

The Millennium_Magic Software

Brought to You by the Midnight ExpressWare Co.,
cause "We only run at Night"

Developer / User Information...

The following information serves as an overview and review of the software. As for Developer(s) and User(s), a 'Windows Visual Demo', is provided with hands-on interaction to show you the capabilities, the flexibilities, and adaptabilities that the software can provide you in your software development.

- 0) The Demo comes in a Zip file and will need pkunzip.exe to unload the zip file. Run the file 'setup.exe' to set up the demo. Most of the inputs within the Demo are in Valid Date Formats, with some noticed exceptions. Learn the Valid Date Formats first and then run the Demo.

The demo comes in two pieces:

- A) A MS Visual Basic Front End.
- B) A Windows 95+ based 32-bit DLL file written in MS Visual C++. This Windows 95+ based 32-bit DLL file is the Millennium_Magic Software and has a dual capability:
 - 1) It is Year 2000 Compliant Software.
 - 2) Also, it's a Date Manipulation Utility, A Tool!

This DLL/software does answer the questions like, what is the Century for '01/01/00'. And does address and answer the Y2K questions being faced by DP Mgrs., and Developers alike. This is a Windows 95/98+ platform based piece of software, developed within 1900's and 2030's Date time frames.

- 1) The demo is broken down into 'Approx' 10 major sections:
 - A) General Date Information.
 - B) Between Date Comparisons.
 - C) Next Working Days.
 - D) Date Conversions, with additional feature(s).
 - E) Date Lapse Calculations.
 - F) Date Calculations.
 - G) Date and Time Information (Retrieval Only).
 - H) Julian to Calendar Date Conversion and Calendar to Julian Date Conversion.
 - I) A Date Sliding Window.
 - J) "Create your own" Date Format(s).

(* The Main 10 sections, A-J *)

- K) Works with 'D)', An External Date Data File, which works with in conjunction with the Date Conversions, with additional feature. This feature creates this file,

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Developer-User Information... (Cont'd)

the date conversion feature reads the file. This is a useful programmable option. You can "Access an External Date Data File" gets a Date Format Value Id that can override the value you can send via the parameter containing the Date Format Value Id you desire. If the file is not there, or the Date Format Value is invalid, it uses the id value you sent via the parameter containing the Date Format Value Id you desired.

- L) You can also create this External Date Data File, with the desired Date Format Value Id, for possible override capabilities. This is also part of the Programmable option.

There are plenty of display boxes showing the flexibility of software. The Input/Entry boxes are black and the display (Output boxes "Non 3d") only are also black.

- 2) From the initial start up screen, you will find two columns of four(4)+ buttons each, and four small buttons on the right side. Each one of the ten(10) buttons represents one of the ten major sections mentioned above in '1)'.

The main form of input is in Date format only, but with a few exceptions. You can use 'today' or 'now' for today's date or use 'Yester', 'Yester0' to 'Yester7' to retrieve prior days dates.

- 3) The input boxes have a white background with black print. The display or read-only boxes have white backgrounds, but with black print, but very clear and readable print.
- 4) This solution presented here address' the Y2K problems, and is definitely an alternative solution, in DLL function call format! This solution presented here is NOT a fix, but a workable/via solution.
- 5) Before you 'run' the program, become familiar with the 40 supported date formats first! Input must be left justified! There is a list of 'Date Formats' provided, you can access it via a button on the right side of the demo, labeled 'Supported Date Formats'. But first press the 'Read Me, General Information' button, and then read the page.

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- 6) Suggestions are encouraged and welcomed.

Software Features...

A) Date Calculations:

- 1) Given an input date plus a (+-) number of days equals a computed output date.

Meaning: Enter a Start Date and a number of days, and you will get a computed End Date.

- 2) Given two input dates, the function return an approx. difference in the number (+-) of days, between two dates.

Meaning: Enter a Start Date and a End Date, and you will get a computed (+-) number of days.

B) Date Conversions: See Note 1:

- 1) Convert from one date format to another date format. Software support 40 Input/Output date formats.
- 2) Can retrieve the current(today's) Date. Type in 'Today' w/o quotes and press the OK Button.
- 3) You can choose what Century you want your 'Changed Dates in. I recommend that you leave the Century in the "Def: 19" mode. You can also "access an External Date Data File". For changing 'Date Formats' from one to another on the 'fly', without having to recompile code. This is the programmable option.

