



# TIME TO WIN

This is the help file for 'TIME TO WIN' for VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT} and MSOffice 95.

Overview

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ANY REGISTERED USERS CAN ASK ME TO ADD SOME FUNCTIONNALITIES (non graphical routines).

# DESencryptFile, DESdecryptFile

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[DESencryptFile](#) copy one file to an another file but with DES encryption.

[DESdecryptFile](#) copy one file to an another file but with DES decryption.

## Declare Syntax :

Declare Function cDESencryptFile Lib "[time2win.dll](#)" (ByVal FileIn As String, ByVal FileOut As String, Key As String) As Long

Declare Function cDESdecryptFile Lib "[time2win.dll](#)" (ByVal FileIn As String, ByVal FileOut As String, Key As String) As Long

## Call Syntax :

test& = cDESencryptFile(FileIn, FileOut, Key)

test& = cDESdecryptFile(FileIn, FileOut, Key)

## Where :

FileIn\$	is the source file.
FileOut\$	is the destination file.
Key	is the key to use for encryption/decryption.
test&	> 0 if all is OK (the returned value is the total bytes copied), < 0 if an error has occurred.

If the returned code is a negative value, it take the following value :

```
Public Const CRYPTO_KEY_TOO_SMALL = -1
Public Const CRYPTO_CANT_INIT_KEY = -2
Public Const CRYPTO_CANT_INIT_BUFFER = -11
Public Const CRYPTO_CANT_OPEN_FILEIN = -21
Public Const CRYPTO_CANT_CREATE_FILEOUT = -22
Public Const CRYPTO_ERROR_READING_FILEIN = -31
Public Const CRYPTO_ERROR1_WRITING_FILEOUT = -41
Public Const CRYPTO_ERROR2_WRITING_FILEOUT = -42
Public Const CRYPTO_ERROR1_WRITING_LASTBYTE = -51
Public Const CRYPTO_ERROR2_WRITING_LASTBYTE = -52
Public Const CRYPTO_BAD_LASTBYTE = -61
```

## Comments :

The Key is case sensitive.

The length of Text can be any size.

The length of Key must be greater or equal to 8 characters.

The encrypted file is always a multiple of 8 characters + 1 character.

## Examples :

Dim TestAs Long

Test = cDESencryptFile("c:\autoexec.bat", "c:\autoexec.tb1", "Time To Win")

Test = cDESdecryptFile("c:\autoexec.tb1", "c:\autoexec.tb2", "Time To Win")

**See also :** [Encryption](#)

TIME TO WIN for VB 3.0	: TIME2WIN.DLL	: <b>9.05</b>	(08/07/1996)
TIME TO WIN for VB 4.0 (16-Bit)	: T2WIN-16.DLL	: <b>9.05</b>	(08/07/1996)
TIME TO WIN for VB 4.0 (32-Bit)	: T2WIN-32.DLL	: <b>3.05</b>	(08/07/1996)
TIME TO WIN for MSOffice 95	: T2WOFFIC.DLL	: <b>2.01</b>	(08/07/1996)

Select the following product :

TIME TO WIN for VB 3.0

TIME TO WIN for VB 4.0 (16-Bit)

TIME TO WIN for VB 4.0 (32-Bit)

TIME TO WIN for MSOffice 95

# TIME TO WIN for VB 3.0 : Installation

## **Demonstration version :**

The files TIME2WIN.DLL and TIME2WIN.HLP should be copied in your WINDOWS\SYSTEM or WIN95\SYSTEM and/or WINNT35\SYSTEM32 directory.

## **Registered version :**

The files TIME2WIN.DLL, TIME2WIN.HLP should be copied in your WINDOWS\SYSTEM or WIN95\SYSTEM and/or WINNT35\SYSTEM32 directory.

The file TIME2WIN.LIC should be copied in your WINDOWS or WIN95 directory.

## **Distribution note:**

When you create and distribute applications that use 'TIME TO WIN' dynamic link library, you should install the file 'TIME2WIN.DLL' in the customer's Microsoft Windows \SYSTEM or \SYSTEM32 subdirectory. The Visual Basic Setup Kit included with the Professional VB product provides tools to help you write setup programs that install you applications correctly.

***You are not allowed to distribute TIME2WIN.LIC file with any application that you distribute.***

# TIME TO WIN for VB 4.0 (16-Bit) : Installation

## **Demonstration version :**

The files T2WIN-16.DLL and T2WIN-16.HLP should be copied in your WINDOWS\SYSTEM or WIN95\SYSTEM and/or WINNT35\SYSTEM32 directory.

## **Registered version :**

The files T2WIN-16.DLL, T2WIN-16.HLP should be copied in your WINDOWS\SYSTEM or WIN95\SYSTEM and/or WINNT35\SYSTEM32 directory.

The file T2WIN-16.LIC should be copied in your WINDOWS or WIN95 directory.

## **Distribution note:**

When you create and distribute applications that use 'TIME TO WIN (16-Bit)' dynamic link library, you should install the file 'T2WIN-16.DLL' in the customer's Microsoft Windows \SYSTEM or \SYSTEM32 subdirectory. The Visual Basic Setup Kit included with the Professional VB product provides tools to help you write setup programs that install you applications correctly.

***You are not allowed to distribute T2WIN-16.LIC file with any application that you distribute.***

# TIME TO WIN for VB 4.0 (32-Bit) : Installation

## **Demonstration version :**

The files T2WIN-32.DLL and T2WIN-32.HLP should be copied in your WIN95\SYSTEM and/or WINNT35\SYSTEM32 directory.

## **Registered version :**

The files T2WIN-32.DLL, T2WIN-32.HLP should be copied in your WIN95\SYSTEM and/or WINNT35\SYSTEM32 directory.

The file T2WIN-32.LIC should be copied in your WIN95 directory.

## **Distribution note:**

When you create and distribute applications that use 'TIME TO WIN (32-Bit)' dynamic link library, you should install the file 'T2WIN-32.DLL' in the customer's Microsoft Windows \SYSTEM or \SYSTEM32 subdirectory. The Visual Basic Setup Kit included with the Professional VB product provides tools to help you write setup programs that install you applications correctly.

***You are not allowed to distribute T2WIN-32.LIC file with any application that you distribute.***

# TIME TO WIN for MSOffice 95 : Installation

## **Demonstration version :**

The files T2WOFFIC.DLL and T2WOFFIC.HLP should be copied in your WINDOWS\SYSTEM or WIN95\SYSTEM and/or WINNT35\SYSTEM32 directory.

## **Registered version :**

The files T2WOFFIC.DLL, T2WOFFIC.HLP should be copied in your WINDOWS\SYSTEM or WIN95\SYSTEM and/or WINNT35\SYSTEM32 directory.

The file T2WOFFIC.LIC should be copied in your WIN95 directory.

## **Distribution note:**

***You are not allowed to distribute T2WOFFIC.LIC file with any application that you distribute.***



# Technical support

## Only registered users can receive support and update.

To receive support, you must specify your registration ID.

However, any report on any problem are the welcome.

The following information may be of help to you in streamlining your efforts to resolve any technical problems you may have with any version of TIME TO WIN Dynamic Link Library.

### **GPF?**

If you are getting a GPF (General Protection Fault), write down the information that is displayed when the error occurs. Also, make a note of what your code was doing (in general terms.)

### **ISOLATE IT**

Try to isolate the cause of the error. If at all possible, step through your code with F8 and F9. Try to find the one line of code that is causing the error.

### **SCALE IT DOWN**

If at all possible, try to reproduce the problem in a small test program that you can send in. Send your test on CompuServe.

### **Update**

You can download the update of all of my products on the following network :

On CompuServe :

MSBASIC forum  
VBPJ forum  
MSACCESS forum

On Internet :

TIME2WIN.ZIP	(ftp.winsite.com/pub/pc/win3/programr/vbasic)
T2WIN-16.ZIP	(ftp.winsite.com/pub/pc/win3/programr/vbasic)
T2WIN-32.ZIP	(ftp.winsite.com/pub/pc/win95/programr/vbasic)
MCVBHTP.ZIP	(ftp.winsite.com/pub/pc/win95/programr/vbasic)
MCSECURE.ZIP	(ftp.winsite.com/pub/pc/win95/programr/vbasic)

### **CompuServe Mail:**

**Name : Michaël RENARD**  
**CIS : 100042,3646**  
**Internet : 100042.3646@compuserve.com**

I'm on CompuServe one time a day.

# License agreement

All versions of TIME TO WIN dynamic link library are not public domain software or free software.

All versions of TIME TO WIN dynamic link library are copyrighted, and all rights are reserved by its author: Michaël Renard.

You are licensed to use this software on a restricted number of computers. You may copy the software to facilitate your use of it on as many computers as there are licensed users specified in the license file. Making copies for any other purpose violates international copyright laws.

***You are not allowed to distribute the [TIME TO WIN.LIC] file with any application that you distribute.***

## **Disclaimer:**

This software is sold AS IS without warranty of any kind, either expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. The authors assume no liability for any alleged or actual damages arising from the use of this software. (Some states do not allow the exclusion of implied warranties, so the exclusion may not apply to you.)

**Your use of this product indicates that you have read and agreed to these terms.**

## Distribution note

When you create and distribute applications that use a version of 'TIME TO WIN', you should install the [TIME TO WIN.DLL] in the customer's Microsoft Windows \SYSTEM or \SYSTEM32 subdirectory. The setup kit included with Visual Basic provides tools that help you write setup programs that install your applications correctly.

***You are not allowed to distribute the [TIME TO WIN.LIC] file with any application that you distribute.***

TIME TO WIN for VB 3.0	: time2win.dll
TIME TO WIN for VB 4.0 (16-Bit)	: t2win-16.dll
TIME TO WIN for VB 4.0 (32-Bit)	: t2win-32.dll
TIME TO WIN for MSOffice 95	: t2woffic.dll

TIME TO WIN for VB 3.0	: TIME2WIN.LIC
TIME TO WIN for VB 4.0 (16-Bit)	: T2WIN-16.LIC
TIME TO WIN for VB 4.0 (32-Bit)	: T2WIN-32.LIC
TIME TO WIN for MSOffice 95	: T2WOFFIC.LIC

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Special thanks to [Andy Brown](#) for adaptation of the U.S. [Data Encryption Standard \(DES\)](#) cipher in a Win3.1x DLL..  
Special thanks to [Andy Brown](#) for adaptation of the [International Data Encryption Algorithm \(IDEA\)](#) cipher in a Win3.1x DLL.  
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Special thanks to [Michael Paul Johnson](#) for [RUBY Mark 5 Algorithm](#).  
About *DIAMOND* and *RUBY MARK 5* algorithm, you can reach Michael Paul Johnson at :  
Internet e-mail : [mpj@csn.net](mailto:mpj@csn.net)  
Web site : <http://www.csn.net/~mpj> <- Get John (GLW)  
Colorado Catacombs BBS : 303-772-1062  
Special thanks to [Haruhiko Okumura](#) for [Data Compression Algorithms of LARC and LHarc](#).  
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This help has been written by using [ForeHelp](#) v1.04 from [ForeFront, Inc.](#)

For TIME TO WIN (32-Bit), special thanks for registered user who have asked me some new functions :

[Guillermo Kunst](#) for [cEnumPrinterJobs](#).  
[Norm Zastre](#) for [c3DWeightAverage](#), [cFProcessAsciiFile](#), [cFGotoRecord](#).  
[John Sinnott](#) for [cEnumOpenFiles](#).  
[Tom A. King](#) for [RUBY Mark 5 encryption](#).

# Other products

## Basis products :

### 1) [TIME TO WIN \(VB 4.0 \(32-Bit\)\)](#)

This product is a powerfull 32-Bit DLL with more than 665 routines for VB 4.0 (32-Bit) application.

You can download the full product (demo included) from the following site :

CompuServe : GO MSBASIC : select T2WIN-32.ZIP  
Internet : ftp.winsite.com/pub/pc/win95/programr/vbasic/T2WIN-32.ZIP

You can register the full product (demo included) at the price of **\$52.00** from the following site :

CompuServe : GO SWREG : select the product item #7516  
Internet : use REGISTER.EXE in the ZIP'ed file : select [TIME TO WIN \(32-Bit\)](#)

### 2) [TIME TO WIN \(VB 3.0 or VB 4.0 \(16-Bit\)\)](#)

This product is a powerfull 16-Bit DLL with more than 650 routines for VB 3.0 and VB 4.0 (16-Bit) application.

You can download the full product (demo included) from the following site :

CompuServe : GO MSBASIC : select TIME2WIN.ZIP and T2WIN-16.ZIP  
Internet : ftp.winsite.com/pub/pc/win3/programr/vbasic/TIME2WIN.ZIP  
ftp.winsite.com/pub/pc/win3/programr/vbasic/T2WIN-16.ZIP

You can register the full product (demo included) at the price of **\$43.00** from the following site :

CompuServe : GO SWREG : select the product item #4045  
Internet : use REGISTER.EXE in the ZIP'ed file : select [TIME TO WIN \(16-Bit\)](#)

### 3) [TIME TO WIN for MS Office 95](#)

This product is a powerfull 32-Bit DLL with more than 360 routines for Access 95, Excel 95 and Word 95.

You can download the full product (demo included) from the following site :

CompuServe : GO MSBASIC : select T2WOFFIC.ZIP  
Internet : ftp.winsite.com/pub/pc/win95/programr/vbasic/T2WOFFIC.ZIP

You can register the full product (demo included) at the price of **\$25.00** from the following site :

CompuServe : GO SWREG : select the product item #10355  
Internet : use REGISTER.EXE in the ZIP'ed file : select [TIME TO WIN for MS Office 95](#)

### 4) [mcr VB/Error Handler - Tracer Profiler](#)

This product is a powerfull product for adding/removing the management of errors and tracer-profiler for project under VB 3.0, VB 4.0 (16-Bit) and VB 4.0 (32-Bit).

You can download the full product (demo included) from the following site :

CompuServe : GO MSBASIC : select MCVBEHTP.ZIP  
Internet : ftp.winsite.com/pub/pc/win95/programr/vbasic/MCVBEHTP.ZIP

You can register the full product (demo included) at the price of **\$25.00** from the following site :

CompuServe : GO SWREG : select the product item #4380  
Internet : use REGISTER.EXE in the ZIP'ed file : select [MCVBEHTP for UNregistered user ...](#)

### 5) [MC SECURITY for VB 4.0 \(16/32 Bit\)](#)

This product is a powerfull 16/32-Bit DLL with 28 routines for VB 4.0 (16/32 Bit) application.

You can download the full product (demo included) from the following site :

CompuServe : GO MSBASIC : select MCSECURE.ZIP  
Internet : ftp.winsite.com/pub/pc/win95/programr/vbasic/MCSECURE.ZIP

You can register the full product (demo included) at the price of **\$10.00** from the following site :

CompuServe : GO SWREG : select the product item #8536  
Internet : use REGISTER.EXE in the ZIP'ed file : select [MC-SECURITY \(16/32-Bit\)](#)

### 6) [MC STRING for VB 4.0 \(32 Bit\)](#)

This product is a powerfull 32-Bit DLL with 64 routines for VB 4.0 (32 Bit) application.

You can download the full product (demo included) from the following site :

CompuServe : GO MSBASIC : select MCSTR-32.ZIP

Internet : ftp.winsite.com/pub/pc/win95/programr/vbasic/MCSTR-32.ZIP

You can register the full product (demo included) at the price of \$**10.00** from the following site :

CompuServe : GO SWREG : select the product item #**12012**

Internet : use REGISTER.EXE in the ZIP'ed file : select **MC-STRING (32-Bit)**

#### 7) [MC DISK VB 4.0 \(32 Bit\)](#)

This product is a powerfull 32-Bit DLL with 94 routines for VB 4.0 (32 Bit) application.

You can download the full product (demo included) from the following site :

CompuServe : GO MSBASIC : select MCDSK-32.ZIP

Internet : ftp.winsite.com/pub/pc/win95/programr/vbasic/MCDSK-32.ZIP

You can register the full product (demo included) at the price of \$**10.00** from the following site :

CompuServe : GO SWREG : select the product item #**12011**

Internet : use REGISTER.EXE in the ZIP'ed file : select **MC-DISK (32-Bit)**

#### Update products :

##### 1) [Update TIME TO WIN \(VB 3.0 or VB 4.0 \(16-Bit\)\) -> TIME TO WIN 32-Bit \(VB 4.0 \(32-Bit\)\)](#)

This product is an update for registered user of 'TIME TO WIN' which want register the 'TIME TO WIN (32-Bit)'.

You can download the full product (demo included) from the following site :

CompuServe : GO MSBASIC : select T2WIN-32.ZIP

Internet : ftp.winsite.com/pub/pc/win95/programr/vbasic/T2WIN-32.ZIP

You can register the full product (demo included) at the price of \$**29.00** from the following site :

CompuServe : GO SWREG : select the product item #**7517**

Internet : use REGISTER.EXE in the ZIP'ed file : select **update TIME TO WIN (16-Bit) to TIME TO WIN (32-Bit)**

#### Special price for registered user :

##### 1) [If you're a registered user of 'TIME TO WIN' or 'TIME TO WIN \(32-Bit\)](#)

You receive a special price for 'mcr VB/Error Handler - Tracer Profiler' under VB 3.0, VB 4.0 (16-Bit) and VB 4.0 (32-Bit).

You can download the full product (demo included) from the following site :

CompuServe : GO MSBASIC : select MCVBEHTP.ZIP

Internet : ftp.winsite.com/pub/pc/win95/programr/vbasic/MCVBEHTP.ZIP

You can register the full product (demo included) at the price of \$**16.00** from the following site :

CompuServe : GO SWREG : select the product item #**4379**

Internet : use REGISTER.EXE in the ZIP'ed file : select **MCVBEHTP for registered user ...**



# TIME TO WIN for VB 4.0 (16-Bit) : New features

See also : [Revision History](#)

Version	Comments
.	
9.01	Compress a string into a compressed format using GZIP compression method. <a href="#">GZIPStringCompress</a> Expand a compressed string into a normal format using GZIP compression method. <a href="#">GZIPStringExpand</a>
9.00	Compress a file into a compressed format using GZIP compression method. <a href="#">GZIPFileCompress</a> Expand a compressed file into a normal format using GZIP compression method. <a href="#">GZIPFileExpand</a>
8.08	<i>no new features.</i>
7.07	Conversion of a binary string into an integer variable. <a href="#">cB2I</a> Conversion of a binary string into a long variable. <a href="#">cB2L</a> Conversion of a hexa string into an integer variable. <a href="#">cH2I</a> Conversion of a hexa string into a long variable. <a href="#">cH2L</a> Access of method (by position) of OCX custom controls. <a href="#">cObjectMethodByPos</a> Access of method (by name) of OCX custom controls. <a href="#">cObjectMethodByName</a> Reads data in properties (by position) from OCX custom controls. <a href="#">cObjectGetPropertyByPos</a> Reads data in properties (by name) from OCX custom controls. <a href="#">cObjectGetPropertyByName</a> Writes data in properties (by position) in OCX custom controls. <a href="#">cObjectPutPropertyByPos</a> Writes data in properties (by name) from OCX custom controls. <a href="#">cObjectPutPropertyByName</a>
7.00	Initial release of the 'TIME TO WIN (16-Bit)' Dynamic Link Library for Visual Basic 4.0 (16-Bit Edition).

Select the following product :

TIME TO WIN for VB 3.0

TIME TO WIN for VB 4.0 (16-Bit)

TIME TO WIN for VB 4.0 (32-Bit)

TIME TO WIN for MSOffice 95

# TIME TO WIN for VB 3.0 : New features

See also : [Revision History](#)

Version	Comments
.	
9.04	Encode a string with a password using the RUBY algorithm (7 modes). <a href="#">RUBYencrypt</a> Decode a string with a password using the RUBY algorithm (7 modes). <a href="#">RUBYdecrypt</a> Copy one file to an another file but with RUBY algorithm (7 modes). <a href="#">RUBYencryptFile</a> Copy one file to an another file but with RUBY algorithm (7 modes). <a href="#">RUBYdecryptFile</a>
9.01	Compress a string into a compressed format using GZIP compression method. <a href="#">GZIPStringCompress</a> Expand a compressed string into a normal format using GZIP compression method. <a href="#">GZIPStringExpand</a>
9.00	Compress a file into a compressed format using GZIP compression method. <a href="#">GZIPFileCompress</a> Expand a compressed file into a normal format using GZIP compression method. <a href="#">GZIPFileExpand</a>
8.08	<i>no new features.</i>
7.01	Adds new fonctionnalités for language management by using only one file per language. <a href="#">c.x.CtlLanguage</a>
7.00	<i>no new features.</i>
6.01	Implementation for CATALAN language : LNG_CATALAN. <a href="#">Constants and Types declaration</a> Implementation for POLISH language : LNG_POLISH. <a href="#">Constants and Types declaration</a> Counts a specific value in an Integer array. <a href="#">cCountI</a> Counts a specific value in a Long array. <a href="#">cCountL</a> Counts a specific value in a Single array. <a href="#">cCountS</a> Counts a specific value in a Double array. <a href="#">cCountD</a> Searches a specific value in an Integer array. <a href="#">cSearchI</a> Searches a specific value in a Long array. <a href="#">cSearchL</a> Searches a specific value in a Single array. <a href="#">cSearchS</a> Searches a specific value in a Double array. <a href="#">cSearchD</a>
6.00	Truncates a long path with filename. <a href="#">cTruncatePath</a> Searches and replace a string in a string (search can be case-sensitive or not). <a href="#">cStringSAR</a> Initializes the random generator. <a href="#">cRndInit</a> Returns a double random number between 0.0 and 1.0. <a href="#">cRnd</a> Returns an integer random number. <a href="#">cRndI</a> Returns a long random number. <a href="#">cRndL</a> Returns a single random number. <a href="#">cRndS</a> Returns a double random number. <a href="#">cRndD</a>
5.29	Returns a number in the form of a fraction. <a href="#">cFraction</a> Spells money value with hundredth. <a href="#">cSpellMoney</a>

### chHMACClearRow

Clear a single Col in a Huge Array with only one sheet.  
cHMAAsClearCol  
 Clear a single Row in a Huge Array with only one sheet.  
cHMAAsClearRow  
 Read an element from a Huge Array with only one sheet.  
cHMAAsGet  
 Read a type'd variable from a Huge Array with only one sheet.  
cHMAAsGetType  
 Save an element from a Huge Array with only one sheet.  
cHMAAsPut  
 Save a type'd variable from a Huge Array with only one sheet.  
cHMAAsPutType  
 Read an element from a Huge Array with only one sheet and one row.  
cHMArGet  
 Read a type'd variable from a Huge Array with only one sheet and one row.  
cHMArGetType  
 Save an element from a Huge Array with only one sheet and one row.  
cHMArPut  
 Save a type'd variable from a Huge Array with only one sheet and one row.  
cHMArPutType  
 Get/Put a Huge Array from/to a file on disk.  
cHMAOnDisk

4.00 Adds a VB string into a Huge String.

cHugeStrAdd  
 Returns a pointer for the first char of a Huge String.  
cHugeStrAddress  
 Appends a VB string into a Huge String.  
cHugeStrAppend  
 Returns the number of block of 64,000 chars from a Huge String.  
cHugeStrBlocks  
 Clears a Huge String.  
cHugeStrClear  
 Creates a Huge String.  
cHugeStrCreate  
 Free a Huge String (destroy it).  
cHugeStrFree  
 Gets the Next Pointer of a Huge String.  
cHugeStrGetNP  
 Gets the Write Pointer of a Huge String.  
cHugeStrGetWP  
 Returns the length of data in a Huge String.  
cHugeStrLength  
 Extracts a VB sub-string from a Huge String. cHugeStrMid  
 Reads the next part of a Huge String.  
cHugeStrNext  
 Get/Put a Huge String from/to a file on disk.  
cHugeStrOnDisk  
 Read a block of 64,000 chars or minder from a Huge String.  
cHugeStrRead  
 Sets the Next Pointer of a Huge String.  
cHugeStrSetNP  
 Sets the Write Pointer of a Huge String.  
cHugeStrSetWP  
 Returns the full size of a Huge String.  
cHugeStrSize

3.52 Increment the number of file handle (20 -> 80).

3.51 *no new features.*

3.50 Extracts a sub-string from the right of a gived string.

cGetInR

Extracts the first/second part from the left of a given string.

cGetInPart

Extracts the first/second part from the right of a given string.

cGetInPartR

Returns the version number of 'TIME TO WIN'.

cGetVersion

3.00 Calculates the day of the week (ISO and non-ISO specification).

cDayOfWeek

Calculates the week of the year (ISO and non-ISO specification).

cWeekOfYear

Calculates the day of the year.

cDayOfYear

Calculates a scalar (long) from a date.

cDateToScalar

Decomposes a scalar into date parts.

cScalarToDate

Transfers the contents of a file to a List Box.

cFileToListBox

Transfers the contents of a file to a Combo Box.

cFileToComboBox

Performs some special effects between two Picture Box.

cFXPicture

Auto-increments an integer variable.

cIncrI

Auto-increments a long variable.

cIncrL

Auto-decrements an integer variable.

cDecrI

Auto-decrements a long variable.

cDecrL

Adds two time strings and returns a time string.

cAddTwoTimes

Create a new multiple big sized array on disk or use an existing big sized array on disk.

cMDACreate

Close a multiple big sized array and keep it or close a big sized array and destroy it.

cMDAClose

Read an element from a multiple big sized array on disk.

cMDAGet

Read a type'd variable from a multiple big sized array on disk.

cMDAGetType

Save an element to a multiple big sized array on disk.

cMDAPut

Save a type'd variable to a multiple big sized array on disk.

cMDAPutType

Clear a multiple big sized array (fill it with chr\$(0) or chr\$(32) (for string array)).

cMDAClear

Clear a single Sheet in a multiple big sized array (fill it with chr\$(0) or chr\$(32) (for string array)).

cMDAClearSheet

Clear a single Col on one Sheet or on all sheets in a multiple big sized array (see above).

cMDAClearCol

Clear a single Row on one Sheet or on all Sheets in a multiple big sized array (see above).

cMDAClearRow

Clear a single Col in a multiple big sized array with only one sheet.

cMDAsClearCol

Clear a single Row in a multiple big sized array with only one sheet.

cMDAsClearRow

Read an element from a multiple big sized array on disk with only one sheet.

cMDAsGet

Read a type'd variable from a multiple big sized array on disk with only one sheet.

cMDAsGetType

Save an element from a multiple big sized array on disk with only one sheet.

cMDAsPut

Save a type'd variable from a multiple big sized array on disk with only one sheet.

cMDAsPutType

Read an element from a multiple big sized array on disk with only one sheet and one row. cMDArGet

Read a type'd variable from a multiple big sized array on disk with only one sheet and one row.

cMDArGetType

Save an element from a multiple big sized array on disk with only one sheet and one row. cMDArPut



Removes a serialization information (descriptions and number) from a serialized file.

cSerialRmv

Sorts an ASCII file or a BINARY file in ascending or descending order with case sensitive or not.

cFileSort

Computes the number of combinations of n items, taken m at a time.

cCombination

Converts an ASCII string into an EBCDIC string.

cCnvASCIItoEBCDIC

Converts an EBCDIC string into an ASCII string.

cCnvEBCDICtoASCII

Opens a file for I/O

cFopen

Closes an open stream.

cFclose

Reads a single character from a stream.

cFgetc

Writes a single character to a stream.

cFputc

Writes a line of characters to a stream.

cFputs

Reads a line of characters from a stream.

cFgets

Writes an arbitrary number of characters to a stream.

cFwrite

Reads an arbitrary number of characters from a stream.

cFread

Closes all files opened.

cFcloseall

Flushes buffered I/O to a particular stream to disk.

cFlush

Flushes buffered I/O for all open streams to disk.

cFlushall

Tests for end-of-file on a stream.

cFeof

Tests for an error on a stream.

cFerror

Resets the error indicator for a stream.

cFclearerr

Moves the file pointer to a specified location.

cFseek

Gets the current position of a file pointer.

cFtell

Moves the file pointer to the beginning of a file.

cFrewind

1.36 Arrange all desktop icons.

cArrangeDesktopIcons

Put/Get full variable string array (one dimension) on/from disk.

cArrayStringOnDisk

Put/Get full array (any dimension) on/from disk (very fast routine).

cArrayOnDisk

Extract a sub-string delimited by a separator's list in a gived string.

cTokenIn

Align a string in left, center, right position

cAlign

New timer for more accuracy (1 ms in place of 55 ms)

cTimer.x.

Increment the serialized number of a serialized file by a value (positive or negative).

cSerialInc

Check if a file is serialized.

cIsSerial

Put or Modify a serialization information (descriptions and number) to a file.

cSerialPut

Get a serialization information (descriptions and number) from a file.

cSerialGet

Walk thru the window's list.

cWalkThruWindow

UnHide all edit forms in the VB design environnement.

cUnHideAllEditForm

Hide all edit forms in the VB design environnement.

cHideAllEditForm

UnHide debug form in the VB design environnement.

cUnHideDebugForm

Hide debug form in the VB design environnement.

cHideDebugForm

Multiple AND 'InStr' in one call.

cAndToken, cAndTokenIn

Multiple OR 'InStr' in one call.

cOrToken, cOrTokenIn



- 1.33 Close all edit forms in the VB design environment.  
cCloseAllEditForm  
 Create a multiple directory in one call.  
cMakeMultipleDir
- 1.30 Clear a single Sheet in a big sized array (fill it with chr\$(0) or chr\$(32) (for string array))  
cDAClearSheet  
 Clear a single Col on one Sheet or on all sheets in a big sized array (see above).  
cDAClearCol  
 Clear a single Row on one Sheet or on all Sheets in a big sized array (see above).  
cDAClearRow  
 Clear a single Col in a big sized array with only one sheet.  
cDAsClearCol  
 Clear a single Row in a big sized array with only one sheet.  
cDAsClearRow  
 Read an element from a big sized array on disk with only one sheet. cDAsGet  
 Read a type'd variable from a big sized array on disk with only one sheet.  
cDAsGetType  
 Save an element from a big sized array on disk with only one sheet. cDAsPut  
 Save a type'd variable from a big sized array on disk with only one sheet.  
cDAsPutType  
 Read an element from a big sized array on disk with only one sheet and one row. cDArGet  
 Read a type'd variable from a big sized array on disk with only one sheet and one row.  
cDArGetType  
 Save an element from a big sized array on disk with only one sheet and one row. cDArPut  
 Save a type'd variable from a big sized array on disk with only one sheet and one row.  
cDArPutType
- 1.28 Merge two files in one.  
cFileMerge  
 Search and replace a string in a file (search can be case-sensitive or not).  
cFileSearchAndReplace  
 Search a string in a file (search is case-sensitive or not).  
cFileSearch  
 Count occurrence of a string in a file (search can be case-sensitive or not).  
cFileSearchCount  
 Check the specified ISBN (International Standard Book Numbers). cIsISBN  
 Extend the use of pattern matching with [...], [...] constructs and hexa.  
cPatternExtMatch  
 Convert a string into a morse string. cMorse  
 Kill a group of files even if one or more file are read-only file in the directory and all sub-dirs.  
cKillDirFilesAll  
 Kill a sub-directory and its associated directories. cKillDirs  
 Base conversion between two radixs.  
cBaseConversion  
 Count lines, words and chars in a file.  
cFileStatistics  
 Create a new big sized array on disk or use an existing big sized array on disk.  
cDACreate  
 Close an big sized array and keep it or close a big sized array and destroy it.  
cDAClose  
 Read an element from a big sized array on disk. cDAGet  
 Read a type'd variable from a big sized array on disk.  
cDAGetType  
 Save an element to a big sized array on disk. cDAPut  
 Save a type'd variable to a big sized array on disk.  
cDAPutType  
 Clear a big sized array (fill it with chr\$(0) or chr\$(32) (for string array)).  
cDAClear

- 1.22 Modification of a system menu in one call (6 different languages)  
cLngSysMenu
- 1.21 Multi-Language Message Box (fully replacement of the standard sub MsgBox)  
cLngBoxMsg  
Multi-Language Message Box (fully replacement of the standard function MsgBox)  
cLngMsgBox  
Multi-Language InputBox (fully replacement of the standard function InputBox\$)  
cLngInpBox  
Convert a partial path stored in a path to a fully qualified path.  
cFullPath  
Make a full qualified path composed of a drive letter, directory, filename, extension  
cMakePath  
Mix all chars in a gived string in random position.  
cMixChars  
Kill a file even if the file is a read-only file.  
cKillFileAll  
Kill a group of file even if one or more file are read-only file.  
cKillFilesAll  
Count the total number of lines in an ASCII file.  
cFileLineCount  
Convert an ASCII file to a file with lower case char.  
cFileToLower  
Convert an ASCII file to a file with upper case char.  
cFileToUpper  
Operation on big numbers (big double) cBig.x.  
Convert a value (in the form of a string) into a big double representation (for use with cBig.x.) cMKN  
Operation on big numbers (in the form of a string)  
cBigNum
- 1.14 Compare one file to another file (attribute, contents, size, time) cCmpFile.x.  
Copy a file to an another file  
cFileCopy  
Copy a file to an another file but with filtering some chars  
cFileFilter  
Copy a file to an another file but with filtering chars not present in the filter  
cFileFilterNot  
Copy a file to an another file but with encryption  
cFileEncrypt  
Copy a file to an another file but with decryption  
cFileDecrypt  
Copy a file to an another file but with compressing spaces into tab  
cFileCompressTab  
Copy a file to an another file but with expanding tab into spaces  
cFileExpandTab  
Split a full path breaks into its four components.  
cSplitPath  
Check if the name of a file is valid  
clsFilenameValid
- 1.07 Implementation for some languages : French, Dutch, German, English, Italian, Spanish.  
Constants and Types declaration  
Full implementation for extracting the day name and the month name in different language.  
cGet.x.Day, cGet.x.Month  
Date and time in a normalized string in different language from a language number  
cGetAscTime  
Cluster size on a specified disk.  
cGetDiskClusterSize  
Physical size of files by file mask on a disk.  
cFilesSizeOnDisk  
Slack percent for files by file mask on a disk. cFilesSlack

State (enabled or disabled) of a form.

clsFormEnabled

Full class name of a specified control.

cGetClassName

Save/Read language information from a form

c.x.CtlLanguage

1.00 Initial release of the 'TIME TO WIN' dynamic link library.

# TIME TO WIN for VB 4.0 (32-Bit) : New features

See also : [Revision History](#)

Version	Comments
.	
3.05	<i>no new features.</i>
3.04	Encode a string with a password using the RUBY algorithm (7 modes). <a href="#">RUBYencrypt</a> Decode a string with a password using the RUBY algorithm (7 modes). <a href="#">RUBYdecrypt</a> Copy one file to an another file but with RUBY algorithm (7 modes). <a href="#">RUBYencryptFile</a> Copy one file to an another file but with RUBY algorithm (7 modes). <a href="#">RUBYdecryptFile</a> Encode a string with a password using the Diamond Encryption Algorithm (4 modes). <a href="#">DIAMONDencrypt</a> Decode a string with a password using the Diamond Encryption Algorithm (4 modes). <a href="#">DIAMONDdecrypt</a> Copy one file to an another file but with Diamond Encryption Algorithm (4 modes). <a href="#">DIAMONDencryptFile</a> Copy one file to an another file but with Diamond Encryption Algorithm (4 modes). <a href="#">DIAMONDdecryptFile</a> Copy one file to an another file but with U.S. Data Encryption Standard encryption. <a href="#">DESencryptFile</a> Copy one file to an another file but with U.S. Data Encryption Standard decryption. <a href="#">DESdecryptFile</a> Copy one file to an another file but with the International Data Encryption Algorithm encryption. <a href="#">IDEAencryptFile</a> Copy one file to an another file but with the International Data Encryption Algorithm decryption. <a href="#">IDEAdencryptFile</a>
3.03	Compress a file into a compressed format using ASH arithmetic compression. <a href="#">ASHFileCompress</a> Expand a compressed file into a normal format using ASH arithmetic compression. <a href="#">ASHFileExpand</a>
3.02	Compress a string into a compressed format using GZIP compression method. <a href="#">GZIPStringCompress</a> Expand a compressed string into a normal format using GZIP compression method. <a href="#">GZIPStringExpand</a>
3.01	Compress a file into a compressed format using GZIP compression method. <a href="#">GZIPFileCompress</a> Expand a compressed file into a normal format using GZIP compression method. <a href="#">GZIPFileExpand</a>
3.00	Encode a string with a password using the U.S. Data Encryption Standard cipher. <a href="#">DESencrypt</a> Decode a string with a password using the U.S. Data Encryption Standard cipher. <a href="#">DESdecrypt</a> Encode a string with a password using the International Data Encryption Algorithm cipher. <a href="#">IDEAencrypt</a> Decode a string with a password using the International Data Encryption Algorithm cipher. <a href="#">IDEAdencrypt</a> Compress a file into a compressed format using arithmetic compression. <a href="#">LZARlcompress</a> Expand a compressed file into a normal format using arithmetic compression.

