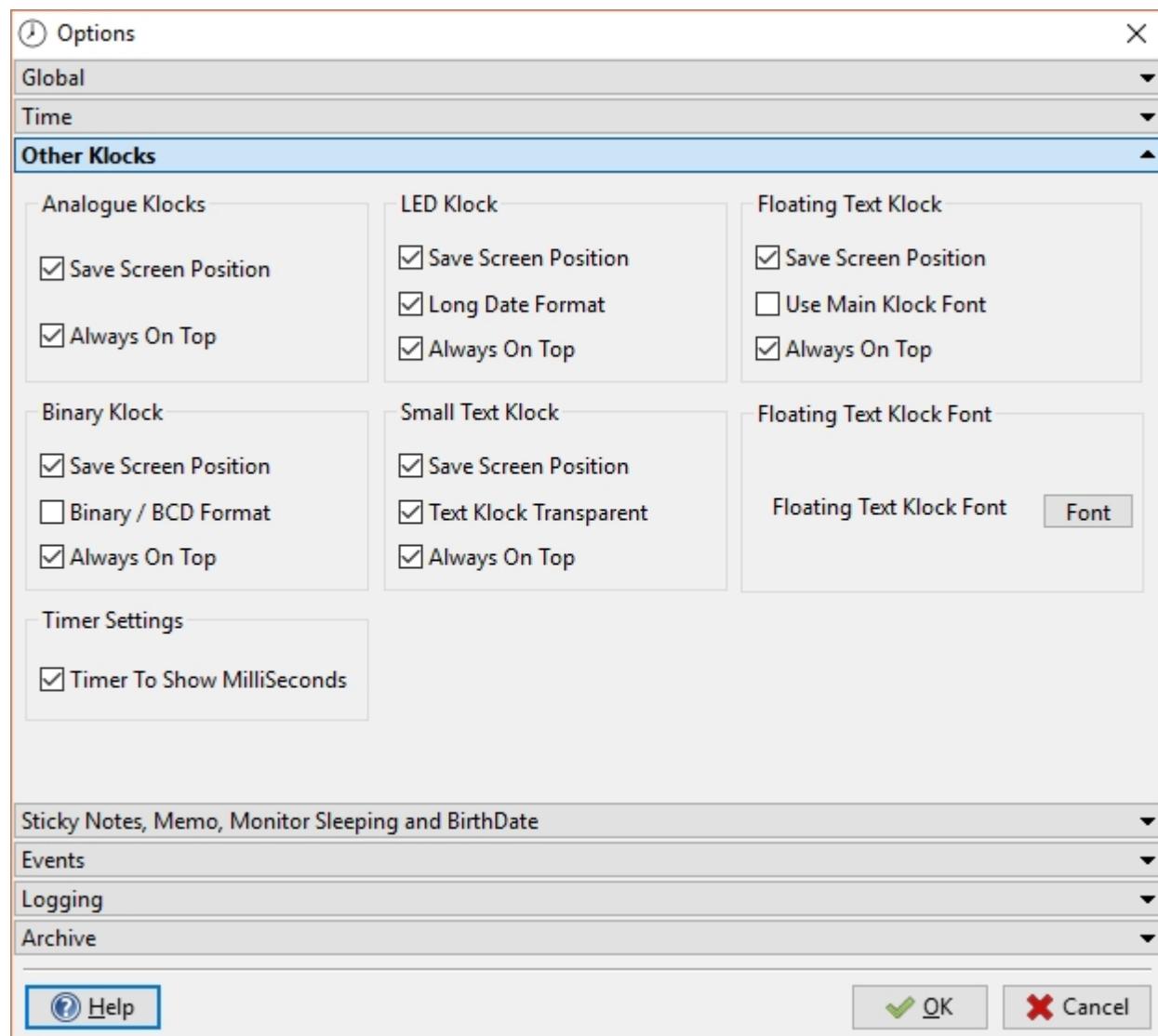
---

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## Other Klocks

### Text Klock



The Text Klock options are as follows.

Allows all the secondary Klocks to remember screen positions on exit and to be always on top.

The binary klock has two modes - BCD or true Binary.

BinaryCoded Decimal - takes each two digit number [hours, minutes & seconds] and codes them as two binary strings.

True Binary - takes each two digit number [hours, minutes & seconds] and codes them as a single binary string

The Floating Klock can be toggled to use the main Klock font or not. If unchecked, the font button is enabled which allows a custom font to be used.

The fonts provided will be any on the system plus any loaded by Klock.

Because of the way the form transparency works, you can not use a block font. Klock should prevent this.

#### **Timer Settings.**

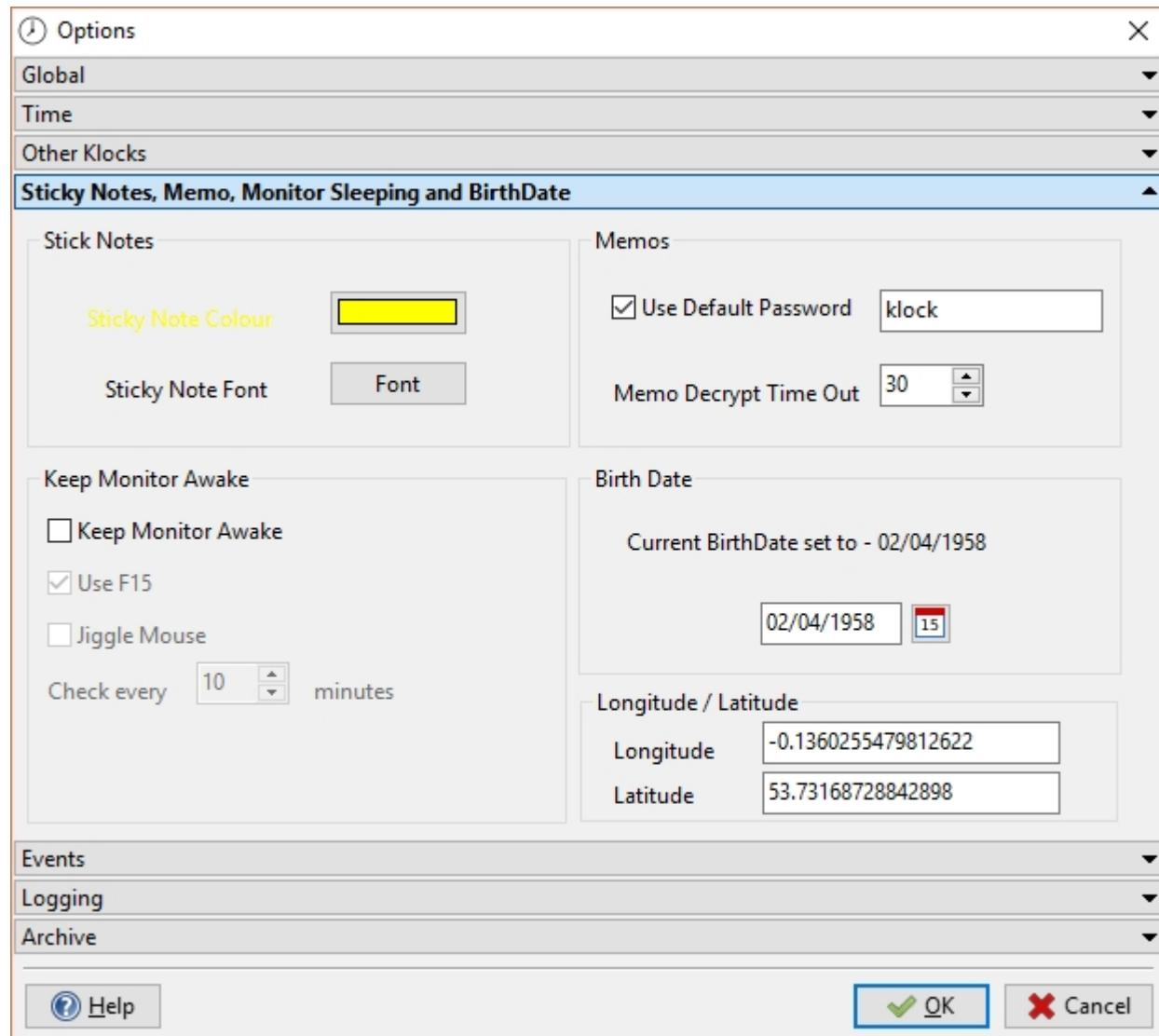
Time will show milliseconds.

Pressing OK will save the new settings.  
Pressing cancel will not save any changes.

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## **Sticky Notes, Sticky Notes, Memo, Monitor Sleeping and BirthDate**

# Sticky Notes, Memos and Monitor Sleeping



The options are as follows.

### **Sticky Notes**

The default background colour and font can be selected. This is over-ridable on each individual memo, if desired.

### **Memos**

When a memo is encrypted and password is selected, this can be chosen by the user for each individual memo or a default password can be chosen. A default password can be entered here and indeed if default passwords are even used.

Also the time an encrypted memo is shown as plain text can be selected - in seconds.

### **Keep Monitor Awake**

Klock can be configured to keep The Monitor awake, that is stop the system putting the monitor to sleep.

Klock can used to methods to achieve this.

Klock can simulate the pressing of <CTRL F15>. This is recognised my the OS, but does not appear on most keyboards so therefore is nut used by many programs. If this does cause problems, the second method can be used.

Klock can jiggle the mouse, the mouse is moved on pixel and moved back again.

The time interval for this can also be set, this should be just under the system time out.

### **Birth Date**

Allows a birth date to be entered, which is used for the start of the biorhytm chart.

### **Longitude / Latitude.**

This is used for the sun/Moon rise and set times.

The default is 10 Downing Street, London.

There are several sites on the internet that will provide co-ordinates of a desired location.

Pressing OK will save the new settings.

Pressing cancel will not save any changes.