C) Current Date and Time retrieval:

Retrieve the Date in one of the many Date Formats.

D) Date Lapse:

- 1) Given two dates, the function returns the approx. information: Input a Start and End Dates.

- A) Number of Years
- B) Number of Months
- C) Number of Weeks
- D) Number of Days

- 2) Leap Years are taken into consideration. Function can handle negative approximations.

E) Next Working Day:

- 1) Given a input date plus a POSITIVE number of future working days, the function will return a computed date based on the information supplied.

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F) Week-Work-Day:

- 1) Function returns, based on an inputted date: the following information:

- A) The Name of the Day

- B) The week day number. e.g.: (1-7, 1 = Sunday)
- C) The approx. week number.

G) Some General Date Information:

INPUT a Date. The following information is retrieved:

- 1) Get the name of the day of a date.
- 2) Get the week day number of a date. e.g.: (1-7, 1 = Sunday).
- 3) Gets the day id of a date. E.g.: 17 of '04/17/1997'
- 4) Gets month number. E.g.: 01 is Jan, 02 is Feb, ... 12 is Dec.
- 5) Gets month name. January, February, ... December.
- 6) Gets year number of a date. E.g. 97 of 1997
- 7) Gets century number of a date. E.g. 19 of 1997
- 8) Gets full century/year value of a date. 1997
- 9) Is it a Leap Year of a date.
- 10) Is today a Holiday?

Please refer to the "'MilMagFl.Ini' File:" area below for info.

The KeyYearForHolidayFile option.

- H) The Software(DLL) is written in MS Visual C++, in a modular format/fashion. The front end is written in MS Visual Basic.

I) Full-Date-Format:

Create you own day/date formats, with or without Day/Date Abbreviations and a few other tid-bits.

- K) ALL FUNCTIONS will ALWAYS validates all input dates first! And either returns a '1' for a good date, else a '0' for a bad date.

NOTE: 1

DATE CONVERSIONS - 40 SUPPORTED Input/Output DATE FORMATS

A definition of a Date Format, is as follows:

Using the following Date Formats as examples...

- | | | |
|---------------|---------------|----------------|
| A) MM-DD-CCYY | B) MM/DD/CCYY | C) MM-DD-YY |
| 01-01-1998 | 10/19/1984 | 10-19-84 |
| D) MMDDCCYY | E) CCYYMMDD | F) CCYY-mmm-DD |
| 01011998 | 19981225 | 1998-Dec-25 |

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Software supports the following Date Formats:

- | | | |
|----------------|-------------|--------------|
| 1) MMDDYY | 2) YYMMDD | 3) MM/DD/YY |
| 4) YY/MM/DD | 5) YY.MM.DD | 6) DD-mmm-YY |
| 7) DD-mmm-CCYY | 8) DDmmmYY | 9) DDmmmCCYY |

- | | | |
|-------------------------|-------------------------|-------------------------|
| A) MM-DD-CCYY | B) MM/DD/CCYY | C) MM-DD-YY |
| D) MMDDCCYY | E) CCYYMMDD | F) CCYY- <i>mmm</i> -DD |
| G) CCYY-MM-DD | H) DD/ <i>mmm</i> /CCYY | I) DD/ <i>mmm</i> /YY |
| J) CCYY/ <i>mmm</i> /DD | K) <i>mmm</i> /DD/CCYY | L) <i>mmm</i> /DD/YY |
| M) <i>mmm</i> -DD-CCYY | N) <i>mmm</i> -DD-YY | O) CCYY/MM/DD |
| P) CCYY/DD/MM | Q) CCYY-DD-MM | R) CCYY/DD/ <i>mmm</i> |
| S) CCYY-DD- <i>mmm</i> | T) CCYY <i>mmm</i> DD | U) MM-D-CCYY |
| V) MM/D/CCYY | W) M-DD-CCYY | X) M/DD/CCYY |
| Y) D- <i>mmm</i> -CCYY | Z) D/ <i>mmm</i> /CCYY | *) <i>mmm</i> -D-CCYY |
| #) <i>mmm</i> /D/CCYY | @) M-D-CCYY | &) M/D/CCYY |
| \$) D <i>mmm</i> CCYY | | |

Are there any other date formats you may be requiring or needing for your Windows applications??