[LZARlexpand](#)

- 2.52 Enumerate all open files and/or all unmovable open files.  
[EnumOpenFiles](#)
- 2.51 Now, T2WIN-32.DLL can be registered directly by using the Register button. This method is usefully for Internet user.
- 2.50 Now, T2WIN-32.DLL is compatible with Windows NT 3.51.  
New help file T2WINALL.HLP (this file).
- 2.10 Reads the offset of each line from an ASCII file (CR/LF line terminated) in an array.  
[FProcessAsciiFile](#)  
Moves the file pointer to the beginning of the specified line in an ASCII file (CR/LF line terminated).  
[FGotoRecord](#)  
Calculate the z value of an additional point from four points.  
[3DWeightAverage](#)
- 2.00 Enumerate all pendings jobs on a printer.  
[EnumPrinterJobs](#)
- 1.60 TileBitmapOnWindow tile a bitmap (DDB or DIB format) on a window.  
[TileBitmapOnWindow](#)
- 1.42 Save the screen (entire desktop) in a file (DIB format).  
[DIBSaveScreen](#)  
Save a window in a file (DIB format).  
[DIBSaveWindow](#)  
Install a hook keyboard to save the screen or the active window in a file (DIB format).  
[InstallHookKeyboard](#)
- 1.33 Display an icon for an application in the tray of the task bar.  
[TaskBarAddIcon](#)  
Delete the tray icon from an application in the task bar.  
[TaskBarDeleteIcon](#)  
Modify an icon for an application in the tray of the task bar.  
[TaskBarModifyIcon](#)
- 1.24 Reads the media ID (serial number, volume label, ...) from a disk.  
[DOSGetMediaID](#)  
Changes the media ID (serial number, volume label, ...) to a disk.  
[DOSSetMediaID](#)
- 1.20 Returns a key setting value from an application's Windows registry entry.  
[GetRegistry](#)  
Saves or creates an application entry in the Windows registry entry.  
[PutRegistry](#)  
Deletes a section or key setting from the Windows registry entry.  
[KillRegistry](#)
- 1.11 *no new features.*
- 1.10 *no new features.*
- 1.06 Search for file(s) and save the result in a file.  
[SearchFile](#)  
Search for file(s) and show the result in a standard list box.  
[ListSearchFile](#)  
Search for file(s) and show the result in a standard combo box.  
[ComboSearchFile](#)

Crypt a file with password.

FileCrypt

Crypt a string with password.

Crypt

Calculate a registration key (method 1).

RegistrationKey

Calculate a registration key (method 2).

RegistrationKey2

Calculate a registration key (method 3).

RegistrationKey3

Perform a file copy and show a progress bar in a standard control or form.

PBFileCopy

Perform a file copy and show a dialog box with progress bar on desktop.

DBFileCopy

UUencode/UUdecode a file.

FileUUCP

1.02 Set tab spacing in a standard list box.

ListSetTabs

Load the contents of a directory in a standard list box.

ListFiles

Load the contents of a directory in a standard combo box.

ComboFiles

1.00 Initial release of the 'TIME TO WIN (32-Bit)' Dynamic Link Library for Visual Basic 4.0 (32-Bit Edition under Windows 95/NT).

# TIME TO WIN for MSOffice 95 : New features

**See also :** [Revision History](#)

Version	Comments
.	
2.00	Encode a string with a password using the RUBY algorithm (7 modes). <a href="#">RUBYencrypt</a> Decode a string with a password using the RUBY algorithm (7 modes). <a href="#">RUBYdecrypt</a> Copy one file to an another file but with RUBY algorithm (7 modes). <a href="#">RUBYencryptFile</a> Copy one file to an another file but with RUBY algorithm (7 modes). <a href="#">RUBYdecryptFile</a> Compress a string into a compressed format using GZIP compression method. <a href="#">GZIPStringCompress</a> Expand a compressed string into a normal format using GZIP compression method. <a href="#">GZIPStringExpand</a> Compress a file into a compressed format using GZIP compression method. <a href="#">GZIPFileCompress</a> Expand a compressed file into a normal format using GZIP compression method. <a href="#">GZIPFileExpand</a>
1.00	Initial release of the 'TIME TO WIN for MSOffice 95' Dynamic Link Library.

# TIME TO WIN for VB 3.0 : Revision history

See also : [New Features](#)

Version	Comments
.	
9.05	Add the registration of my products on Internet with KAGI SHAREWARE, use REGISTER.EXE for registration.
9.04	Modification of the memory allocation for some routines.
9.01	<i>no revision.</i>
9.00	<i>no revision.</i>
8.08	Correct a problem with <a href="#">cDOSSetVolumeLabel</a> . The function can't delete the volume label.
7.01	<i>no revision.</i>
7.00	Correct a problem when accessing a Sheet other than the first in ClearSheet, ClearRow, ClearCol in <a href="#">Disk Array routines</a> <a href="#">Multiple Disk Array routines</a> , <a href="#">Huge Memory Arrays</a> .
6.01	<i>no revision.</i>
6.00	Increase of line length from 2304 to 4096 and changes some internal fonctionnalités in <a href="#">cFileSearchAndReplace</a> .
5.29	Adds RS_MENU for language's management. Adds A_NORMAL_ARCHIVE and A_ALL attributes.
5.20	Correct a GPF problem with <a href="#">cGetCurrentDrive</a> .
5.10	<i>no revision.</i>
5.02	Correct a problem with <a href="#">cGetVersion</a> . The version returned don't take care of minor version.
5.00	<i>no revision.</i>
4.57	<i>no revision.</i>
4.50	<i>no revision.</i>
4.00	<i>no revision.</i>
3.52	Some little internal change.
3.51	Correct a problem with <a href="#">clsFilenameValid</a> if the filename begins with '..\'
3.50	<i>no revision.</i>
3.00	Changes the fonctionnalité of <a href="#">cProperName2</a> .
2.05	<i>no revision.</i>
2.00	<i>no revision.</i>
1.60	<i>no revision.</i>



- 1.52 *no revision.*
- 1.50 Correct a problem with cGetSectionItems (other .INI file than WIN.INI are not processed).
- 1.42 Adds a new value for Encrypt/Decrypt (ENCRYPT\_LEVEL\_4) (see cEncrypt, cDecrypt, cFileEncrypt, cFileDecrypt).
- 1.36 *no revision.*
- 1.33 Corrects a problem if you pass a bad open mode (not OPEN\_MODE\_BINARY or OPEN\_MODE\_TEXT) in cFileCRC32.  
 Corrects a problem in cLngMsgbox, cLngBoxMsg when using MB\_MESSAGE\_LEFT (default).  
 Corrects a problem in the UNREGISTERED version when the 'Shareware License Agreement' box is displayed (VB causes a GPF).
- 1.30 Adds a new item (.nlsTyped) in the description of a big sized array to specify the init of a type'd variable, see cDACreate.  
 Adds a new item (RS\_TAG) to handle .Tag property in cSaveCtlLanguage, cReadCtlLanguage.  
 Adds missing help topic for cScrollL and cScrollR.  
 Speed up the encrypt/decrypt algorithm by 20% (cEncrypt, cDecrypt, cFileEncrypt, cFileDecrypt).
- Corrects a problem when accessing a sheet in a big sized array. This problem has no effect on a single sheet array.  
 Changes allocation of temporary memory to avoid/correct some problems in some strings routines (see Affected routines).
- Corrects a problem when creating a big sized array of type'd variable in disk. This problem has not occurred all times.
- 1.28 Adds TimeOut functionality (from 2 to 30 seconds by step of 2 seconds) and display TimeOut to cLngMsgBox, cLngBoxMsg.  
 Adds the detection of CD-ROM drive (with MSCDEX driver) in cGetDriveType.  
 Adds some errors code and network drive validation for clsFilenameValid.  
cKillFile, cKillFileAll, now, returns TRUE if the filename not exists.  
 Now, all files, from the executable demo, are included. (Be indulgent, no comments are in the demo).
- 1.22 *no revision.*
- 1.21 Removes the need of passing the letter drive in cFileSizeOnDisk and cFilesSlack by using cSplitPath.  
 Now, cFileSize, cFilesSizeOnDisk, cFilesSlack and cFilesInDirectory take care of the file attribute (Read-Only, System, Hidden).  
 Now, cAllSubDirectories can handle 700 directories (in place of 300) of maximum 70 chars long each.  
 Changes cSplitPath from sub to function to check if the filename is valid.  
 Improves cFileCopy, cFileFilter, cFileFilterNot, cCmpFileContents speed performance.  
 Improves cFileEncrypt, cFileDecrypt, cFileCompressTab, cFileExpandTab speed performance.  
 Improves cFileCRC32 speed performance.  
 Changes some errors number returned for standardization (see Returned Errors).
- Corrects a problem with clsFilenameValid (some valid filename was not check als valid).  
 Corrects a problem with cGetFileVersion (sometimes GPF when accessing '\\StringFileInfo\04090000').  
 Corrects a problem with cGetFileVersionInfo (sometimes returns a chr\$(0)).
- 1.14 Modify the encrypt/decrypt algorithm. (cEncrypt, cDecrypt, cFileEncrypt, cFileDecrypt).
- 1.07 Add a new protection algorithm.  
 Add modal dialog box for unregistered version in place of message box.
- 1.00 Initial release of the 'TIME TO WIN' dynamic link library for VB 3.0.

Select the following product :

TIME TO WIN for VB 3.0

TIME TO WIN for VB 4.0 (16-Bit)

TIME TO WIN for VB 4.0 (32-Bit)

TIME TO WIN for MSOffice 95

# TIME TO WIN for VB 4.0 (16-Bit) : Revision history

See also : [New Features](#)

Version	Comments
.	
9.05	Add the registration of my products on Internet with KAGI SHAREWARE, use REGISTER.EXE for registration.
9.01	<i>no revision.</i>
9.00	<i>no revision.</i>
8.08	Correct a problem with <a href="#">cDOSSetVolumeLabel</a> . The function can't delete the volume label.
7.07	The following functions has been removed : cReadMnuLanguage has been included in the functions <a href="#">cReadCtlLanguage</a> , <a href="#">cReadCtlLanguageExt</a> cSaveMnuLanguage has been included in the functions <a href="#">cSaveCtlLanguage</a> , <a href="#">cSaveCtlLanguageExt</a>
7.00	Initial release of the 'TIME TO WIN (16-Bit)' Dynamic Link Library for Visual Basic 4.0 (16-Bit Edition).

# Compression : Overview

[ASHFileCompress](#)

compress a file into a compressed format using ASH arithmetic compression.

[ASHFileExpand](#)

expand a compressed file into a normal format using ASH arithmetic compression.

[FileCompress](#)

compress a file into a compressed format.

[FileExpand](#)

expand a compressed file into a normal format.

[GZIPFileCompress](#)

compress a file into a compressed format using GZIP compression method.

[GZIPFileExpand](#)

expand a compressed file into a normal format using GZIP compression method.

[GZIPStringCompress](#)

compress a string into a compressed format using GZIP compression method.

[GZIPStringExpand](#)

expand a compressed string into a normal format using GZIP compression method.

[LZARlcompress](#)

compress a file into a compressed format using arithmetic compression.

[LZARlexpand](#)

expand a compressed file into a normal format using arithmetic compression.

[StringCompress](#)

compress a string into a compressed format.

[StringExpand](#)

expand a compressed string into a normal format.

# TIME TO WIN for VB 4.0 (32-Bit) : Revision history

See also : [New Features](#)

Version	Comments
.	
3.05	<p>Add the registration of my products on Internet with KAGI SHAREWARE, use REGISTER.EXE for registration.</p> <p>Change of the maximum compress ratio from 1:3 to 1:10 in <a href="#">StringCompression</a> / <a href="#">StringExpand</a></p> <p>Now, <a href="#">FileSize</a> / <a href="#">FileSizeOnDisk</a> / <a href="#">FilesSlack</a> can handle hard disk greater than 2Gb (return value is a DOUBLE in place of LONG).</p> <p>Now, <a href="#">RcsFileSize</a> / <a href="#">RcsFileSizeOnDisk</a> / <a href="#">RcsFilesSlack</a> can handle hard disk greater than 2Gb (return value is a DOUBLE in place of LONG).</p> <p>Now, <a href="#">GetDiskFree</a> / <a href="#">GetDiskSpace</a> / <a href="#">GetDiskUsed</a> / <a href="#">GetDiskClusterSize</a> can handle hard disk greater than 2Gb (return value is a DOUBLE in place of LONG).</p>
3.04	<i>no revision.</i>
3.03	<p>Now, <a href="#">DESEncrypt</a> / <a href="#">DESdecrypt</a> can handle a string with any size (not only a multiple of 8 chars).</p> <p>Now, <a href="#">IDEAencrypt</a> / <a href="#">IDEAdencrypt</a> can handle a string with any size (not only a multiple of 8 chars).</p>
3.02	<i>no revision.</i>
3.01	<i>no revision.</i>
3.00	<i>no revision.</i>
2.52	<i>no revision.</i>
2.51	<p>Now, T2WIN-32.DLL can be registered directly by using the Register button. This method is usefully for Internet user.</p>
2.50	<p>Now, T2WIN-32.DLL is compatible with Windows NT 3.51. To do this, I've removed the cModule, cProcess, cThread functions.</p> <p>New help file T2WINALL.HLP (this file).</p>
2.10	<i>no revision.</i>
2.00	<i>no revision.</i>
1.60	<i>no revision.</i>
1.42	<i>no revision.</i>
1.33	<p>Display some TimeOuts when 'TIME TO WIN (32-Bit) is not registered.</p> <p>Display an icon (and a tooltip) in the tray on the task bar when 'TIME TO WIN (32-Bit) is used in design mode.</p>
1.24	<p>The icons used in the International Message Box and International Input Box are now the icons used by Windows 95.</p>
1.20	<i>no revision.</i>
1.11	<p>Correct a problem with <a href="#">cChDir</a> and <a href="#">cChDrive</a> when the parameter is a zero-length string.</p>
1.10	<p>Suppression of the expiration date.</p> <p>Add a logo in the UNregistered version.</p> <p>Add a module (_T2WREG.EXE) for registering thru Internet.</p> <p>Some improvements.</p>

1.06     Correct a problem in cFileCRC32.

1.02     *no revision.*

1.00     Initial release of the 'TIME TO WIN (32-Bit)' Dynamic Link Library for Visual Basic 4.0 (32-Bit Edition under Windows 95/NT).

# ArrayStringOnDisk

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ArrayStringOnDisk](#) put/get full variable string array (one dimension) on/from disk ascii file.

## Declare Syntax :

Declare Function cArrayStringOnDisk Lib "[time2win.dll](#)" (ByVal File As String, Array() As Any, ByVal GetPut As Integer, rRecords As Long) As Long

## Call Syntax :

test& = cArrayStringOnDisk(File\$, Array(), GetPut%, rRecords&)

## Where :

File\$	is the file to use.
Array()	is the variable array string with one dimension.
GetPut%	PUT_ARRAY_ON_DISK to put the array on disk, GET_ARRAY_ON_DISK to get the array from disk.
rRecords&	the returned number of records.
test&	>=0 is the returned length of the file, < 0 is an error occurs (error n° is the negative value of all DA_x values, see <a href="#">Constants and Types declaration</a> ).

## Comments :

This function can handle only a variable type'd string derived from tagVARSTRING (see below).

Don't forget that if you use the 'ReDim' statement at the procedure level without have declared the array als Global, you must initialize the array before using this function (see below). You must initialize the array with enough space to handle the size of the file This is due to a VB limitation.

When reading, if the number of lines in the file is below the size of the array, the remain items in the array are set to EMPTY string. The CR + LF are not included in the array.

When writing, all lines are appended with CR + LF.

This function can handle huge array (greater than 65535 bytes) (see the example below).

Type tagVARSTRING	
Contents	As String
End Type	

## Examples :

```
ReDim AD(-999 To 1000)           As tagVARSTRING
Dim i                             As Long
Dim r                             As Long

For i = -999 To 1000
    AD(i).Contents = Space$(256)
Next i

Debug.Print cArrayStringOnDisk("c:\autoexec.bat", AD(), GET_ARRAY_ON_DISK, r)

Debug.Print cArrayStringOnDisk("c:\autoexec.tab", AD(), PUT_ARRAY_ON_DISK, r)
```

```
For i = -999 To 1000
    AD(i).Contents = Space$(256)
Next i

Debug.Print cArrayStringOnDisk("c:\autoexec.tab", AD(), GET_ARRAY_ON_DISK, r)

Debug.Print AD(-999).Contents
Debug.Print AD(-998).Contents
```

**See also :** Disk Array routines, [cArrayOnDisk](#)



# TIME TO WIN for MSOffice 95 : Revision history

**See also :** [New Features](#)

Version	Comments
.	
2.01	Add the registration of my products on Internet with KAGI SHAREWARE, use REGISTER.EXE for registration.
2.00	<i>no revision.</i>
1.00	Initial release of the 'TIME TO WIN for MSOffice 95' Dynamic Link Library.

# EnumPrinterJobs

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[EnumPrinterJobs](#) enumerate all pending jobs on a printer.

## Declare Syntax :

Declare Function cEnumPrinterJobs Lib "[time2win.dll](#)" (ByVal PrinterName As String, JOBINFO As tagJOBINFO, ByVal FirstNext As Integer) As Integer

## Call Syntax :

```
intResult% = cEnumPrinterJobs(PrinterName$, JOBINFO, FirstNext%)
```

## Where :

PrinterName\$	is the ame of the printer for which the job is spooled;
JOBINFO	is the type'd tagJOBINFO;
FirstNext%	TRUE : begin the enumeration and return the first job; FALSE : continue the enumeration and return the next job;
intResult%	EPJ_SUCCESS : all is ok EPJ_PRINTER_NAME_EMPTY: PrinterName\$ is empty EPJ_CANT_OPEN_PRINTER : can't open the specified PrinterName\$ EPJ_STRANGE_ERROR : unknow error when accessing the enumeration EPJ_CANT_ENUMERATE_MORE_JOBS : no more jobs

## Comments :

The returned 'IStatus' can be one or more of the following constant value :

```
JOB_STATUS_PAUSED
JOB_STATUS_ERROR
JOB_STATUS_DELETING
JOB_STATUS_SPOOLING
JOB_STATUS_PRINTING
JOB_STATUS_OFFLINE
JOB_STATUS_PAPEROUT
JOB_STATUS_PRINTED
JOB_STATUS_DELETED
JOB_STATUS_BLOCKED_DEVQ
JOB_STATUS_USER_INTERVENTION
```

## Examples :

```
Dim intResult          As Integer
Dim strDisplay          As String
Dim JI                  As tagJOBINFO

strDisplay = ""

intResult = cEnumPrinterJobs("LPT1:", JI, True)  'first job

Do While intResult = EPJ_SUCCESS

    strDisplay = strDisplay + "sPrinterName : " & JI.sPrinterName & "" & vbCrLf
    strDisplay = strDisplay + "sMachineName : " & JI.sMachineName & "" & vbCrLf
    strDisplay = strDisplay + "sUserName : " & JI.sUserName & "" & vbCrLf
    strDisplay = strDisplay + "sDocument : " & JI.sDocument & "" & vbCrLf
```

```

strDisplay = strDisplay + "JobId : " & JI.JobId & vbCrLf
strDisplay = strDisplay + "Status : " & JI.IStatus & vbCrLf
strDisplay = strDisplay + "Priority : " & JI.IPriority & vbCrLf
strDisplay = strDisplay + "Position : " & JI.IPosition & vbCrLf
strDisplay = strDisplay + "StartTime : " & JI.IStartTime & vbCrLf
strDisplay = strDisplay + "UntilTime : " & JI.IUntilTime & vbCrLf
strDisplay = strDisplay + "TotalPages : " & JI.ITotalPages & vbCrLf
strDisplay = strDisplay + "PagesPrinted : " & JI.IPagesPrinted & vbCrLf
strDisplay = strDisplay + "Size : " & JI.ISize & vbCrLf
strDisplay = strDisplay + "Time : " & JI.ITime & vbCrLf
strDisplay = strDisplay + "Submitted : " & JI.wMonth & "/" & JI.wDay & "/" & JI.wYear & " " & JI.wHour & ":" &
JI.wMinute & ":" & JI.wSecond & vbCrLf & vbCrLf

```

```

intResult = cEnumPrinterJobs("LPT1:", JI, False)      'next job

```

```

Loop

```

```

debug.print strDisplay

```

**See also :**

Select the following product :

TIME TO WIN for VB 3.0

TIME TO WIN for VB 4.0 (16-Bit)

TIME TO WIN for VB 4.0 (32-Bit)

TIME TO WIN for MSOffice 95

# TIME TO WIN for VB 3.0 : Registration

'TIME TO WIN' Library Registration Benefits :

- Create your application easier and faster
- Create a smaller application
- Accelerate the speed of your application
- Full support for one year

## Registering the 'TIME TO WIN' Library (DLL) on CompuServe

- 1) On CompuServe [GO SWREG](#)
- 2) Choose Register Shareware.
- 3) 'TIME TO WIN' SWREG ID is : #4045. (price is \$43.00)

## Registering the 'TIME TO WIN' Library (DLL) on Internet

- 1) Use the program REGISTER.EXE
- 2) Select the product TIME TO WIN (16-Bit).
- 3) Send by e-mail or fax or postal.

As soon as I receive notification of your registration (usually 1 - 3 days) I will send you out via e-Mail a license file for each single user license that you've asked, or site license or world license.

You also qualify to receive new versions of 'TIME TO WIN' during one year.

*This price is much a contribution to my works that a payment.*

*When you register 'TIME TO WIN', you help me to develop better products and others products.*

'TIME TO WIN' is written in C and has been compiled using Visual C++ 1.52c.  
The code has been optimized for 80386 use with the 'maximize speed' option.

'TIME TO WIN' can only be used with Visual Basic 3.0 under Windows 3.1x, Windows 95 and Windows NT.

# TIME TO WIN for VB 4.0 (16-Bit) : Registration

'TIME TO WIN (16-Bit)' Library Registration Benefits :

- Create your application easier and faster
- Create a smaller application
- Accelerate the speed of your application
- Full support for one year

## Registering the 'TIME TO WIN (16-Bit)' Library (DLL) on CompuServe

- 1) On CompuServe [GO SWREG](#)
- 2) Choose Register Shareware.
- 3) 'TIME TO WIN (16-Bit)' SWREG ID is : **#4045**. (price is **\$43.00**)

## Registering the 'TIME TO WIN' Library (DLL) on Internet

- 1) Use the program REGISTER.EXE
- 2) Select the product TIME TO WIN (16-Bit).
- 3) Send by e-mail or fax or postal

As soon as I receive notification of your registration (usually 1 - 3 days) I will send you out via e-Mail a license file for each single user license that you've asked, or site license or world license.

You also qualify to receive new versions of 'TIME TO WIN' during one year.

*This price is much a contribution to my works that a payment.*

*When you register 'TIME TO WIN (16-Bit)', you help me to develop better products and others products.*

'TIME TO WIN (16-Bit)' is written in C and has been compiled using Visual C++ 1.52c.

The code has been optimized for 80386 use with the 'maximize speed' option.

'TIME TO WIN (16-Bit)' can only be used with Visual Basic 4.0 (16-Bit) under Windows 3.1x, Windows 95 and Windows NT.

# TIME TO WIN for VB 4.0 (32-Bit) : Registration

'TIME TO WIN (32-Bit)' Library Registration Benefits :

- Create your application easier and faster
- Create a smaller application
- Accelerate the speed of your application
- Full support for one year

## Registering the 'TIME TO WIN (32-Bit)' Library (DLL) on CompuServe

- 1) On CompuServe [GO SWREG](#)
- 2) Choose Register Shareware.
- 3) 'TIME TO WIN (32-Bit)' SWREG ID is : **#7516**. (price is **\$52.00**)

## Registering the 'TIME TO WIN' Library (DLL) on Internet

- 1) Use the program REGISTER.EXE
- 2) Select the product TIME TO WIN (32-Bit).
- 3) Send by e-mail or fax or postal.

## Upgrading to 'TIME TO WIN (32-Bit)' Library from 'TIME TO WIN' or 'TIME TO WIN (16-Bit)' on CompuServe

- 1) On CompuServe [GO SWREG](#)
- 2) Choose Register Shareware.
- 3) 'UPDATE T2WIN -> T2WIN (32-Bit)' SWREG ID is : **#7517**. (price is **\$29.00**)

## Upgrading to 'TIME TO WIN (32-Bit)' Library from 'TIME TO WIN' or 'TIME TO WIN (16-Bit)' on Internet

- 1) Use the program REGISTER.EXE
- 2) Select the product update TIME TO WIN (16-Bit) to TIME TO WIN (32-Bit).
- 3) Send by e-mail or fax or postal.

As soon as I receive notification of your registration (usually 1 - 3 days) I will send you out via e-Mail a license file for each single user license that you've asked, or site license or world license.

You also qualify to receive new versions of 'TIME TO WIN (32-Bit)' during one year.

*This price is much a contribution to my works that a payment.*

*When you register 'TIME TO WIN (32-Bit)', you help me to develop better products and others products.*

'TIME TO WIN (32-Bit)' is written in C and has been compiled using Visual C++ 4.00.  
The code has been optimized for 80486 use with the 'maximize speed' option.

'TIME TO WIN (32-Bit)' can only be used with Visual Basic 4.0 (32-Bit Edition) under Windows 95 and Windows NT.

# TIME TO WIN for MSOffice 95 : Registration

'TIME TO WIN for MSOffice 95' Library Registration Benefits :

- Create your application easier and faster
- Create a smaller application
- Accelerate the speed of your application
- Full support for one year

## Registering the 'TIME TO WIN for MSOffice 95' Library (DLL) on CompuServe

- 1) On CompuServe [GO SWREG](#)
- 2) Choose Register Shareware.
- 3) 'TIME TO WIN for MSOffice 95' SWREG ID is : #10355. (price is **\$25.00**)

## Registering the 'TIME TO WIN for MSOffice 95' Library (DLL) on Internet

- 1) Use the program REGISTER.EXE
- 2) Select the product TIME TO WIN for MSOffice 95.
- 3) Send by e-mail or fax or postal.

As soon as I receive notification of your registration (usually 1 - 3 days) I will send you out via e-Mail a license file for each single user license that you've asked, or site license or world license.

You also qualify to receive new versions of 'TIME TO WIN' during one year.

*This price is much a contribution to my works that a payment.*

*When you register 'TIME TO WIN for MSOffice 95', you help me to develop better products and others products.*

'TIME TO WIN for MSOffice 95' is written in C and has been compiled using Visual C++ 4.00.  
The code has been optimized for 80486 use with the 'maximize speed' option.

'TIME TO WIN for MSOffice 95' can only be used with MSOffice 95.



# AddD, AddI, AddL, AddS

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**AddD** add a constant value to all of the elements of a **Double** array.

**AddI** add a constant value to all of the elements of an **Integer** array.

**AddL** add a constant value to all of the elements of a **Long** array.

**AddS** add a constant value to all of the elements of a **Single** array.

## Declare Syntax :

Declare Function cAddD Lib "time2win.dll" (array() As Double, ByVal nValue As Double) As Integer

Declare Function cAddI Lib "time2win.dll" (array() As Integer, ByVal nValue As Integer) As Integer

Declare Function cAddL Lib "time2win.dll" (array() As Long, ByVal nValue As Long) As Integer

Declare Function cAddS Lib "time2win.dll" (array() As Single, ByVal nValue As Single) As Integer

## Call Syntax :

status% = cAddD(array(), nValue)

status% = cAddI(array(), nValue)

status% = cAddL(array(), nValue)

status% = cAddS(array(), nValue)

## Where :

array() is the array (Double, Integer, Long, Single).

nValue is the value (Double, Integer, Long, Single) to add (if positive) or to subtract (if negative) to all of the elements of the array (Double, Integer, Long, Single).

status% always TRUE

## Comments :

**See Also :** [Array](#)

# Overview

'TIME TO WIN' is a DLL (Dynamic Link Library) for Visual Basic 3.0 and Visual Basic 4.0 (16/32-Bit).

I'm an Engineer in Electricity and Electronic and I've wrote 'TIME TO WIN' to help any users of VB to find a solution at some missing functions in VB. VB is a powerfull product but by some aspects it is limited.

I hope that 'TIME TO WIN' will be a great advantage for you and for your application.

'TIME TO WIN' contains more over **665** functions or subroutines (following product).