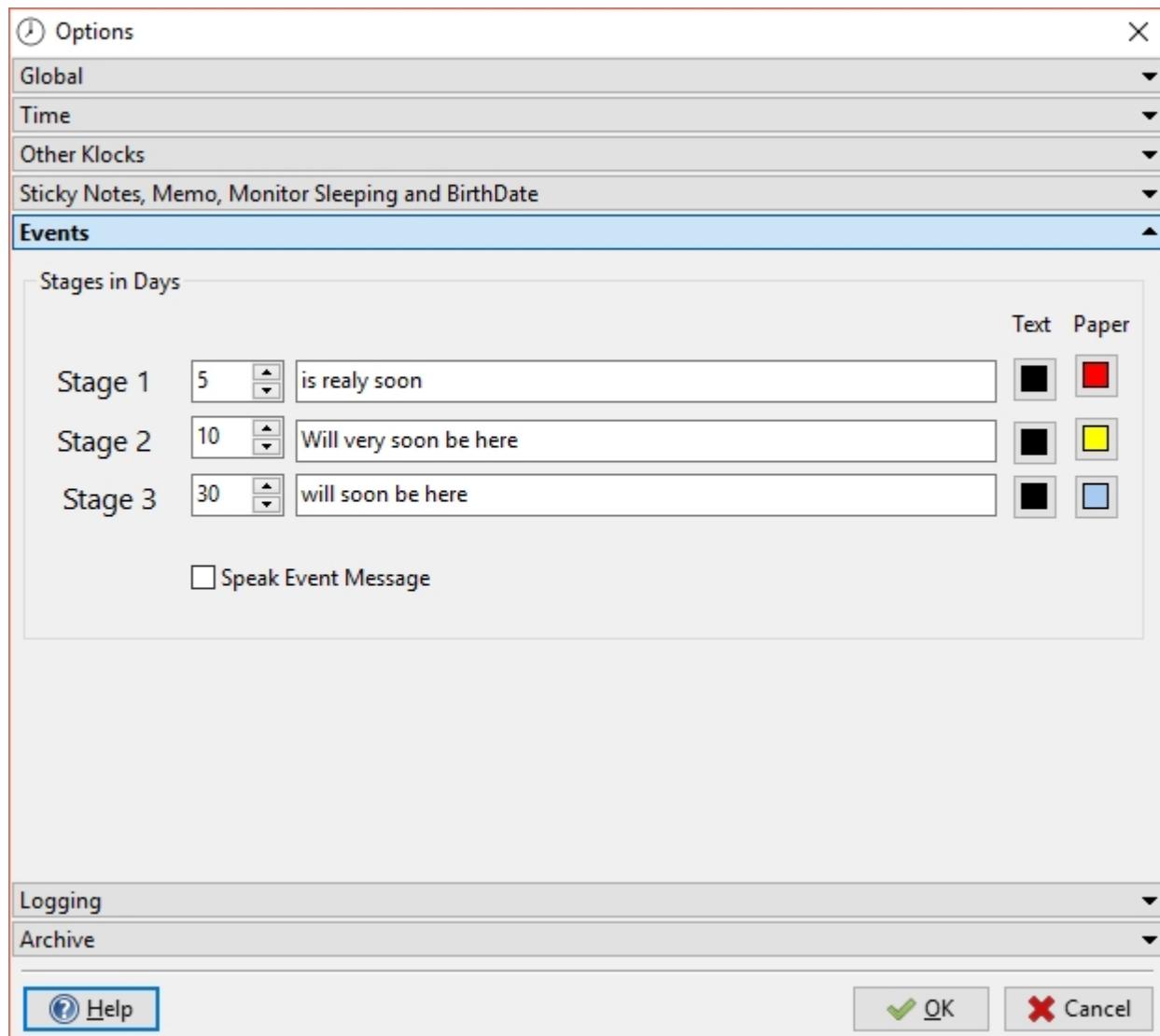
---

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## **Events**

# Events



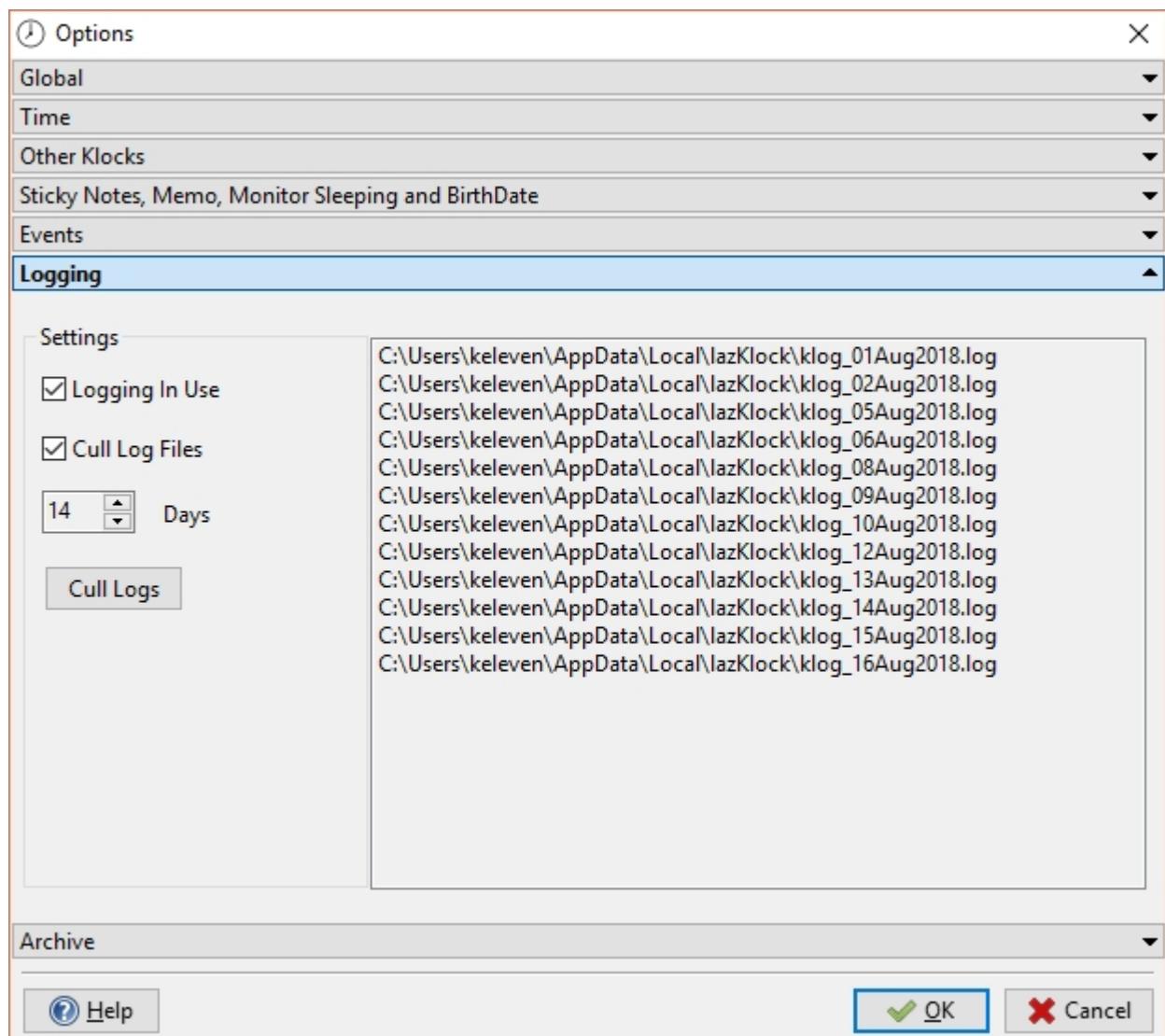
Events prompts are arranged in three stages, the days at which they are triggered can be set. For each stage the prompt and colour can be set.

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## Logging

### Logging



Certain errors and message can be logged to text file for further reading. This facility can be disabled. If enabled, the log files are displayed.

The number of days to keep the log files can be specified, default is 14. After this time, the Klock will delete the older log files.

A clean up of log files can be completed by clicking the button.

Clicking the entry for the log file, should log the log file into the default text editor.