Also, there are the following additional date formats:

** Seven(7) 'INPUT Only' date formats:

M-D-YY	and M/D/YY:	9-4-98,	3/1/96
D- <i>mmm</i> -YY	and D/ <i>mmm</i> /YY:	7-Jul-76,	7/Jul/76
<i>mmm</i> -D-YY	and <i>mmm</i> /D/YY	Apr-3-97,	Apr/3/97
D <i>mmm</i> YY:		7Jul76	

** Eight(8) 'OUTPUT Only' date formats, in English style date form, with day first:

DD/MM/CCYY	DD/M/CCYY	D/M/CCYY	D/MM/CCYY
DD-MM-CCYY	DD-M-CCYY	D-M-CCYY	D-MM-CCYY

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** Date Format Legend: **

CC = Century Value	DD = Day Number (01-(28,29,30,31))
MM = Month Number (01-12)	<i>mmm</i> = (Jan, Feb, ..., Nov, Dec)
YY = Year Value	D = (1-9) M = Month Number (1-9)

Plus:

The ability to retrieve Today's Date: 'Today' and 'Now' in any case (Upper or Lower case, or a combination there of).

The ability to retrieve Yesterdays date and up to a week back. E.G.: 'Yester', 'Yester0' to 'Yester7'
When the demo initially starts up, the following lines of text will be placed within the 'MilMagFl.Ini' file. This Ini file contains the information that the DLL file needs.

'MilMagFl.Ini' File:

```
[MillMagSoft]      <-This Section, with mentioned Section Name,
                    will appear within 'MilMagFl.Ini' File.
* MillMagLocation=C:\      <- Location of the two(2) Files.
* MillMagFile=DatCvFil.Bnf  <- A user programmable option.
                        The Name of external Date Data File.
* MillMagHoldy=Holidayf.Bnf <- Name of Holiday File.
* KeyYearForHolidayFile=1998 <- For Year (CCYY) of Holidays
```

To change the Holidays within the Year(=CCYY), do the following: just change the 'KeyYearForHolidayFile' value(CCYY) passed the equal sign(=). For examples:

CCYY	CCYY
KeyYearForHolidayFile=1997	<- For the Holidays in 1997.
KeyYearForHolidayFile=1998	<- For the Holidays in 1998.
KeyYearForHolidayFile=1999	<- For the Holidays in 1999.
KeyYearForHolidayFile=2000	<- For the Holidays in 2000.

and so forth... The Holiday File can be very big!
UPON Initial DLL Invocation, the holidays for that Year will be computed and added into the Holiday File.
The default year is the current Year.

* MilMagDateIniChgd=<May/22/1998, 07:14:57 PM>
This Date and Time reflects the 'Ini' file has changed.

Each time thereafter, upon initial DLL invocation, this area is always checked.

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Note(s):

- A) Please remember that the demo comes in two pieces:
 - 1) A MS Visual Basic Front End.
 - 2) A Windows 95/98+ based 32-bit DLL file written in MS Visual C++. This custom built Windows 95/98+ based 32-bit DLL file is the actual Millennial_Magic Software.

- B) Within each section or screen, that's off the initial or main screen, there are a set of DLL routines that provides the information necessary for that screen.

- C) Just added feature: A sliding window feature.
 - 1) Given a Pivot(Start) Date

- 2) Plus a number of years(plus(+) or minus(-), (numofyrs) you create an end date. And thus creating a sliding window.
- 3) Then put in a check date, and Then see if this check date fits within this 'sliding window'.

Pivot-Date

```
<-----|----->
**  A Negative Window          A positive window  **
Note: (**) means computed an end (date)point:
      Either subtract OR add 'numofyrs' to the Pivot-Date.
```

For any further Information and/or for questions OR in that fact any other questions you might have about the software, Please contact me(Thad) regarding this software either by Email or by Snail Mail AND you will get a quick response and answer(s) BACK!!

My Email Address at: methorpe@burgoyne.com

- OR -

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