You can find functions or routines over the following sections :

[2-D Geometry](#)

[3-D Geometry](#)

[Array](#)

[Binary](#)

[Bitmap](#)

[Compression](#)

[Crc32](#)

[Date and time](#)

[Days and months in different language](#)

[Disk array](#)

[Encryption](#)

[File](#)

[File I/O from C](#)

[Hi-Crypt](#)

[Huge memory array](#)

[Huge string](#)

[IEEEEnum](#)

[Interest rate](#)

[Is](#)

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[List box - combo box](#)

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[Multiple disk array](#)

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[Network](#)

[Object](#)

[Printer](#)

[Process ID](#)

[Protection](#)

[Random](#)

[Registry key](#)

[Serialization](#)

[String](#)

[Swap](#)

[Task - File version](#)

[TIME2WIN](#)

[Timer](#)

[Type](#)

[UUCP](#)

[Windows](#)

[Windows 95](#)

# ArrayOnDisk

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

ArrayOnDisk put/get full array on/from disk

## Declare Syntax :

Declare Function cArrayOnDisk Lib "time2win.dll" (ByVal File As String, Array() As Any, ByVal GetPut As Integer) As Long

## Call Syntax :

test& = cArrayOnDisk(File\$, Array(), GetPut%)

## Where :

File\$ is the file to use.  
Array() is the array with any dimension.  
GetPut% PUT\_ARRAY\_ON\_DISK to put the array on disk,  
GET\_ARRAY\_ON\_DISK to get the array from disk.  
test& >=0 is the returned length of the file,  
< 0 is an error occurs (error n° is the negative value of all DA\_x values, see Constants and Types declaration).

## Comments :

This function can handle any type'd variable (if strings are used, you must use only fixed string).

Don't forget that if you use the 'ReDim' statement at the procedure level without have declared the array als Global, you must initialize the array before using this function (see below). You must initialize the array with enough space to handle the size of the file This is due to a VB limitation.

This function can handle huge array (greater than 65535 bytes) (see the example below).

Beware, the ANY parameter in the definition of this function doesn't support string array (why ? ask to VB creator). To handle string (only fixed string), create a type'd variable with only an item, see below :

```
Type tagStringType
    newString As String * 80
End Type
```

'This type replaces

```
Dim newString As String * 80
```

## Examples :

```
ReDim AD(-999 To 9000, 0 To 1) As Long 'size is ((1+(9000 - -999)) * (1+(1 - 0)) * 4) = 80.000 bytes
Dim i As Long
```

```
For i = -999 To 9000
    AD(i, 0) = 1
    AD(i, 1) = 2
Next i
```

```
Debug.Print cArrayOnDisk("c:\tmp\test.dat", AD(), PUT_ARRAY_ON_DISK) '-> 80.000
```

```
For i = -999 To 9000
```

```
        AD(i, 0) = 0
        AD(i, 1) = 0
Next i

Debug.Print cArrayOnDisk("c:\tmp\test.dat", AD(), GET_ARRAY_ON_DISK)    '-> 80.000

Debug.Print AD(-999, 0), AD(9000, 0)
Debug.Print AD(-999, 1), AD(9000, 1)
```

**See also :** [Array](#)

# Array : Overview

ArrayOnDisk, ArrayStringOnDisk

AddD, AddI, AddL, AddS

ArrayPrm

CountD, CountI, CountL, CountS

DeviationD, DeviationI, DeviationL, DeviationS

elements in an array

FillD, FillI, FillL, FillS

one for any element.

FillIncrD, FillIncrI, FillIncrL, FillIncrS

an increment for any element.

MaxD, MaxI, MaxL, MaxS

MeanD, MeanI, MeanL, MeanS

array.

MinD, MinI, MinL, MinS

ReverseSortD, ReverseSortI, ReverseSortL, ReverseSortS

ReverseSortStr

SearchD, SearchI, SearchL, SearchS

SetD, SetI, SetL, SetS

same value.

SortD, SortI, SortL, SortS

SortStr

SumD, SumI, SumL, SumS

Put/Get full array on/from disk.

Adding a value to all elements in an array

Read the configuration of an array.

Count a specific value in an array.

Calculating the standard deviation from all

Filling an array with a value incremented by

Filling an array with a value incremented by

Finding the maximum value in an array.

Calculating the mean from all elements in an

Finding the minimum value in an array.

Sort an array in descending order.

Sort, in descending order, a string.

Search a specific value in an array.

Setting all elements in an array with the

Sort an array in ascending order.

Sort, in ascending order, a string.

Sum all elements from an array.

# DeviationD, DeviationI, DeviationL, DeviationS

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[DeviationD](#) will calculate the standard deviation from all elements in a [Double](#) array.

[DeviationI](#) will calculate the standard deviation from all elements in an [Integer](#) array.

[DeviationL](#) will calculate the standard deviation from all elements in a [Long](#) array.

[DeviationS](#) will calculate the standard deviation from all elements in a [Single](#) array.

## Declare Syntax :

Declare Function cDeviationD Lib "[time2win.dll](#)" (array() As Double) As Double

Declare Function cDeviationI Lib "[time2win.dll](#)" (array() As Integer) As Double

Declare Function cDeviationL Lib "[time2win.dll](#)" (array() As Long) As Double

Declare Function cDeviationS Lib "[time2win.dll](#)" (array() As Single) As Double

## Call Syntax :

deviation# = cDeviationD(array())

deviation# = cDeviationI(array())

deviation# = cDeviationL(array())

deviation# = cDeviationS(array())

## Where :

array() is the array (Double, Integer, Long, Single).

deviation# is the standard deviation calculated. This value is always a Double value.

## Comments :

**See Also :** [Array](#)

# ArrayPrm

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**ArrayPrm** retrieve the definition of a gived array (only one dimension and for numeric array)

## Declare Syntax :

Declare Function cArrayPrm Lib "time2win.dll" (array() As Any, nArray As Any) As Integer

## Call Syntax :

status% = cArrayPrm(array(), nArray)

## Where :

array()	the array to proceed
nArray	a type variable 'ArrayType' for receiving the definition
status%	always TRUE

## Comments :

The definition of an array is gived by the following parameters :

Bounds	is the far address of the array in memory.
LBound	is the smallest available subscript for the first dimension of the array.
UBound	is the highest available subscript for the first dimension of the array.
ElemSize	is the size of the element of the array
IndexCount	is the number of dimension of the array.
TotalElem	is the number of element in the array (UBound - LBound + 1) in the first dimension.

## Examples :

Dim array(1 To 16)	As Integer
Dim arrayDef	As ArrayType
Dim status	As Integer

status = cArrayPrm(array(), arrayDef)

arrayDef.Bounds	is 1048577
arrayDef.LBound	is 1
arrayDef.UBound	is 16
arrayDef.ElemSize	is 2 (INTEGER)
arrayDef.IndexCount	is 1
arrayDef.TotalElem	is 16

Dim array(-7 To 25)	As Double
Dim arrayDef	As ArrayType
Dim status	As Integer

status = cArrayPrm(array(), arrayDef)

arrayDef.Bounds	is 1703929
arrayDef.LBound	is -7
arrayDef.UBound	is 25
arrayDef.ElemSize	is 8 (DOUBLE)
arrayDef.IndexCount	is 1
arrayDef.TotalElem	is 33

Dim array(-10 To 10, 1 TO 7)	As Long
Dim arrayDef	As ArrayType

Dim status	As Integer
------------	------------

```
status = cArrayPrm(array(), arrayDef)
```

```
arrayDef.Bounds      is 458753
arrayDef.LBound is 1
arrayDef.UBound      is 7
arrayDef.ElemSize    is 4 (LONG)
arrayDef.IndexCount  is 2
arrayDef.TotalElem   is 7
```

**See also :** [Array](#)



# FiIID, FiIII, FiILL, FiIIS

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**FiIID** fill, with an automatic incremented value, all of the elements of a **Double** array.

**FiIII** fill, with an automatic incremented value, all of the elements of an **Integer** array.

**FiILL** fill, with an automatic incremented value, all of the elements of a **Long** array.

**FiIIS** fill, with an automatic incremented value, all of the elements of a **Single** array.

## Declare Syntax :

Declare Function cFiIID Lib "time2win.dll" (array() As Double, ByVal nValue As Double) As Integer

Declare Function cFiIII Lib "time2win.dll" (array() As Integer, ByVal nValue As Integer) As Integer

Declare Function cFiILL Lib "time2win.dll" (array() As Long, ByVal nValue As Long) As Integer

Declare Function cFiIIS Lib "time2win.dll" (array() As Single, ByVal nValue As Single) As Integer

## Call Syntax :

status% = cFiIID(array(), nValue#)

status% = cFiIII(array(), nValue%)

status% = cFiILL(array(), nValue&)

status% = cFiIIS(array(), nValue!)

## Where :

array() is the Double array.

nValue is the Double value automatically incremented by one.

status is always TRUE.

## Comments :

**See Also :** [Array](#)

# FillIncrD, FillIncrI, FillIncrL, FillIncrS

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**FillIncrD** fill, with an automatic incremented value, all of the elements of a **Double** array.

**FillIncrI** fill, with an automatic incremented value, all of the elements of an **Integer** array.

**FillIncrL** fill, with an automatic incremented value, all of the elements of a **Long** array.

**FillIncrS** fill, with an automatic incremented value, all of the elements of a **Single** array.

## Declare Syntax :

Declare Function cFillIncrD Lib "time2win.dll" (Array() As Double, ByVal nValue As Double, ByVal Increment As Double) As Integer

Declare Function cFillIncrI Lib "time2win.dll" (Array() As Integer, ByVal nValue As Integer, ByVal Increment As Integer) As Integer

Declare Function cFillIncrL Lib "time2win.dll" (Array() As Long, ByVal nValue As Long, ByVal Increment As Long) As Integer

Declare Function cFillIncrS Lib "time2win.dll" (Array() As Single, ByVal nValue As Single, ByVal Increment As Single) As Integer

## Call Syntax :

status% = cFillIncrD(array(), nValue#, Increment#)

status% = cFillIncrI(array(), nValue%, Increment%)

status% = cFillIncrL(array(), nValue&, Increment&)

status% = cFillIncrS(array(), nValue!, Increment!)

## Where :

array()	is the array (Double, Integer, Long, Single).
nValue	is the starting value (Double, Integer, Long, Single).
Increment	is the increment (Double, Integer, Long, Single).
status	is always TRUE.

## Comments :

**See Also :** [Array](#)

# MaxD, MaxI, MaxL, MaxS

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**MaxD** will return the largest value in a **Double** array.

**MaxI** will return the largest value in an **Integer** array.

**MaxL** will return the largest value in a **Long** array.

**MaxS** will return the largest value in a **Single** array.

## Declare Syntax :

Declare Function cMaxD Lib "time2win.dll" (array() As Double) As Double

Declare Function cMaxI Lib "time2win.dll" (array() As Integer) As Integer

Declare Function cMaxL Lib "time2win.dll" (array() As Long) As Long

Declare Function cMaxS Lib "time2win.dll" (array() As Single) As Single

## Call Syntax :

largest# = cMaxD(array())

largest% = cMaxI(array())

largest& = cMaxL(array())

largest! = cMaxS(array())

## Where :

array() is the array (Double, Integer, Long, Single).

largest is the largest value (Double, Integer, Long, Single) from all of the elements of the array (Double, Integer, Long, Single).

## Comments :

**See Also :** [Array](#)

# MeanD, MeanI, MeanL, MeanS

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**MeanD** will calculate the mean from all elements in a **Double** array.

**MeanI** will calculate the mean from all elements in an **Integer** array.

**MeanL** will calculate the mean from all elements in a **Long** array.

**MeanS** will calculate the mean from all elements in a **Single** array.

## Declare Syntax :

Declare Function cMeanD Lib "time2win.dll" (array() As Double) As Double

Declare Function cMeanI Lib "time2win.dll" (array() As Integer) As Double

Declare Function cMeanL Lib "time2win.dll" (array() As Long) As Double

Declare Function cMeanS Lib "time2win.dll" (array() As Single) As Double

## Call Syntax :

mean# = cMeanD(array())

mean% = cMeanI(array())

mean& = cMeanL(array())

mean! = cMeanS(array())

## Where :

array() is the array (Double, Integer, Long, Single).

mean is the mean calculated. This value is always a Double value.

## Comments :

**See Also :** [Array](#)

# MinD, MinI, MinL, MinS

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**MinD** will return the smallest value in a **Double** array.

**MinI** will return the smallest value in an **Integer** array.

**MinL** will return the smallest value in a **Long** array.

**MinS** will return the smallest value in a **Single** array.

## Declare Syntax :

Declare Function cMinD Lib "time2win.dll" (array() As Double) As Double

Declare Function cMinI Lib "time2win.dll" (array() As Integer) As Integer

Declare Function cMinL Lib "time2win.dll" (array() As Long) As Long

Declare Function cMinS Lib "time2win.dll" (array() As Single) As Single

## Call Syntax :

smallest# = cMinD(array())

smallest% = cMinI(array())

smallest& = cMinL(array())

smallest! = cMinS(array())

## Where :

array() is the array (Double, Integer, Long, Single).

smallest is the smallest value (Double, Integer, Long, Single) from all of the elements of the array (Double, Integer, Long, Single).

## Comments :

**See Also :** [Array](#)

# ReverseSortD, ReverseSortI, ReverseSortL, ReverseSortS, ReverseSortStr

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ReverseSortD](#) will sort, in descending order, all elements in a [Double](#) array.  
[ReverseSortI](#) will sort, in descending order, all elements in an [Integer](#) array.  
[ReverseSortL](#) will sort, in descending order, all elements in a [Long](#) array.  
[ReverseSortS](#) will sort, in descending order, all elements in a [Single](#) array.  
[ReverseSortStr](#) will sort, in descending order, a string divided in basis elements of a fixed length.

## Declare Syntax :

```
Declare Function cReverseSortD Lib "time2win.dll" (array() As Double) As Integer
Declare Function cReverseSortI Lib "time2win.dll" (array() As Integer) As Integer
Declare Function cReverseSortL Lib "time2win.dll" (array() As Long) As Integer
Declare Function cReverseSortS Lib "time2win.dll" (array() As Single) As Integer
Declare Function cReverseSortStr Lib "time2win.dll" (Txt As String, ByVal nItem As Integer, ByVal ItemLength As Integer) As Integer
```

## Call Syntax :

```
status% = cReverseSortD(array())
status% = cReverseSortI(array())
status% = cReverseSortL(array())
status% = cReverseSortS(array())
status% = cReverseSortStr(txt$, nItem%, ItemLength%)
```

## Where :

For ReverseSortD, ReverseSortI, ReverseSortL, ReverseSortS :

array()	is the array (Double, Integer, Long, Single).
status%	is always TRUE.

For ReverseSortStr :

txt	is the string to sort.
nItem	is the total element is the string.
ItemLength	is the length for one element.
status	is FALSE if the length of the string is not the 'nItem * ItemLength', or if length of the string is 0. is TRUE if all is OK.

## Comments :

**See Also :** [Array](#)

# SetD, SetI, SetL, SetS

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**SetD** fill, with the same value, all of the elements of a **Double** array.

**SetI** fill, with the same value, all of the elements of an **Integer** array.

**SetL** fill, with the same value, all of the elements of a **Long** array.

**SetS** fill, with the same value, all of the elements of a **Single** array.

## Declare Syntax :

Declare Function cSetD Lib "time2win.dll" (array() As Double, ByVal nValue As Double) As Integer

Declare Function cSetI Lib "time2win.dll" (array() As Integer, ByVal nValue As Integer) As Integer

Declare Function cSetL Lib "time2win.dll" (array() As Long, ByVal nValue As Long) As Integer

Declare Function cSetS Lib "time2win.dll" (array() As Single, ByVal nValue As Single) As Integer

## Call Syntax :

status = cSetD(array(), nValue)

status = cSetI(array(), nValue)

status = cSetL(array(), nValue)

status = cSetS(array(), nValue)

## Where :

array() is the array (Double, Integer, Long, Single).

nValue is the value (Double, Integer, Long, Single) to initialize the array.

status is always TRUE.

## Comments :

**See Also :** [Array](#)

# SortD, SortI, SortL, SortS, SortStr

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**SortD** will sort, in ascending order, all elements in a **Double** array.

**SortI** will sort, in ascending order, all elements in an **Integer** array.

**SortL** will sort, in ascending order, all elements in a **Long** array.

**SortS** will sort, in ascending order, all elements in a **Single** array.

**SortStr** will sort, in ascending order, a string divided in basis elements of a fixed length.

## Declare Syntax :

Declare Function cSortD Lib "time2win.dll" (array() As Double) As Integer

Declare Function cSortI Lib "time2win.dll" (array() As Integer) As Integer

Declare Function cSortL Lib "time2win.dll" (array() As Long) As Integer

Declare Function cSortS Lib "time2win.dll" (array() As Single) As Integer

Declare Function cSortStr Lib "time2win.dll" (Txt As String, ByVal nItem As Integer, ByVal ItemLength As Integer) As Integer

## Call Syntax :

status% = cSortD(array())

status% = cSortI(array())

status% = cSortL(array())

status% = cSortS(array())

status% = cSortStr(txt\$, nItem%, ItemLength%)

## Where :

For SortD, SortI, SortL, SortS :

array()	is the array (Double, Integer, Long, Single).
status%	is always TRUE.

For SortStr :

txt	is the string to sort.
nItem	is the total element is the string.
ItemLength	is the length for one element.
status	is FALSE if the length of the string is not the 'nItem * ItemLength', or if length of the string is 0. is TRUE if all is OK.

## Comments :

**See Also :** [Array](#)



# SumD, SumI, SumL, SumS

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**SumD** will calculate the sum from all elements in a **Double** array.

**SumI** will calculate the sum from all elements in an **Integer** array.

**SumL** will calculate the sum from all elements in a **Long** array.

**SumS** will calculate the sum from all elements in a **Single** array.

## Declare Syntax :

Declare Function cSumD Lib "time2win.dll" (array() As Double) As Double

Declare Function cSumI Lib "time2win.dll" (array() As Integer) As Double

Declare Function cSumL Lib "time2win.dll" (array() As Long) As Double

Declare Function cSumS Lib "time2win.dll" (array() As Single) As Double

## Call Syntax :

sum# = cSumD(array())

sum% = cSumI(array())

sum& = cSumL(array())

sum! = cSumS(array())

## Where :

array()            is the array (Double, Integer, Long, Single).

sum                is the sum calculated. This value is always a Double value.

## Comments :

**See Also :** [Array](#)

# CountD, CountI, CountL, CountS

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**CountD** counts a specific value in a **Double** array.

**CountI** counts a specific value in an **Integer** array.

**CountL** counts a specific value in a **Long** array.

**CountS** counts a specific value in a **Single** array.

## Declare Syntax :

Declare Function cCountD Lib "time2win.dll" (array() As Double, ByVal Value As Double) As Long

Declare Function cCountI Lib "time2win.dll" (array() As Integer, ByVal Value As Integer) As Long

Declare Function cCountL Lib "time2win.dll" (array() As Long, ByVal Value As Long) As Long

Declare Function cCountS Lib "time2win.dll" (array() As Single, ByVal Value As Single) As Long

## Call Syntax :

cnt& = cCountD(array(), Value!)

cnt& = cCountI(array(), Value%)

cnt& = cCountL(array(), Value&)

cnt& = cCountS(array(), Value#)

## Where :

array()            is the array (Double, Integer, Long, Single).

Value?            is the value (Double, Integer, Long, Single) to count.

cnt&                is the returned counted value.

## Comments :

**See Also :** [Array](#)

# SearchD, SearchI, SearchL, SearchS

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[SearchD](#) search a specific value in a [Double](#) array.

[SearchI](#) search a specific value in an [Integer](#) array.

[SearchL](#) search a specific value in a [Long](#) array.

[SearchS](#) search a specific value in a [Single](#) array.

## Declare Syntax :

Declare Function cSearchD Lib "[time2win.dll](#)" (array() As Double, ByVal Value As Double) As Long

Declare Function cSearchI Lib "[time2win.dll](#)" (array() As Integer, ByVal Value As Integer) As Long

Declare Function cSearchL Lib "[time2win.dll](#)" (array() As Long, ByVal Value As Long) As Long

Declare Function cSearchS Lib "[time2win.dll](#)" (array() As Single, ByVal Value As Single) As Long

## Call Syntax :

cnt& = cSearchD(array(), Value#)

cnt& = cSearchI(array(), Value%)

cnt& = cSearchL(array(), Value&)

cnt& = cSearchS(array(), Value!)

## Where :

array() is the array (Double, Integer, Long, Single).

Value? is the value to search (Double, Integer, Long, Single).

cnt& > 0 : the position of the searched value;

= -1 : the searched value is not found.

## Comments :

**See Also :** [Array](#)

# Disk array : Overview

The functions/subs used in the Disk Array routines handle big sized arrays on disk.

Each array must give/have a file to handle the information.

The concept of big sized arrays on disk is to use the mass storage (hard disk) in place of memory. This concept minimize the use of the memory for big array but decrease the speed to accessing data.

A fixed string array of 500 rows by 500 cols, 2 Sheets and a string size of 50 take 25.000.000 bytes. I think that this is better to place this array on the disk.

The following functions/subs are used to handle big sized arrays on disk :

<u>DAClear</u>	clear a big sized array.
<u>DAClearCol</u>	clear a single col on on a sheet in a big sized array.
<u>DAClearRow</u>	clear a single row on a sheet in a big sized array.
<u>DAClearSheet</u>	clear a single sheet in a big sized array.
<u>DAClose</u>	close a big sized array and keep it or close a big sized array and destroy it.
<u>DACreate</u>	create a new big sized array on disk or use an existing big sized array on disk.
<u>DAGet</u>	read an element from a big sized array on disk.
<u>DAGGetType</u>	read a type'd variable from a big sized array on disk.
<u>DAPut</u>	save an element to a big sized array on disk.
<u>DAPutType</u>	save a type'd variable to a big sized array on disk.
<u>DARGet</u>	read an element from a big sized array on disk with only one sheet and one row.
<u>DARGetType</u>	read a type'd variable from a big sized array on disk with only one sheet and one row.
<u>DARPut</u>	save an element to a big sized array on disk with only one sheet and one row.
<u>DARPutType</u>	save a type'd variable to a big sized array on disk with only one sheet
<u>DAsClearCol</u>	clear a single col on on a sheet in a big sized array with only one sheet.
<u>DAsClearRow</u>	clear a single row on a sheet in a big sized array with only one sheet.
<u>DAsGet</u>	read an element from a big sized array on disk with only one sheet.
<u>DAsGetType</u>	read a type'd variable from a big sized array on disk with only one sheet.
<u>DAsPut</u>	save an element to a big sized array on disk with only one sheet.
<u>DAsPutType</u>	save a type'd variable to a big sized array on disk with only one sheet.and one row.

To minimize the use of too many functions for the different variable type in VB, DAGet and DAPut uses variant value (integer, long, single, double, currency, string). This can be slow down (a little bit) the speed for accessing the data.

To handle type'd variable, you must use DAGetType, DAPutType.

When you create a new array on disk, a header (128 chars for VB 3.0 and VB 4.0 (16-Bit), 200 chars for VB 4.0 (32-Bit)) is writed to begin of the associated file. This header is readed when you re-use an existing array to verify that this is a good big sized disk array.

Actually, the maximum number of chars for a string element or for a type'd variable is 4096.

# DAClear, DAClearSheet, DAClearCol, DAsClearCol, DAClearRow, DAsClearRow

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

**DAClear** clear a big sized array (fill it with chr\$(0) or chr\$(32) (for string array)).

**DAClearSheet** clear a single Sheet in a big sized array (fill it with chr\$(0) or chr\$(32) (for string array)).

**DAClearCol** clear a single Col on one Sheet or on all Sheets in a big sized array (fill it with chr\$(0) or chr\$(32) (for string array)).

**DAsClearCol** have the same functionality but with a big sized array with only one sheet.

**DAClearRow** clear a single Row on one Sheet or on all Sheets in a big sized array (fill it with chr\$(0) or chr\$(32) (for string array)).

**DAsClearRow** have the same functionality but with a big sized array with only one sheet.

## **Declare Syntax :**

Declare Function cDAClear Lib "time2win.dll" (DISKARRAY As tagDISKARRAY) As Integer

Declare Function cDAClearSheet Lib "time2win.dll" (DISKARRAY As tagDISKARRAY, ByVal Sheet As Long) As Integer

Declare Function cDAClearCol Lib "time2win.dll" (DISKARRAY As tagDISKARRAY, ByVal Col As Long, ByVal Sheet As Long) As Integer

Declare Function cDAsClearCol Lib "time2win.dll" (DISKARRAY As tagDISKARRAY, ByVal Col As Long) As Integer

Declare Function cDAClearRow Lib "time2win.dll" (DISKARRAY As tagDISKARRAY, ByVal Row As Long, ByVal Sheet As Long) As Integer

Declare Function cDAsClearRow Lib "time2win.dll" (DISKARRAY As tagDISKARRAY, ByVal Row As Long) As Integer

## **Call Syntax :**

ErrCode% = cDAClear(DISKARRAY)

ErrCode% = cDAClearSheet(DISKARRAY, Sheet&)

ErrCode% = cDAClearCol(DISKARRAY, Col&, Sheet&)

ErrCode% = cDAsClearCol(DISKARRAY, Col&)

ErrCode% = cDAClearRow(DISKARRAY, Row&, Sheet&)

ErrCode% = cDAsClearRow(DISKARRAY, Row&)

## **Where :**

DISKARRAY is a type'd variable (tagDISKARRAY).

Col& is the desired Col.

Row& is the desired Row.

Sheet& is the desired Sheet.

ErrCode% is the returned error code.

## **Comments :**

This function must be used only after you've created a big sized array on disk OR after the using of an existing big sized array on disk.

If you've created a big sized array on disk, the array is already cleared.

For DAClearSheet :

If the big sized array on disk have a single Sheet, this routine have the same effect that cDAClear.

If the Sheet is -1 then all Sheets are used. This parameter have the same functionality that cDAClear

If the Sheet is below 1 and different of -1, the Sheet 1 is used.

If the Sheet is greater than DISKARRAY.nSheets, the Sheet DISKARRAY.nSheets is used.

For DAClearCol, DAsClearCol :

If the Col is below 1, the Col 1 is used.

If the Col is greater than DISKARRAY.nCols, the Col DISKARRAY.nCols is used.

If the Sheet is -1 then all Sheets are used.

If the Sheet is below 1 and different of -1, the Sheet 1 is used.

If the Sheet is greater than DISKARRAY.nSheets, the Sheet DISKARRAY.nSheets is used.

For DAClearRow, DAsClearRow :

If the Row is below 1, the Row 1 is used.

If the Row is greater than DISKARRAY.nRows, the Row DISKARRAY.nRows is used.

If the Sheet is -1 then all Sheets are used.

If the Sheet is below 1 and different of -1, the Sheet 1 is used.

If the Sheet is greater than DISKARRAY.nSheets, the Sheet DISKARRAY.nSheets is used.

### Examples :

```
Dim ErrCode           As Integer
Dim DA                 As tagDISKARRAY
```

```
DA.nFilename = "c:\t2w_tmp\dastring.tmp"
```

'name of the file to use

```
DA.nType = 50
```

'positive value for a string

```
DA.nIsTyped = False
```

'init the array with spaces

```
DA.nRows = 500
```

'500 rows

```
DA.nCols = 500
```

'500 cols

```
DA.nSheets = 2
```

'2 sheets

```
ErrCode = cDACreate(DA, True)
```

'create a new big sized array on disk

```
Call cDAPut(DA, 1, 1, 1, "D:1, ABCDEFGHIJ")
```

'save the string in Row 1, Col 1, Sheet 1

```
Call cDAPut(DA, 1, DA.nCols, 1, "D:1, abcdefghij")
```

'save the string in Row 1, Col 500, Sheet 1

```
Call cDAPut(DA, DA.nRows, 1, 1, "D:1, OPQRSTUVWXYZ")
```

'save the string in Row 500, Col 1, Sheet 1

```
Call cDAPut(DA, DA.nRows, DA.nCols, 1, "D:1, oprqstuvwxyz")
500, Sheet 1
```

'save the string in Row 500, Col

```
'..... some codes
```

```
ErrCode = cDAClear(DA)
disk
```

'clear all elements in the big sized array on disk

```
ErrCode = cDAClearSheet(DA, 2)
disk
```

'clear the Sheet 2 in the big sized array on disk

```
ErrCode = cDAClearCol(DA, DA.nCols, 2)
array on disk
```

'clear the last Col in Sheet 2 in the big sized array on disk

```
ErrCode = cDAsClearCol(DA, DA.nCols)
array on disk
```

'clear the last Col in Sheet 1 in the big sized array on disk

```
ErrCode = cDAClearRow(DA, DA.nRows, 2)
array on disk
```

'clear the last Row in Sheet 2 in the big sized array on disk

```
ErrCode = cDAsClearRow(DA, DA.nRows)
array on disk
```

'clear the last Row in Sheet 1 in the big sized array on disk

**See also :** [Disk Array](#)

# DAGet, DAsGet, DArGet

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[DAGet](#) read an element from a big sized array on disk.

[DArGet](#) have the same fonctionnality but with a big sized array with only one sheet and only one row.

[DAsGet](#) have the same fonctionnality but with a big sized array with only one sheet.

## Declare Syntax :

Declare Function cDAGet Lib "[time2win.dll](#)" (DISKARRAY As tagDISKARRAY, ByVal Row As Long, ByVal Col As Long, ByVal Sheet As Long) As Variant

Declare Function cDArGet Lib "[time2win.dll](#)" (DISKARRAY As tagDISKARRAY, ByVal Col As Long) As Variant

Declare Function cDAsGet Lib "[time2win.dll](#)" (DISKARRAY As tagDISKARRAY, ByVal Row As Long, ByVal Col As Long) As Variant

## Call Syntax :

Var = cDAGet(DISKARRAY, Row&, Col&, Sheet&)

## Where :

DISKARRAY	is a type'd variable (tagDISKARRAY).
Row&	is the row.
Col&	is the col.
Sheet&	is the sheet.
Var	is the readed variant value depending of the variable type used in the creation.

## Comments :

If the Row is below 1, the Row 1 is used.

If the Col is below 1, the Col 1 is used.

If the Sheet is below 1, the Sheet 1 is used.

If the Row is greater than DISKARRAY.nRows, the Row DISKARRAY.nRows is used.

If the Col is greater than DISKARRAY.nCols, the Col DISKARRAY.nCols is used.

If the Sheet is greater than DISKARRAY.nSheets, the Sheet DISKARRAY.nSheets is used.

## Examples :

see [DACreate](#)

**See also :** [Disk Array](#)

# DAGetType, DAsGetType, DArGetType

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**DAGetType** read a type'd variable from a big sized array on disk.

**DArGetType** have the same fonctionnality but with a big sized array with only one sheet and only one row.

**DAsGetType** have the same fonctionnality but with a big sized array with only one sheet.

## Declare Syntax :

Declare Sub cDAGetType Lib "time2win.dll" (DISKARRAY As tagDISKARRAY, ByVal Row As Long, ByVal Col As Long, ByVal Sheet As Long, nType As Any)

Declare Sub cDArGetType Lib "time2win.dll" (DISKARRAY As tagDISKARRAY, ByVal Col As Long, nType As Any)

Declare Sub cDAsGetType Lib "time2win.dll" (DISKARRAY As tagDISKARRAY, ByVal Row As Long, ByVal Col As Long, nType As Any)

## Call Syntax :

Call cDAGetType(DISKARRAY, Row&, Col&, Sheet&, nType)

Call cDArGetType(DISKARRAY, Col&, nType)

Call cDAsGetType(DISKARRAY, Row&, Col&, nType)

## Where :

DISKARRAY	is a type'd variable (tagDISKARRAY).
Row&	is the row.
Col&	is the col.
Sheet&	is the sheet.
nType	is the readed type'd variable depending of the variable type used in the creation.

## Comments :

If the Row is below 1, the Row 1 is used.

If the Col is below 1, the Col 1 is used.

If the Sheet is below 1, the Sheet 1 is used.

If the Row is greater than DISKARRAY.nRows, the Row DISKARRAY.nRows is used.

If the Col is greater than DISKARRAY.nCols, the Col DISKARRAY.nCols is used.

If the Sheet is greater than DISKARRAY.nSheets, the Sheet DISKARRAY.nSheets is used.

## Examples :

Dim ErrCode	As Integer
Dim DA	As tagDISKARRAY
Dim TE(1 To 4)	As tagTASKENTRY

DA.nFilename = "c:\t2w_tmp\datatype.tmp"	'name of the file to use
DA.nType = Len(TE(1))	'positive value for a type'd variable
DA.nIsTyped = True	'init the array with chr\$(0) because type'd variable
DA.nRows = 500	'500 rows
DA.nCols = 500	'500 cols
DA.nSheets = 2	'2 sheets

ErrCode = cDAGetType(DA, False)	'use a created big sized array on disk
---------------------------------	--

Call cDAGetType(DA, 1, 1, 1, TE(1))	'read the type'd variable in Row 1, Col 1, Sheet 1
-------------------------------------	--

Call cDAGetType(DA, 1, DA.nCols, 1, TE(2))	'read the type'd variable in Row 1, Col 500,
--	--



Sheet 1

Call cDAGetType(DA, DA.nRows, 1, 1, TE(3))

'read the type'd variable in Row 500, Col 1,

Sheet 1

Call cDAGetType(DA, DA.nRows, DA.nCols, 1, TE(4))

'read the type'd variable in Row 500, Col 500, Sheet 1

**See also :** [Disk Array](#)

# DAPut, DAsPut, DArPut

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[DAPut](#) save an element to a big sized array on disk.