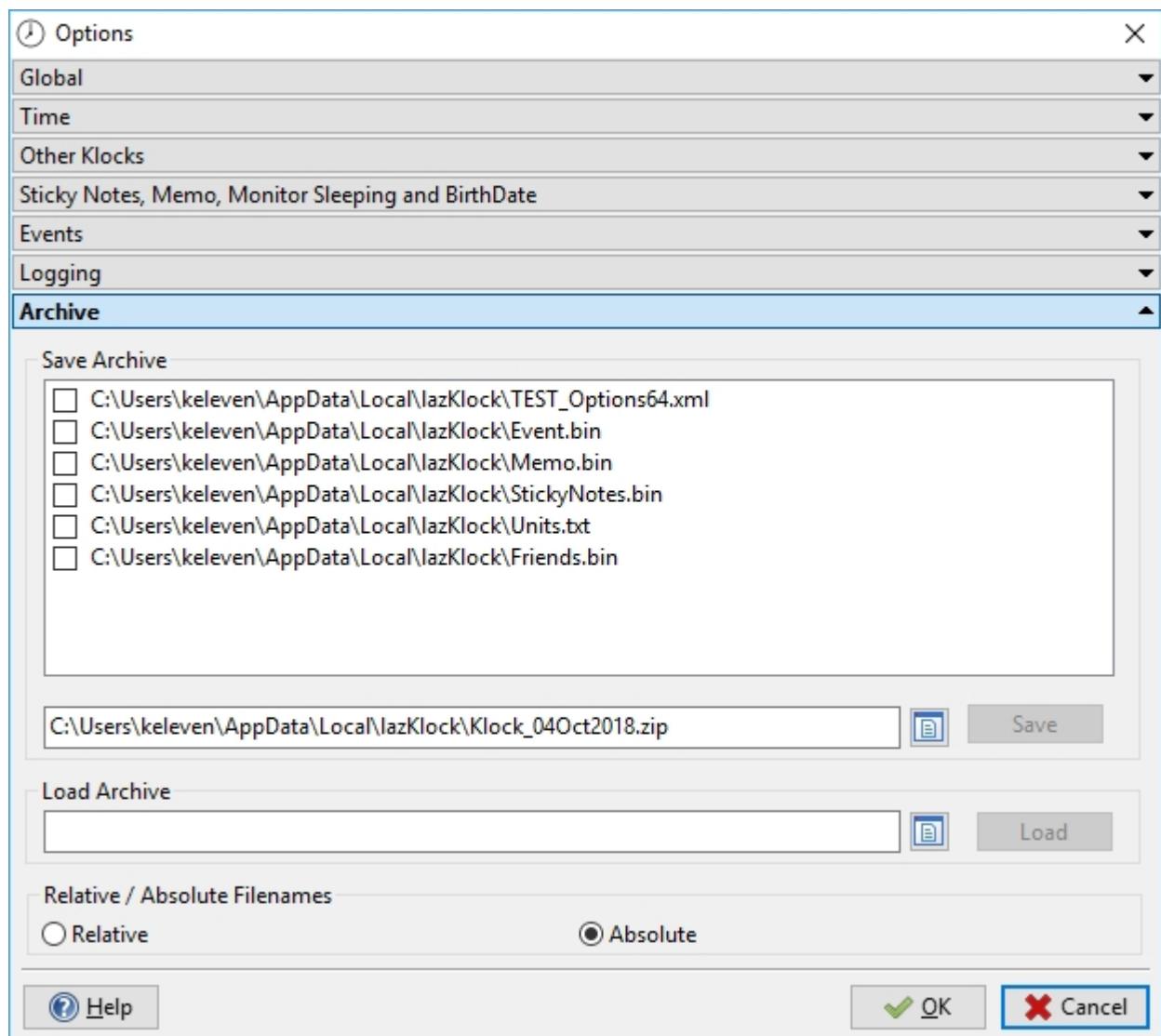
```

1 31Dec2017 104005 : Log Created
2 31Dec2017 104005 :
3 31Dec2017 104005 : lazclock
4 31Dec2017 104005 : User : keleven
5 31Dec2017 104005 : PC : KELEVEN
6 31Dec2017 104005 : OS : Microsoft Windows [Version 10.0.16299.125]
7 31Dec2017 104005 : lazClock Build :: 58
8 31Dec2017 104005 : lazClock Version :: 2.1.4.58
9 31Dec2017 104005 : Built with 64 bit Lazarus Version :: 1.8.0.6
10 31Dec2017 104005 : App Dir : C:\Program Files\keleven\lazClock\
11 31Dec2017 104005 :
12 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\fuzzytime_19Dec2017.log with age 11 19 Dec 2017
13 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_15Dec2017.log with age 15 16 Dec 2017
14 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_16Dec2017.log with age 14 16 Dec 2017
15 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_17Dec2017.log with age 13 18 Dec 2017
16 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_18Dec2017.log with age 12 19 Dec 2017
17 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_19Dec2017.log with age 11 19 Dec 2017
18 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_20Dec2017.log with age 10 20 Dec 2017
19 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_21Dec2017.log with age 9 21 Dec 2017
20 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_22Dec2017.log with age 8 23 Dec 2017
21 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_23Dec2017.log with age 7 24 Dec 2017
22 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_24Dec2017.log with age 6 25 Dec 2017
23 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_25Dec2017.log with age 5 25 Dec 2017
24 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_26Dec2017.log with age 4 27 Dec 2017
25 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_27Dec2017.log with age 3 27 Dec 2017
26 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_28Dec2017.log with age 2 28 Dec 2017
27 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_29Dec2017.log with age 1 30 Dec 2017
28 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_30Dec2017.log with age 0 31 Dec 2017
29 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\klog_31Dec2017.log with age 0 31 Dec 2017
30 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\Klock00000.tmp with age 13 17 Dec 2017
31 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\Klock00001.tmp with age 12 18 Dec 2017
32 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\Klock00002.tmp with age 11 19 Dec 2017
33 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\Klock00003.tmp with age 11 19 Dec 2017
34 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\Klock00004.tmp with age 10 20 Dec 2017
35 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\Klock00005.tmp with age 3 27 Dec 2017
36 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\Klock00006.tmp with age 3 27 Dec 2017
37 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\Klock00007.tmp with age 0 30 Dec 2017
38 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\Klock00008.tmp with age 0 30 Dec 2017
39 31Dec2017 104005 : C:\Users\keleven\AppData\Local\lazClock\Klock00009.tmp with age 0 30 Dec 2017
40 31Dec2017 104005 : Adding C:\Program Files\keleven\lazClock\fonts\Barcode39.ttf
41 31Dec2017 104005 : Adding C:\Program Files\keleven\lazClock\fonts\NancyBlackett.ttf
42 31Dec2017 104005 : Adding C:\Program Files\keleven\lazClock\fonts\BrailleLatin.ttf
43 31Dec2017 104005 : Adding C:\Program Files\keleven\lazClock\fonts\Semaphore.ttf
44 31Dec2017 104005 : Adding C:\Program Files\keleven\lazClock\fonts\Christmas.ttf
45 31Dec2017 104005 : Adding C:\Program Files\keleven\lazClock\fonts\Hack.ttf
46 31Dec2017 104005 : FormOptions Create
47 31Dec2017 104005 : FormAbout Create
48 31Dec2017 104006 : FormHelp Create
49 31Dec2017 104006 : FormLicense Create
50 31Dec2017 104006 : FormReminderInput Create
51 31Dec2017 104006 : FormAnalogue Klock Create
52 31Dec2017 104006 : formClipboard Create
53 31Dec2017 104006 : FormLEDKlock Klock Create
54 31Dec2017 104006 : FormBinaryKlock Klock Create
55 31Dec2017 104006 : Binary Klock
56 31Dec2017 104006 : formSmallTextKlock Klock Create
57 31Dec2017 104006 : FormKlock Showing
58 31Dec2017 104006 : FormKlock SetDefaults
59

```

## Archive

## Archive



The options are as follows.

This allows the loading and saving of certain configuration files to and from a zip file.

### Save Archive

Select the configuration files to be save in the check box, only files that exist will appear.

Choose the location of the zip file name - a default is presented.

Click on Save. If the file already exists a confirm dialogue will appear.

### Load Archive

Find the location of the zip file to be loaded in the lower section.

Click on load.

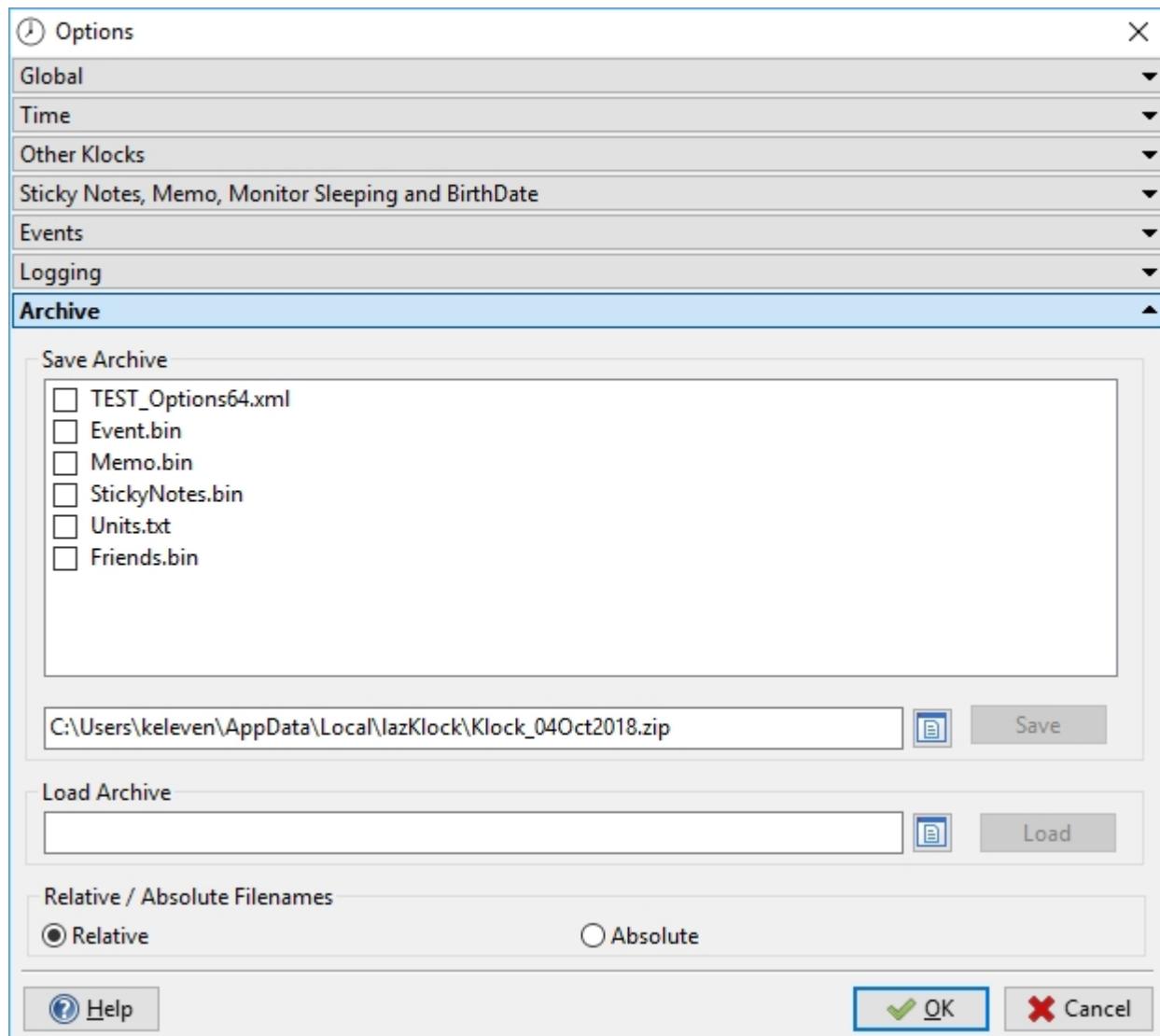
This will overwrite any existing configuration files currently been used by Klock.

The archive can be either save with absolute or relative pathnames. [relative is just the file name and absolute is with full path]

Klock should know what mode was used in the save and load accordingly.

Also, Klock should reject archives not generated by Klock

NB : this most useful when moving between different instances of klock, best to use relative.



Pressing OK will save the new settings.  
Pressing cancel will not save any changes.

---

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## History

---

### History

Build 1

commit a3539dd01031498d3c25c9a5ca3a454e18748aa6

Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 20:50:37 2016 +0100

Initial Import.

Most of the GUI structure is complete.

Countdown page complete.

## Build 2

commit dc39233aeaa2191988890a6964d7d721e78d3bf0

Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 20:56:56 2016 +0100

Nearly completed timer page - just an issue with the pause/resume.

Changed icon to clock.ico

Changed message to popup notification.

## Build 3

commit d16134c3bd9b03fee717a13f51b75ca79be2ed4d

Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 21:12:48 2016 +0100

Timer page completed.

Reminder page started.

## Build 4

commit 2bb295ab57abacd842d99879a21a46feec62d8c

Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 21:15:59 2016 +0100

Fuzzy time page completed.

Still working on reminder page.

## Build 5

commit 012c8dcaa5ef6569b178c9263e8553b0208f46aa

Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 21:22:06 2016 +0100

All four pages [fuzzy, countdown, time & reminder] are all complete.

Added logic to change status bar on page change.

Tidied up code.

## Build 6

commit 04bbd3f4d9c7fbff3d493f570177b9c422f8fbbd

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Thu Sep 29 21:26:21 2016 +0100

All four pages now work - maybe an issue with reminders.

Added option record, that is passed between option form and the main form.

Added first option - colour of the main labels.