[DArPut](#) have the same fonctionnality but with a big sized array with only one sheet and only one row.

[DAsPut](#) have the same fonctionnality but with a big sized array with only one sheet.

## Declare Syntax :

Declare Sub cDAPut Lib "[time2win.dll](#)" (DISKARRAY As tagDISKARRAY, ByVal Row As Long, ByVal Col As Long, ByVal Sheet As Long, Var As Variant)

Declare Sub cDArPut Lib "[time2win.dll](#)" (DISKARRAY As tagDISKARRAY, ByVal Col As Long, Var As Variant)

Declare Sub cDAsPut Lib "[time2win.dll](#)" (DISKARRAY As tagDISKARRAY, ByVal Row As Long, ByVal Col As Long, Var As Variant)

## Call Syntax :

Call cDAPut(DISKARRAY, Row&, Col&, Sheet&, Var)

Call cDArPut(DISKARRAY, Col&, Var)

Call cDAsPut(DISKARRAY, Row&, Col&, Var)

## Where :

DISKARRAY	is a type'd variable (tagDISKARRAY).
Row&	is the row.
Col&	is the col.
Sheet&	is the sheet.
Var	is the variant value to save depending of the variable type used in the creation.

## Comments :

If the Row is below 1, the Row 1 is used.

If the Col is below 1, the Col 1 is used.

If the Sheet is below 1, the Sheet 1 is used.

If the Row is greater than DISKARRAY.nRows, the Row DISKARRAY.nRows is used.

If the Col is greater than DISKARRAY.nCols, the Col DISKARRAY.nCols is used.

If the Sheet is greater than DISKARRAY.nSheets, the Sheet DISKARRAY.nSheets is used.

## Examples :

see [DACreate](#)

**See also :** [Disk Array](#)

# DAPutType, DAsPutType, DArPutType

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**DAPutType** save a type'd variable from a big sized array on disk.

**DArPutType** have the same functionality but with a big sized array with only one sheet and only one row.

**DAsPutType** have the same functionality but with a big sized array with only one sheet.

## Declare Syntax :

Declare Sub cDAPutType Lib "time2win.dll" (DISKARRAY As tagDISKARRAY, ByVal Row As Long, ByVal Col As Long, ByVal Sheet As Long, nType As Any)

Declare Sub cDArPutType Lib "time2win.dll" (DISKARRAY As tagDISKARRAY, ByVal Col As Long, nType As Any)

Declare Sub cDAsPutType Lib "time2win.dll" (DISKARRAY As tagDISKARRAY, ByVal Row As Long, ByVal Col As Long, nType As Any)

## Call Syntax :

Call cDAPutType(DISKARRAY, Row&, Col&, Sheet&, nType)

Call cDArPutType(DISKARRAY, Col&, nType)

Call cDAsPutType(DISKARRAY, Row&, Col&, nType)

## Where :

DISKARRAY is a type'd variable (tagDISKARRAY).

Row& is the row.

Col& is the col.

Sheet& is the sheet.

nType is the type'd variable to save depending of the variable type used in the creation.

## Comments :

If the Row is below 1, the Row 1 is used.

If the Col is below 1, the Col 1 is used.

If the Sheet is below 1, the Sheet 1 is used.

If the Row is greater than DISKARRAY.nRows, the Row DISKARRAY.nRows is used.

If the Col is greater than DISKARRAY.nCols, the Col DISKARRAY.nCols is used.

If the Sheet is greater than DISKARRAY.nSheets, the Sheet DISKARRAY.nSheets is used.

## Examples :

```
Dim ErrCode As Integer
Dim DA As tagDISKARRAY
Dim TE As tagTASKENTRY
```

DA.nFilename = "c:\t2w\_tmp\datatype.tmp"

DA.nType = Len(TE)

DA.nIsTyped = True

variable

DA.nRows = 500

DA.nCols = 500

DA.nSheets = 2

ErrCode = cDAPutType(DA, True)

ErrCode = cTasks(TE, True)

Call cDAPutType(DA, 1, 1, 1, TE)

Sheet 1

'name of the file to use

'positive value for a type'd variable

'init the array with chr\$(0) because type'd

'500 rows

'500 cols

'2 sheets

'create a new big sized array on disk

'save the type'd variable in Row 1, Col 1,

```
ErrCode = cTasks(TE, False)
Call cDAPutType(DA, 1, DA.nCols, 1, TE)
Sheet 1
ErrCode = cTasks(TE, False)
Call cDAPutType(DA, DA.nRows, 1, 1, TE)
Sheet 1
ErrCode = cTasks(TE, False)
Call cDAPutType(DA, DA.nRows, DA.nCols, 1, TE)
500, Sheet 1
```

'save the type'd variable in Row 1, Col 500,

'save the type'd variable in Row 500, Col 1,

'save the type'd variable in Row 500, Col

**See also :** [Disk Array](#)

# DACreate

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

DACreate create a new big sized array on disk or use an existing big sized array on disk.

## Declare Syntax :

Declare Function cDACreate Lib "time2win.dll" (DISKARRAY As tagDISKARRAY, ByVal CreateOrUse As Integer) As Integer

## Call Syntax :

ErrCode% = cDACreate(DA, CreateOrUse%)

## Where :

DISKARRAY	is a type'd variable (tagDISKARRAY).
CreateOrUse%	TRUE : if you want to create a new big sized array on disk, FALSE : if you want to re-use an existing big sized array on disk.
ErrCode%	is the returned <u>error code</u> .

## Comments :

In theory :

The maxixum number of Rows is 2147483647  
The maxixum number of Cols is 2147483647  
The maxixum number of Sheets is 2147483647

You are only limited by the size of the disk on which the big sized array are defined.

The length of the filename can be 64 (VB 3.0, VB 4.0 (16-Bit)) or 128 (VB 4.0 (32-Bit)) chars maximum.

If you create a new big sized array on disk and if the file is already exists, the file is deleted before used.  
If you re-use an existing big sized array on disk, some checkings are made to verify the validity of the big sized array on disk.

Bigger are nRows, nCols or nSheets, bigger is the time to initialize.

When you create a new big sized array on disk, the only parameters that you must initialize are :

DA.nFilename = "c:\t2w_tmp\dastring.tmp"	'name of the file (you must have enough space on the drive).
DA.nType = 50	'the type of the variable to use, see <u>Constants and Types declaration</u> . (DA_x)
DA.nIsTyped = False	'Must be True for a type'd variable.
DA.nRows = 500	'the number of rows to use.
DA.nCols = 500	'the number of cols to use.
DA.nSheets = 2	'the number of sheets to use.

**YOU CAN'T CHANGE THESE PARAMETERS AFTER THE CREATION OF THE BIG SIZED ARRAY.  
YOU CAN'T CHANGE THE OTHER VALUES IN THE TYPE'D VARIABLE.**

When you create a new array, all elements are initialized with chr\$(0) except for string array which are initialized with chr\$(32) (spaces).

However, string array and type'd array use the same positive value to define in .nType, but the type'd array must be initialized with chr\$(0) not with chr\$(32) therefore for a type'd you must specify .nIsTyped on True to initialize it with chr\$(0).

If you use big size array of type'd variable, the type'd variable can be only a mix of fixed variable (variable string length can't be used).

#### Examples :

```
Dim ErrCode           As Integer
Dim DA                As tagDISKARRAY
Dim Var(1 To 8)       As Variant
```

```
DA.nFilename = "c:\t2w_tmp\dastring.tmp"
DA.nType = 50
DA.nIsTyped = False
DA.nRows = 500
DA.nCols = 500
DA.nSheets = 2
```

```
'name of the file to use
'positive value for a string
'init the array with spaces
'500 rows
'500 cols
'2 sheets
```

```
ErrCode = cDACreate(DA, True)
```

```
'create a new big sized array on disk
```

```
Call cDAPut(DA, 1, 1, 1, "D:1, ABCDEFGHIJ")
Call cDAPut(DA, 1, DA.nCols, 1, "D:1, abcdefghij")
Call cDAPut(DA, DA.nRows, 1, 1, "D:1, OPQRSTUVWXYZ")
Call cDAPut(DA, DA.nRows, DA.nCols, 1, "D:1, oprqstuvwxyz")
500, Sheet 1
```

```
'save the string in Row 1, Col 1, Sheet 1
'save the string in Row 1, Col 500, Sheet 1
'save the string in Row 500, Col 1, Sheet 1
'save the string in Row 500, Col
```

```
Call cDAPut(DA, 1, 1, 2, "D:2, 1234567890")
Call cDAPut(DA, 1, DA.nCols, 2, "D:2, 0987654321")
Call cDAPut(DA, DA.nRows, 1, 2, "D:2, 12345ABCDE")
Call cDAPut(DA, DA.nRows, DA.nCols, 2, "D:2, VWXYZ54321")
```

```
'save the string in Row 1, Col 1, Sheet 2
'save the string in Row 1, Col 500, Sheet 2
'save the string in Row 500, Col 1, Sheet 2
'save the string in Row 500, Col 500, Sheet 2
```

```
Var(1) = cDAGet(DA, 1, 1, 1)
Var(2) = cDAGet(DA, 1, DA.nCols, 1)
Var(3) = cDAGet(DA, DA.nRows, 1, 1)
Var(4) = cDAGet(DA, DA.nRows, DA.nCols, 1)
```

```
'read the string in Row 1, Col 1, Sheet 1
'read the string in Row 1, Col 500, Sheet 1
'read the string in Row 500, Col 1, Sheet 1
'read the string in Row 500, Col 500, Sheet 1
```

```
Var(5) = cDAGet(DA, 1, 1, 2)
Var(6) = cDAGet(DA, 1, DA.nCols, 2)
Var(7) = cDAGet(DA, DA.nRows, 1, 2)
Var(8) = cDAGet(DA, DA.nRows, DA.nCols, 2)
```

```
'read the string in Row 1, Col 1, Sheet 2
'read the string in Row 1, Col 500, Sheet 2
'read the string in Row 500, Col 1, Sheet 2
'read the string in Row 500, Col 500, Sheet 2
```

```
Call cDAClose(DA, False)
```

```
'close the file without delete it.
```

On my system :

```
ErrCode = -1
```

```
'no error
```

```
DA.daSize = 128
DA.Signature = "MCR_347"
DA.nFilename = "c:\t2w_tmp\dastring.tmp"
DA.nType = 50
DA.nRows = 500
DA.nCols = 500
DA.nSheets = 2
DA.rHandle = 0
DA.rElementSize = 50
DA.rFileSize = 25000128
DA.rParts = 762
chars)
DA.rRemain = 30784
DA.rSheetSize = 250000
DA.rTime = 26639
```

```
'internal header size
'internal signature
'name fo the file
'fixed string of 50 chars
'500 rows
'500 cols
'2 sheets
'internal handle
'internal size of a element
'internal size of the file
'internal number of parts (block of 32768
'internal remain chars
'internal size of one sheet
'internal time to perform the operation
```

Var(1) = "D:1, ABCDEFGHIJ"  
Var(2) = "D:1, abcdefghij"  
Var(3) = "D:1, OPQRSTUVWXYZ"  
Var(4) = "D:1, oprqrstuvwxyz"

Var(5) = "D:2, 1234567890"  
Var(6) = "D:2, 0987654321"  
Var(7) = "D:2, 12345ABCDE"  
Var(8) = "D:2, VWXYZ54321"

**See also :** [Disk Array](#)

# DAClose

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**DAClose** close a big sized array and keep it or close a big sized array and destroy it.

## Declare Syntax :

Declare Sub cDAClose Lib "time2win.dll" (DISKARRAY As tagDISKARRAY, ByVal DeleteFile As Integer)

## Call Syntax :

Call cDAClose(DISKARRAY, DeleteFile%)

## Where :

DISKARRAY	is a type'd variable (tagDISKARRAY).
DeleteFile%	TRUE : delete the file
	FALSE : don't delete the file (the file can be re-used by cDACreate)

## Comments :

If you want to re-use the big sized array on disk with the same parameters and whitout a new initialization, don't delete it.

## Examples :

see DACreate

**See also :** Disk Array



# MDAClose

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[MDAClose](#) close a multiple big sized array and keep it or close a multiple big sized array and destroy it.

## Declare Syntax :

Declare Sub cMDAClose Lib "time2win.dll" (MULTIPLIEDISKARRAY As tagMULTIPLIEDISKARRAY, ByVal DeleteFile As Integer)

## Call Syntax :

Call cMDAClose(MULTIPLIEDISKARRAY, DeleteFile%)

## Where :

MULTIPLIEDISKARRAY	is a type'd variable (tagMULTIPLIEDISKARRAY).
DeleteFile%	TRUE : delete the file
	FALSE : don't delete the file (the file can be re-used by cMDACreate)

## Comments :

If you want to re-use the multiple big sized array on disk with the same parameters and whitout a new initialization, don't delete it.

## Examples :

see [MDACreate](#)

**See also :** [Multiple Disk Array](#)

# MDAClear, MDAClearSheet, MDAClearCol, MDAsClearCol, MDAClearRow, MDAsClearRow

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

**MDAClear** clear a multiple big sized array (fill it with chr\$(0) or chr\$(32) (for string array)).  
**MDAClearSheet** clear a single Sheet in a multiple big sized array (fill it with chr\$(0) or chr\$(32) (for string array)).  
**MDAClearCol** clear a single Col on one Sheet or on all Sheets in a multiple big sized array (fill it with chr\$(0) or chr\$(32) (for string array)).  
**MDAsClearCol** have the same fonctionnality but with a multiple big sized array with only one sheet.  
**MDAClearRow** clear a single Row on one Sheet or on all Sheets in a multiple big sized array (fill it with chr\$(0) or chr\$(32) (for string array)).  
**MDAsClearRow** have the same fonctionnality but with a multiple big sized array with only one sheet.

## **Declare Syntax :**

```
Declare Function cMDAClear Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY) As Integer
Declare Function cMDAClearSheet Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Sheet As Long) As Integer
Declare Function cMDAClearCol Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Col As Long, ByVal Sheet As Long) As Integer
Declare Function cMDAsClearCol Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Col As Long) As Integer
Declare Function cMDAClearRow Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Row As Long, ByVal Sheet As Long) As Integer
Declare Function cMDAsClearRow Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Row As Long) As Integer
```

## **Call Syntax :**

```
ErrCode% = cMDAClear(Array%, MULTIPLEDISKARRAY)
ErrCode% = cMDAClearSheet(Array%, MULTIPLEDISKARRAY, Sheet&)
ErrCode% = cMDAClearCol(Array%, MULTIPLEDISKARRAY, Col&, Sheet&)
ErrCode% = cMDAsClearCol(Array%, MULTIPLEDISKARRAY, Col&)
ErrCode% = cMDAClearRow(Array%, MULTIPLEDISKARRAY, Row&, Sheet&)
ErrCode% = cMDAsClearRow(Array%, MULTIPLEDISKARRAY, Row&)
```

## **Where :**

MULTIPLEDISKARRAY	is a type'd variable (tagMULTIPLEDISKARRAY).
Array%	is the array in the multiple array (must be between 1 to 20).
Col&	is the desired Col.
Row&	is the desired Row.
Sheet&	is the desired Sheet.
ErrCode%	is the returned <u>error code</u> .

## **Comments :**

This function must be used only after you've created a multiple big sized array on disk OR after the using of an existing multiple big sized array on disk.

If you've created a multiple big sized array on disk, the array is already cleared.

For MDAClearSheet :

If the multiple big sized array on disk have a single Sheet, this routine have the same effect that cMDAClear.

If the Sheet is -1 then all Sheets are used. This parameter have the same functionality that cMDAClear

If the Sheet is below 1 and different of -1, the Sheet 1 is used.

If the Sheet is greater than MULTIPLEDISKARRAY.nSheets(Array%), the Sheet MULTIPLEDISKARRAY.nSheets(Array%) is used.

For MDAClearCol, MDAsClearCol :

If the Col is below 1, the Col 1 is used.

If the Col is greater than MULTIPLEDISKARRAY.nCols(Array%), the Col MULTIPLEDISKARRAY.nCols(Array%) is used.

If the Sheet is -1 then all Sheets are used.

If the Sheet is below 1 and different of -1, the Sheet 1 is used.

If the Sheet is greater than MULTIPLEDISKARRAY.nSheets(Array%), the Sheet MULTIPLEDISKARRAY.nSheets(Array%) is used.

For MDAClearRow, MDAsClearRow :

If the Row is below 1, the Row 1 is used.

If the Row is greater than MULTIPLEDISKARRAY.nRows(Array%), the Row MULTIPLEDISKARRAY.nRows(Array%) is used.

If the Sheet is -1 then all Sheets are used.

If the Sheet is below 1 and different of -1, the Sheet 1 is used.

If the Sheet is greater than MULTIPLEDISKARRAY.nSheets(Array%), the Sheet MULTIPLEDISKARRAY.nSheets(Array%) is used.

### Examples :

```
Dim ErrCode           As Integer
Dim MDA               As tagMULTIPLEDISKARRAY

MDA.nFilename = "c:\t2w_tmp\mda.tmp"           'name of the file to use
MDA.nType(1) = 50                               'positive value for a string
MDA.nIsTyped(1) = False                         'init the array with spaces
MDA.nRows(1) = 500                             '500 rows
MDA.nCols(1) = 500                             '500 cols
MDA.nSheets(1) = 2                             '2 sheets

ErrCode = cMDACreate(MDA, True)                 'create a new multiple big sized
array on disk

Call cMDAPut(1, MDA, 1, 1, 1, "D:1, ABCDEFGHIJ") 'save the string in Row 1, Col 1,
Sheet 1, Array 1
Call cMDAPut(1, MDA, 1, MDA.nCols(1), 1, "D:1, abcdefghij") 'save the string in Row 1, Col 500,
Sheet 1, Array 1
Call cMDAPut(1, MDA, MDA.nRows(1), 1, 1, "D:1, OPQRSTUVWXYZ") 'save the string in Row 500, Col 1,
Sheet 1, Array 1
Call cMDAPut(1, MDA, MDA.nRows(1), MDA.nCols(1), 1, "D:1, oprqstuvwxyz") 'save the string in Row 500, Col
500, Sheet 1, Array 1

'..... some codes

ErrCode = cMDAClear(1, MDA)                     'clear all elements in the multiple
big sized array on disk

ErrCode = cMDAClearSheet(1, MDA, 1)            'clear the Sheet 1 in the multiple big
sized array on disk
```

ErrCode = cMDAClearCol(1, MDA, MDA.nCols(1), 2)  
big sized array on disk  
ErrCode = cMDAsClearCol(1, MDA, MDA.nCols(1))  
big sized array on disk

'clear the last Col in Sheet 2 in the

'clear the last Col in Sheet 1 in the

ErrCode = cMDAClearRow(1, MDA, MDA.nRows(1), 2)  
big sized array on disk  
ErrCode = cMDAsClearRow(1, MDA, MDA.nRows(1), 1)  
big sized array on disk

'clear the last Row in Sheet 2 in the

'clear the last Row in Sheet 1 in the

**See also :** [Multiple Disk Array](#)

# Multiple disk array : Overview

The functions/subs used in the Multiple Disk Array routines handle big sized arrays on disk in only file.

Each array use only a file to handle the information. A file can contain 20 big sized arrays.

The concept of big sized arrays on disk is to use the mass storage (hard disk) in place of memory. This concept minimize the use of the memory for big array but decrease the speed to accessing data.

A fixed string array of 500 rows by 500 cols, 2 Sheets and a string size of 50 take 25.000.000 bytes. I think that this is better to place this array on the disk.

The following functions/subs are used to handle big sized arrays on disk :

<u>MDAClear</u>	clear a multiple big sized array.
<u>MDAClearCol</u>	clear a single col on on a sheet in a multiple big sized array.
<u>MDAClearRow</u>	clear a single row on a sheet in a multiple big sized array.
<u>MDAClearSheet</u>	clear a single sheet in a multiple big sized array.
<u>MDAClose</u>	close a big sized array and keep it or close a multiple big sized array and destroy it.
<u>MDACreate</u>	create a new big sized array on disk or use an existing multiple big sized array on disk.
<u>MDAGet</u>	read an element from a multiple big sized array on disk.
<u>MDAGetType</u>	read a type'd variable from a multiple big sized array on disk.
<u>MDAPut</u>	save an element to a multiple big sized array on disk.
<u>MDAPutType</u>	save a type'd variable to a multiple big sized array on disk.
<u>MDArGet</u>	read an element from a multiple big sized array on disk with only one sheet and one row.
<u>MDArGetType</u>	read a type'd variable from a big sized array on disk with only one sheet and one row.
<u>MDArPut</u>	save an element to a multiple big sized array on disk with only one sheet and one row.
<u>MDArPutType</u>	save a type'd variable to a multiple big sized array on disk with only one sheet and one row.
<u>MDAsClearCol</u>	clear a single col on on a sheet in a multiple big sized array with only one sheet.
<u>MDAsClearRow</u>	clear a single row on a sheet in a multiple big sized array with only one sheet.
<u>MDAsGet</u>	read an element from a multiple big sized array on disk with only one sheet.
<u>MDAsGetType</u>	read a type'd variable from a multiple big sized array on disk with only one sheet.
<u>MDAsPut</u>	save an element to a multiple big sized array on disk with only one sheet.
<u>MDAsPutType</u>	save a type'd variable to a multiple big sized array on disk with only one sheet.

To minimize the use of too many functions for the different variable type in VB, MDAGet and MDAPut uses variant value (integer, long, single, double, currency, string). This can be slow down (a little bit) the speed for accessing the data.

To handle type'd variable, you must use MDAGetType, MDAPutType.

When you create a new multiple array on disk, a header (640 chars for VB 3.0 and VB 4.0 (16-Bit)) is writed to begin of the associated file. This header is readed when you re-use an existing array to verify that this is a good big sized disk array.

Actually, the maximum number of chars for a string element or for a type'd variable is 4096.

# MDACreate

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[MDACreate](#) create a multiple new big sized array on disk or use an existing multiple big sized array on disk.

## Declare Syntax :

Declare Function cMDACreate Lib "[time2win.dll](#)" (MULTIPLIEDISKARRAY As tagMULTIPLIEDISKARRAY, ByVal CreateOrUse As Integer) As Integer

## Call Syntax :

ErrCode% = cMDACreate(MDA, CreateOrUse%)

## Where :

MULTIPLIEDISKARRAY is a type'd variable (tagMULTIPLIEDISKARRAY).  
CreateOrUse% TRUE : if you want to create a new big sized array on disk,  
FALSE : if you want to re-use an existing big sized array on disk.  
ErrCode% is the returned error code.

## Comments :

In theory :

The maximum number of Arrays is 20  
The maximum number of Rows is 2147483647  
The maximum number of Cols is 2147483647  
The maximum number of Sheets is 2147483647

You are only limited by the size of the disk on which the big sized array are defined.

The length of the filename can be 64 chars for VB 3.0 and VB 4.0 (16-Bit), 128 chars for VB 4.0 (32-Bit) maximum.

If you create a new multiple big sized array on disk and if the file is already exists, the file is deleted before used.  
If you re-use an existing multiple big sized array on disk, some checkings are made to verify the validity of the multiple big sized array on disk.

Bigger are nRows, nCols or nSheets, bigger is the time to initialize.

When you create a new multiple big sized array on disk, the only parameters that you must initialize are :

DA.nFilename = "c:\t2w_tmp\dastring.tmp"	'name of the file (you must have enough space on the drive).
DA.nType(1) = 50	'the type of the variable to use, see <a href="#">Constants and</a>
<u>Types declaration.</u> (DA_x)	
DA.nIsTyped(1) = False	'Must be True for a type'd variable for Array 1.
DA.nRows(1) = 500	'the number of rows to use for Array 1.
DA.nCols(1) = 500	'the number of cols to use for Array 1.
DA.nSheets(1) = 2	'the number of sheets to use for Array 1.
.../...	
DA.nType(20) = 25	'the type of the variable to use, see <a href="#">Constants and</a>
<u>Types declaration.</u> (DA_x)	
DA.nIsTyped(20) = False	'Must be True for a type'd variable for Array 20.
DA.nRows(20) = 500	'the number of rows to use for Array 20.
DA.nCols(20) = 500	'the number of cols to use for Array 20.
DA.nSheets(20) = 2	'the number of sheets to use for Array 20.

**YOU CAN'T CHANGE THESE PARAMETERS AFTER THE CREATION OF THE MULTIPLE BIG SIZED ARRAY.**

**YOU CAN'T CHANGE THE OTHER VALUES IN THE TYPE'D VARIABLE.**

**Don't forget that you create the multiple array of maximum 20 arrays in one call. The order is not important, but you must take in mind that if you use only 3 arrays on the 20, there are only initialization for these 3 arrays and you can't insert other arrays.**

When you create a new array, all elements are initialized with chr\$(0) except for string array which are initialized with chr\$(32) (spaces).

However, string array and type'd array use the same positive value to define in .nType, but the type'd array must be initialized with chr\$(0) not with chr\$(32) therefore for a type'd you must specify .nIsTyped on True to initialize it with chr\$(0).

If you use multiple big size array of type'd variable, the type'd variable can be only a mix of fixed variable (variable string length can't be used).

#### **Examples :**

```
Dim ErrCode           As Integer
Dim MDA               As tagMULTIPLEDISKARRAY
Dim Var(1 To 8)       As Variant
```

```
DA.nFilename = "c:\t2w_tmp\dastring.tmp"      'name of the file to use
DA.nType(1) = 50                              'positive value for a string (array 1)
DA.nIsTyped(1) = False                        'init the array with spaces (array 1)
DA.nRows(1) = 500                             '500 rows (array 1)
DA.nCols(1) = 500                             '500 cols (array 1)
DA.nSheets(1) = 2                             '2 sheets (array 1)
```

```
DA.nType(9) = 25                              'positive value for a string (array 9)
DA.nIsTyped(9) = False                        'init the array with spaces (array 9)
DA.nRows(9) = 100                             '100 rows (array 9)
DA.nCols(9) = 100                             '100 cols (array 9)
DA.nSheets(9) = 5                             '5 sheets (array 9)
```

```
ErrCode = cMDACreate(MDA, True)               'create a new multiple big sized
array on disk
```

```
Call cMDAPut(1, MDA, 1, 1, 1, "D:1, ABCDEFGHIJ")      'save the string in Row 1, Col 1,
Sheet 1, Array 1
Call cMDAPut(1, MDA, 1, DA.nCols(1), 1, "D:1, abcdefghij") 'save the string in Row 1, Col 500,
Sheet 1, Array 1
Call cMDAPut(1, MDA, DA.nRows(1), 1, 1, "D:1, OPQRSTUVWXYZ") 'save the string in Row 500, Col 1,
Sheet 1, Array 1
Call cMDAPut(1, MDA, DA.nRows(1), DA.nCols(1), 1, "D:1, oprqstuvwxyz") 'save the string in Row 500, Col
500, Sheet 1, Array 1
```

```
Call cMDAPut(9, MDA, 1, 1, 5, "D:2, 1234567890")      'save the string in Row 1, Col 1,
Sheet 5, Array 9
Call cMDAPut(9, MDA, 1, MDA.nCols(9), 5, "D:2, 0987654321") 'save the string in Row 1, Col 100,
Sheet 5, Array 9
Call cMDAPut(9, MDA, MDA.nRows(9), 1, 5, "D:2, 12345ABCDE") 'save the string in Row 100, Col 1,
Sheet 5, Array 9
Call cMDAPut(9, MDA, MDA.nRows(9), MDA.nCols(9), 5, "D:2, VWXYZ54321") 'save the string in Row 100, Col
100, Sheet 5, Array 9
```

```
Var(1) = cMDAGet(1, MDA, 1, 1, 1)                'read the string in Row 1, Col 1,
Sheet 1, Array 1
Var(2) = cMDAGet(1, MDA, 1, MDA.nCols(1), 1)      'read the string in Row 1, Col 500,
Sheet 1, Array 1
```

```
Var(3) = cMDAGet(1, MDA, MDA.nRows(1), 1, 1)  
Sheet 1, Array 1  
Var(4) = cMDAGet(1, MDA, MDA.nRows(1), MDA.nCols(1), 1)  
500, Sheet 1, Array 1
```

'read the string in Row 500, Col 1,

'read the string in Row 500, Col

```
Var(5) = cMDAGet(9, MDA, 1, 1, 5)  
Sheet 5, Array 9
```

'read the string in Row 1, Col 1,

```
Var(6) = cMDAGet(9, MDA, 1, MDA.nCols(9), 5)  
Sheet 5, Array 9
```

'read the string in Row 1, Col 100,

```
Var(7) = cMDAGet(9, MDA, MDA.nRows(9), 1, 5)  
Sheet 5, Array 9
```

'read the string in Row 100, Col 1,

```
Var(8) = cMDAGet(9, MDA, MDA.nRows(9), MDA.nCols(9), 5)  
100, Sheet 5, Array 9
```

'read the string in Row 100, Col

```
Call cMDAClose(MDA, False)
```

'close the file without delete it.

**See also :** [Multiple Disk Array](#)



# MDAGet, MDAsGet, MDArGet

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[MDAGet](#) read an element from a multiple big sized array on disk.

[MDArGet](#) have the same fonctionnality but with a multiple big sized array with only one sheet and only one row.

[MDAsGet](#) have the same fonctionnality but with a multiple big sized array with only one sheet.

## Declare Syntax :

Declare Function cMDAGet Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Row As Long, ByVal Col As Long, ByVal Sheet As Long) As Variant

Declare Function cMDArGet Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Col As Long) As Variant

Declare Function cMDAsGet Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Row As Long, ByVal Col As Long) As Variant

## Call Syntax :

Var = cMDAGet(Array%, MULTIPLEDISKARRAY, Row&, Col&, Sheet&)

Var = cMDAGet(Array%, MULTIPLEDISKARRAY, Col&, Sheet&)

Var = cMDAGet(Array%, MULTIPLEDISKARRAY, Row&, Col&)

## Where :

MULTIPLEDISKARRAY	is a type'd variable (tagMULTIPLEDISKARRAY).
Array%	is the array in the multiple array (must be between 1 to 20).
Row&	is the row.
Col&	is the col.
Sheet&	is the sheet.
Var	is the readed variant value depending of the variable type used in the creation.

## Comments :

If the Row is below 1, the Row 1 is used.

If the Col is below 1, the Col 1 is used.

If the Sheet is below 1, the Sheet 1 is used.

If the Row is greater than MULTIPLEDISKARRAY.nRows(Array%), the Row MULTIPLEDISKARRAY.nRows(Array%) is used.

If the Col is greater than MULTIPLEDISKARRAY.nCols(Array%), the Col MULTIPLEDISKARRAY.nCols(Array%) is used.

If the Sheet is greater than MULTIPLEDISKARRAY.nSheets(Array%), the Sheet MULTIPLEDISKARRAY.nSheets(Array%) is used.

## Examples :

see [MDACreate](#)

**See also :** [Multiple Disk Array](#), [MDAPut](#)

# MDAPut, MDAsPut, MDAPut

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**MDAPut** save an element to a big sized array on disk.

**MDArPut** have the same fonctionnality but with a multiple big sized array with only one sheet and only one row.

**MDAsPut** have the same fonctionnality but with a multiple big sized array with only one sheet.

## Declare Syntax :

```
Declare Sub cMDAPut Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Row As Long, ByVal Col As Long, ByVal Sheet As Long, Var As Variant)
Declare Sub cMDArPut Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Col As Long) As Variant
Declare Sub cMDAsPut Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Row As Long, ByVal Col As Long, Var As Variant)
```

## Call Syntax :

```
Call cMDAPut(Array%, MULTIPLEDISKARRAY, Row&, Col&, Sheet&, Var)
Call cMDArPut(Array%, MULTIPLEDISKARRAY, Col&, Var)
Call cMDAsPut(Array%, MULTIPLEDISKARRAY, Row&, Col&, Var)
```

## Where :

MULTIPLEDISKARRAY	is a type'd variable (tagMULTIPLEDISKARRAY).
Array%	is the array in the multiple array (must be between 1 to 20).
Row&	is the row.
Col&	is the col.
Sheet&	is the sheet.
Var	is the variant value to save depending of the variable type used in the creation.

## Comments :

If the Row is below 1, the Row 1 is used.

If the Col is below 1, the Col 1 is used.

If the Sheet is below 1, the Sheet 1 is used.

If the Row is greater than MULTIPLEDISKARRAY.nRows(Array%), the Row MULTIPLEDISKARRAY.nRows(Array%) is used.

If the Col is greater than MULTIPLEDISKARRAY.nCols(Array%), the Col MULTIPLEDISKARRAY.nCols(Array%) is used.

If the Sheet is greater than MULTIPLEDISKARRAY.nSheets(Array%), the Sheet MULTIPLEDISKARRAY.nSheets(Array%) is used.

## Examples :

see [MDACreate](#)

**See also :** [Multiple Disk Array](#), [MDAGet](#)

# MDAGetType, MDAsGetType, MDArGetType

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**MDAGetType** read a type'd variable from a multiple big sized array on disk.