## Build 7

commit 3a979b66d0e3fad03dfb79aef2b207025db3784f

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Thu Sep 29 21:29:35 2016 +0100

Added NET & UNIX time to fuzzypage.

Added extra buttons to the radio group.

## Build 8

commit fd88525ca99a09df732c03859b5e963c91c4679f

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Thu Sep 29 21:32:24 2016 +0100

Corrected bugs in fuzzytime & net time.

Added UTC time.

## Build 9

commit 2aad4c41fb6f0410f6ff7f69c952e660a5c96f2d

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Thu Sep 29 21:35:59 2016 +0100

Changed the way to select the time format from a radio group to a combo box.

Added Swatch time.

## Build 10

commit 53193a6c8825b941b4b2d9648e40eb1552d8a87b

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Thu Sep 29 21:38:26 2016 +0100

Changed the data input on the reminder page from spin edits [one for hours and one for minutes] to a floating spin edit to handle both hours and minutes. Still working on the logic to make it work in 24 hours and 60 minutes.

Also added a date picker to the reminder page.

## Build 11

commit e1da1e2a4a2bdb103668b2bab9a084b2bb8df54d

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Thu Sep 29 21:42:20 2016 +0100

More work done on the reminder page.  
Finally decided to use two normal spin edits for the hours and mins.  
Not too pretty, but simple and it works.  
Also added a date picker and added the date into the reminder logic.

Added a clear button to the reminder page, to cancel the running reminder.

#### Build 12

commit 00b786ab517dc5c7833ace39a7cb35187d9fa811  
Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 21:59:53 2016 +0100

Tidied up the code for the radio group - select time.

#### Build 13

commit 9cdc03d6cb236ae91a3b997d203371a6849910a6  
Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 22:02:36 2016 +0100

Reduced the height of most of the components, to make the overall application more sleek - I think it looks better.

Added a new form for the license [same as the help form], hangs off the help menu.  
Help & Licence forms now load their text from text files.

#### Build 14

commit daaa17da01956208064528a5eaad527547f31994  
Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 22:06:24 2016 +0100

Added split time button to time page.

Removed the function ItoS, which converted integer to two digit strings and use internal format functions instead.

#### Build 15

commit f69334f878d9b7451b21fb5811aaa45203ea1a8d  
Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 22:25:08 2016 +0100

Added try..except clause to all file operations.

Another attempt to fix noon bug in fuzzytime.

#### Build 16

commit b2a0dc26bb2192179201688d36afd76500aedb9f  
Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 22:27:24 2016 +0100

Recompiled to check for Lazarus 0.9.30.4

Licence window made read only - thanks Zach.  
Reminders can now not be set in the past - thanks Zach.

Start of code for saving options in a .ini file.

#### Build 18

commit eb8bb66d933973ec2915c68f5be9a78ac921a6c1  
Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 22:38:52 2016 +0100

Further work completed on the .ini file

Extended the GUI on the options screen.

#### Build 19

commit 6258d4478adef926ad45e166503e3a9e47b46bb4  
Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 22:41:08 2016 +0100

Further work on the ini file stuff.

Timer can now run either second / milli seconds.  
Default page control can now be set.  
Both saved to ini file.

#### Build 20

commit d6208a7f77b04de861eac0154dc886be990c34b4  
Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 22:43:24 2016 +0100

All modules now load version info from options record.

#### Build 21

commit 9f04e9dd7a8ad1106d10310a6f9933d40b297faa  
Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 22:46:44 2016 +0100

Added unit uOptionsUtils.pas, which contains the functions StringToFont & FontToString - enables font information to be saved to the ini file.

Added code to save and load fonts from the ini file - to be tested.

#### Build 22

commit d74e9710c48371a8e92a440c372b15ae673e6119  
Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 29 22:50:15 2016 +0100

Further work on font options.

Removal of colour buttons in the options screen. The colour can be changed in the font page, so making these buttons redundant.

### Build 23

commit 2f4a695fc917e80fa463ee1726e62eb95c253ac0

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Thu Sep 29 23:01:23 2016 +0100

Removed colour buttons, duplicated in font dialogue screen.

Finished font stuff.

Will save screen position if desired.

### Build 24

commit 0d76e07735779d51ae2e12853badf8d9ca57a8d5

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Thu Sep 29 23:04:34 2016 +0100

Added option for net time to count in 1 or 15 seconds.

[15 seconds net time = 1 second real time]

Added option for Swatch time to display centibeats.

Added option for default time display.

Changed both default time & tab to be drop down lists.

Added option for countdown to trigger sound, event command or pop up message.

event is a system event i.e. PC shut down or reboot.

command is the ability to run an external application.

### Build 25

commit 35b26cb97e749407f6b120ca4c0bcc4c853e4a2e

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 21:34:21 2016 +0100

Over 1000 lines of meaningless code :0)

Renamed UOptionsUtils.pas to UKlockUtils.pas - a more general utils unit.

Moved doSystemEvent & doComand procedures into this unit.

Corrected several bugs with the countdown event procedures.

Change AProcess.CommandLine [deprecated] to AProcess.Executable & Aprocess.Parameters.

Corrected bug; screen would reset to saved screen co-ordinates, even though the screen saved not clicked in options. Now checks option when resets main form.

Options; changed around the NET time and Swatch time to be a common checkbox list, instead of two check boxes.

Finally got around to the case statement, converted most nested IF statements.

Added Julian Time - needs checking.

#### Build 26

commit 730ffd5076edbf3267f54ae52616ca06a94a043

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 21:50:20 2016 +0100

Added Julian time.

Added Decimal Time.

Added Hexadecimal Time.

Added Binary Time.

#### Build 27

commit 82242ff21bab25c4919463bdde34d3f8c335f4d2

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 21:55:00 2016 +0100

Bug with the ini file, could not create in Windows 7. Not enough permissions, I think.

Use GetAppConfigDir, it retrieves the correct place to store the ini file.

Store in something like c:\Users\user\AppData\local\kloc\ in Windows 7.

And c:\D&S\usr\Local Settings\Application Data\Klock\ on Windows XP.

#### Build 28

commit 1c4daa3d9c873b3bf2feeaa83630b46e4e9ef2ee3

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 21:58:57 2016 +0100

Removed local Klock.ini, not now needed - will create on start up.

Problem with the screen position of main form after options screen closed

- Corrected [thanks Zach].

#### Build 29

commit 8453f000a73e627323eef4c51971a9cce65e09d3

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 22:03:36 2016 +0100

Corrected bug; Setting the date on the reminder did not enable the set button - the time needed changing as well - [thanks Zach].

#### Build 30

commit 0e1fc4257b6bdde90a8282545b24531a7e3ea83a

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 22:08:30 2016 +0100

Added tray icon to klock.

Added button, that hides the main form to a tray icon.

Added pop-up menu to tray icon, that gives the following options -

1 - Show main form.

- 2 - Show current selected time as a pop-up notification.
- 3 - Exit Klock.

Changed the way the pop-up notification is called. Now uses a global array to hold different messages from time, countdown and reminder.

Added some new comments to procedures [which where their all the time ;o)]

#### Build 31

commit 1d6bf1d7c014e3575f62223afeb9729d5bcfbef8

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 22:14:03 2016 +0100

Recompiled to check for lazarus 1.0 RC1 [although showing 0.9.31 in about box].

Also turned off generate debugging info GDN in linking options.  
This creates a lot smaller executable.

#### Build 32

commit f73c566840d177dad0dc09013bab2422c7ab883

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 22:17:23 2016 +0100

Recompiled to check for Lazarus 1.0 RC2 [now showing 1.0.1.2 in about box].

Tidied up the logic that checks that a reminder has been set in the future date.

If a system shut down is chosen in reminder or countdown and the application is being displayed in the system tray, switch to normal mode - allows the abort button to be selected.

Added a display to the status bar that indicates the status of the cap, numlock & scroll lock [in real time].

#### Build 33

commit 03c22837daa680df290ed247314cca7b33ce18a3

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Fri Sep 30 22:22:17 2016 +0100

Ran source through a spell checker - many changes.

Changed reminder tab to event tab.

Changed all existing references of reminder to event.

This is to allow a new reminder tab, which will remind on birthdays, anniversaries etc.

Added new reminder tab.

Added new form to add reminders.

Added logic to save reminders to csv file.

Added logic to load csv file and display date on reminder tab.

There is a bug with Icl, the pop-up notifier timeout does not seem to work.

Added a timer, that will kill the notifier after ten seconds.

#### Build 34

commit 0a457f25b2170992c563062f8a5ee4d8084ba82f  
Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Fri Sep 30 22:57:59 2016 +0100

Converted SVN repository to GIT. Uploaded this to GitHub.

Recompiled to check for Lazarus 1.6 [showing 1.6.0.4 in about box].

#### Build 35

Recompiled to check for Lazarus 1.8.0.4.

Added VI backup files to .gitignore.

Amended klock.iss [inno setup script] to either install 32 or 64 bit executable, depending on target machine.

Increased version number of 35 in uOptions.pas.

Tidied up history.txt

#### Build 36 [1.0.0.36]

commit c607fcfc8110893a99bc89120532a1f1f34c6955c  
Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Thu Sep 7 22:36:38 2017 +0100

Renamed all form files from uxxx.pas to formxxx.pas. i.e. uKlock.pas -> formKlock.pas.

So, all source files that contain GUI elements will start with form.  
All none GUI source files will start with u - a unit file.

Currently  
2968 lines of source code.  
1549 statements  
14.6% comments

\*\*\*\*\* Version 2 \*\*\*\*\*

#### Build 37 [2.0.0.37]

commit 3d7a9e43522baac7af8adea345307b107d33a228  
Author: Kevin Scott <lazKlock@keleven.co.uk>  
Date: Mon Oct 16 22:15:32 2017 +0100

Added config file for SourceMonitor.

Added uOptions.pas, an options record that uses XML files. Hopefully this will replace the existing .ini file based options.

Amended all references in formKlock.pas that used the old .ini options to use the new .xml options record.

NOTE :: formOptions has not been touched yet and still point to the old style options records - this will be stripped out next.

Currently  
3450 lines of source code.  
1802 statements

15.5% comments

#### Build 38 [2.0.0.38]

commit c35513fb5200d949b4d7a01cb63240000e00073b

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Wed Oct 18 22:18:09 2017 +0100

Amended formLicence, formHelp & formAbout to use new user Options.

Added to formAbout disk size and free space for all disks on the system

Added to formAbout system and application up time.

Added to formAbout to display if compile to either 32 or 64 bit.

Added to formAbout powered by Lazarus logo.

Tidied up formAbout.

Amended klock.iss to use lazKlock instead of Klock - should that be lazKlock.iss.

reloaded licence.txt from web site.

Currently

3567 lines of source code.

1856 statements

16.0% comment

#### Build 39 [2.0.0.39]

commit b9e05ca031036a4a64abf128859f401e10fab5f2

Author: Kevin Scott <lazKlock@keleven.co.uk>

Date: Thu Oct 19 21:21:15 2017 +0100

Removed all references to the old .ini in formOptions, fromKlock & ufuzzyTime.

Also removed all non-visual components from formOptions.

We now build the new options screen.

Currently

3112 lines of source code.

1615 statements

16.4% comment

#### Build 40 [2.0.0.40]

commit 98eeea8d6afdb62fc0bfc23bd0cc52fbc703883

Author: Kevin Scott <github@keleven.co.uk>

Date: Fri Oct 27 21:40:30 2017 +0100

Started building the new options screens - using an accordion.

Although all options are written to the xml file has strings, amended the Options class so that all options are presented to lazKlock has native type i.e. Integers and Boolean. The conversions are not in the options class and not the main program.

Changed the logic in formOptions, when the options form loads a backup options record is created and this is amended, it is only copied to the main options records if OK is clicked. If cancel is click the amendments are discarded.

Added the logic to uKlockUtils to amend the registry for starting the app with windows.

Removed self from variable references in uFuzzTime - not sure why they were there.

Currently

3338 lines of source code.

1738 statements

17.4% comment

#### Build 41 [2.0.0.41]

commit 57332b6a2300cb489eee6d399318876c9519575e

Author: Kevin Scott <github@keleven.co.uk>

Date: Mon Oct 30 22:14:19 2017 +0000

Added a separate form to house an Analogue Klock - frmAnalogueKlock.pas.

Made this form transparent, just leaving the form.

Added logic to make this draggable, with just the Klock visible.

Added User Options to remember the Analogue Klock screen position.

Added to main Klock to display the idle time.

Added percent Time to FuzzyTime.

#### Build 42 [2.0.0.42]

commit 7b3781a898da3a2f69387a5eca5eae372c198112

Author: Kevin Scott <github@keleven.co.uk>

Date: Mon Nov 6 13:39:29 2017 +0000

The shutdown command seems to have changed in windows 10.

Parameters are now preceded with a / and not a -.

Also, having problems passing parameter's with spaces, removed for now.

Corrected bug where if no action was selected, an index out of bounds could be created.

#### Build 43 [2.0.0.43]

commit 92d89f0d1125dd1f4aa33a102f38c94de928ef13

Author: Kevin Scott <github@keleven.co.uk>

Date: Mon Nov 6 15:03:59 2017 +0000

Passed all source files through a spell checker - mainly for comments.

Passed all source through JEDI source checker.

Bumped up a minor version point.

Currently

3693 lines of source code.

1874 statements

16.7% comment

#### Build 44 [2.0.1.44]

commit d0ffe89eb2885a8226c87d2b274fe099ce0684cc

Author: Kevin Scott <github@keleven.co.uk>

Date: Fri Nov 10 20:15:11 2017 +0000

Added time displayed as barcode, Semaphore, Nancy Blackett Semaphore & Braille. These are achieved my font substitution.

Added a new unit uFont.pas - to load custom fonts.

Added logic to formKlock to use new fonts when required.

Added two new directories fonts & sounds.

Added a number of mp3 files to play the hourly chimes and The pips.

Amended to procedure doPlaySound in uKlockUtils.pas to play all sound files and not just .wav files. Also, made this procedure more robust.

Also added to this unit to play the hourly chimes.

Added user options for sound volume, sound the pips on the hour or hourly chimes.  
Also added the option for the analogue klock to save screen position.

Currently

4080 lines of source code.

2120 statements

16.4% comment

#### Build 45 [2.0.1.45]

commit a9296bca47a258c567d6d096bca416709e943c63

Author: Kevin Scott <github@keleven.co.uk>

Date: Tue Nov 14 14:57:13 2017 +0000

Added the ability for Klock to write Info and Debug information to log files.  
Logging can be enabled / disabled by a user options. Also the ability to delete log files older then a certain age. This is also specified by user options.

An extra tab was added to the options form for the logging options, the log files are also displayed here.

Added a new unit, uLoggingUtils. The unit contains the helper routines to read and delete log files.

Started to sprinkle debug entries all over.

Cleaned up the calling process for the chimes.

Added doubleTime to uFuzzyTime.

Added a new unit, uOptionsUtils. This unit contains helper routines to read and write XML entries.

Changed the Klock icon.

Currently

4303 lines of source code.

2199 statements

16.7% comment

## Build 46 [2.0.1.46]

commit 2a0201bd0094f867199523c53545e03695adb89f  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Mon Nov 20 14:11:16 2017 +0000

Added formClipboard and uformClipboardUtils which implements a clipboard manager.

Added various options for the clipboard managers to formOptions and uOptions.

/\*\*\*\*\*

Looks like I have messed up and corrupted the sources somewhere along the line.  
 It would compile but would error when loading with Access Violation.  
 What ever I did, I could not see what I had done wrong. This happened at both 32 & 64 bit.  
 It did happen at the same time as I had tried a new couple of components, maybe I had  
 mixed up the 32 and 64 bit things. Or, more probably, trying to access an object  
 that had not been initialised. I gave up.

Lazarus then released the final V1.8 - So I decided to try and fix it.

The first build that would compile and run was build 41. So branch V2.1 starts from there.

I will try apply the changes gradually and see if I can spot the errors[s].

/\*\*\*\*\*

## Build 47 [2.1.1.47]

commit 6cd165f08dbdf1636c5e595ab623e35d89a5efb4  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Tue Dec 12 21:22:21 2017 +0000

[This is a duplication of build 42]

The shutdown command seems to have changed in windows 10.  
 Parameters are now preceded with a / and not a -.  
 Also, having problems passing parameter's with spaces, removed for now.

Corrected bug where if no action was selected, an index out of bounds could be created.

Currently  
 3611 lines of source code.  
 1851 statements  
 17.2% comment

## Build 48 [2.1.2.48]

commit e6d03bec376307cbf63b324ea64f181d8a03867b  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Wed Dec 13 10:00:24 2017 +0000

[This is a duplication of build 43]

Passed all source files through a spell checker - mainly for comments.

Passed all source through JEDI source checker.

Bumped up a minor version point.

Currently  
 3703 lines of source code.  
 1863 statements  
 16.7% comment

#### Build 49 [2.1.3.49]

commit f7b1216f1f682f9a2f28593dffbd45ca84521d0

Author: Kevin Scott <github@keleven.co.uk>

Date: Wed Dec 13 20:12:19 2017 +0000

[This is a NEARLY duplication of build 43]

Added time displayed as barcode, Semaphore, Nancy Blackett Semaphore & Braille. These are achieved my font substitution.

Added a new unit uFont.pas - to load custom fonts.

Added logic to formKlock to use new fonts when required.

Added two new directories fonts & sounds.

Added a number of mp3 files to play the hourly chimes and The pips.

Amended to procedure doPlaySound in uKlockUtils.pas to play all sound files and not just .wav files. Also, made this procedure more robust. Also added to this unit to play the hourly chimes.

Added user options for sound volume, sound the pips on the hour or hourly chimes. Also added the option for the analogue klock to save screen position.

Currently  
 4077 lines of source code.  
 2113 statements  
 16.4% comment

#### Build 50 [2.1.3.50]

commit ce387521eca09467d8a50d3617c9b0d79254acd5

Author: Kevin Scott <github@keleven.co.uk>

Date: Wed Dec 13 22:06:13 2017 +0000

[This is a part duplication of build 45 - mainly the options stuff.]

Cleaned up the calling process for the chimes.

Added doubleTime to uFuzzyTime.

Added a new unit, uOptionsUtils. This unit contains helper routines to read and write XML entries.

Changed the Klock icon.

Currently  
 4051 lines of source code.  
 2051 statements  
 16.9% comment

#### Build 51 [2.1.3.51]

commit 22135ab71701bcf61cedef606c118d34eae6ab28

Author: Kevin Scott <github@keleven.co.uk>

Date: Sat Dec 16 18:56:37 2017 +0000

[This is a part duplication of build 45 - mainly the options stuff.]

Added the ability for Klock to write Info and Debug information to log files.

Logging can be enabled / disabled by a user options. Also the ability to delete log files older than a certain age. This is also specified by user options.

An extra tab was added to the options form for the logging options, the log files are also displayed here.

Added a new unit, uLogging.pas. The unit contains the helper routines to read and delete log files.

Started to sprinkle debug entries all over.

I started to get the Access Violation again, especially in the 32 bit application.

This seemed to be either the logging not being thread safe and a problem in loading the fonts. I changed the method that loads the faults and stopped using TEvent and wrote a simple logging class of my own that just appends to a text file.

[The logging class resides in uLogging.pas]

All seems to be okay.

Added a routine that retrieves the version of Windows, this is displayed in the About form and the header of the log file.

Also removed the option to install the sources from the inno installer, they can download them from GitHub.

Currently

4402 lines of source code.

2228 statements

17.2% comment

## Build 52 [2.1.3.52]

commit 955ef8502453ccbc89da6a283ef28ff39acb7f7a

Author: Kevin Scott <github@keleven.co.uk>

Date: Sun Dec 17 21:37:49 2017 +0000

[This is a NEARLY duplication of build 46]

Added formClipboard and uformClipboardUtils which implements a clipboard manager.

Added various options for the clipboard managers to formOptions and uOptions.

Currently

4946 lines of source code.

2517 statements

16.6% comment

/\*\*\*\*\*

Klock has now caught up to the point before the corruption.

I have done two things differently - the logger and the font loading - see build 51.

Another bump on the minor version.

/\*\*\*\*\*

## Build 53 [2.1.4.53]

commit a8fcda0f1df54159f605d1241fbcded9aed1f45b

Author: Kevin Scott <github@keleven.co.uk>  
Date: Mon Dec 18 13:04:20 2017 +0000

Added an info screen it display information about Easter & lent dates, Power Source and Daylight Saving. These are called from an Info menu from the main Klock screen.  
uInfoUtils was added and this contains the routines which do the heavy lifting.

Added Time in words, Morse time and Roman Numerals Time to uFuzzyTime.

Added Application directory to formAbout and log file header.