**MDArGetType** have the same fonctionnality but with a multiple big sized array with only one sheet and only one row.

**MDAsGetType** have the same fonctionnality but with a multiple big sized array with only one sheet.

## Declare Syntax :

```
Declare Sub cMDAGetType Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Row As Long, ByVal Col As Long, ByVal Sheet As Long, nType As Any)
Declare Sub cMDArGetType Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Col As Long, nType As Any)
Declare Sub cMDAsGetType Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Row As Long, ByVal Col As Long, nType As Any)
```

## Call Syntax :

```
Call cMDAGetType(Array%, MULTIPLEDISKARRAY, Row&, Col&, Sheet&, nType)
Call cMDArGetType(Array%, MULTIPLEDISKARRAY, Col&, nType)
Call cMDAsGetType(Array%, MULTIPLEDISKARRAY, Row&, Col&, nType)
```

## Where :

MULTIPLEDISKARRAY	is a type'd variable (tagMULTIPLEDISKARRAY).
Array%	is the array in the multiple array (must be between 1 to 20).
Row&	is the row.
Col&	is the col.
Sheet&	is the sheet.
nType	is the readed type'd variable depending of the variable type used in the creation.

## Comments :

If the Row is below 1, the Row 1 is used.

If the Col is below 1, the Col 1 is used.

If the Sheet is below 1, the Sheet 1 is used.

If the Row is greater than MULTIPLEDISKARRAY.nRows(Array%), the Row MULTIPLEDISKARRAY.nRows(Array%) is used.

If the Col is greater than MULTIPLEDISKARRAY.nCols(Array%), the Col MULTIPLEDISKARRAY.nCols(Array%) is used.

If the Sheet is greater than MULTIPLEDISKARRAY.nSheets(Array%), the Sheet MULTIPLEDISKARRAY.nSheets(Array%) is used.

## Examples :

```
Dim ErrCode           As Integer
Dim MDA               As tagMULTIPLEDISKARRAY
Dim TE(1 To 4)        As tagTASKENTRY
```

MDA.nFilename = "c:\t2w_tmp\datatype.tmp"	'name of the file to use
MDA.nType(1) = Len(TE(1))	'positive value for a type'd variable
MDA.nIsTyped(1) = True	'init the array with chr\$(0) because type'd variable
MDA.nRows(1) = 500	'500 rows
MDA.nCols(1) = 500	'500 cols
MDA.nSheets(1) = 2	'2 sheets

ErrCode = cMDACreate(MDA, False)  
disk

'use a created multiple big sized array on

Call cDAGetType(1, MDA, 1, 1, 1, TE(1))  
Sheet 1, Array 1.

'read the type'd variable in Row 1, Col 1,

Call cDAGetType(1, MDA, 1, DA.nCols(1), 1, TE(2))  
Sheet 1, Array 1.

'read the type'd variable in Row 1, Col 500,

Call cDAGetType(1, MDA, MDA.nRows(1), 1, 1, TE(3))  
Sheet 1, Array 1.

'read the type'd variable in Row 500, Col 1,

Call cDAGetType(1, MDA, MDA.nRows(1), MDA.nCols(1), 1, TE(4))  
500, Sheet 1, Array 1.

'read the type'd variable in Row 500, Col

**See also :** Multiple Disk Array, MDAPutType

# MDAPutType, MDAsPutType, MDAPutType

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**MDAPutType** save a type'd variable from a big sized array on disk.

**MDArPutType** have the same fonctionnality but with a big sized array with only one sheet and only one row.

**MDAsPutType** have the same fonctionnality but with a big sized array with only one sheet.

## Declare Syntax :

```
Declare Sub cMDAPutType Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Row As Long, ByVal Col As Long, ByVal Sheet As Long, nType As Any)
Declare Sub cMDArPutType Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Col As Long, nType As Any)
Declare Sub cMDAsPutType Lib "time2win.dll" (ByVal Array As Integer, MULTIPLEDISKARRAY As tagMULTIPLEDISKARRAY, ByVal Row As Long, ByVal Col As Long, nType As Any)
```

## Call Syntax :

```
Call cMDAPutType(Array%, MULTIPLEDISKARRAY, Row&, Col&, Sheet&, nType)
Call cMDArPutType(Array%, MULTIPLEDISKARRAY, Row&, nType)
Call cMDAsPutType(Array%, MULTIPLEDISKARRAY, Row&, Col&, nType)
```

## Where :

MULTIPLEDISKARRAY	is a type'd variable (tagMULTIPLEDISKARRAY).
Array%	is the array in the multiple array (must be between 1 to 20).
Row&	is the row.
Col&	is the col.
Sheet&	is the sheet.
nType	is the type'd variable to save depending of the variable type used in the creation.

## Comments :

If the Row is below 1, the Row 1 is used.

If the Col is below 1, the Col 1 is used.

If the Sheet is below 1, the Sheet 1 is used.

If the Row is greater than MULTIPLEDISKARRAY.nRows(Array%), the Row MULTIPLEDISKARRAY.nRows(Array%) is used.

If the Col is greater than MULTIPLEDISKARRAY.nCols(Array%), the Col MULTIPLEDISKARRAY.nCols(Array%) is used.

If the Sheet is greater than MULTIPLEDISKARRAY.nSheets(Array%), the Sheet MULTIPLEDISKARRAY.nSheets(Array%) is used.

## Examples :

```
Dim ErrCode           As Integer
Dim MDA               As tagMULTIPLEDISKARRAY
Dim TE                As tagTASKENTRY
```

```
DA.nFilename = "c:\t2w_tmp\datatype.tmp"
```

```
DA.nType(1) = Len(TE)
```

```
DA.nIsTyped(1) = True
variable
```

```
DA.nRows(1) = 500
```

```
DA.nCols(1) = 500
```

```
DA.nSheets(1) = 2
```

'name of the file to use

'positive value for a type'd variable

'init the array with chr\$(0) because type'd

'500 rows

'500 cols

'2 sheets

ErrCode = cMDACreate(MDA, True)	'create a new multiple big sized array on disk
ErrCode = cTasks(TE, True)	
Call cMDAPutType(1, MDA, 1, 1, 1, TE)	'save the type'd variable in Row 1, Col 1,
Sheet 1, Array 1.	
ErrCode = cTasks(TE, False)	
Call cMDAPutType(1, MDA, 1, MDA.nCols(1), 1, TE)	'save the type'd variable in Row 1, Col 500,
Sheet 1, Array 1.	
ErrCode = cTasks(TE, False)	
Call cMDAPutType(1, MDA, MDA.nRows(1), 1, 1, TE)	'save the type'd variable in Row 500, Col 1,
Sheet 1, Array 1.	
ErrCode = cTasks(TE, False)	
Call cMDAPutType(1, MDA, MDA.nRows(1), MDA.nCols(1), 1, TE)	'save the type'd variable in Row 500, Col
500, Sheet 1, Array 1.	

**See also :** [Multiple Disk Array](#), [MDAGetType](#)

# FromBinary, FromBinary2, ToBinary, ToBinary2

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FromBinary](#) converts a binary string (0, 1) to a string

[FromBinary2](#) converts a binary string (custom letters) to a string

[ToBinary](#) converts a string to a binary representation with 0, 1

[ToBinary2](#) converts a string to a binary representation with two custom letters for 0, 1 representation

## Declare Syntax :

Declare Function cFromBinary Lib "[time2win.dll](#)" (Text As String) As String

Declare Function cFromBinary2 Lib "[time2win.dll](#)" (Text As String, Bin As String) As String

Declare Function cToBinary Lib "[time2win.dll](#)" (Text As String) As String

Declare Function cToBinary2 Lib "[time2win.dll](#)" (Text As String, Bin As String) As String

## Call Syntax :

test\$ = cFromBinary(Text)

test\$ = cFromBinary2(Text, Bin)

test\$ = cToBinary(Text)

test\$ = cToBinary2(Text, Bin)

## Where :

Text	the string to proceed
Bin	the two custom letters for 0, 1 representation
test\$	the result

## Comments :

## Examples :

test\$ = cToBinary("MC")	-> "0100110101000011"
test\$ = cToBinary2("MC","mc")	-> "cmccmmcmcmccmm"
test\$ = cFromBinary("0100110101000011")	-> "MC"
test\$ = cFromBinary2("cmccmmcmcmccmm","mc")	-> "MC"

**See also :** [Binary](#)

# 2-D Geometry : Overview

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**V2Add** add two 2D vectors.

**V2Sub** subtract two 2D vectors.

**V2Combine** combine two 2D vectors.

**V2Copy** copy a 2D vector into an another.

**V2Dot** calculate the dot of two 2D vectors.

**V2Length** calculate the length (magnitude) of a 2D vector.

**V2Length** calculate the length squared (magnitude squared) of a 2D vector.

**V2LinearLp** perform the linear interpolation of two 2D vector.

**V2Mul** multiply two 2D vector.

**V2Neg** perform the negate of a 2D vector.

**V2Normalized** normalize a 2D vector.

**V2Ortho** perform the orthogonal transformation of two 2D vector.

**V2ScaledNewLength** change the x,y of a 2D vector from a new length (magnitude).

**V2SegmentLength** calculate the length of the segment between the two 2D vector.

## Declare Syntax :

```
Declare Sub cV2Add Lib "time2win.dll" (u As tagVECTOR2, v As tagVECTOR2, w As tagVECTOR2)
Declare Sub cV2Sub Lib "time2win.dll" (u As tagVECTOR2, v As tagVECTOR2, w As tagVECTOR2)
Declare Sub cV2Combine Lib "time2win.dll" (u As tagVECTOR2, ByVal c1 As Double, v As tagVECTOR2, ByVal c2 As Double, w As tagVECTOR2)
Declare Sub cV2Copy Lib "time2win.dll" (u As tagVECTOR2, w As tagVECTOR2)
Declare Function cV2Dot Lib "time2win.dll" (u As tagVECTOR2, v As tagVECTOR2) As Double
Declare Function cV2Length Lib "time2win.dll" (u As tagVECTOR2) As Double
Declare Function cV2LengthSquared Lib "time2win.dll" (u As tagVECTOR2) As Double
Declare Sub cV2LinearLp Lib "time2win.dll" (lo As tagVECTOR2, hi As tagVECTOR2, ByVal alpha As Double, w As tagVECTOR2)
Declare Sub cV2Mul Lib "time2win.dll" (u As tagVECTOR2, v As tagVECTOR2, w As tagVECTOR2)
Declare Sub cV2Neg Lib "time2win.dll" (u As tagVECTOR2)
Declare Sub cV2Normalized Lib "time2win.dll" (u As tagVECTOR2)
Declare Sub cV2Ortho Lib "time2win.dll" (u As tagVECTOR2, w As tagVECTOR2)
Declare Sub cV2ScaledNewLength Lib "time2win.dll" (u As tagVECTOR2, ByVal newlen As Double)
Declare Function cV2SegmentLength Lib "time2win.dll" (p As tagVECTOR2, q As tagVECTOR2) As Double
```

## Call Syntax :

## Where :

## Comments :

## Examples :

**See also :** [3-D Geometry](#)



# 3-D Geometry : Overview

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**V3Add** add two 3D vectors.

**V3Sub** subtract two 3D vectors.

**V3Combine** combine two 3D vectors.

**V3Copy** copy a 3D vector into an another.

**V3Dot** calculate the dot of two 3D vectors.

**V3Length** calculate the length (magnitude) of a 3D vector.

**V3Length** calculate the length squared (magnitude squared) of a 3D vector.

**V3LinearLp** perform the linear interpolation of two 3D vector.

**V3Mul** multiply two 3D vector.

**V3Neg** perform the negate of a 3D vector.

**V3Normalized** normalize a 3D vector.

**V3Ortho** perform the orthogonal transformation of two 3D vector.

**V3ScaledNewLength** change the x,y of a 3D vector from a new length (magnitude).

**V3SegmentLength** calculate the length of the segment between the two 3D vector.

**3DWeightAverage** calculate the z value of an additional point from four points.

## Declare Syntax :

```
Declare Sub cV3Add Lib "time2win.dll" (u As tagVECTOR3, v As tagVECTOR3, w As tagVECTOR3)
Declare Sub cV3Sub Lib "time2win.dll" (u As tagVECTOR3, v As tagVECTOR3, w As tagVECTOR3)
Declare Sub cV3Combine Lib "time2win.dll" (u As tagVECTOR3, ByVal c1 As Double, v As tagVECTOR3, ByVal c2 As Double, w As tagVECTOR3)
Declare Sub cV3Copy Lib "time2win.dll" (u As tagVECTOR3, w As tagVECTOR3)
Declare Sub cV3Cross Lib "time2win.dll" (u As tagVECTOR3, v As tagVECTOR3, w As tagVECTOR3)
Declare Function cV3Dot Lib "time2win.dll" (u As tagVECTOR3, v As tagVECTOR3) As Double
Declare Function cV3Length Lib "time2win.dll" (u As tagVECTOR3) As Double
Declare Function cV3LengthSquared Lib "time2win.dll" (u As tagVECTOR3) As Double
Declare Sub cV3LinearIp Lib "time2win.dll" (lo As tagVECTOR3, hi As tagVECTOR3, ByVal alpha As Double, w As tagVECTOR3)
Declare Sub cV3Mul Lib "time2win.dll" (u As tagVECTOR3, v As tagVECTOR3, w As tagVECTOR3)
Declare Sub cV3Neg Lib "time2win.dll" (u As tagVECTOR3)
Declare Sub cV3Normalized Lib "time2win.dll" (u As tagVECTOR3)
Declare Sub cV3ScaledNewLength Lib "time2win.dll" (u As tagVECTOR3, ByVal newlen As Double)
Declare Function cV3SegmentLength Lib "time2win.dll" (p As tagVECTOR3, q As tagVECTOR3) As Double
Declare Function c3DWeightAverage Lib "time2win.dll" (ul3D As tagVECTOR3, ll3D As tagVECTOR3, lr3D As tagVECTOR3, ur3D As tagVECTOR3, ptToLocate3D As tagVECTOR3) As Double
```

## Call Syntax :

## Where :

## Comments :

## Examples :

For 3DWeightAverage :

```
Dim uLeft3D          As tagVECTOR3
Dim lLeft3D          As tagVECTOR3
```

```
Dim lRight3D      As tagVECTOR3
Dim uRight3D      As tagVECTOR3
Dim ptToLocate3D  As tagVECTOR3
```

```
uLeft3D.x = 11
uLeft3D.y = 21
uLeft3D.z = 20
```

```
lLeft3D.x = 11
lLeft3D.y = 15
lLeft3D.z = 17
```

```
lRight3D.x = 17
lRight3D.y = 15
lRight3D.z = 21
```

```
uRight3D.x = 17
uRight3D.y = 21
uRight3D.z = 30
```

```
ptToLocate3D.x = 15
ptToLocate3D.y = 20
ptToLocate3D.z = 0
```

```
Debug.Print c3DWeightAverage(uLeft3D, lLeft3D, lRight3D, uRight3D, ptToLocate3D)    '->
24,0609108270454
```

```
ptToLocate3D.x = 15
ptToLocate3D.y = 19
ptToLocate3D.z = 0
```

```
Debug.Print c3DWeightAverage(uLeft3D, lLeft3D, lRight3D, uRight3D, ptToLocate3D)    '->
23,3029834668893
```

**See also :** [2-D Geometry](#)

# TimerClose, TimerOpen, TimerRead, TimerStart

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**TimerOpen** open a timer and return an handle of an available timer (1 to 64).

**TimerStart** start the selected timer's handle.

**TimerRead** read the current value of the selected timer's handle.

**TimerClose** close the selected timer's handle.

## Declare Syntax :

Declare Function cTimerOpen Lib "time2win.dll" () As Integer

Declare Function cTimerStart Lib "time2win.dll" (ByVal TimerHandle As Long) As Integer

Declare Function cTimerRead Lib "time2win.dll" (ByVal TimerHandle As Long) As Long

Declare Function cTimerClose Lib "time2win.dll" (ByVal TimerHandle As Long) As Integer

## Call Syntax :

TimerHandle% = cTimerOpen()

StartOk% = cTimerStart(TimerHandle%)

Test& = cTimerRead(TimerHandle%)

CloseOk% = cTimerClose(TimerHandle%)

## Where :

TimerHandle%	>0 is one timer is available, = 0 if no timers available..
StartOk%	TRUE if the starting is successfully, FALSE if the starting fail.
Test&	is the current value of the specified timer handle.
CloseOk%	TRUE if the closing is successfully, FALSE if the closing fail.

## Comments :

These timers functions is independant of the calling program.

The value of timers is in milliseconds.

The accuracy of timers is 1 milliseconds.

## Examples :

```
Dim TimerHandle      As Integer
Dim TimerValue       As Long

Dim i                As Long
Dim n                As Long
Dim StartOk          As Integer
Dim CloseOk          As Integer
```

```
TimerHandle = cTimerOpen()
StartOk = cTimerStart(TimerHandle)
```

```
For i = 1 To 54321
    n = i * 2
Next i
```

```
MsgBox "Time (in milliseconds) to perform the test is " & cTimerRead(TimerHandle) & " milliseconds"
```

```
CloseOk = cTimerClose(TimerHandle)
```

' On my system : "Time (in milliseconds) to perform the test is 330"

**See also :** [Timer](#)

# Timer : Overview

Timer functions performs timing functions for your application. These functions are divided in two parts :

1) Timing which use the GetTickCount() have an accuracy of **55** ms, these functions are available for all applications in memory and share the same memory space. You can have 32 timers. Be carefully, when distributing the DLL on an other computer did use the same DLL.

<a href="#"><u>CheckWait</u></a>	check if the specified timer has reached the time to wait.
<a href="#"><u>ReadBasisTimer</u></a>	read the value of the default timer.
<a href="#"><u>ReadTimer</u></a>	read the value of the specified timer.
<a href="#"><u>SetWait</u></a>	set the time to wait in a specified timer.
<a href="#"><u>Sleep</u></a>	suspend the current execution of a routine for a gived delay.
<a href="#"><u>StartBasisTimer</u></a>	start the default timer.
<a href="#"><u>StartTimer</u></a>	start the specified timer.
<a href="#"><u>StartWait</u></a>	start the specified timer.
<a href="#"><u>StopBasisTimer</u></a>	stop the value of the default timer.
<a href="#"><u>StopTimer</u></a>	stop the value of the specified timer.

2) Timing which use the TimerCountt() have an accuracy of **1** ms, these functions use the concept of handle to permit to have many different application which can use the DLL. You can have 64 handles.

<a href="#"><u>TimerOpen</u></a>	open a timer and return an handle of an available timer (1 to 64).
<a href="#"><u>TimerStart</u></a>	start the selected timer's handle.
<a href="#"><u>TimerRead</u></a>	read the current value of the selected timer's handle.
<a href="#"><u>TimerClose</u></a>	close the selected timer's handle.

# Sleep

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**Sleep** suspend the current execution of a routine for a gived delay.

## Declare Syntax :

Declare Function cSleep Lib "time2win.dll" (ByVal Delay As Long) As Integer

## Call Syntax :

status% = cSleep(Delay)

## Where :

Delay	is the time to sleep the current execution of a routine in milliseconds.
status%	TRUE if all is OK
	FALSE if the delay is below 0.

## Comments :

Use this function with care.  
Don't set a delay to bigger.  
Don't forget that the delay is in milliseconds.

## Examples :

Dim status        As Integer

status% = cSleep(-10)	-> Don't sleep, the delay is negative value.
status% = cSleep(0)	-> A very short sleeping.
status% = cSleep(7000)	-> Sleep for 7 seconds

Call cStartBasisTimer  
status = cSleep(7000)  
MsgBox "Time elapsed for the current sleeping is " & cReadBasisTimer() & " milliseconds"

' On my system : "Time elapsed for the current sleeping is 7031 milliseconds"

**See also :** [Timer](#)

# ReadBasisTimer, StartBasisTimer, StopBasisTimer

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[StartBasisTimer](#) start the default timer.

[ReadBasisTimer](#) read the value of the default timer.

[StopBasisTimer](#) stop the value of the default timer.

## Declare Syntax :

```
Declare Sub cStartBasisTimer Lib "time2win.dll" ()
Declare Function cReadBasisTimer Lib "time2win.dll" () As Long
Declare Sub cStopBasisTimer Lib "time2win.dll" ()
```

## Call Syntax :

```
Call cStartBasisTimer
test& = cReadBasisTimer()
Call cReadBasisTimer
```

## Where :

test&                    the current value of the default timer.

## Comments :

The value of the timer is in milliseconds.

The accuracy of the timer is 55 milliseconds (1/18.2 second).

## Examples :

```
Dim i                    as Long
Dim n                    as Long
```

```
Call cStartBasisTimer
For i = 1 To 123456
    n = i * 2
Next i
MsgBox "Time (in milliseconds) to perform the test is " & cReadBasisTimer() & " milliseconds"
```

'On my system : "Time (in milliseconds) to perform the test is 769"

**See also :** [Timer](#)

# ReadTimer, StartTimer, StopTimer

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[StartTimer](#) start the specified timer.

[ReadTimer](#) read the value of the specified timer.

[StopTimer](#) stop the value of the specified timer.

## Declare Syntax :

```
Declare Sub cStartTimer Lib "time2win.dll" (ByVal nTimer As Integer)
Declare Function cReadTimer Lib "time2win.dll" (ByVal nTimer As Integer) As Long
Declare Function cStopTimer Lib "time2win.dll" (ByVal nTimer As Integer) As Long
```

## Call Syntax :

```
Call cStartTimer(nTimer)
test& = cReadTimer(nTimer)
test& = cStopTimer(nTimer)
```

## Where :

nTimer                is the timer counter between 1 to 32.  
test&                is the current value of the specified timer.

## Comments :

The value of timers is in milliseconds.

The accuracy of timers is 55 milliseconds (1/18.2 second).

## Examples :

```
Dim i                as Long
Dim n                as Long
```

```
Call cStartTimer(7)
For i = 1 To 54321
    n = i * 2
Next i
MsgBox "Time (in milliseconds) to perform the test is " & cReadTimer(7) & " milliseconds"
```

' On my system : "Time (in milliseconds) to perform the test is 330"

**See also :** [Timer](#)



# CheckWait, SetWait, StartWait

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[SetWait](#) set the time to wait in a specified timer.

[StartWait](#) start the specified timer.

[CheckWait](#) check if the specified timer has reached the time to wait.

## Declare Syntax :

Declare Sub cSetWait Lib "[time2win.dll](#)" (ByVal nTimer As Integer, ByVal nValue As Long)

Declare Sub cStartWait Lib "[time2win.dll](#)" (ByVal nTimer As Integer)

Declare Function cCheckWait Lib "[time2win.dll](#)" (ByVal nTimer As Integer) As Integer

## Call Syntax :

Call cSetWait(nTimer, nValue)

Call cStartWait(nTimer)

test% = cCheckWait(nTimer)

## Where :

nTimer is the timer counter between 1 TO 32.

nValue is the value to wait in milliseconds.

test% TRUE if the time to wait is reached.

FALSE is the time to wait is not reached.

## Comments :

The value of timers is in milliseconds.

The accuracy of timers is 55 millisecond (1/18.2 second).

## Examples :

```
Dim i As Long
Dim n As Long
```

```
i = 0
```

```
Call cStartTimer(32)
```

```
Call cSetWait(7, 1000)
```

```
Call cStartWait(7)
```

```
Do Until (cCheckWait(7) = True)
```

```
    i = i + 1
```

```
    n = i * 2
```

```
Loop
```

```
MsgBox "Total iterations in 1 second (1000 milliseconds) is " & i & ", waiting time is " & cReadTimer(32) & " milliseconds"
```

' On my system : "Total iterations in 1 second (1000 milliseconds) is 54929, waiting time is 1043 milliseconds"

**See also :** [Timer](#)

' structure for disk array

Type tagDISKARRAY

daSize	As Integer	'size of the type'd
Signature	As String * 7	'signature
nFilename	As String * 128	'name of the file
nType	As Integer	'variable type
nRows	As Long	'number of rows
nCols	As Long	'number of cols
nSheets	As Long	'number of sheets
rHandle	As Long	'returned handle for use with other functions
rElementSize	As Long	'returned size of a element
rFileSize	As Long	'returned size of the file
rParts	As Long	'returned total part
rRemain	As Long	'returned size of the remain part
rSheetSize	As Long	'size of a sheet
rOffset1	As Long	'returned offset 1
rOffset2	As Long	'returned offset 2
rTime	As Long	'time for the last correct transaction
nIsTyped	As Integer	'is nType a type'd variable
Dummy	As String * 7	'reserved for future use

End Type

' definition for variable type in disk array

```
Public Const DA_TYPE = 0
Public Const DA_BYTE = -1
Public Const DA_INTEGER = -2
Public Const DA_LONG = -3
Public Const DA_SINGLE = -4
Public Const DA_DOUBLE = -5
Public Const DA_CURRENCY = -6
```

' definition for error type in disk array

```
Public Const DA_NO_ERROR = True
Public Const DA_EMPTY_FILENAME = 1
Public Const DA_BAD_FILENAME = 2
Public Const DA_CAN_KILL_FILE = 3
Public Const DA_CAN_NOT_OPEN_FILE = 4
Public Const DA_FILE_NOT_FOUND = 5
Public Const DA_BAD_TYPE = 6
Public Const DA_BAD_ROWS = 7
Public Const DA_BAD_COLS = 8
Public Const DA_BAD_SHEETS = 9
Public Const DA_CAN_NOT_WRITE_HEADER = 10
Public Const DA_CAN_NOT_WRITE_PART = 11
Public Const DA_CAN_NOT_WRITE_REMAIN = 12
Public Const DA_CAN_NOT_READ_HEADER = 13
Public Const DA_HEADER_SIZE = 14
Public Const DA_BAD_SIGNATURE = 15
Public Const DA_FILE_SIZE_MISMATCH = 16
Public Const DA_CAN_NOT_SEEK = 17
Public Const DA_INVALID_HANDLE = 18
Public Const DA_CAN_NOT_READ_PART = 19
Public Const DA_CAN_NOT_READ_REMAIN = 20
```

' structure for multiple disk array

Type tagMULTIPLEDISKARRAY

daSize	As Integer	'size of the structure
Signature	As String * 7	'signature
nFilename	As String * 128	'name of the file
nType(1 To 20)	As Integer	'standard variable type (for 20 arrays)
nIsTyped(1 To 20)	As Integer	'is a type'd (for 20 arrays)
nRows(1 To 20)	As Long	'number of rows (for 20 arrays)
nCols(1 To 20)	As Long	'number of cols (for 20 arrays)
nSheets(1 To 20)	As Long	'number of sheets (for 20 arrays)
rHandle	As Long	'returned handle for use with other functions
rFileSize	As Long	'returned size of the file
rElementSz(1 To 20)	As Long	'returned size of a element (for 20 arrays)
rSheetSz(1 To 20)	As Long	'size of a sheet (for 20 arrays)
rOffsetPos(1 To 20)	As Long	'position of each array in the file (for 20 arrays)
rOffset1	As Long	'returned offset 1
rOffset2	As Long	'returned offset 2
rTime	As Long	'time for the last correct transaction
Dummy	As String * 28	'reserved for future use

End Type

' definition for variable type in multiple disk array

```
Public Const MDA_TYPE = 0
Public Const MDA_BYTE = -1
Public Const MDA_INTEGER = -2
Public Const MDA_LONG = -3
Public Const MDA_SINGLE = -4
Public Const MDA_DOUBLE = -5
Public Const MDA_CURRENCY = -6
```

' definition for error type in multiple disk array

```
Public Const MDA_NO_ERROR = -1
Public Const MDA_EMPTY_FILENAME = 1
Public Const MDA_BAD_FILENAME = 2
Public Const MDA_CAN_KILL_FILE = 3
Public Const MDA_CAN_NOT_OPEN_FILE = 4
Public Const MDA_FILE_NOT_FOUND = 5
Public Const MDA_BAD_TYPE = 6
Public Const MDA_BAD_ROWS = 7
Public Const MDA_BAD_COLS = 8
Public Const MDA_BAD_SHEETS = 9
Public Const MDA_CAN_NOT_WRITE_HEADER = 10
Public Const MDA_CAN_NOT_WRITE_PART = 11
Public Const MDA_CAN_NOT_WRITE_REMAIN = 12
Public Const MDA_CAN_NOT_READ_HEADER = 13
Public Const MDA_HEADER_SIZE = 14
Public Const MDA_BAD_SIGNATURE = 15
Public Const MDA_FILE_SIZE_MISMATCH = 16
Public Const MDA_CAN_NOT_SEEK = 17
Public Const MDA_INVALID_HANDLE = 18
Public Const MDA_CAN_NOT_READ_PART = 19
Public Const MDA_CAN_NOT_READ_REMAIN = 20
Public Const MDA_BAD_MULTIPLE_ARRAY = 21
```

## IEEEEnum : Overview

[CVB](#), [CVC](#), [CVD](#), [CVI](#), [CVL](#) and [CVS](#) return number in a certain precision given a string containing the IEEE representation of the number. Six separate functions are provided, with one each intended for BYTE, CURRENCY, DOUBLE, INTEGER, LONG and SINGLE.

[CVB](#)  
[CVC](#)  
[CVD](#)  
[CVI](#)  
[CVL](#)  
[CVS](#)

[MKB](#), [MKC](#), [MKD](#), [MKI](#), [MKL](#), and [MKS](#) return a string containing the IEEE representation of a number. Six separate functions are provided, with one each intended for BYTE, CURRENCY, DOUBLE, INTEGER, LONG, SINGLE.

[MKN](#) return a string containing the IEEE representation of a big double number. The big double is not a part of the standard variable type of VB.

[MKB](#)  
[MKC](#)  
[MKD](#)  
[MKI](#)  
[MKL](#)  
[MKN](#)  
[MKS](#)

# Binary : Overview

<u>B2I</u>	convert a binary string into an integer variable.
<u>B2L</u>	convert a binary string into a long variable.
<u>CreateBits</u>	create a string which contains how many bits specified by a number.
<u>FindBitReset</u>	find the first bit Reset starting at the position given for a given string.
<u>FindBitSet</u>	find the first bit Set starting at the position given for a given string.
<u>FromBinary</u>	convert a binary string (0, 1) to a string
<u>FromBinary2</u>	convert a binary string (custom letters) to a string
<u>FromHexa</u>	convert a hexa string to an ascii string.
<u>GetBit</u>	return if a given bit in a given string if Set or Reset.
<u>GiveBitPalindrome</u>	return all chars on which bit 0 is bit 7, bit 1 is bit 6, bit 2 is bit 5, bit 3 is bit 4.
<u>H2I</u>	convert a hexa string into an integer variable.
<u>H2L</u>	convert a hexa string into a long variable.
<u>IsBitPalindrome</u>	check if a string is Bit palindrome.
<u>ReverseAllBits</u>	reverse all bits in a given string.
<u>ReverseAllBitsByChar</u>	reverse all bits by each char in a given string.
<u>SetAllBits</u>	set all bits of a given string to Set state or Reset state.
<u>SetBit</u>	set a given bit in a given string to Set state or Reset state.
<u>SetBitToFalse</u>	set a given bit in a given string to Reset state.
<u>SetBitToTrue</u>	set a given bit in a given string to Set state.
<u>ToBinary</u>	convert a string to a binary representation with 0, 1
<u>ToBinary2</u>	convert a string to a binary representation with two custom letters for 0, 1 representation
<u>ToggleAllBits</u>	toggle all bits in a given string. If a bit is in Set state, it comes in Reset state. If a bit is in
<u>Reset state, it comes is Set state.</u>	
<u>ToggleBit</u>	toggle a given bit in a given string. If a bit is in Set state, it comes in Reset state. If a bit is
<u>in Reset state, it comes is Set state.</u>	
<u>ToHexa</u>	convert a ascii string to hexa string.

# CVx

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[CVB](#), [CVC](#), [CVD](#), [CVI](#), [CVL](#) and [CVS](#) return number in a certain precision given a string containing the IEEE representation of the number. Six separate functions are provided, with one each intended for BYTE, CURRENCY, DOUBLE, INTEGER, LONG and SINGLE.

## Declare Syntax :

```
Declare Function cCVB Lib "time2win.dll" (Value As String) As Integer
Declare Function cCVC Lib "time2win.dll" (Value As String) As Currency
Declare Function cCVD Lib "time2win.dll" (Value As String) As Double
Declare Function cCVI Lib "time2win.dll" (Value As String) As Integer
Declare Function cCVL Lib "time2win.dll" (Value As String) As Long
Declare Function cCVS Lib "time2win.dll" (Value As String) As Single
```

## Call Syntax :

```
test% = cCVB(Value$)
test@ = cCVC(Value$)
test# = cCVD(Value$)
test% = cCVI(Value$)
test& = cCVL(Value$)
test! = cCVS(Value$)
```

## Where :

test? receives the value represented by the IEEE string held in Value\$

## Comments :

**See also :** [MKx](#)

# MKx

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[MKB](#), [MKC](#), [MKD](#), [MKI](#), [MKL](#), and [MKS](#) return a string containing the IEEE representation of a number. Six separate functions are provided, with one each intended for BYTE, CURRENCY, DOUBLE, INTEGER, LONG, SINGLE.