Currently  
5514 lines of source code.  
2903 statements  
15.8% comment

#### Build 54 [2.1.4.54]

commit d4c4e3ef6602799b13f2e93f662ee9d86002df5a  
Author: Kevin Scott <github@keleven.co.uk>  
Date: Wed Dec 20 20:10:32 2017 +0000

Added a Christmas font and an option to automatically use this font for the 12 day of Christmas - 12 days before and 12 days after.  
Other holiday fonts will be added when found.

formAbout - Removed info labels and added a listbox to display Klock about stuff.

formKlock - Tidied up the setting of main timer interval when using NET time.  
- Added logic to use Christmas font.  
- First attempt at auto sizing main fuzzy time label depending upon size.

formOptions - Added checkbox for Christmas font.

formClipboard - Added the start of culling tmp files.

formInfo - Removed info labels and added a listbox to display Info stuff.

uFonts - Added loading and removal of Christmas font.

uFuzzyTime - Added logic for fuzzyTime to write out it's own debug log.  
- Corrected bug[s] in fuzzyTime.

uKlockUtils - Added getTextWidth & isChristams helper functions.

Currently  
5654 lines of source code.  
2984 statements  
15.7% comment

#### Build 55 [2.1.4.55]

commit 3721a3e5d078a2ae0c14b5cb17fc7370ed747d51  
Author: Kevin Scott <github@keleven.co.uk>  
Date: Thu Dec 21 14:12:46 2017 +0000

Added a LED Klock, this hangs off the Time menu on the main Klock.  
Added formLEDKlock to the project.

formKlock - Added menu item to call the LED Klock.

formOptionss - Added options for LED Klock [save screen position].  
 uOptions - Added above options.

uFuzzyTime - Added Flow Time and Metric Time.

Currently  
 5917 lines of source code.  
 3091 statements  
 15.8% comment

Build 56 [2.1.4.56]

commit 16b49360bd2f6cb5c60385c86662c27817c0829d  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Tue Dec 26 22:14:24 2017 +0000

Added a Binary Klock, this hangs off the Time menu on the main Klock.  
 Added formBinaryKlock to the project.

The Klock can display time in either Binary or BCD format.

formKlock - Added menu item to call the Binary Klock.

formOptions - Added options for LED Klock [Use long date format].  

- Added options for Binary Klock [save screen position].
- Added options for Binary Klock [Binary/BCD format].

 uOptions - Added above options.

formAnalogueKlock - Changed method of moving [dragging] the klock,  
 it now mirrors the LED Klock.

formLEDKlock - Added use long date option.  

- Fixed a bug in screen save logic.

Currently  
 6514 lines of source code.  
 3437 statements  
 15.4% comment

Build 57 [2.1.4.57]

commit 0c32a35ccb44ae3e11875382adb185a32ec9f074  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Thu Dec 28 13:47:14 2017 +0000

Developing Small Text Klock.

Build 58 [2.1.4.58]

commit 8c72e195366d5433a2a37e10d3122f7113a1d94b  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Fri Dec 29 22:51:21 2017 +0000

Added a Small Text Klock, this hangs off the Time menu on the main Klock.  
 Added formSmallTextKlock to the project.

The Klock can either have a transparent or solid background.

formKlock - Added menu item to call the Binary Klock.

formOptions - Added options for Binary Klock [save screen position].

- Added options for Binary Klock [Transparent background].

uOptions - Added above options.

Renamed hack-Regular.ttf to Hack.ttf.

uFonts - Added loading of hack.ttf.

Currently

7636 lines of source code.

4140 statements

14.1% comment

### Build 58 [2.1.4.58]

commit 76c6308ba019b6fcab6df701040e99fb393f91a2

Author: Kevin Scott <github@keleven.co.uk>

Date: Mon Jan 1 20:08:48 2018 +0000

Added A [proper] help file in .chm, .pdf and .html format.

This was created using HelpNDoc V5, a help.hdn file has been added to the source.

A new sub directory called help was created to hold all the files.

The old style formHelp has been deleted from the project.

The new style help [.chm] is now loaded from both the help button on the main form, the help menu and the help button on the options screen.

Currently

7600 lines of source code.

4116 statements

14.2% comment

### Build 59 [2.2.0.59]

commit a0ad6ae5e5e9530dd159b19ad3010dc5c7b597e5

Author: Kevin Scott <github@keleven.co.uk>

Date: Wed Jan 3 15:06:05 2018 +0000

Changes to history.txt and lazKlock.smproj hanging over from last commit.

Also, did some git admin. Since the master branch was corrupt and all the recent work had been done in branch V2.1, it was time to clean up. This was achieved with the following.

```
git branch -m master master-old      # rename master on local
git push -f origin :master          # delete master on remote
git push origin master-old          # create master-old on remote
git checkout -b master V2.1          # create a new local master on top of V2.1
git push origin master              # create master on remote
```

I now have a current and good master and a working copy at V2.1.

I also deleted branches v1 and v2. I will delete branches master-old and v2.1 when happy is all is okay.

This also becomes V2.2 and will create a working branch of v2.

#### Build 60 [2.2.0.60]

commit c98469c78125b59aa4c0ccb8733024250a402f47

Author: Kevin Scott <github@keleven.co.uk>

Date: Thu Jan 4 17:05:51 2018 +0000

Added Easter font and option to use this font at the Easter weekend.

formOptions - Added logic to cull [delete] log files over a certain age.

This can be configured in options.

formClipboard - Added logic to cull [delete] tmp files over a certain age.

The age is currently hard coded to be 10 days..

formBinaryKlock - changed the status bar for a panel.

This can have the background colour changed without leaving ugly lines as the status bar does.

Currently

7742 lines of source code.

4185 statements

14.6% comment

#### Build 61 [2.2.1.61]

commit fd4886c7d4a8aaf195e5c57bc3762cda5e055fe

Author: Kevin Scott <github@keleven.co.uk>

Date: Sun Jan 7 17:07:08 2018 +0000

Added a new tab to Klock for Conversions. This allows the conversion between several units i.e. weight and distance etc. A new file uConversion was added, this holds the helper functions for the conversion tab.

Also removed a lot of old image files from the help file - reduced the size a lot.

Merged branch V2 back into master branch.

Currently

8021 lines of source code.

4339 statements

14.9% comment

#### Build 62 [2.2.1.62]

commit fa152df41daf92f75bf9d74b5b69e1b9efa4942e

Author: Kevin Scott <github@keleven.co.uk>

Date: Sun Jan 7 23:05:10 2018 +0000

Made the xml [options] reading routines more robust.

If an entry is missing, the default values for that entry is now used instead of an error being generated.

This then cures the problem of new options being added, up to now if the old options file was not deleted and error was generated.

Also, removed uOptinsUtils and moved the helper routines into the main options class.

#### Build 63 [2.2.2.63]

commit c964c7287aa66205cd3f014015fca519daefc92f

Author: Kevin Scott <github@keleven.co.uk>

Date: Thu Jan 11 22:07:21 2018 +0000

Added a Sticky note option.

This compromises of two classes [uStickNote and UStickNotes] and one form [formStickNote]. The uStickNote holds the info for one stick Note and uStickyNotes handles creation and storage of all the stick Notes.

A menu option was added to Klock to create a new Sticky Note.

Needs some testing yet.

Currently

8762 lines of source code.

4777 statements

15.4% comment

#### Build 64 [2.2.2.64]

commit 5abce3c97050cf33dbbbf4dc177af99d224af7db

Author: Kevin Scott <github@keleven.co.uk>

Date: Fri Jan 12 16:02:37 2018 +0000

Changed all the icon [again] - now from <https://icons8.com/>

Removed the button bar from the main Klock screen and added individual buttons, with their own icons.

Added a sub menu option to save the Sticky Notes to each Sticky Note.

Added Binary and BCD time to uFuzzyTime.

Currently

8863 lines of source code.

4830 statements

15.3% comment

#### Build 65 [2.2.2.65]

commit 06a77cd4cae5903b208f99fa53239d4c360007c5

Author: Kevin Scott <github@keleven.co.uk>

Date: Mon Jan 15 14:14:25 2018 +0000

Added a form close to all forms if missing, this allowd a "CloseAction := caFree;" to be added to every form.

Added a new Sticky Note option to all extra Klocks pop up menus.

Added icons to all extra Klocks pop up menus.

Ran all source [including this file] through a spell checker.

Currently  
 8952 lines of source code.  
 4861 statements  
 15.2% comment

### Build 66 [2.2.3.66]

commit c6501001cd0fe2e02f3a2a5e06f5aab51a0fa2cc  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Mon Jan 22 12:00:56 2018 +000

Added a memo tab, this will allow memo's to be entered, edited, printed and saved. Any previously saved memos will be loaded into Klock on startup. The memos can be optionally encrypted and only be displayed on demand.

This added two new files - uMemos.pas and uMemo.pas.  
 The memo workflow is modeled on the Sticky Note workflow.

Half way through adding the Memo tab.

### Build 67 [2.2.3.67]

commit b3f072e6e432af1feeb6126b2334053e374f3b65  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Fri Jan 26 16:50:33 2018 +0000

Still implementing memo tab.

The new, delete, save and load functions seem now to work.  
 Edit and print to go

### Build 68 [2.2.3.68]

Completed the Edit and Encryption bit.  
 They look to be working - but need further testing.  
 Still got print to go.

In build 65 I added in "CloseAction := caFree;" to every form, I read this was a good idea. This seems to make Klock crash if that form is opened more than once in any session. So, I removed it from every form.

Currently  
 9558 lines of source code.  
 5132 statements  
 15.7% comment

### Build 69 [2.2.3.69]

commit fbfef9e5ddc0d89be56546412de91ebfe8924554  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Sun Feb 4 21:39:00 2018 +000

formKlock - Moved the loading of Sticky Notes and memo to formload from formShow, this should stop duplicate loading of Stick notes when switching from another klock back to the main Klock.

formOptions, uOptions - added options for Sticky Note Colour and Font.  
added options for Memo default password, use default  
password and Time out.

formInfo, uInfoUtils - Added Moon stuff to Info menu. This includes a graphic  
of the moon phase and procedure to calculate the moon phase and illuminance.

uFuzzyTime - Change the algorithm for calculating the Julian Date - this looks  
more accurate.

formStickNote - Amended to use default colour and font on create.

Currently  
9835 lines of source code.  
5287 statements  
15.8% comment

#### Build 70 [2.2.3.70]

commit 3ea9e46703b0151a67b57214f9b283ef6cf01ec0

Author: Kevin Scott <github@keleven.co.uk>

Date: Mon Feb 5 20:54:16 2018 +000

Added three new fonts - SweetHearts [Valentines], grroyChosties [Halloween]  
and ChristmasChard [a rather nice script font]. Added user options so the first  
two will be used on their holiday days.

Corrected a bug in fuzzyTime which referred to one minutes instead of one minute in  
wordtime.

Updated all help files.