[MKN](#) return a string containing the IEEE representation of a big double number. The big double is not a part of the standard variable type of VB.

## Declare Syntax :

```
Declare Function cMKB Lib "time2win.dll" (ByVal Value As Integer) As String
Declare Function cMKC Lib "time2win.dll" (ByVal Value As Currency) As String
Declare Function cMKD Lib "time2win.dll" (ByVal Value As Double) As String
Declare Function cMKI Lib "time2win.dll" (ByVal Value As Integer) As String
Declare Function cMKL Lib "time2win.dll" (ByVal Value As Long) As String
Declare Function cMKS Lib "time2win.dll" (ByVal Value As Single) As String
```

```
Declare Function cMKN Lib "time2win.dll" (ByVal Value As String) As String
```

## Call Syntax :

```
Nm$ = cMKB(Value%)
Nm$ = cMKC(Value@)
Nm$ = cMKD(Value#)
Nm$ = cMKI(ValueM)
Nm$ = cMKL(Value&)
Nm$ = cMKS(Value!)
```

```
Nm$ = cMKN(Value$)
```

## Where :

Nm\$ receives the IEEE representation of Value?.

## Comments :

For cMKN :

Arithmetics operations on big double value must be use the function defined in [cBig.x](#).  
To convert a standard value to a big double value, you must pass the string representation of the value.  
The string representation of the value must be founded by using STR\$ not FORMAT\$.  
In fact, the FORMAT\$ convert the decimal separator into the separator defined in the Control Panel (Number format). The STR\$ doesn't change the decimal separator.  
The length of the string representation of a big double is always 10 chars.

**See also :** [CVx](#)

# FromHexa, ToHexa

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FromHexa](#) convert a hexa string to an ascii string.

[ToHexa](#) convert a ascii string to hexa string.

## Declare Syntax :

Declare Function cFromHexa Lib "time2win.dll" (Text As String) As String

Declare Function cToHexa Lib "time2win.dll" (Text As String) As String

## Call Syntax :

test\$ = cFromHexa(Text)

test\$ = cToHexa(Text)

## Where :

Text	the string to proceed
test\$	the result

## Comments :

The returned string from ToHexa is always a multiple of 2

If the size of the string passed to FromHexa is not a multiple of 2, only n-1 chars are used

## Examples :

test\$ = cToHexa("ABCDEFGH")

-> "41424344454647"

test\$ = cFromHexa("47464544434241")

-> "GFEDCBA"

**See also :** [Binary](#)



# B2I, B2L, H2I, H2L

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**B2I** convert a binary string into an integer variable.

**B2L** convert a binary string into a long variable.

**H2I** convert a hexa string into an integer variable.

**H2L** convert a hexa string into a long variable.

## Declare Syntax :

Declare Function cB2I Lib "time2win.dll" (ByVal Txt As String) As Integer

Declare Function cB2L Lib "time2win.dll" (ByVal Txt As String) As Long

Declare Function cH2I Lib "time2win.dll" (ByVal Txt As String) As Integer

Declare Function cH2L Lib "time2win.dll" (ByVal Txt As String) As Long

## Call Syntax :

Test% = cB2I(txtBinary\$)

Test& = cB2L(txtBinary\$)

Test% = cH2I(txtHexa\$)

Test& = cH2L(txtHexa\$)

## Where :

txtBinary\$ is a binary string (only combinaison of 0, 1)

txtHexa\$ is a hexa string (only combinaison of A-Z, a-z, 0-9)

## Comments :

If the function detects that that a char is not valid, the conversion is stopped and the returned value is truncated.

## Examples :

```
Debug.Print cB2I("1") ' -> 1
Debug.Print cB2I("11") ' -> 3
Debug.Print cB2I("11111111") ' -> 255
Debug.Print cB2I("1111111111111111") ' -> -1
Debug.Print cB2I("0101010101010101") ' -> 21845
Debug.Print cB2I("1010101010101010") ' -> -21846

Debug.Print cB2L("1") ' -> 1
Debug.Print cB2L("1111111111111111") ' -> 65535
Debug.Print cB2L("11111111111111111111111111111111") ' -> -1
Debug.Print cB2L("010101010101010101010101010101") ' -> 1431655765
Debug.Print cB2L("101010101010101010101010101010") ' -> -1431655766

Debug.Print cH2I("0") ' -> 0
Debug.Print cH2I("A1") ' -> 161
Debug.Print cH2I("A1B") ' -> 2587
Debug.Print cH2I("7FFF") ' -> 32767
Debug.Print cH2I("A1B2") ' -> -24142
Debug.Print cH2I("FFFF") ' -> -1

Debug.Print cH2L("0") ' -> 0
Debug.Print cH2L("A1") ' -> 161
Debug.Print cH2L("A1B") ' -> 2587
Debug.Print cH2L("A1B2") ' -> 41394
Debug.Print cH2L("7FFFFFFF") ' -> 2147483647
```

```
Debug.Print ch2L("B2A1A1B2")  
Debug.Print ch2L("FFFFFFFF")
```

```
' -> -1298030158  
' -> -1
```

**See also :** [Binary](#)

# SetAllBits, SetBit, SetBitToFalse, SetBitToTrue

QuickInfo : VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[SetAllBits](#) set all bits of a given string to Set state or Reset state.

[SetBit](#) set a given bit in a given string to Set state or Reset state.

[SetBitToFalse](#) set a given bit in a given string to Reset state.

[SetBitToTrue](#) set a given bit in a given string to Set state.

## Declare Syntax :

Declare Sub cSetAllBits Lib "time2win.dll" (Txt As String, ByVal Value As Integer)

Declare Sub cSetBit Lib "time2win.dll" (Txt As String, ByVal Position As Integer, ByVal Value As Integer)

Declare Sub cSetBitToFalse Lib "time2win.dll" (Txt As String, ByVal Position As Integer)

Declare Sub cSetBitToTrue Lib "time2win.dll" (Txt As String, ByVal Position As Integer)

## Call Syntax :

Call cSetAllBits(Txt\$, Value)

Call cSetBit(Txt\$, Position, Value)

Call cSetBitToFalse(Txt\$, Position)

Call cSetBitToTrue(Txt\$, Position)

## Where :

Txt\$	the string to proceed
Position	the bit position
Value	TRUE to Set the bit
	FALSE to Reset the bit

## Comments :

The first bit in the string is the bit 0.

For cSetBitToFalse :

This routine is a short-cut routine from cSetBit(Txt, Position, FALSE)

For cSetBitToTrue :

This routine is a short-cut routine from cSetBit(Txt, Position, TRUE)

**See also :** [Binary](#)

# FindBitReset, FindBitSet

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FindBitReset](#) find the first bit Reset starting at the position given for a a gived string.

[FindBitSet](#) find the first bit Set starting at the position given for a a gived string.

## Declare Syntax :

Declare Function cFindBitReset Lib "[time2win.dll](#)" (Txt As String, ByVal Position As Integer) As Integer

Declare Function cFindBitSet Lib "[time2win.dll](#)" (Txt As String, ByVal Position As Integer) As Integer

## Call Syntax :

test = cFindBitReset(Txt\$, Position)

test = cFindBitSet(Txt\$, Position)

## Where :

Txt\$	the string to proceed
Position	the starting position
test	TRUE if no bit founded
	<> TRUE if a bit founded

## Comments :

For cFindBitReset :

This function is useful to find or scan a string for the bit Reset. The first bit in the string to start the test is -1.

For cFindBitSet :

This function is useful to find or scan a string for the bit Set. The first bit in the string to start the test is -1.

**See also :** [Binary](#)

# ToggleAllBits, ToggleBit

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ToggleAllBits](#) toggle all bits in a gived string. If a bit is in Set state, it comes in Reset state. If a bit is in Reset state, it comes is Set state.

[ToggleBit](#) toggle a gived bit in a gived string. If a bit is in Set state, it comes in Reset state. If a bit is in Reset state, it comes is Set state.

## Declare Syntax :

Declare Sub cToggleAllBits Lib "[time2win.dll](#)" (Txt As String)

Declare Sub cToggleBit Lib "[time2win.dll](#)" (Txt As String, ByVal Position As Integer)

## Call Syntax :

Call cToggleAllBits(Txt\$)

Call cToggleBit(Txt, Position)

## Where :

Txt\$	the string to proceed
Position	the bit position

## Comments :

The first bit in the string is the bit 0.

**See also :** [Binary](#)

# ReverseAllBits, ReverseAllBitsByChar

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[ReverseAllBits](#) reverse all bits in a gived string.

[ReverseAllBitsByChar](#) reverse all bits by each char in a gived string.

## **Declare Syntax :**

Declare Sub cReverseAllBits Lib "[time2win.dll](#)" (Txt As String)

Declare Sub cReverseAllBitsByChar Lib "[time2win.dll](#)" (Txt As String)

## **Call Syntax :**

Call cReverseAllBits(Txt\$)

Call cReverseAllBitsByChar(Txt\$)

## **Where :**

Txt\$                    the string to proceed

## **Comments :**

**See also :** [Binary](#)

# IsBitPalindrome

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[IsBitPalindrome](#) check if a string is Bit palindrome.

## **Declare Syntax :**

Declare Function clsBitPalindrome Lib "time2win.dll" (Txt As String) As Integer

## **Call Syntax :**

test = clsBitPalindrome(Txt\$)

## **Where :**

Txt\$	the string to proceed
test	TRUE if the string is Bit palindrome FALSE if the string is not Bit Palindrome

## **Comments :**

**See also :** [Binary](#)

# CreateBits

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[CreateBits](#) create a string which contains how many bits specified by a number.

## Declare Syntax :

Declare Function cCreateBits Lib "time2win.dll" (ByVal nBits As Integer) As String

## Call Syntax :

```
test = cCreateBits(nBits)
```

## Where :

nBits	number of bits wished
test	the result

## Comments :

## Examples :

```
nBits = 10  
test = cCreateBits(nBits)           ' test will be a size of 2 chars
```

**See also :** [Binary](#)



# GetBit

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetBit](#) return if a gived bit in a gived string if Set or Reset.

## Declare Syntax :

Declare Function cGetBit Lib "[time2win.dll](#)" (Txt As String, ByVal Position As Integer) As Integer

## Call Syntax :

test = cGetBit(Txt, Position)

## Where :

Txt	the string to proceed
Position	the bit position
test	TRUE if the bit is Set FALSE if the bit is Reset

## Comments :

The first bit in the string is the bit 0.

**See also :** [Binary](#)

# GiveBitPalindrome

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[GiveBitPalindrome](#) return all chars on which bit 0 is bit 7, bit 1 is bit 6, bit 2 is bit 5, bit 3 is bit 4.

## **Declare Syntax :**

Declare Function cGiveBitPalindrome Lib "time2win.dll" () As String

## **Call Syntax :**

test = cGiveBitPalindrome

## **Where :**

test                      the result

## **Comments :**

**See also :** [Binary](#)

# Get, GetBlock, GetIn, GetInPart, GetInPartR, GetInR, TokenIn

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**Get** extract a sub-string delimited by '|' in a given string.

**GetBlock** read a block of n chars starting at a given block in a given string.

**GetIn** extract a left sub-string delimited by a separator in a given string.

**GetInPart** extract the first left sub-string or the rest after the first sub-string delimited by a separator in a given string.

**GetInPartR** extract the first right sub-string or the rest after the first sub-string delimited by a separator in a given string.

**GetInR** extract a right sub-string delimited by a separator in a given string.

**TokenIn** extract a sub-string delimited by a separator's list in a given string.

## Declare Syntax :

Declare Function cGet Lib "time2win.dll" (Txt As String, ByVal Position As Integer) As String

Declare Function cGetBlock Lib "time2win.dll" (Txt As String, ByVal Position As Integer, ByVal Length As Integer) As String

Declare Function cGetIn Lib "time2win.dll" (Txt As String, Separator As String, ByVal Position As Integer) As String

Declare Function cGetInPart Lib "time2win.dll" (Txt As String, Separator As String, ByVal Position As Integer) As String

Declare Function cGetInPartR Lib "time2win.dll" (Txt As String, Separator As String, ByVal Position As Integer) As String

Declare Function cGetInR Lib "time2win.dll" (Txt As String, Separator As String, ByVal Position As Integer) As String

Declare Function cTokenIn Lib "time2win.dll" (Txt As String, Separator As String, ByVal Position As Integer) As String

## Call Syntax :

test\$ = cGet(Txt, Position)

test\$ = cGetBlock(Txt, Position, Length)

test\$ = cGetIn(Txt, Separator, Position)

test\$ = cGetInPart(Txt, Separator, Position)

test\$ = cGetInPartR(Txt, Separator, Position)

test\$ = cGetInR(Txt, Separator, Position)

test\$ = cTokenIn(Txt, SeparatorList, Position)

## Where :

Txt	the string to proceed.
Position	the position of the sub-string or the block.
Length	the length of each block.
Separator	the delimiter for each sub-string.
SeparatorList	the separator's list for each sub-string.
test\$	the result.

## Comments :

\* If the size of the string is 0 or if the position is < 1 or greater than the maximum block is the string or if the length is 0. The returned string is an empty string.

\* The function cGet is a subset of the cGetIn function.

\* The function cGetBlock is similar to MID\$(Txt, 1 + ((n-1) \* m), m)

\* The function cTokenIn is a superset of the cGetIn function, in the fact that you can pass a separator's list.

\* For the function cGetInPart, cGetInPartR, you must set Position to TRUE for first part (left or right) and to FALSE for second part (left or right).

\* The function cGetInPartR is very usefull when you must isolate a file extension or the full directory and the filename function.

### Examples :

test\$ = cGet("A BC DEF G", 1)	-> "A"
test\$ = cGet("A BC DEF G", 3)	-> "DEF"
test\$ = cGetIn("A/BC/DEF/G", "/", 4)	-> "G"
test\$ = cGetIn("A/BC/DEF/G", "D", 2)	-> "EF/G"
test\$ = cGetInR("A/BC/DEF/G", "/", 4)	-> "A"
test\$ = cGetInR("A/BC/DEF/G", "D", 2)	-> "A/BC/"
test\$ = cGetInPart("A/BC/DEF/G", "/", True)	-> "A"
test\$ = cGetInPart("A/BC/DEF/G", "/", False)	-> "BC/DEF/G"
test\$ = cGetInPartR("c:\vberr.hnd\test.mak", ".", True)	-> "mak"
test\$ = cGetInPartR("c:\vberr.hnd\test.mak", ".", False)	-> "c:\vberr.hnd\test"
test\$ = cGetBlock("A/BC/DEF/G", 1, 2)	-> "A/"
test\$ = cGetBlock("A/BC/DEF/G", 4, 2)	-> "EF"
test\$ = cTokenIn("A/BC:DEF\G", ":\\", 4)	-> "G"
test\$ = cTokenIn("A/BC:DEF\G", ":\\", 3)	-> "DEF"

**See also :** [String](#)

# String : Overview

<a href="#">AddDigit</a>	sum all numerics chars in a gived string.
<a href="#">Align</a>	align a give string (left, center, right) into an another new string.
<a href="#">AndToken</a>	check if all items of a list of token separated by ' ' is present in a specified string.
<a href="#">AndTokenIn</a>	check if all items of a list of token separated by a separator is present in a specified string.
<a href="#">ArabicToRoman</a>	convert an integer or a long integer into Roman representation.
<a href="#">BlockCharFromLeft</a>	read n chars from the left of a string.
<a href="#">BlockCharFromRight</a>	read n chars from the right of a string.
<a href="#">ChangeChars</a>	change all chars speciefien by others chars in a string.
<a href="#">ChangeCharsUntil</a>	change all chars speciefien by others chars in a string until a char is encountered.
<a href="#">CheckChars</a>	verify that all chars speciefien are present in a string.
<a href="#">CheckNumericity</a>	check if a string is a numeric string.
<a href="#">CnvASCIItoEBCDIC</a>	convert an ASCII string into EBCDIC equivalent.
<a href="#">CnvEBCDICtoASCII</a>	convert an EBCDIC string into ASCII equivalent.
<a href="#">Compact</a>	compact a string composed of numeric chars.
<a href="#">Compress</a>	remove all chr\$(0):ASCII NULL, chr\$(9):TAB, chr\$(32):SPACE from a string.
<a href="#">CompressTab</a>	pack all n space chars into a tab char.
<a href="#">CplAlpha</a>	return the complementary string from a gived string composed with ascii chars.
<a href="#">CplDigit</a>	return the complementary string from a gived string composed with numerics chars.
<a href="#">Count</a>	count the number of a specified char in a string.
<a href="#">CreateAndFill</a>	create a string with the specified size and fill it with some chars.
<a href="#">ExpandTab</a>	unpack all tab chars into n space chars.
<a href="#">Fill</a>	fill a string with some chars.
<a href="#">FilterBlocks</a>	remove one or more sub-string separated by two delimiters in a gived string.
<a href="#">FilterChars</a>	remove some chars speciefien in a gived string.
<a href="#">FilterFirstChar</a>	remove some chars beginning at first position of a gived string.
<a href="#">FilterNotChar</a>	remove all chars except speciefien chars in a gived string.
<a href="#">Get</a>	extract a sub-string delimited by ' ' in a gived string.
<a href="#">GetBlock</a>	read a block of n chars starting at a gived block in a gived string.
<a href="#">GetIn</a>	extract a left sub-string delimited by a separator in a gived string.
<a href="#">GetInPart</a>	extract the first left sub-string or the rest after the first sub-string delimited by a separator
<a href="#">in a gived string.</a>	
<a href="#">GetInPartR</a>	extract the first right sub-string or the rest after the first sub-string delimited by a separator
<a href="#">in a gived string.</a>	
<a href="#">GetInR</a>	extract a right sub-string delimited by a separator in a gived string.
<a href="#">InsertBlocks</a>	insert different block of char in a gived string separated by '~'.
<a href="#">InsertBlocksBy</a>	insert different block of char in a gived string separated by a gived separator.
<a href="#">InsertByMask</a>	replace the specified char by a string in a gived string.
<a href="#">InsertChars</a>	insert a string starting at a gived position in a gived string.
<a href="#">Lrc</a>	calculate the LRC of a gived string.
<a href="#">MixChars</a>	will mix all chars in a gived string in a random position.
<a href="#">Morse</a>	convert a string to a morse string.
<a href="#">NumDigit</a>	sum and sums all numerics chars in a gived string to have a maximum value of 9.
<a href="#">OneCharFromLeft</a>	read 1 char at a position starting from the left of a string.
<a href="#">OneCharFromRight</a>	read 1 char at a position starting from the right of a string.
<a href="#">OrToken</a>	check if one item of a list of token separated by ' ' is present in a specified string.
<a href="#">OrTokenIn</a>	check if one item of a list of token separated by a separator is present in a specified string.
<a href="#">PatternExtMatch</a>	search if a gived pattern can be found is a gived string.
<a href="#">PatternMatch</a>	search if a gived pattern can be found is a gived string.
<a href="#">ProperName</a>	convert the first letter of each word separated by a space in a string to upper case.
<a href="#">ProperName2</a>	convert the first letter of some words separated by a space or punctuation in upper letter
<a href="#">case.</a>	
<a href="#">RemoveBlockChar</a>	remove a block of chars at the specified position in a string.
<a href="#">RemoveOneChar</a>	remove one char at the specified position in a string.
<a href="#">ResizeString</a>	resize the size of a string to a new length.
<a href="#">ResizeStringAndFill</a>	resize the size of a string to a new length and fill it with chars if the new length is greater
<a href="#">than the current length.</a>	
<a href="#">Reverse</a>	reverse all chars in a gived string.
<a href="#">RomanToArabic</a>	convert a Roman string into an integer or a long integer.
<a href="#">ScrollL</a>	scroll one char to the left of a specified string.
<a href="#">ScrollR</a>	scroll one char to the right of a specified string.

[StringSAR](#)  
[TokenIn](#)  
[Uncompact](#)

search and replace a string by an another in the specified string.  
extract a sub-string delimited by a separator's list in a gived string.  
uncompact a string composed of numeric chars.

# BlockCharFromLeft, BlockCharFromRight, OneCharFromLeft, OneCharFromRight

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[BlockCharFromLeft](#) read n chars from the left of a string.

[BlockCharFromRight](#) read n chars from the right of a string.

[OneCharFromLeft](#) read 1 char at a position starting from the left of a string.

[OneCharFromRight](#) read 1 char at a position starting from the right of a string.

## Declare Syntax :

```
Declare Function cBlockCharFromLeft Lib "time2win.dll" (Txt As String, ByVal Position As Integer) As String
Declare Function cBlockCharFromRight Lib "time2win.dll" (Txt As String, ByVal Position As Integer) As String
Declare Function cOneCharFromLeft Lib "time2win.dll" (Txt As String, ByVal Position As Integer) As String
Declare Function cOneCharFromRight Lib "time2win.dll" (Txt As String, ByVal Position As Integer) As String
```

## Call Syntax :

```
test = cBlockCharFromLeft(Txt, Position)
test = cBlockCharFromRight(Txt, Position)
test = cOneCharFromLeft(txt, position)
test = cOneCharFromRight(Txt, Position)
```

## Where :

Txt	the string to extract some chars
Position	the number of chars to read
Test	the result

## Comments :

For cBlockCharFromLeft :

This fonction is the same that Left\$(Txt, Position) but doesn't generate an Error if a problem occurs.

For cBlockCharFromRight :

This fonction is the same that Right\$(Txt, Position) but doesn't generate an Error if a problem occurs.

From cOneCharFromLeft :

This function is the same that MID\$(Txt, Position, 1)

From cOneCharFromRight :

This function is the same that MID\$(Txt, Len(Txt) - Position + 1, 1)

## Examples :

For cBlockCharFromLeft :

```
Txt = "ABCDEF"
Position = 3
Test = cBlockCharFromLeft(Txt, Position)           ' Test = "ABC"
```

For cBlockCharFromRight :

```
Txt = "ABCDEF"  
Position = 3  
Test = cBlockCharFromRight(Txt, Position)      ' Test = "DEF"
```

For cOneCharFromLeft :

```
Txt = "ABCDEF"  
Position = 3  
Test = cOneCharFromLeft(Txt, Position)         ' Test = "C"
```

For cOneCharFromRight :

```
Txt = "ABCDEF"  
Position = 3  
Test = cOneCharFromRight(Txt, Position)        ' Test = "D"
```

**See also :** [String](#)



# InsertBlocks, InsertBlocksBy, InsertByMask, InsertChars

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**InsertBlocks** insert different block of char in a gived string separated by '~'.

**InsertBlocksBy** insert different block of char in a gived string separated by a gived separator.

**InsertByMask** replace the specified char by a string in a gived string.

**InsertChars** insert a string starting at a gived position in a gived string.

## Declare Syntax :

```
Declare Function cInsertBlocks Lib "time2win.dll" (Txt As String, Insert As String) As String
Declare Function cInsertBlocksBy Lib "time2win.dll" (Txt As String, Insert As String, Delimitor As String) As String
Declare Function cInsertByMask Lib "time2win.dll" (Txt As String, Mask As String, Insert As String) As String
Declare Function cInsertChars Lib "time2win.dll" (Txt As String, ByVal Position As Integer, Insert As String) As String
```

## Call Syntax :

```
test$ = cInsertBlocks(Txt, Insert)
test$ = cInsertBlocksBy(Txt, Insert, Delimitor)
test$ = cInsertByMask(Txt, Mask, Insert)
test$ = cInsertChars(Txt, Position, Insert)
```

## Where :

Txt	the string to proceed
Insert	the string to insert
Delimitor	the delimiter to use for the insert string
Mask	the mask to use for the insert string
Position	the position to use for the insert string

## Comments :

- \* If the size of the string is 0 The returned string is an empty string.
- \* The function cInsertBlocks is a subset of the cInsertBlocksBy function.
- \* The number of blocks for cInsertBlocks, cInsertBlocksBy functions in the string to proceed must be greater than one from the number of block in the insert string.
- \* The function cInsertChars is similar to LEFT\$(Txt, n) + Insert + RIGHT\$(Txt, LEN(Txt) - n)

## Examples :

test\$ = cInsertBlocks("A~BC~DEF", "x~yz")	' "AxBcYzDEF"
test\$ = cInsertBlocksBy("U/VW/XYZ", "a/bc", "/"	' "UaVWbcXYZ"
test\$ = cInsertByMask("Nr ## Price \$###.##", "#", "0705200")	' "Nr 07 Price \$052.00"
test\$ = cInsertChars("ABCDEFGF", 3, "wxyz")	' "ABCwxyzDEFG"
test\$ = cInsertChars("ABCDEFGF", 90, "wxyz")	' "ABCDEFGFwxyz"
test\$ = cInsertChars("ABCDEFGF", 0, "wxyz")	' "wxyzABCDEFGF"

**See also :** [String](#)

# AndToken, AndTokenIn, OrToken, OrTokenIn

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**AndToken** check if all items of a list of token separated by '|' is present in a specified string.

**AndTokenIn** check if all items of a list of token separated by a separator is present in a specified string.

**OrToken** check if one item of a list of token separated by '|' is present in a specified string.

**OrTokenIn** check if one item of a list of token separated by a separator is present in a specified string.

## Declare Syntax :

```
Declare Function cAndToken Lib "time2win.dll" (ByVal Txt As String, ByVal Token As String) As Integer
Declare Function cAndTokenIn Lib "time2win.dll" (ByVal Txt As String, ByVal Token As String, ByVal Separator As String) As Integer
Declare Function cOrToken Lib "time2win.dll" (ByVal Txt As String, ByVal Token As String) As Integer
Declare Function cOrTokenIn Lib "time2win.dll" (ByVal Txt As String, ByVal Token As String, ByVal Separator As String) As Integer
```

## Call Syntax :

```
Test% = cAndToken(Txt$, Token$)
Test% = cAndTokenIn(Txt$, Token$, Separator$)
```

```
Test% = cOrToken(Txt$, Token$)
Test% = cOrTokenIn(Txt$, Token$, Separator$)
```

## Where :

Txt\$	is the specified string.
Token\$	is the list of token.
Separator\$	is the specified separator (default is ' ').
Test%	TRUE if one of the list of token is present, FALSE if not

## Comments :

AndToken, AndTokenIn, OrToken, OrTokenIn works only with string without embedded chr\$(0).

AndToken, AndTokenIn, OrToken, OrTokenIn are case-sensitive. Use UCase\$ or LCase\$ to perform no case-sensitivity.

## Examples :

```
Dim Txt           As String
Dim Token         As String
Dim Separator     As String
Dim Test         As Integer
```

```
Txt = "THE QUICK BROWN FOX JUMPS OVER THE LAZY DOG"
```

```
Token = "THE|DOG|QUICK"
Test = cOrToken(Txt, Token)           ' True
```

```
Token = "the|dog|quick"
Test = cOrToken(Txt, Token)           ' False
```

```
Token = "the\dog\quick"
Separator = "\"
Test = cOrTokenIn(LCase$(Txt), LCase$(Token), Separator) ' True
```

Token = "THE DOG QUICK"	
Test = cAndToken(Txt, Token)	' True
Token = "the dog quick"	
Test = cAndToken(Txt, Token)	' False
Token = "the\dog\quick"	
Separator = "\"	
Test = cAndTokenIn(lcase\$(Txt), lcase\$(Token), Separator)	' True

**See also :** [String](#)

# FilterBlocks, FilterChars, FilterFirstChars, FilterNotChars

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**FilterBlocks** remove one or more sub-string separated by two delimiters in a gived string.

**FilterChars** remove some chars specifen in a gived string.

**FilterFirstChar** remove some chars beginning at first position of a gived string.

**FilterNotChar** remove all chars except speficien chars in a gived string.

## Declare Syntax :

```
Declare Function cFilterBlocks Lib "time2win.dll" (Txt As String, Delimitor As String) As String
Declare Function cFilterChars Lib "time2win.dll" (Txt As String, charSet As String) As String
Declare Function cFilterFirstChars Lib "time2win.dll" (Txt As String, charSet As String) As String
Declare Function cFilterNotChars Lib "time2win.dll" (Txt As String, charSet As String) As String
```

## Call Syntax :

```
test = cFilterBlocks(Txt, Delimitor)
test = cFilterChars(Txt, charSet)
test = cFilterFirstChars(Txt, charSet)
test = cFilterNotChars(Txt, charSet)
```

## Where :

Txt                    the string to proceed  
Delimitor            two chars for filter the string  
charSet              the chars for filter the string  
test                  the result

## Comments :

## Examples :

```
Txt = "A/BC/DEF/GHIJ"
Delimitor = "/"
test = cFilterBlocks(Txt, Delimitor)
' test = "ADEF"
```

```
Txt = "A/BC/DEF/GHIJ"
charSet = "B/"
test = cFilterChars(Txt, charSet)
' test = "ACDEFGHIJ"
```

```
Txt = "A/BC/DEF/GHIJ"
charSet = "A/"
test = cFilterFirstChars(Txt, charSet)
' test = "BC/DEF/GHIJ"
```

```
Txt = "A/BC/DEF/GHIJ"
charSet = "B/"
test = cFilterNotChars(Txt, charSet)
' test = "/B/"
```

```
Txt = "A/BC/DEF/GHIJ"
Delimitor = "B|"
test = cFilterBlocks(Txt, Delimitor)
' test = "A/J"
```

```
Txt = "A/BC/DEF/GHIJ"
charSet = "AF/"
test = cFilterChars(Txt, charSet)
' test = "BCDEFGHIJ"
```

```
Txt = "A/BC/DEF/GHIJ"
charSet = "A/BC/"
test = cFilterFirstChars(Txt, charSet)
' test = "DEF/GHIJ"
```

```
Txt = "A/BC/DEF/GHIJ"
charSet = "AF/"
test = cFilterNotChars(Txt, charSet)
' test = "A//F"
```

**See also :** [String](#)

# AddDigit, CplDigit, NumDigit, CplAlpha

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**AddDigit** sum all numerics chars in a gived string.

**CplDigit** return the complementary string from a gived string composed with numerics chars.

**NumDigit** sum and sums all numerics chars in a gived string to have a maximum value of 9.

**CplAlpha** return the complementary string from a gived string composed with ascii chars.

## Declare Syntax :

Declare Function cAddDigit Lib "time2win.dll" (Txt as string) As Integer

Declare Function cCplDigit Lib "time2win.dll" (Txt as string) As String

Declare Function cNumDigit Lib "time2win.dll" (Txt as string) As Integer

Declare Function cCplAlpha Lib "time2win.dll" (Txt As String) As String

## Call Syntax :

```
test% = cAddDigit(Txt)
```

```
test$ = cCplDigit(Txt)
```

```
test% = cNumDigit(Txt)
```

```
test$ = cCplAlpha(Txt)
```

## Where :

Txt\$	the string to proceed
test%	the result
test\$	the result for CplAlpha

## Comments :

For AddDigit, CplDigit, NumDigit if one or more chars are different from digit, the value for each one is 0

## Examples :

```
test% = cAddDigit("1234567890987654321712345678909876543217") ' 194
```

```
test% = cNumDigit("1234567890987654321712345678909876543217")' 5
```

```
test$ = cCplDigit("1234567890987654321712345678909876543217") '
"8765432109012345678287654321090123456782"
```

```
test% = cAddDigit("8765432109012345678287654321090123456782") ' 166
```

```
test% = cNumDigit("8765432109012345678287654321090123456782")' 4
```

```
test$ = cCplAlpha("ÄÅÃÄÃÄ/Æ") ' ">=<;:9"
```

**See also :** [String](#)

# CnvASCIIttoEBCDIC, CnvEBCDICtoASCII

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[CnvASCIIttoEBCDIC](#) convert an ASCII string into EBCDIC equivalent.

[CnvEBCDICtoASCII](#) convert an EBCDIC string into ASCII equivalent.

## Declare Syntax :

Declare Sub cCnvASCIIttoEBCDIC Lib "time2win.dll" (Txt As String)

Declare Sub cCnvEBCDICtoASCII Lib "time2win.dll" (Txt As String)

## Call Syntax :

Call cCnvASCIIttoEBCDIC(Txt\$)

Call cCnvEBCDICtoASCII(Txt\$)

## Where :

Txt\$                      the string to convert

## Comments :

## Examples :

Dim Tmp              As String

Tmp = "A/BC/DEF/GHIJ"

Call cCnvASCIIttoEBCDIC(Tmp)

Debug.Print Tmp                      ' ÁaÃÃaÃÃÆaÇÈÈÑ

Call cCnvEBCDICtoASCII(Tmp)

Debug.Print Tmp                      ' A/BC/DEF/GHIJ

**See also :** [String](#)

# ArabicToRoman, RomanToArabic

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ArabicToRoman](#) convert an integer or a long integer into Roman representation.

[RomanToArabic](#) convert a Roman string into an integer or a long integer.