Currently  
9910 lines of source code.  
5351 statements  
15.7% comment

#### Build 71 [2.2.3.71]

commit a4ab066100526459c2c02ad69ad431a32870ef67

Author: Kevin Scott <github@keleven.co.uk>

Date: Thu Feb 8 21:22:29 2018 +0000

Added a tab to the options firm - Archive.  
This allows the loading and saving of certain configuration files to and from a zip file.  
The configuration files will only appear if they exist on the system.  
The location of the zip file can be selected, but a default is presented.  
A new file, uArchiveUtils, holds the helper Archive routines [called from formOptions].

Added the location of the configuration files to the options files, easier to use elsewhere  
in the program and are now only specified in one place.

Currently  
10128 lines of source code.  
5499 statements  
15.7% comment

## Build 72 [2.2.3.72]

commit 70961f2593ec1ef5c728a1a9dbf6c52daf11e0e0  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Fri Feb 9 22:06:33 2018 +0000

Divided fuzzyTime between calculated time and font substitution.

Added a second combo :box populated with the available fonts.

So, each time format can be displayed in each available font.

Added loads of fonts. :-)

## Build 73 [2.2.3.73]

commit 484542e3e514a70cf38e004312c082b5fe45c8a5  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Sun Feb 11 21:38:40 2018 +0000

Added an extra tab - World Klock.

This display a list of Time Zones and when selected will display the time in that time zone.  
 This uses the component PascalTZ.

Currently

10171 lines of source code.

5565 statements

15.8% comment

## Build 74 [2.2.4.74]

commit e2d67730fd28e6cb0fba31124bd1c515ba517f4f  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Wed Feb 14 22:00:56 2018 +0000

Added an extra klock - Floating Text Klock. The textual display of the time seems to float on the screen - all other item i.e. form is transparent.

Added formFloatingKlock to hold this.

Added the following user options for Floating Text Klock.

Screen Save, Form Top, Form Left, Font and use Klock Font.

Added calling menu items if formKlock.

Added speed buttons to the countdown tab - so the countdown can be quickly started with either 30, 60, 90 or 120 minutes.

Added TPascalTZ to uFuzzyTime used for local and UTC time, this will take into account time zones.

Currently

10592 lines of source code.

5765 statements

15.9% comment

## Build 75 [2.2.4.75]

commit b094cceaf4631b2c95c838e3b2f1eb9881721758  
Author: Kevin Scott <github@keleven.co.uk>  
Date: Sun Feb 18 15:59:16 2018 +0000

Added more Moon info to the Moon info page - all from the DelphiMoon component.

Added a Sun info page - with all info coming from the DephiMoon component.

Added the user options for Longitude and Latitude - used in Sun/Moon rise and setting times.  
The defaults are for 10 Downing Street, London :-)

Changed Julian time in uFuzzyTie to use the function from TZPaascal, instead of a calculation.

Changed Easter date in uInfoUtils to use the function from TZPaascal, instead of a calculation.  
Also changed the moon stuff to use various function from Delphimoon instead of calculations.

uKlockUtils also uses the function for Easter Sunday instead of a calling the one in uInfoUtils.

Currently

10632 lines of source code.

5791 statements

15.8% comment

#### Build 76 [2.2.4.76]

commit 42cd5887a7e4959e98812979c22b2d8bb59a1042  
Author: Kevin Scott <github@keleven.co.uk>  
Date: Sun Feb 18 21:47:35 2018 +0000

Added a Chinese info page - display Chinese new year and cycle of year.

Corrected a bug in the moon/sun rise and set dates.

Updated all help files.

Currently

10666 lines of source code.

5818 statements

15.7% comment

#### Build 77 [2.2.5.77]

commit 1387927f9db9d6aee758d855fb47ebe4b8e86ed8  
Author: Kevin Scott <github@keleven.co.uk>  
Date: Sun Feb 25 20:45:45 2018 +0000

Tidied up the font handling. The font work flow needed three entries - one for the file name, one for the name to load the font and a third friendly version for the drop down menus. All three where hard coded.

This has been changed so that the font directory is scanned and all .ttf files are loaded. This directory now contains two text files that contain the name to load the font [fontNames.txt] and a list of friendly names [fontTypes.txt]. These text files need to be amended when a new font is added. But, this means a new font can be added without re-compiling Klock.

Added the option to include the font directory to the archive.

Currently

10721 lines of source code.  
 5799 statements  
 15.8% comment

#### Build 78 [2.2.5.78]

commit e60600bb8e49cd12188b62e8ccbb097fb92f549f  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Fri Mar 2 16:35:32 2018 +0000

I found the forms properties FormStyle which can be set to fsSystemStayOnTop. Amended the five other Klock [Analogue Klock, LED Klock, Floating Text Klock, Binary Klock and Small Text Klock] to be able to stay on top, this can be either selected from each Klocks pop up menu or set in the user options.

I think Floating text Klock in Gushing Meadow font in red with stay on top enabled looks cool.

Added a splash screen to Klock [formSplashScreen]. This is called when the program starts and closes. The splash screen just echo entries being made to the log file. This is useful if a few fonts are being loaded as this slows down both starting and closing Klock.

Currently  
 10962 lines of source code.  
 5976 statements  
 15.7% comment

#### Build 79 [2.3.0.79]

commit 2d09414002dea88a47a6eba4cb15e8fcc2a88a8b  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Sun Mar 4 20:17:34 2018 +0000

Started experiencing a system crash sometimes when Klock loaded. I think this was caused by the logging unit writing to the splash screen, Changed the way this was done - will monitor. This seemed more pronounced in the 32 bit version.

Tidied up some of the classes, introduced destructor routines to clear memory objects.

Also, on the other Klocks, set timer enable to false on form create and form close and time enable to true on form show.

Currently  
 11040 lines of source code.  
 6006 statements  
 15.7% comment

#### Build 80 [2.3.0.80]

commit 02be524ca68d5567014aadf66ea2062109472f24  
 Author: Kevin Scott <github@keleven.co.uk>  
 Date: Sun Mar 11 21:36:23 2018 +0000

Noticed that there was a flicker when displaying Floating text Klock. So, amended the update time thingy so it only updated the display when the text changed and not every second. This makes a difference when displaying fuzzyTime that changes every five minutes. Also made this change to the main Klock, to save resources.

Added an option verbose to FuzzyTime so it could add "nearly" and "just gone" to the output.

General code tidy up and correcting spelling errors.

Merged master and V2.

Currently

11075 lines of source code.

6036 statements

15.9% comment

### Build 81 [2.3.0.81]

commit 12155d8788a9eb6b1720acd283ced68e41c3efe0

Author: Kevin Scott <github@keleven.co.uk>

Date: Sat Mar 17 20:03:13 2018 +0000

Added the ability for Klock to keep a Monitor Awake, i.e. stop the system sending the display monitor to sleep.

Klock can used to methods to achieve this.

Klock can simulate the pressing of <CTRL F15>. This is recognised my the OS, but does not appear on most keyboards so therefore is nut used by many programs. If this does cause problems, the second method can be used.

Klock can jiggle the mouse, the mouse is moved on pixel and moved back again.

The time interval for this can also be set, this should be just under the system time out.

This is configured with new user options.

Simplified the logic for the idle timer. This routine now checks whether to keep the monitor awake or not.

Currently

11232 lines of source code.

6132 statements

16.0% comment

### Build 82 [2.3.0.82]

commit e94ed76b2832fd8f8d54ad81512c2bc9851c58bc

Author: Kevin Scott <github@keleven.co.uk>

Date: Sun Mar 18 20:53:35 2018 +0000

Added Monitor Stuff to the Info menu.

This shows information about all the display monitors connects to the system.

This is gathered from Lazarus Tscreen and the WMI system [probably only windows then].

Currently

11312 lines of source code.

6181 statements

16.0% comment

### Build 83 [2.3.1.83]

commit e79dea6c7d3a4f043190562f30ed061719d3758a

Author: Kevin Scott <github@keleven.co.uk>

Date: Wed Apr 11 22:04:18 2018 +0100

Updated tzdata to latest version [2018d].

Implemented a simple Biorhythm chart, the start date is held in the user options. The chart is called via a menu option of the main Klock form.

Tidied up some code in ulnfoutils.pas, so that the returned stringLists are correctly handled - closed when not needed

The about, and Licence, Info forms are now created when needed and not at the start of the app. Trying to do the same with the time forms - but the ones with transparency seem a problem. Simplified the calling of the info forms.

More changes to Power stuff when running on a lap top. It now shows more meaningful times for battery use, but not quite the same as is shown in the windows system tray.

More code made to look pretty.

Currently

11534 lines of source code.

6253 statements

16.0%

Build 84 [2.3.1.84]

commit 4700fa88ef2593800a7c86f0deb85ab15262250b

Author: keleven-uk <github@keleven.co.uk>

Date: Tue May 22 21:47:25 2018 +0100

Added a call to the enhanced version of Biorhythms to menu.  
This is a separate github project.

Corrected a bug with compile time in formAbout.

Corrected a bug with writing default options in uOptions.

Merged into master.

Currently

11552 lines of source code.

6265 statements

16.0% comment

Build 85 [2.4.0.85]

commit b1d2fedaaad3da057af3d1163cae905445c1e659

Author: keleven-uk <github@keleven.co.uk>

Date: Tue May 29 22:48:52 2018 +0100

The current Reminder tab had a couple [many] bugs and did not really work and needed re-writing really. Also the naming of the Reminder and Event tabs was not really correct.

So, I have deleted the Reminder tab and all associated code.

I have renamed the Events tab to Reminder - This tab is about a single one off prompt at a given time so suits the name Reminder and not Events.

A new Events tab will be written, hopefully more suited to the job.

Compiled with Lazarus 1.8.4.

Currently  
11393 lines of source code.  
6154 statements  
15.9% comment

#### Build 86 [2.4.0.86]

commit d623a7fecabd19599c5a6ffc7f74bb8ca26723cd  
Author: keleven-uk <github@keleven.co.uk>  
Date: Fri Jun 1 21:39:08 2018 +0100

Deleted formReminderInput - Not now used.

Combined the event handler routine for the four speed buttons on the countdown tab into one generic handler routine. These buttons provide pre-determined minute intervals - 30, 60, 90 and 120 minutes.

Combined all the event handlers for the menu's and front panel buttons into one generic event handler.

Even more code tidying.

Ran source against a spell checker.

Currently  
11062 lines of source code.  
6093 statements  
16.0% comment

#### Build 87 [2.4.1.87]

commit 3055fcda201b0d1fd4f265a8607e0a7f086a4ff8c  
Author: keleven-uk <github@keleven.co.uk>  
Date: Tue Jun 5 22:31:38 2018 +0100

Switched on Hi-Dpi aware.