## Declare Syntax :

Declare Function cArabicToRoman Lib "[time2win.dll](#)" (Var As Variant) As String

Declare Function cRomanToArabic Lib "[time2win.dll](#)" (Txt As String) As Variant

## Call Syntax :

testAR = cArabicToRoman(var)

testRA = cRomanToArabic(txt)

## Where :

var                    is the integer or long integer value  
testAR                return the Roman representation of var

txt                    is a Roman string.  
testRA                return the Arabic representation of txt.

## Comments :

For cArabicToRoman :

The string returned by this function is always in lowercase.

For cRomanToArabic :

The value returned by this function is an integer or a long integer.

## Examples :

testAR = cArabicToRoman(1994)	' testAR -> MCMXCIV
testAR = cArabicToRoman(1995)	' testAR -> MCMXCV
testAR = cArabicToRoman(1993)	' testAR -> MCMXCIII

testRA = cRomanToArabic("MCMXCIV")	' testRA -> 1994
testRA = cRomanToArabic("MCMXCV")	' testRA -> 1995
testRA = cRomanToArabic("MCMXCIII")	' testRA -> 1993

**See also :** [String](#)

## Days and Months in different language : Overview

<u>GetAscTime</u>	retrieve the current date and time in a 26 chars string from a language number.
<u>GetTinyDay</u>	return the specified day into one letter.
<u>GetSmallDay</u>	return the specified day into two letters.
<u>GetShortDay</u>	return the specified day into three letters.
<u>GetLongDay</u>	return the specified day into full day name.
<u>GetTinyMonth</u>	return the specified month into one letter.
<u>GetShortMonth</u>	return the specified month into three letters.
<u>GetLongMonth</u>	return the specified month into full month name.



# Get.X.Day, Get.X.Month

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetTinyDay](#) return the specified day into one letter.  
[GetSmallDay](#) return the specified day into two letters.  
[GetShortDay](#) return the specified day into three letters.  
[GetLongDay](#) return the specified day into full day name.  
[GetTinyMonth](#) return the specified month into one letter.  
[GetShortMonth](#) return the specified month into three letters.  
[GetLongMonth](#) return the specified month into full month name.

## Declare Syntax :

```
Declare Function cGetTinyDay Lib "time2win.dll" (ByVal nLanguage As Integer, ByVal nDay As Integer) As String
Declare Function cGetSmallDay Lib "time2win.dll" (ByVal nLanguage As Integer, ByVal nDay As Integer) As String
Declare Function cGetShortDay Lib "time2win.dll" (ByVal nLanguage As Integer, ByVal nDay As Integer) As String
Declare Function cGetLongDay Lib "time2win.dll" (ByVal nLanguage As Integer, ByVal nDay As Integer) As String
Declare Function cGetTinyMonth Lib "time2win.dll" (ByVal nLanguage As Integer, ByVal nMonth As Integer) As String
Declare Function cGetShortMonth Lib "time2win.dll" (ByVal nLanguage As Integer, ByVal nMonth As Integer) As String
Declare Function cGetLongMonth Lib "time2win.dll" (ByVal nLanguage As Integer, ByVal nMonth As Integer) As String
```

## Call Syntax :

```
test$ = GetTinyDay(nLanguage, nDay)
test$ = GetSmallDay(nLanguage, nDay)
test$ = GetShortDay(nLanguage, nDay)
test$ = GetLongDay(nLanguage, nDay)
test$ = GetTinyMonth(nLanguage, nMonth)
test$ = GetShortMonth(nLanguage, nMonth)
test$ = GetLongMonth(nLanguage, nMonth)
```

## Where :

nLanguage	is the language number
nDay	is the day number
nMonth	is the month number

## Comments :

nLanguage must be a correct language number.  
If the language number is not correct, the french language is always returned.

nDay is the day of the week between 0 and 6. You can use the VB WeekDay() fonction to retrieve it from a date.

nMonth is a month between 1 and 12. You can use the VB Month() fonction to retrieve it from a date.

## Examples :

test\$ = cGetShortDay(LNG_FRENCH, 0)	' "Dim"
test\$ = cGetLongDay(LNG_FRENCH, 0)	' "Dimanche"
test\$ = cGetShortDay(LNG_FRENCH, 6)	' "Sam"
test\$ = cGetLongDay(LNG_FRENCH, 6)	' "Samedi"
test\$ = cGetShortDay(LNG_DUTCH, 0)	' "Zon"
test\$ = cGetLongDay(LNG_DUTCH, 0)	' "Zondag"
test\$ = cGetShortDay(LNG_DUTCH, 6)	' "Zat"
test\$ = cGetLongDay(LNG_DUTCH, 6)	' "Zaterdag"

test\$ = cGetShortMonth(LNG_FRENCH, 3)	' "Mar"
test\$ = cGetLongMonth(LNG_FRENCH, 3)	' "Mars"
test\$ = cGetShortMonth(LNG_FRENCH, 12)	' "Déc"
test\$ = cGetLongMonth(LNG_FRENCH, 12)	' "Decembre"
test\$ = cGetShortMonth(LNG_DUTCH, 3)	' "Maa"
test\$ = cGetLongMonth(LNG_DUTCH, 3)	' "Maart"
test\$ = cGetShortMonth(LNG_DUTCH, 12)	' "Dec"
test\$ = cGetLongMonth(LNG_DUTCH, 12)	' "December"

**See also :** [Days and months in different language](#)

Public Const LNG\_FRENCH = 1  
Public Const LNG\_DUTCH = 2  
Public Const LNG\_GERMAN = 3  
Public Const LNG\_ENGLISH = 4  
Public Const LNG\_ITALIAN = 5  
Public Const LNG\_SPANISH = 6  
Public Const LNG\_CATALAN = 7  
Public Const LNG\_POLISH = 8

# GetAscTime

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

**GetAscTime** retrieve the current date and time in a 26 chars string from a language number.

## **Declare Syntax :**

Declare Function cGetAscTime Lib "time2win.dll" (ByVal nLanguage As Integer) As String

## **Call Syntax :**

test\$ = cGetAscTime(nLanguage)

## **Where :**

nLanguage                                      is the language number

## **Comments :**

nLanguage must be a correct language number.

If the language number is not correct, the french language is always returned.

A 24-hour clock is used.

All fields have a constant width.

## **Examples :**

test\$ = cGetAscTime(LNG_FRENCH)	-> "Mer Déc 14 22:31:51 1994"
test\$ = cGetAscTime(LNG_DUTCH)	-> "Woe Dec 14 22:32:11 1994"
test\$ = cGetAscTime(LNG_ENGLISH)	-> "Wed Dec 14 22:32:29 1994"

**See also :** [Days and months in different language](#)

# StringCompress, StringExpand

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[StringCompress](#) compress a string into a compressed format.

[StringExpand](#) expand a compressed string into a normal format.

## **Declare Syntax :**

```
Declare Function cStringCompress Lib "time2win.dll" (Txt As String) As String
Declare Function cStringExpand Lib "time2win.dll" (Txt As String) As String
```

## **Call Syntax :**

```
Test$ = cStringCompress(Txt$)
Test$ = cStringExpand(Txt$)
```

## **Where :**

Txt\$	is the original string.
Test\$	is the compressed string.

## **Comments :**

The compression gives the better result on TEXT string.

## **Examples :**

```
Dim Str1 As String
Dim Str2 As String
Dim Str3 As String
```

```
Str1 = "T2WIN-32 is a powerfull DLL for VB 4.0 (32-Bit) under Win95/WinNT"
```

```
Str2 = cStringCompress(Str1)
Str3 = cStringExpand(Str2)
```

```
If (Str1 = Str3) Then Debug.Print "Success !" Else Debug.Print "Error !"
```

**See also :** [Compression](#)

# GZIPStringCompress, GZIPStringExpand

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GZIPStringCompress](#) compress a string into a compressed format using GZIP compression method.

[GZIPStringExpand](#) expand a compressed string into a normal format using GZIP compression method.

## Declare Syntax :

Declare Function cGZIPStringCompress Lib "[time2win.dll](#)" (Txt As String) As String

Declare Function cGZIPStringExpand Lib "[time2win.dll](#)" (Txt As String) As String

## Call Syntax :

Test\$ = cGZIPStringCompress(Txt\$)

Test\$ = cGZIPStringExpand(Txt\$)

## Where :

Txt\$ is the original string.

Test\$ is the compressed string.

## Comments :

The compression gives the better result on TEXT string.

## Examples :

Dim Str1 As String

Dim Str2 As String

Dim Str3 As String

Str1 = "T2WIN-32 is a powerfull DLL for VB 4.0 (32-Bit) under Win95/WinNT"

Str2 = cGZIPStringCompress(Str1)

Str3 = cGZIPStringExpand(Str2)

If (Str1 = Str3) Then Debug.Print "Success !" Else Debug.Print "Error !"

**See also :** [Compression](#)

# FileCompress, FileExpand

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileCompress](#) compress a file into a compressed format.

[FileExpand](#) expand a compressed file into a normal format.

## Declare Syntax :

Declare Function cFileCompress Lib "time2win.dll" (ByVal FileIn As String, ByVal FileOut As String) As Long

Declare Function cFileExpand Lib "time2win.dll" (ByVal FileIn As String, ByVal FileOut As String) As Long

## Call Syntax :

Test& = cFileCompress(FileIn\$, FileOut\$)

Test& = cFileExpand(FileIn\$, FileOut\$)

## Where :

FileIn\$	is the original/compressed file.
FileOut\$	is the compressed/original file.
Test&	<0, an error has occurred.
	>=0, the length of the created file.

## Comments :

The compression gives the better result on TEXT file.

The following constants are used to explain the error code :

```
Public Const CMPEXP_FILEIN_CANT_BE_NULL = -1
' occurs when the FileIn is an empty string
Public Const CMPEXP_FILEOUT_CANT_BE_NULL = -2
' occurs when the FileOut is an empty string
Public Const CMPEXP_FILEIN_AND_FILEOUT_CANT_BE_THE_SAME = -3
' occurs when the FileIn and FileOut are the same
Public Const CMPEXP_FILEIN_CANT_BE_OPENED = -4
' occurs when the FileIn can't be opened (not valid, not exist or disk error)
Public Const CMPEXP_FILEOUT_CANT_BE_CREATED = -5
' occurs when the FileOut can't be created (not valid or disk error)
Public Const CMPEXP_COMPRESS_OR_EXPAND_ERROR = -6
' occurs when compression or expansion can't be performed (disk error)
Public Const CMPEXP_CANT_GET_FILEOUT_SIZE = -7
' occurs when the length of FileOut can be read (disk error)
```

## Examples :

```
Dim FileIn      As String
Dim FileOut     As String
Dim FileOut2    As String
Dim LengthIn   As Long
Dim LengthOut  As Long
```

```
FileIn = "c:\win95\system\msjt3032.dll"
FileOut = "c:\tmp\test.cmp"
FileOut = "c:\tmp\test.uncmp"
```

```
LengthOut = cFileCompress(FileIn, FileOut)
LengthIn = cFileExpand(FileOut, FileOut2)
```

**See also :** [Compression](#)



# Is.X

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

These routines checks if the specified string is :

IsAlnum	Alphanumeric ('A'-'Z', 'a'-'z', or '0'-'9')
IsAlpha	Letter ('A'-'Z' or 'a'-'z')
IsAscii	ASCII character (0x00 - 0x7F)
IsCsym	Letter, underscore, or digit
IsCsymf	Letter or underscore
IsDigit	Digit ('0'-'9')
IsISBN	International Standard Book Numbers (ISBNs)
IsLower	Lowercase letter ('a'-'z')
IsPalindrome	the string and the reverse string are the same
IsPunct	Punctuation character
IsSpace	White-space character (0x09 - 0x0D or 0x20)
IsUpper	Uppercase letter ('A'-'Z')
IsXdigit	Hexadecimal digit ('A'-'F', 'a'-'f', or '0'-'9')
IsBalance	test if the specified balance is a valid balance
IsDate	test if the specified date is a valid date
IsHour	test if the specified hour is a valid hour
IsLeapYear	test if the specified year is a leap year

## Declare Syntax :

```
Declare Function clsAlnum Lib "time2win.dll" (Txt As String) As Integer
Declare Function clsAlpha Lib "time2win.dll" (Txt As String) As Integer
Declare Function clsAscii Lib "time2win.dll" (Txt As String) As Integer
Declare Function clsCsym Lib "time2win.dll" (Txt As String) As Integer
Declare Function clsCsymf Lib "time2win.dll" (Txt As String) As Integer
Declare Function clsDigit Lib "time2win.dll" (Txt As String) As Integer
Declare Function clsISBN Lib "time2win.dll" (Txt As String) As Integer
Declare Function clsLower Lib "time2win.dll" (Txt As String) As Integer
Declare Function clsPalindrome Lib "time2win.dll" (Txt As String) As Integer
Declare Function clsPunct Lib "time2win.dll" (Txt As String) As Integer
Declare Function clsSpace Lib "time2win.dll" (Txt As String) As Integer
Declare Function clsUpper Lib "time2win.dll" (Txt As String) As Integer
Declare Function clsXDigit Lib "time2win.dll" (Txt As String) As Integer
```

```
Declare Function clsBalance Lib "time2win.dll" (ByVal nHour As Long, ByVal nMinute As Integer, ByVal nSecond As Integer) As Integer
Declare Function clsDate Lib "time2win.dll" (ByVal nYear As Integer, ByVal nMonth As Integer, ByVal nDay As Integer) As Integer
Declare Function clsHour Lib "time2win.dll" (ByVal nHour As Integer, ByVal nMinute As Integer, ByVal nSecond As Integer) As Integer
Declare Function clsLeapYear Lib "time2win.dll" (ByVal nYear As Integer) As Integer
```

## Call Syntax :

```
test = clsAlnum(Txt)
test = clsAlpha(Txt)
test = clsAscii(Txt)
test = clsCsym(Txt)
test = clsCsymf(Txt)
test = clsDigit(Txt)
test = clsLower(Txt)
test = clsPalindrome(Txt)
```

```
test = clsPunct(Txt)
test = clsSpace(Txt)
test = clsUpper(Txt)
test = clsXdigit(Txt)
```

```
test = clsBalance(nHour, nMinute, nSecond)
test = clsDate(nYear, nMonth, nDay)
test = clsHour(nHour, nMinute, nSecond)
test = clsLeapYear(nYear)
```

**Where :**

Txt	the string to proceed
nHour	the hour to test (can be negative and/or greater than 1439 for clsBalance)
nMinute	the minute to test
nSecond	the second to test
nYear	the year to test
nMonth	the month to test
nDay	the day to test
test	TRUE if test is OK FALSE if the test fails

**Comments :**

**Examples :**

Txt = "ABCDEFGH"

test = clsAlnum(Txt)	TRUE
test = clsAlpha(Txt)	TRUE
test = clsAscii(Txt)	TRUE
test = clsCsym(Txt)	TRUE
test = clsCsymf(Txt)	TRUE
test = clsDigit(Txt)	FALSE
test = clsLower(Txt)	FALSE
test = clsPalindrome(Txt)	FALSE
test = clsPunct(Txt)	FALSE
test = clsSpace(Txt)	FALSE
test = clsUpper(Txt)	TRUE
test = clsXdigit(Txt)	FALSE

test = clsBalance(-1200, 58, 34)	TRUE
test = clsDate(1995, 2, 29)	FALSE
test = clsHour(23, 60, 10)	FALSE
test = clsLeapYear(1996)	TRUE

**See also : ls**

# HMAPutType, HMArPutType, HMAsPutType

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**HMAPutType** save a type'd variable from a huge array.

**HMArPutType** have the same fonctionnality but with a huge array with only one sheet and only one row.

**HMAsPutType** have the same fonctionnality but with a huge array with only one sheet.

## Declare Syntax :

Declare Sub cHMAPutType Lib "time2win.dll" (HMA As tagHMA, ByVal Row As Long, ByVal Col As Long, ByVal Sheet As Long, nType As Any)

Declare Sub cHMArPutType Lib "time2win.dll" (HMA As tagHMA, ByVal Col As Long, nType As Any)

Declare Sub cHMAsPutType Lib "time2win.dll" (HMA As tagHMA, ByVal Row As Long, ByVal Col As Long, nType As Any)

## Call Syntax :

Call cHMAPutType(HMA, Row&, Col&, Sheet&, nType)

## Where :

HMA	is a type'd variable (tagHMA).
Row&	is the row.
Col&	is the col.
Sheet&	is the sheet.
nType	is the type'd variable to save depending of the variable type used in the creation.

## Comments :

If the Row is below 1, the Row 1 is used.

If the Col is below 1, the Col 1 is used.

If the Sheet is below 1, the Sheet 1 is used.

If the Row is greater than HMA.nRows, the Row HMA.nRows is used.

If the Col is greater than HMA.nCols, the Col HMA.nCols is used.

If the Sheet is greater than HMA.nSheets, the Sheet HMA.nSheets is used.

## Examples :

Dim ErrCode	As Integer
Dim HMA	As tagHMA
Dim TE	As tagTASKENTRY

HMA.nType = Len(TE)	' positive value for a type'd variable
HMA.nIsTyped = True	' init the array with chr\$(0) because type'd variable
HMA.nRows = 500	' 500 rows
HMA.nCols = 500	' 500 cols
HMA.nSheets = 2	' 2 sheets

ErrCode = cHMACreate(HMA) ' create a new huge array

ErrCode = cTasks(TE, True)  
Call cHMAPutType(HMA, 1, 1, 1, TE) ' save the type'd variable in Row 1, Col 1, Sheet 1

ErrCode = cTasks(TE, False)  
Call cHMAPutType(HMA, 1, HMA.nCols, 1, TE) ' save the type'd variable in Row 1, Col 500, Sheet 1

```
ErrCode = cTasks(TE, False)
Call cHMAPutType(HMA, HMA.nRows, 1, 1, TE)
Sheet 1
ErrCode = cTasks(TE, False)
Call cHMAPutType(HMA, HMA.nRows, HMA.nCols, 1, TE)
500, Sheet 1
```

' save the type'd variable in Row 500, Col 1,

' save the type'd variable in Row 500, Col

**See also :** [Huge memory array](#)

# Is : Overview

These routines checks if the specified string is :

<u>IsAlnum</u>	Alphanumeric ('A'-'Z', 'a'-'z', or '0'-'9')
<u>IsAlpha</u>	Letter ('A'-'Z' or 'a'-'z')
<u>IsAscii</u>	ASCII character (0x00 - 0x7F)
<u>IsCsym</u>	Letter, underscore, or digit
<u>IsCsymf</u>	Letter or underscore
<u>IsDigit</u>	Digit ('0'-'9')
<u>IsISBN</u>	International Standard Book Numbers (ISBNs)
<u>IsLower</u>	Lowercase letter ('a'-'z')
<u>IsPalindrome</u>	the string and the reverse string are the same
<u>IsPunct</u>	Punctuation character
<u>IsSpace</u>	White-space character (0x09 - 0x0D or 0x20)
<u>IsUpper</u>	Uppercase letter ('A'-'Z')
<u>IsXdigit</u>	Hexadecimal digit ('A'-'F', 'a'-'f', or '0'-'9')
<u>IsBalance</u>	test if the specified balance is a valid balance
<u>IsDate</u>	test if the specified date is a valid date
<u>IsHour</u>	test if the specified hour is a valid hour
<u>IsLeapYear</u>	test if the specified year is a leap year

The routines checks if a specified file has or not the specified attribute.

IsFileArchive check if the specified file is an ARCHIVE file.  
IsFileEmpty check if the specified file contains or not data (size > 0).  
IsFileHidden check if the specified file is a HIDDEN file.  
IsFilenameValid check if the specified file follows the DOS or WIN95 or WINNT syntax for a file.  
IsFileNormal check if the specified file is a NORMAL file.  
IsFileReadOnly check if the specified file is a READ-ONLY file.  
IsFileSubDir check if the specified file is a SUB-DIRECTORY file.  
IsFileSystem check if the specified file is a SYSTEM file.  
IsFileVold check if the specified file is a VOLUME-ID file.  
IsFileFlag check if the specified file have the specified attributes.

# IsFile.X

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**IsFileArchive** check if the specified file is an ARCHIVE file.  
**IsFileEmpty** check if the specified file contains or not data (size > 0).  
**IsFileHidden** check if the specified file is a HIDDEN file.  
**IsFilenameValid** check if the specified file follows the DOS or WIN95 or WINNT syntax for a file.  
**IsFileNormal** check if the specified file is a NORMAL file.  
**IsFileReadOnly** check if the specified file is a READ-ONLY file.  
**IsFileSubDir** check if the specified file is a SUB-DIRECTORY file.  
**IsFileSystem** check if the specified file is a SYSTEM file.  
**IsFileVold** check if the specified file is a VOLUME-ID file.  
**IsFileFlag** check if the specified file have the specified attributes.

## Declare Syntax :

```
Declare Function clsFileArchive Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function clsFileEmpty Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function clsFileHidden Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function clsFilenameValid Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function clsFileNormal Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function clsFileReadOnly Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function clsFileSubDir Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function clsFileSystem Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function clsFileVold Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function clsFileFlag Lib "time2win.dll" (ByVal nFilename As String, ByVal nStatus As Integer) As Integer
```

## Call Syntax :

```
test% = clsFileArchive(nFilename)
test% = clsFileEmpty(nFilename)
test% = clsFileHidden(nFilename)
test% = clsFilenameValid(nFilename)
test% = clsFileNormal(nFilename)
test% = clsFileReadOnly(nFilename)
test% = clsFileSubDir(nFilename)
test% = clsFileSystem(nFilename)
test% = clsFileVold(nFilename)
test% = clsFileFlag(nFilename, nStatus)
```

## Where :

nFilename	the filename to check
nStatus	the status to check (only for clsFileFlag) combine file <u>attributes</u> with logical OR.
test	TRUE if the specified flag is present FALSE if the specified flag is not present

## Comments :

IsFilenameValid checks only the validity of a file (normal file or network file) not the presence on a disk, the returned code can be :

IFV_ERROR	bad char in the filename
IFV_NAME_TOO_LONG	the length of the file part is too long (> 8)
IFV_EXT_TOO_LONG	the length of the extension part is too long (> 3)
IFV_TOO_MANY_BACKSLASH	too many successing backslash (> 2)
IFV_BAD_DRIVE_LETTER	bad drive letter before the colon ':'

IFV_BAD_COLON_POS	bad colon ':' position (<>2)
IFV_EXT_WITHOUT_NAME	extension without a name

If the filename is not a good filename or if the filename not exist or if an error occurs when accessing the filename, the return value is always FALSE.

**See also :** [ls](#)

# Huge memory array : Overview

The functions/subs used in the Huge Memory Arrays routines handle Huge Arrays.

Huge Arrays is based on the same principle that DISK ARRAY and MULTIPLE DISK ARRAY.

An bigger advantage of Huge Arrays is the speed.

The maximum number of Huge Arrays is 8192.

This number is a theoretical maximum and is depending of any application loaded in memory.

The following functions/subs are used to handle big sized arrays on disk :

<u>HMAClear</u>	Clear a Huge Array (fill it with chr\$(0) or chr\$(32) (for string array)).
<u>HMAClearCol</u>	Clear a single Col on on one Sheet or on all sheets in a Huge Array (see above).
<u>HMAClearRow</u>	Clear a single Row on one Sheet or on all Sheets in a Huge Array (see above).
<u>HMAClearSheet</u>	Clear a single Sheet in a Huge Array (fill it with chr\$(0) or chr\$(32) (for string array)).
<u>HMACreate</u>	Create a Huge Array.
<u>HMAFree</u>	Free a Huge Array.
<u>HMAGet</u>	Read an element from a Huge Array.
<u>HMAGetType</u>	Read a type'd variable from a Huge Array.
<u>HMAOnDisk</u>	Get/Put a Huge Array from/to a file on disk.
<u>HMAPut</u>	Save an element to a Huge Array.
<u>HMAPutType</u>	Save a type'd variable to a Huge Array.
<u>HMArGet</u>	Read an element from a Huge Array with only one sheet and one row.
<u>HMArGetType</u>	Read a type'd variable from a Huge Array with only one sheet and one row.
<u>HMArPut</u>	Save an element from a Huge Array with only one sheet and one row.
<u>HMArPutType</u>	Save a type'd variable from a Huge Array with only one sheet and one row.
<u>HMAscClearCol</u>	Clear a single Col in a Huge Array with only one sheet.
<u>HMAscClearRow</u>	Clear a single Row in a Huge Array with only one sheet.
<u>HMAscGet</u>	Read an element from a Huge Array with only one sheet.
<u>HMAscGetType</u>	Read a type'd variable from a Huge Array with only one sheet.
<u>HMAscPut</u>	Save an element from a Huge Array with only one sheet.
<u>HMAscPutType</u>	Save a type'd variable from a Huge Array with only one sheet.

Don't forget that any Huge Memory Arrays must be destroyed before quitting the application. If you not destroy all Huge Memory Arrays that you've created, the memory used will be only released when the DLL will be unloaded from memory.



# HMAPut, HMArPut, HMAsPut

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HMAPut](#) save an element to a huge array.

[HMArPut](#) have the same fonctionnality but with a huge array with only one sheet and only one row.

[HMAsPut](#) have the same fonctionnality but with a huge array with only one sheet.

## Declare Syntax :

Declare Sub cHMAPut Lib "[time2win.dll](#)" (HMA As tagHMA, ByVal Row As Long, ByVal Col As Long, ByVal Sheet As Long, Var As Variant)

Declare Sub cHMArPut Lib "[time2win.dll](#)" (HMA As tagHMA, ByVal Col As Long) As Variant

Declare Sub cHMAsPut Lib "[time2win.dll](#)" (HMA As tagHMA, ByVal Row As Long, ByVal Col As Long, Var As Variant)

## Call Syntax :

Call cHMAPut(HMA, Row&, Col&, Sheet&, Var)

## Where :

HMA	is a type'd variable (tagHMA).
Row&	is the row.
Col&	is the col.
Sheet&	is the sheet.
Var	is the variant value to save depending of the variable type used in the creation.

## Comments :

If the Row is below 1, the Row 1 is used.

If the Col is below 1, the Col 1 is used.

If the Sheet is below 1, the Sheet 1 is used.

If the Row is greater than HMA.nRows, the Row HMA.nRows is used.

If the Col is greater than HMA.nCols, the Col HMA.nCols is used.

If the Sheet is greater than HMA.nSheets, the Sheet HMA.nSheets is used.

## Examples :

see [HMACreate](#)

**See also :** [Huge memory array](#)

# UUCP : Overview

[FileUUCP](#)

uuencode/uudecode a file (this is can be usefull for Internet).

# HMAGetType, HMArGetType, HMAsGetType

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HMAGetType](#) read a type'd variable from a huge array.

[HMArGetType](#) have the same fonctionnality but with a huge array with only one sheet and only one row.

[HMAsGetType](#) have the same fonctionnality but with a huge array with only one sheet.

## Declare Syntax :

Declare Sub cHMAGetType Lib "[time2win.dll](#)" (HMA As tagHMA, ByVal Row As Long, ByVal Col As Long, ByVal Sheet As Long, nType As Any)

Declare Sub cHMArGetType Lib "[time2win.dll](#)" (HMA As tagHMA, ByVal Col As Long, nType As Any)

Declare Sub cHMAsGetType Lib "[time2win.dll](#)" (HMA As tagHMA, ByVal Row As Long, ByVal Col As Long, nType As Any)

## Call Syntax :

Call cHMAGetType(HMA, Row&, Col&, Sheet&, nType)

## Where :

HMA	is a type'd variable (tagHMA).
Row&	is the row.
Col&	is the col.
Sheet&	is the sheet.
nType	is the readed type'd variable depending of the variable type used in the creation.

## Comments :

If the Row is below 1, the Row 1 is used.

If the Col is below 1, the Col 1 is used.

If the Sheet is below 1, the Sheet 1 is used.

If the Row is greater than HMA.nRows, the Row HMA.nRows is used.

If the Col is greater than HMA.nCols, the Col HMA.nCols is used.

If the Sheet is greater than HMA.nSheets, the Sheet HMA.nSheets is used.

## Examples :

```
Dim ErrCode           As Integer
Dim HMA               As tagHMA
Dim TE(1 To 4)        As tagTASKENTRY
```

HMA.nType = Len(TE(1))	' positive value for a type'd variable
HMA.nIsTyped = True	' init the array with chr\$(0) because type'd variable
HMA.nRows = 500	' 500 rows
HMA.nCols = 500	' 500 cols
HMA.nSheets = 2	' 2 sheets
ErrCode = cHMACreate(HMA)	' use a created huge array
Call cHMAGetType(HMA, 1, 1, 1, TE(1))	' read the type'd variable in Row 1, Col 1, Sheet 1
Call cHMAGetType(HMA, 1, HMA.nCols, 1, TE(2))	' read the type'd variable in Row 1, Col 500, Sheet 1
Call cHMAGetType(HMA, HMA.nRows, 1, 1, TE(3))	' read the type'd variable in Row 500, Col 1, Sheet 1

Call `chMAGetType(HMA, HMA.nRows, HMA.nCols, 1, TE(4))`  
500, Sheet 1

' read the type'd variable in Row 500, Col

**See also :** [Huge memory array](#)

# HMAGet, HMArGet, HMAsGet

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HMAGet](#) read an element from a huge array.

[HMArGet](#) have the same fonctionnality but with a huge array with only one sheet and only one row.

[HMAsGet](#) have the same fonctionnality but with a huge array with only one sheet.

## Declare Syntax :

Declare Function cHMAGet Lib "[time2win.dll](#)" (HMA As tagHMA, ByVal Row As Long, ByVal Col As Long, ByVal Sheet As Long) As Variant

Declare Function cHMArGet Lib "[time2win.dll](#)" (HMA As tagHMA, ByVal Col As Long) As Variant

Declare Function cHMAsGet Lib "[time2win.dll](#)" (HMA As tagHMA, ByVal Row As Long, ByVal Col As Long) As Variant

## Call Syntax :

Var = cHMAGet(HMA, Row&, Col&, Sheet&)

## Where :

HMA	is a type'd variable (tagHMA).
Row&	is the row.
Col&	is the col.
Sheet&	is the sheet.
Var	is the readed variant value depending of the variable type used in the creation.

## Comments :

If the Row is below 1, the Row 1 is used.

If the Col is below 1, the Col 1 is used.

If the Sheet is below 1, the Sheet 1 is used.

If the Row is greater than HMA.nRows, the Row HMA.nRows is used.

If the Col is greater than HMA.nCols, the Col HMA.nCols is used.

If the Sheet is greater than HMA.nSheets, the Sheet HMA.nSheets is used.

## Examples :

see [HMACreate](#)

**See also :** [Huge memory array](#)

# HMAFree

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HMAFree](#) free the memory used by a huge array.

## Declare Syntax :

Declare Function cHMAFree Lib "time2win.dll" (HMA As tagHMA) As Integer

## Call Syntax :

ErrCode = cHMAFree(HMA)

## Where :

HMA                                is a type'd variable (tagHMA).  
ErrCode%                        is the returned error code.

## Comments :

## Examples :

see HMACreate

**See also :** Huge memory array

# HMACreate

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HMACreate](#) create a new huge array.

## Declare Syntax :

Declare Function cHMACreate Lib "[time2win.dll](#)" (HMA As tagHMA) As Integer

## Call Syntax :

ErrCode% = cHMACreate(HMA)

## Where :

HMA is a type'd variable (tagHMA).  
ErrCode% is the returned error code.

## Comments :

In theory :

The maxixum number of Rows is 2147483647  
The maxixum number of Cols is 2147483647  
The maxixum number of Sheets is 2147483647

You are only limited by the size of the memory.

Bigger are nRows, nCols or nSheets, bigger is the time to initialize.

When you create a new huge array, the only parameters that you must initialize are :

HMA.nType = 50	'the type of the variable to use, see <a href="#">Constants and</a>
<a href="#">Types declaration</a> . (HMA_x)	
HMA.nIsTyped = False	'Must be True for a type'd variable.
HMA.nRows = 50	'the number of rows to use.
HMA.nCols = 50	'the number of cols to use.
HMA.nSheets = 2	'the number of sheets to use.

**YOU CAN'T CHANGE THESE PARAMETERS AFTER THE CREATION OF THE HUGE ARRAY.  
YOU CAN'T CHANGE THE OTHER VALUES IN THE TYPE'D VARIABLE.**

When you create a new array, all elements are initialized with chr\$(0) except for string array which are initialized with chr\$(32) (spaces).

However, string array and type'd array use the same positive value to define in .nType, but the type'd array must be initialized with chr\$(0) not with chr\$(32) therefore for a type'd you must specify .nIsTyped on True to initialize it with chr\$(0).

If you use huge array of type'd variable, the type'd variable can be only a mix of fixed variable (variable string length can't be used).