Added two new units - uEvent.pas and uEvents.pas.  
Events is a little like a memo, but with a date. These can be one off or recurring and Klock will alert you when they due.  
All of the GUI element for Events in place.  
Code for the New, Clear and add buttons written.  
Need to test, before continuing.

Currently  
11564 lines of source code.  
6333 statements  
16.2% comment

#### Build 88 [2.4.1.88]

commit a8a52ddf513304f41b155dbd6e27fc72175cb78a  
Author: keleven-uk <github@keleven.co.uk>  
Date: Tue Jun 12 23:09:45 2018 +0100

Finally added code to load and save the contents of the clipboard managed to CSV files. The code resides in uClipboardUtils.

Fixed a bug with the Clipboard manager, if an image was clicked in the list it could be duplicated.

Also, added a generic click procedure for the buttons in the Clipboard Manager.  
Added a speed button to the front of Klock that calls up the Clipboard manager.

Currently

11708 lines of source code.

6421 statements

16.4% comment

#### Build 89 [2.4.1.89]

commit 80427f2287bb6a899da3500c876cb0b614aaf149

Author: keleven-uk <github@keleven.co.uk>

Date: Wed Jun 13 22:57:07 2018 +0100

Added event delete and event edit procedures.

Added event list box click event.

Also changed event amend to allow amendments of date as well as text.

Currently

11784 lines of source code.

6466 statements

16.4% comment

#### Build 90 [2.4.1.90]

commit 2900bd48731a06d19eb8fc154eb2b17bbc3c5b21

Author: keleven-uk <github@keleven.co.uk>

Date: Mon Jun 25 21:54:00 2018 +0100

Corrected bug, Clipboard manager not saving screen position.

Another attempt at fixing the duplicate image entries in the clipboard list.

Added logic to check if image or file had been deleted, when clicked in list.

Currently

11776 lines of source code.

6458 statements

16.4% comment

#### Build 91 [2.4.1.91]

commit 847df91841c788e66925a0adee212569343c2ebd

Author: keleven-uk <github@keleven.co.uk>

Date: Wed Jun 27 21:41:05 2018 +0100

Created EventTypes.txt, which is loaded at start up to provides the different event types - will allow customisation later.

Corrected a bug with setting the event buttons in frmKlock.

Corrected a bug where the event type was not being passed out of frmKlock.

Tidied up the event code in frmKlock.

Corrected a bug where the event type was not being correctly saved in uEvent.

Amended the amend procedure in uEvents if handle event types correctly.

Currently  
 11788 lines of source code.  
 6466 statements  
 16.4% comment

#### Build 92 [2.4.1.92]

commit 65d172ca01964af122f619ba3aec12c030f6b04

Author: keleven-uk <github@keleven.co.uk>

Date: Sun Jul 8 21:14:25 2018 +0100

Continuing with event thingy.

Added float, interval\_short & interval\_long properties to the event class.  
 Amended to load and save routines to include the float properties in event.  
 Amended the new and amend routines to include the float properties in events.

Added an update routing the events class that will calculate both interval\_short and interval\_long [not yet complete]. This routine is called upon a new event been added and on every hour form the main Klock.

Added MarsSelDate & CoordinatedMarsTime to uFuzzyTime.

Currently  
 11881 lines of source code.  
 6512 statements  
 16.4% comment

#### Build 93 [2.4.1.93]

commit 681dcfdaf9b231c326f77dc35f011545d2de3b36

Author: keleven-uk <github@keleven.co.uk>

Date: Mon Jul 16 21:51:29 2018 +0100

Continuing with event thingy.

Completed the work on due intervals.

Also, added to the events class, a number of aged dates [stages]. If the due interval falls between these stages, a prompt is displayed to the user.

Also, added properties to the events class for stages 1 to 3 and accompanying messages. These are hard coded at the moment, but will be options.

Removed the fonts directory from the archive routines.

Currently  
 11938 lines of source code.  
 6557 statements  
 16.5% comment

#### Build 94 [2.4.1.94]

commit 97c40bf12091ad48ce4946790509b6eb83a3dd8d

Author: keleven-uk <github@keleven.co.uk>

Date: Wed Aug 1 21:37:54 2018 +0100

Continuing with event thingy.

Added a new form, formEvent. This is generated when an event is due to inform the user. The idea is that when a pre-determined due interval is reached before the event, the user will be reminded. There should be three such intervals and will be user defined - but are hard coded at the moment.  
Changes to Event and Events to check for stages and generate the reminders.  
Changes to formKlock to set up stages.

NB : needs to be tested.

Currently  
12208 lines of source code.  
6689 statements  
16.4% comment

#### Build 95 [2.4.1.95]

commit b53352d16c0ed121a29ee5e9ea44018520f9da68  
Author: keleven-uk <github@keleven.co.uk>  
Date: Sun Aug 5 20:04:25 2018 +0100

Continuing with event thingy.  
Added user options for the Events.  
Added in Options.pas options for Stage Days, Stage Messages, Fore and back Colour for each of the three stages.  
Amended variable names in Events.pas to be more compatible.  
Moved some of the setup stuff from formShow into their own routines.  
Added the required components in formOptions.pas.  
NB : needs to be further tested.

Currently  
12503 lines of source code.  
6926 statements  
16.5% comment

#### Build 96 [2.4.1.96]

commit ee4228017fab33dacef34c228fbe1014e49f5686  
Author: keleven-uk <github@keleven.co.uk>  
Date: Thu Aug 9 22:54:30 2018 +0100

Continuing with event thingy [nearly there].  
Added to uEvents.pas, so the eventSore is now held in sorted order.  
The store is sorted by due days, so the events are now displayed with the next due event top of the list and then descending is chronological order.

Correct bug with displaying eventNew button.

Currently  
12577 lines of source code.  
6977 statements  
16.4% comment

#### Build 97 [2.4.2.97]

commit 3c6d4e41e879a5a8d7d6efab309dfcccd479e36cf  
Author: keleven-uk <github@keleven.co.uk>  
Date: Mon Aug 13 19:38:02 2018 +0100

Continuing with event thingy [Should be a working thing].

Changed event types, now not loaded from a text file but defined in uEvents.pas.

Added a new procedure onto the event class, copy. This copies a supplied event onto the current event - used in sort routine in the events class.

Corrected bug in system tray menu - exit now works okay.

Currently

12590 lines of source code.

6967 statements

16.5% comment

### Build 98 [2.4.2.98]

commit 6b4713eb6b0b5581e33faaac3e1fd8537d9acdb3

Author: keleven-uk <github@keleven.co.uk>

Date: Mon Aug 20 20:52:00 2018 +0100

Added Speech.

Klock can speak the time in the current chosen format configured do so.

The time interval and volume can be set in user options.

The speak routine is in the fuzzyTime class and called form the main timer routine in Klock.

When an event form is displayed, it can speak it's prompt - again if configured to do so.

The speak routine is in formEvent.

formEvent and uevents where changed to handle the above user options.

Help files where updated.

Branch V2 was merged with master.

Currently

12771 lines of source code.

7079 statements

16.4% comment

### Build 99 [2.4.3.99]

commit c838728e1e3a9bd59d5b375b667f7f5af8aca837

Author: keleven-uk <github@keleven.co.uk>

Date: Thu Sep 6 21:50:38 2018 +0100

Started work on the Friends tab.

Added a new form, formFriendsInput, which allows the friends details to be entered. Also, added two new classes, a Friend class which holds the friends details and a Friends class with manipulates a number of friends.

This is work in progress - add input and display routines so far.

Added to formKlock a new main tab to hold the friends and some routines to call the friends input form and display friends.

Currently

13500 lines of source code.

7467 statements

16.5% comment

#### Build 100 [2.4.3.100]

commit e6f0840188d749c0d3b045160ec3643d27dcf8a7

Author: keleven-uk <github@keleven.co.uk>

Date: Mon Sep 10 22:29:09 2018 +0100

Added friends Edit and Delete buttons to formKlock.

Added buttons and routines to formFriendsInput to edit and delete friends.

Added friends file to archive list in uArchiveUtils.

Added missing fields [web page & dob] to saveToFile in uFriend.

Added restoreFriends to uFriends.

Added friendsName [filename] to uOptions.

Currently

13771 lines of source code.

7661 statements

16.4% comment

#### Build 101 [2.4.3.101]

commit 856bec8ee39186b5042bcddf0b87cbe17971a94f

Author: keleven-uk <github@keleven.co.uk>

Date: Mon Sep 17 21:28:58 2018 +0100

Merged Friends edit, delete & new buttons into a generic friends button handler - they shared a lot of similar code.

Corrected a bug in user options with friendsName.

Added a new form, formTimePositions. This allows the screen co-ordinates of the extra klocks to be manually amended. There is a bug [Windows feature?] where they can appear off screen i.e. where monitors are added or resolution is changed.

Will merge into master, Friends, Memo, Events & Sticky Notes should be complete - but need testing further.

Currently

13907 lines of source code.

7730 statements

16.4% comment

#### Build 101 [2.5.0.102]

Updated Help.

---

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Version 3, 29 June 2007

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- Convert based on article in <http://www.dreamincode.net/forums/topic/121316-an-updatable-unit-conversion-calculator/>
- Most of the time formats where found on the internet - clever minds then me out there
- Nancy Blackett Semaphore Font curtsey of ©2006 Roland B. Harris
- [www.allthingsransome.net/downloads/nbsemaphore.html](http://www.allthingsransome.net/downloads/nbsemaphore.html)
- I think all the fonts came from <https://www.dafont.com/>. All authors gratefully acknowledged.
- Font for the Text Klock etc., Hack - <http://sourcefoundry.org/hack/>
- Images from <https://icons8.com/>

Things needed to compile Klock - many thanks to all

- Lazarus IDE - <http://www.lazarus-ide.org/>
- BGRA Controls [Analogue Klock] - <http://wiki.lazarus.freepascal.org/BGRAControls>
- Eye-Candy Controls [Accordion Component on help screen] - [http://wiki.lazarus.freepascal.org/Eye-Candy\\_Controls](http://wiki.lazarus.freepascal.org/Eye-Candy_Controls)
- Visual Planit [L.E.D. Component] - [http://wiki.lazarus.freepascal.org/Turbopower\\_Visual\\_Planit](http://wiki.lazarus.freepascal.org/Turbopower_Visual_Planit)
- PascalTZ - <https://github.com/dezlov/PascalTZ/releases>
- delphiMoon -<https://github.com/wp-xyz/delphimoon/>

Most of the components can be installed from the On-line Package manager.