## Examples :

Dim ErrCode	As Integer
Dim HMA	As tagHMA
Dim Var(1 To 8)	As Variant

HMA.nType = 50	' positive value for a string
HMA.nIsTyped = False	' init the array with spaces
HMA.nRows = 50	' 50 rows
HMA.nCols = 50	' 50 cols
HMA.nSheets = 2	' 2 sheets
ErrCode = cHMACreate(HMA)	' create a new huge array
Call cHMAPut(HMA, 1, 1, 1, "D:1, ABCDEFGHIJ")	' save the string in Row 1, Col 1, Sheet 1
Call cHMAPut(HMA, 1, HMA.nCols, 1, "D:1, abcdefghij")	' save the string in Row 1, Col 50, Sheet 1
Call cHMAPut(HMA, HMA.nRows, 1, 1, "D:1, OPQRSTUVWXYZ")	' save the string in Row 50, Col 1, Sheet 1
Call cHMAPut(HMA, HMA.nRows, HMA.nCols, 1, "D:1, oprqstuvwxyz")	' save the string in Row 50, Col 50, Sheet 1
Call cHMAPut(HMA, 1, 1, 2, "D:2, 1234567890")	' save the string in Row 1, Col 1, Sheet 2
Call cHMAPut(HMA, 1, HMA.nCols, 2, "D:2, 0987654321")	' save the string in Row 1, Col 50, Sheet 2
Call cHMAPut(HMA, HMA.nRows, 1, 2, "D:2, 12345ABCDE")	' save the string in Row 50, Col 1, Sheet 2
Call cHMAPut(HMA, HMA.nRows, HMA.nCols, 2, "D:2, VWXYZ54321")	' save the string in Row 50, Col 50, Sheet 2
Var(1) = cHMAGet(HMA, 1, 1, 1)	' read the string in Row 1, Col 1, Sheet 1
Var(2) = cHMAGet(HMA, 1, HMA.nCols, 1)	' read the string in Row 1, Col 50, Sheet 1
Var(3) = cHMAGet(HMA, HMA.nRows, 1, 1)	' read the string in Row 50, Col 1, Sheet 1
Var(4) = cHMAGet(HMA, HMA.nRows, HMA.nCols, 1)	' read the string in Row 50, Col 50, Sheet 1
Var(5) = cHMAGet(HMA, 1, 1, 2)	' read the string in Row 1, Col 1, Sheet 2
Var(6) = cHMAGet(HMA, 1, HMA.nCols, 2)	' read the string in Row 1, Col 50, Sheet 2
Var(7) = cHMAGet(HMA, HMA.nRows, 1, 2)	' read the string in Row 50, Col 1, Sheet 2
Var(8) = cHMAGet(HMA, HMA.nRows, HMA.nCols, 2)	' read the string in Row 50, Col 50, Sheet 2
ErrCode = cHMAFree(HMA)	' free the memory used.
On my system :	
ErrCode = -1	' no error
HMA.daSize = 64	' internal header size
HMA.nType = 50	' fixed string of 50 chars
HMA.nRows = 50	' 50 rows
HMA.nCols = 50	' 50 cols
HMA.nSheets = 2	' 2 sheets
HMA.rHandle = 0	' internal handle
HMA.rElementSize = 50	' internal size of a element
HMA.rFileSize = 250000	' internal size of the memory used
HMA.rParts = 3	' internal number of parts (block of 64000
chars)	
HMA.rRemain = 58000	' internal remain chars
HMA.rSheetSize = 2500	' internal size of one sheet
Var(1) = "D:1, ABCDEFGHIJ"	
Var(2) = "D:1, abcdefghij"	
Var(3) = "D:1, OPQRSTUVWXYZ"	
Var(4) = "D:1, oprqstuvwxyz"	
Var(5) = "D:2, 1234567890"	
Var(6) = "D:2, 0987654321"	
Var(7) = "D:2, 12345ABCDE"	
Var(8) = "D:2, VWXYZ54321"	

**See also :** [Huge memory array](#)



# HMAClear, HMACClearSheet, HMACClearCol, HMAAsClearCol, HMACClearRow, HMAAsClearRow

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

**HMAClear** clear a huge array (fill it with chr\$(0) or chr\$(32) (for string array)).

**HMACClearSheet** clear a single Sheet in a huge array (fill it with chr\$(0) or chr\$(32) (for string array)).

**HMACClearCol** clear a single Col on one Sheet or on all Sheets in a huge array (fill it with chr\$(0) or chr\$(32) (for string array)).

**HMAAsClearCol** have the same fonctionnality but with a huge array with only one sheet.

**HMACClearRow** clears a single Row on one Sheet or on all Sheets in a huge array (fill it with chr\$(0) or chr\$(32) (for string array)).

**HMAAsClearRow** have the same fonctionnality but with a huge array with only one sheet.

## **Declare Syntax :**

Declare Function cHMAClear Lib "time2win.dll" (HMA As tagHMA) As Integer

Declare Function cHMACClearSheet Lib "time2win.dll" (HMA As tagHMA, ByVal Sheet As Long) As Integer

Declare Function cHMACClearCol Lib "time2win.dll" (HMA As tagHMA, ByVal Col As Long, ByVal Sheet As Long) As Integer

Declare Function cHMAAsClearCol Lib "time2win.dll" (HMA As tagHMA, ByVal Col As Long) As Integer

Declare Function cHMACClearRow Lib "time2win.dll" (HMA As tagHMA, ByVal Row As Long, ByVal Sheet As Long) As Integer

Declare Function cHMAAsClearRow Lib "time2win.dll" (HMA As tagHMA, ByVal Row As Long) As Integer

## **Call Syntax :**

ErrCode% = cHMAClear(HMA)

ErrCode% = cHMACClearSheet(HMA, Sheet&)

ErrCode% = cHMACClearCol(HMA, Col&, Sheet&)

ErrCode% = cHMAAsClearCol(HMA, Col&)

ErrCode% = cHMACClearRow(HMA, Row&, Sheet&)

ErrCode% = cHMAAsClearRow(HMA, Row&)

## **Where :**

HMA is a type'd variable (tagHMA).

Col& is the desired Col.

Row& is the desired Row.

Sheet& is the desired Sheet.

ErrCode% is the returned error code.

## **Comments :**

This function must be used only after you've created a huge array.

If you've created a huge array, the array is already cleared.

For cHMACClearSheet :

If the huge array have a single Sheet, this routine have the same effect that cHMAClear.

If the Sheet is -1 then all Sheets are used. This parameter have the same fonctionnality that cHMAClear

If the Sheet is below 1 and different of -1, the Sheet 1 is used.

If the Sheet is greater than HMA.nSheets, the Sheet HMA.nSheets is used.

For cHMAClearCol, cHMAAsClearCol :

If the Col is below 1, the Col 1 is used.

If the Col is greater than HMA.nCols, the Col HMA.nCols is used.

If the Sheet is -1 then all Sheets are used.

If the Sheet is below 1 and different of -1, the Sheet 1 is used.

If the Sheet is greater than HMA.nSheets, the Sheet HMA.nSheets is used.

For cHMACClearRow, cHMAsclearRow :

If the Row is below 1, the Row 1 is used.

If the Row is greater than HMA.nRows, the Row HMA.nRows is used.

If the Sheet is -1 then all Sheets are used.

If the Sheet is below 1 and different of -1, the Sheet 1 is used.

If the Sheet is greater than HMA.nSheets, the Sheet HMA.nSheets is used.

### Examples :

Dim ErrCode	As Integer
-------------	------------

Dim HMA	As tagHMA
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
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62	62
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68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

HMA.nType = 50 ' positive value for a string

```
HMA.nlsTyped = False
```

```
HMA.nRows = 500
```

HMA.nCols = 500 ' 500 cols

HMA.nSheets = 2 ' 2 sheets

```
ErrCode = cHMACreate(HMA) // create a new huge array
```

Call `cHMAPut(HMA, 1, 1, 1, "D:1, ABCDEFGHIJ")` ' save the string in Row 1, Col 1, Sheet 1

Call `cHMAPut(HMA, 1, HMA.nCols, 1, "D:1, abcdefghij")` 'save the string in Row 1, Col 500, Sheet 1

Call `cHMAPut(HMA, HMA.nRows, 1, 1, "D:1, OPQRSTUVWXYZ")` ' save the string in Row 500, Col 1, Sheet 1

Call `cHMAPut(HMA, HMA.nRows, HMA.nCols, 1, "D:1, oprqrstuvwxyz")` ' save the string in Row 500, Col 500, Sheet 1

'..... some codes

ErrCode = cHMACClear(HMA)	' clear all elements in the huge array
---------------------------	--

```
ErrCode = cHMAClearSheet(HMA, 2) 'clear the Sheet 2 in the huge array
```

```
ErrCode = cHMAClearCol(HMA, HMA.nCols, 2)      ' clear the last Col in Sheet 2 in the huge array
```

```
ErrCode = cHMA$ClearCol(HMA, HMA.nCols)      ' clear the last Col in Sheet 1 in the huge
array
```

```
ErrCode = cHMAClearRow(HMA, HMA.nRows, 2) ' clear the last Row in Sheet 2 in the huge array
```

```
ErrCode = cHMA$ClearRow(HMA, HMA.nRows)      ' clear the last Row in Sheet 1 in the huge
array
```

**See also :** Huge memory array

# HMAOnDisk

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

HMAOnDisk read/write a Huge Array from/to a file.

## Declare Syntax :

Declare Function cHMAOnDisk Lib "time2win.dll" (HMA As tagHMA, ByVal hsFile As String, ByVal hsGetPut As Integer) As Long

## Call Syntax :

hsFileLength& = cHMAOnDisk(HMA, hsFile\$, hsGetPut%)

## Where :

HMA	is a type'd variable (tagHMA).
hsFile\$	is the name of the file to read/write the Huge Array.
hsGetPut%	PUT_ARRAY_ON_DISK to put the array on disk, GET_ARRAY_ON_DISK to get the array from disk.
hsFileLength&	>=0 is the returned length of the file, < 0 is an <u>error</u> occurs.

## Comments :

The file length is the size of the Huge Array.

## Examples :

```
Dim HMA                As tagHMA
Dim ErrCode            As Integer

HMA.nType = 50          ' positive value for a string
HMA.nIsTyped = False   ' init the array with spaces
HMA.nRows = 50          ' 50 rows
HMA.nCols = 50          ' 50 cols
HMA.nSheets = 2         ' 2 sheets

ErrCode = cHMACreate(HMA)

If (ErrCode <> 0) Then
    MsgBox "Huge Array of " & HMA.rMemorySize & " bytes has been created with handle (" & HMA.rHandle & ")"
Else
    MsgBox "Huge Array of " & HMA.rMemorySize & " bytes can't be created."
End If

Call cHMAPut(HMA, 1, 1, 1, "D:1, ABCDEFGHIJ") ' save the string in Row 1, Col 1, Sheet 1
Call cHMAPut(HMA, 1, HMA.nCols, 1, "D:1, abcdefghij") ' save the string in Row 1, Col 50, Sheet 1
Call cHMAPut(HMA, HMA.nRows, 1, 1, "D:1, OPQRSTUVWXYZ") ' save the string in Row 50, Col 1, Sheet 1
Call cHMAPut(HMA, HMA.nRows, HMA.nCols, 1, "D:1, oprqstuvwxyz") ' save the string in Row 50, Col 50, Sheet 1

MsgBox "The length of the saved file is " & cHMAOnDisk(HMA, "c:\hugestr.tmp", PUT_ARRAY_ON_DISK)

ErrCode = cHMAClear(HMA)

MsgBox "The length of the readed file is " & cHMAOnDisk(HMA, "c:\hugestr.tmp", GET_ARRAY_ON_DISK)

ErrCode = cHMAFree(HMA)
```

```
If (ErrCode = TRUE) Then
    MsgBox "Huge Array (" & hsHandle & ") has been destroyed."
Else
    MsgBox "Huge Array (" & hsHandle & ") can't be destroyed."
End If
```

**See also :** [Huge memory array](#)

' structure for huge memory array

```
Type tagHMA
  daSize      As Integer      'size of the type'd
  nTypeAs Integer 'variable type
  nRows       As Long         'number of rows
  nCols As Long         'number of cols
  nSheets     As Long         'number of sheets
  rHandle     As Long         'returned handle for use with other functions
  rElementSize As Long         'returned size of a element
  rMemorySize As Long         'returned size of the memory used
  rPartsAs Long         'returned total part
  rRemain     As Long         'returned size of the remain part
  rSheetSize  As Long         'size of a sheet
  rOffset     As Long         'returned offset
  nIsTyped    As Integer      'is nType a type'd variable
  Dummy      As String * 20   'reserved for future use
End Type
```

' definition for variable type in huge memory array

```
Public Const HMA_TYPE = 0
Public Const HMA_BYTE = -1
Public Const HMA_INTEGER = -2
Public Const HMA_LONG = -3
Public Const HMA_SINGLE = -4
Public Const HMA_DOUBLE = -5
Public Const HMA_CURRENCY = -6
```

' definition for error type in huge memory array

```
Public Const HMA_NO_ERROR = True
Public Const HMA_NO_MEMORY = 1
Public Const HMA_BAD_TYPE = 2
Public Const HMA_BAD_ROWS = 3
Public Const HMA_BAD_COLS = 4
Public Const HMA_BAD_SHEETS = 5
Public Const HMA_INVALID_HANDLE = 6
```

# Encryption : Overview

[Decrypt](#)

decode a string encoded with Encrypt function.

[DESdecrypt](#)

decode a string with a password using the U.S. Data Encryption Standard cipher.

[DIAMONDdecrypt](#)

decode a string with a password using the Diamond Encryption Algorithm (4

modes).

[DESdecryptFile](#)

copy one file to an another file but with U.S. Data Encryption Standard cipher.

[DIAMONDdecryptFile](#)

copy one file to an another file but with Diamond Encryption Algorithm (4 modes).

[DEScrypt](#)

encode a string with a password using the U.S. Data Encryption Standard cipher.

[DIAMONDencrypt](#)

encode a string with a password using the Diamond Encryption Algorithm (4

modes).

[DEScryptFile](#)

copy one file to an another file but with U.S. Data Encryption Standard cipher.

[DIAMONDencryptFile](#)

copy one file to an another file but with Diamond Encryption Algorithm (4 modes).

[Encrypt](#)

encode a string with a password/key.

[FileEncrypt](#)

copy one file to an another file but with encryption.

[FileDecrypt](#)

copy one file to an another file but with decryption.

[IDEAdecrypt](#)

decode a string with a password using the International Data Encryption Algorithm cipher.

[IDEAdecryptFile](#)

copy one file to an another file but with the International Data Encryption Algorithm cipher.

[IDEAencrypt](#)

encode a string with a password using the International Data Encryption Algorithm cipher.

[IDEAencryptFile](#)

copy one file to an another file but with the International Data Encryption Algorithm cipher.

[RUBYdecrypt](#)

decode a string with a password using the RUBY algorithm (7 modes).

[RUBYdecryptFile](#)

copy one file to an another file but with RUBY algorithm (7 modes).

[RUBYencrypt](#)

encode a string with a password using the RUBY algorithm (7 modes).

[RUBYencryptFile](#)

copy one file to an another file but with RUBY algorithm (7 modes).

# Encrypt, Decrypt

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[Encrypt](#) encode a string with a password/key.

[Decrypt](#) decode a string encoded with Encrypt function.

## Declare Syntax :

Declare Function cEncrypt Lib "time2win.dll" (Txt As String, password As String, ByVal level As Integer) As String

Declare Function cDecrypt Lib "time2win.dll" (Txt As String, password As String, ByVal level As Integer) As String

## Call Syntax :

testE = cEncrypt(Txt, password, level)

testD = cDecrypt(Txt, password, level)

## Where :

Txt	is the string to encrypt/decrypt
password	is the key to use for encryption/decryption
level	level of the encryption/decryption
test	is the string encrypted/decrypted

## Comments :

The password/key is case sensitive.

The level is a number between **0** and **4**.

Higher is the level, better is the encryption

You must use the same level for encrypt/decrypt a given string.

## Examples :

Txt = "Under the blue sky, the sun is yellow"

password = "a new encryption"

level = ENCRYPT\_LEVEL\_4

test = cEncrypt(Txt, password, level)

Txt = cDecrypt(test, password, level)

**See also :** [Encryption](#)

# FileEncrypt, FileDecrypt

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileEncrypt](#) copy one file to an another file but with encryption.

[FileDecrypt](#) copy one file to an another file but with decryption.

## Declare Syntax :

Declare Function cFileEncrypt Lib "[time2win.dll](#)" (ByVal file1 As String, ByVal file2 As String, Password As String, ByVal Level As Integer) As Long

Declare Function cFileDecrypt Lib "[time2win.dll](#)" (ByVal file1 As String, ByVal file2 As String, Password As String, ByVal Level As Integer) As Long

## Call Syntax :

test& = cFileEncrypt(file1, file2, password, level)

test& = cFileDecrypt(file1, file2, password, level)

## Where :

file1\$	is the source file.
file2\$	is the destination file.
password	is the key to use for encryption/decryption.
level	level of the encryption/decryption.
test&	> 0 if all is OK (the returned value is the total bytes copied), < 0 if an error has occurred.

## Comments :

The password/key is case sensitive.

The [level](#) is a number between **0** and **4**.

Higher is the level, better is the encryption.

You must use the same level for encrypt/decrypt a gived string.

The returned value can be negative and have the following value :

-1	the password is an EMPTY string.
-32720	the number of chars in a block for writing differs from the number of chars for reading.
-32730	reading error for file 1.
-32740	writing error for file 2.
-32750	opening error for file 1.
-32751	opening error for file 2.
-32760	allocation error for memory buffer 1.
-32761	allocation error for memory buffer 2.

## Examples :

test& = cFileEncrypt("c:\autoexec.bat", "c:\autoexec.tb1", "Time To Win", ENCRYPT\_LEVEL\_4)

test& = cFileDecrypt("c:\autoexec.tb1", "c:\autoexec.tb2", "Time To Win", ENCRYPT\_LEVEL\_4)

**See also :** [Encryption](#)



```
' definition for encrypt/decrypt
Public Const ENCRYPT_LEVEL_0 = 0
Public Const ENCRYPT_LEVEL_1 = 1
Public Const ENCRYPT_LEVEL_2 = 2
Public Const ENCRYPT_LEVEL_3 = 3
Public Const ENCRYPT_LEVEL_4 = 4
```

# Crc32 : Overview

FileCRC32

calculate a 32 bits CRC for a gived file.

StringCRC32

calculate a 32 bits CRC for a gived string.

# Crypt, FileCrypt

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**Crypt** encrypt/decrypt a string with a password.

**FileCrypt** encrypt/decrypt a file with a password.

## Declare Syntax :

Declare Function cCrypt Lib "time2win.dll" (Txt As String, ByVal Password As String) As String

Declare Function cFileCrypt Lib "time2win.dll" (ByVal File1 As String, ByVal File2 As String, ByVal Password As String) As Long

## Call Syntax :

strResult\$ = cCrypt(Txt\$, Password\$)

lngResult& = cFileCrypt(File1\$, File2\$, Password\$)

## Where :

Txt\$	is the string to be encrypted/decrypted
Password\$	is the string to encrypt/decrypt
File1\$	is the file to be encrypted/decrypted
File2\$	is the file encrypted/decrypted
strResult\$	is the string encrypted/decrypted
lngResult&	< 0 : an error has occurred
	> 0 : length of the file encrypted

## Comments :

## Examples :

For cCrypt :

```
Dim lngResult      As Long
Dim strResult      As String
Dim strDisplay As String
```

```
Dim Str1           As String
Dim Str2           As String
Dim Str3           As String
```

```
strResult = ""
strDisplay = ""
```

```
Str1 = "T2WIN-32, t2win-32, T2WIN-32, t2win-32, T2WIN-32, t2win-32"
Str2 = cCrypt(Str1, "1234567")
Str3 = cCrypt(Str2, "1234567")
```

```
strDisplay = strDisplay & "Crypt " & Str1 & "" & vbCrLf & "with password '1234567'" & vbCrLf & "is" & vbCrLf & "" & Str2 & "" & vbCrLf & vbCrLf
strDisplay = strDisplay & "Crypt " & Str2 & "" & vbCrLf & "with password '1234567'" & vbCrLf & "is" & vbCrLf & "" & Str3 & "" & vbCrLf & vbCrLf
strDisplay = strDisplay & "Compare string contents (not sensitive) is " & If(LCase$(Str1) = LCase$(Str3), "same", "not same") & vbCrLf & vbCrLf
```

```
Str1 = String$(30, "a") + String$(6, "b") + String$(5, "c") + String$(4, "d")
```

```
Str2 = cCrypt(Str1, "1234567")
Str3 = cCrypt(Str2, "1234567")
```

```
strDisplay = strDisplay & "Crypt " & Str1 & "" & vbCrLf & "with password '1234567'" & vbCrLf & "is" & vbCrLf & "" & Str2 & "" & vbCrLf & vbCrLf
strDisplay = strDisplay & "Crypt " & Str2 & "" & vbCrLf & "with password '1234567'" & vbCrLf & "is" & vbCrLf & "" & Str3 & "" & vbCrLf & vbCrLf
strDisplay = strDisplay & "Compare string contents (not sensitive) is " & If(LCase$(Str1) = LCase$(Str3), "same", "not same") & vbCrLf & vbCrLf
```

```
Debug.Print strDisplay
```

For cFileCrypt :

```
Dim lngResult As Long
Dim strResult As String
Dim strDisplay As String
```

```
Dim Str1 As String
Dim Str2 As String
Dim Str3 As String
```

```
strResult = ""
strDisplay = ""
```

```
File1 = T2WFileTest
File2 = "autoexec.hi-encrypted"
File3 = "autoexec.hi-decrypte"
```

```
strDisplay = strDisplay & "File Crypt " & File1 & " to " & File2 & " with password '1234567' is " & cFileCrypt(File1, File2, "1234567") & vbCrLf
strDisplay = strDisplay & "File Crypt " & File2 & " to " & File3 & " with password '1234567' is " & cFileCrypt(File2, File3, "1234567") & vbCrLf
strDisplay = strDisplay & "Compare File contents (not sensitive) " & File1 & " with " & File3 & " is " & If(cCmpFileContents(File1, File3, False) = -1, "same", "not same") & vbCrLf & vbCrLf
```

```
Debug.Print strDisplay
```

**See also :** [Hi-Crypt](#)

# FileCRC32

## Purpose :

[FileCRC32](#) calculate a 32 bits CRC for a gived file.

## Declare Syntax :

Declare Function cFileCRC32 Lib "[time2win.dll](#)" (ByVal lpFilename As String, ByVal mode As Integer) As Long

## Call Syntax :

```
test = cFileCRC32(lpFilename, mode)
```

## Where :

lpFilename	the file to proceed
mode	OPEN_MODE_BINARY (calculates the CRC on the full length of the file). This is the default mode. OPEN_MODE_TEXT (calculates the CRC until a EOF is encountered)
test	the calculated CRC 32 bits in a LONG.

## Comments :

The returned value can be negative and have only a value :

-1            If the filename is not a good filename or if the filename not exist or if an error occurs when accessing the filename.

## Examples :

```
test = cFileCRC32("C:\COMMAND.COM")   ' &h1131ADD3            (MS-DOS 6.22)
```

**See also :** [Crc32](#)

# StringCRC32

## Purpose :

[StringCRC32](#) calculate a 32 bits CRC for a gived string.

## Declare Syntax :

Declare Function cStringCRC32 Lib "[time2win.dll](#)" (Txt As String) As Long

## Call Syntax :

```
test = cStringCRC32(Txt)
```

## Where :

Txt	the string to proceed
test	the calculated CRC 32 bits in a LONG.

## Comments :

if the string if empty, the return value is always -1 (&hFFFFFFF).

## Examples :

test = cStringCRC32("ABCDEFGH")	' &hE6F94BC
test = cStringCRC32("GFEDCBA")	' &hF0EC0AB3

**See also :** [Crc32](#)

```
' definition for crc32
Public Const OPEN_MODE_BINARY = 0
Public Const OPEN_MODE_TEXT = 1
```

```
' structure for file attributes
Type FileAttributeType
  ErrNo As Integer
  Archive      As Integer
  Hidden       As Integer
  Normal       As Integer
  ReadOnly     As Integer
  SubDir       As Integer
  System       As Integer
  Compressed   As Integer
End Type
```



# Hi-Crypt : Overview

Crypt

encrypt/decrypt a string with a password.

FileCrypt

encrypt/decrypt a file with a password.

# Serialization : Overview

Serialization is a set of routines primarily intended for developers so that they may append a serial number (or other identifier) to the end of an .exe, .dll or any static files in size, put/modify or get serial numbers or any string to 50 characters. Users may use to initialize purchased software applications with ownership, security-related, or other identifying marks.

A unique serial number going out with each copy of an application affords the developer with a possible opportunity to identify, if need be, the registered client of a particular copy. The end-user is normally unaware of the existence of such a mark, its location, its method of placement or the method of reading/verifying. Its absence or modification may provide evidence of tampering.

The serialization of a file adds an overhead of 200 bytes (in 16-Bit) and 280 bytes (in 32-Bit) to the specified file.

<u>IsSerial</u>	check if a file has been serialized.
<u>SerialGet</u>	get the serialization information from a serialized file.
<u>SerialInc</u>	increment by a value the serialized number part of a serialized file.
<u>SerialPut</u>	put a serialization information to a serialized file.
<u>SerialRmv</u>	remove the serialization information from a serialized file.

# IsSerial, SerialGet, SerialInc, SerialPut, SerialRmv

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**IsSerial** check if a file has been serialized.

**SerialGet** get the serialization information from a serialized file.

**SerialInc** increment by a value the serialized number part of a serialized file.

**SerialPut** put a serialization information to a serialized file.

**SerialRmv** remove the serialization information from a serialized file.

## Declare Syntax :

```
Declare Function clsSerial Lib "time2win.dll" (ByVal File As String) As Integer
Declare Function cSerialGet Lib "time2win.dll" (ByVal file As String, SERIALDATA As tagSERIALDATA) As Integer
Declare Function cSerialInc Lib "time2win.dll" (ByVal file As String, ByVal Increment As Long) As Integer
Declare Function cSerialPut Lib "time2win.dll" (ByVal file As String, SERIALDATA As tagSERIALDATA) As Integer
Declare Function cSerialRmv Lib "time2win.dll" (ByVal File As String) As Integer
```

## Call Syntax :

```
Test% = clsSerial(File$)
Test% = cSerialGet(File$, SERIALDATA)
Test% = cSerialInc(File$, Increment&)
Test% = cSerialPut(File$, SERIALDATA)
Test% = cSerialRmv(File$)
```

## Where :

File\$	is the specified file.
SERIALDATA	is a type'd variable ( <u>tagSERIALDATA</u> ).
Increment&	is the increment (positive or negative).
Test%	TRUE if all is ok, <> TRUE if an error has occurred.

## Comments :

For 16-Bit :

The length of the serialization string is maximum 50 characters (SERIALDATA.Description1, SERIALDATA.Description2).

For 32-Bit :

The length of the serialization string is maximum 52 characters (SERIALDATA.Description1, SERIALDATA.Description2).

For SerialInc :

If you pass a 0 value, the serialization number is reset to 0 (be care).

## Examples :

```
Dim putSERIALDATA As tagSERIALDATA
Dim getSERIALDATA As tagSERIALDATA

putSERIALDATA.Description1 = "1234567890123456789012345"
putSERIALDATA.Description2 = ""
```

```
putSERIALDATA.Number = 987654321
Debug.Print cSerialPut("c:\tmp\sample.exe", putSERIALDATA)
Debug.Print cSerialGet("c:\tmp\sample.exe", getSERIALDATA)
Debug.Print getSERIALDATA.Description1 & Chr$(13) & getSERIALDATA.Description2 & Chr$(13) &
getSERIALDATA.Number
```

```
putSERIALDATA.Description2 = "ABCDEFGHJKLMNOPQRSTUVWXYZ"
putSERIALDATA.Number = 123456789
Debug.Print cSerialPut("c:\tmp\sample.exe", putSERIALDATA)
Debug.Print cSerialGet("c:\tmp\sample.exe", getSERIALDATA)
Debug.Print getSERIALDATA.Description1 & Chr$(13) & getSERIALDATA.Description2 & Chr$(13) &
getSERIALDATA.Number
```

```
Debug.Print cSerialInc("c:\tmp\sample.exe", 123)
Debug.Print cSerialGet("c:\tmp\sample.exe", getSERIALDATA)
Debug.Print getSERIALDATA.Description1 & Chr$(13) & getSERIALDATA.Description2 & Chr$(13) &
getSERIALDATA.Number
```

```
Debug.Print cSerialRmv("c:\tmp\sample.exe")
```

**See also :** [Serialization](#)

# Compress

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

**Compress** remove all chr\$(0):ASCII NULL, chr\$(9):TAB, chr\$(32):SPACE from a string.

## **Declare Syntax :**

Declare Function cCompress Lib "time2win.dll" (Txt As String) As String

## **Call Syntax :**

test = cCompress(Txt)

## **Where :**

Txt	the string to proceed
test	the string returned without any chr\$(0), chr\$(9), chr\$(32)

## **Comments :**

**See also :** [String](#)

' structure for serialization

Type tagSERIALDATA

Description1	As String * 52	' serialization description 1
Description2	As String * 52	' serialization description 2
Number	As Long	' serialization number
Dummy	As String * 52	' reserved for future use

End Type

' definition for error type in SERIAL DATA

Public Const SD\_SERIAL\_NOT\_FOUND = 1

Public Const SD\_CAN\_NOT\_OPEN\_FILE = 2

# CompressTab, ExpandTab

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[CompressTab](#) pack all n space chars into a tab char.

[ExpandTab](#) unpack all tab chars into n space chars.

## Declare Syntax :

Declare Function cCompressTab Lib "[time2win.dll](#)" (Txt As String, ByVal nTab As Integer) As String

Declare Function cExpandTab Lib "[time2win.dll](#)" (Txt As String, ByVal nTab As Integer) As String

## Call Syntax :

test = cCompressTab(Txt, nTabC)

test = cExpandTab(Txt, nTabE)

## Where :

Txt	the string to proceed.
nTabC	the number of space chars to replace by a tab char.
nTabE	the number of space chars which replace a tab char.
test	the result.

## Comments :

## Examples :

Txt = "A" + space\$(2) + "B" + space\$(3) + "C" + space\$(4) + "D"

nTabC = 2

test = cCompressTab(Txt, nTabC)                      ' test = "A" + chr\$(9) + "B" + chr\$(9) + space\$(1) + "C" + chr\$(9) + chr\$(9) + "D"

Txt = test = "A" + chr\$(9) + "B" + chr\$(9) + space\$(1) + "C" + chr\$(9) + chr\$(9) + "D"

nTabE = 2

test = cExpandTab(Txt, nTabE)                      ' test = "A" + space\$(2) + "B" + space\$(3) + "C" + space\$(4) + "D"

**See also :** [String](#)

# ChangeChars, ChangeCharsUntil

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ChangeChars](#) change all chars specifiien by others chars in a string.

[ChangeCharsUntil](#) change all chars specifiien by others chars in a string until a char is encountered.

## Declare Syntax :

Declare Sub cChangeChars Lib "[time2win.dll](#)" (Txt As String, charSet As String, newCharSet As String)

Declare Sub cChangeCharsUntil Lib "[time2win.dll](#)" (Txt As String, charSet As String, newCharSet As String, nUntil As String)

## Call Syntax :

Call cChangeChars(Txt, charSet, newCharSet)

Call cChangeCharsUntil(Txt, charSet, newCharSet, nUntil)

## Where :

Txt	the string to process.
charSet	the chars in the string to be changed.
newCharSet	the new chars.
nUntil	the char to stop the change.

## Comments :

Normally, the size of the newCharSet and charSet must be the same.

If the size are not the same, the smallest size is used.

For cChangeCharsUntil :

If the size of nUntil is 0 then all chars of the string is proceeded.

If the size of nUntil is >1 only the first char is used.

## Examples :

For cChangeChars :

```
Txt = "ABCDEF"
charSet = "ACE"
newCharSet = "ace"
Call cChangeChars(Txt, charSet, newCharSet)      ' Txt = "aBcDeF"
```

For cChangeCharsUntil :

```
Txt = "ABCDEF"
charSet = "ACE"
newCharSet = "ace"
nUntil = "D"
Call cChangeCharsUntil(Txt, charSet, newCharSet, nUntil) ' Txt = "aBcDEF"
```

**See also :** [String](#)



# CheckChars

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[CheckChars](#) verify that all chars specifien are present in a string.

## Declare Syntax :

Declare Function cCheckChars Lib "time2win.dll" (Txt As String, charSet As String) As Integer

## Call Syntax :

status = cCheckChars(Txt, charSet)

## Where :

Txt	the string to proceed.
charSet	the chars to be verified.
status	TRUE if all chars specifien in charSet are present in Txt. FALSE if all chars specifien in charSet are not present in Txt.

## Comments :

## Examples :

```
Txt = "ABCDEFGH"  
charSet = "CAD"  
status = cCheckChars(Txt, charSet)' status = TRUE
```

```
Txt = "ABCDEFGH"  
charSet = "CADZ"  
status = cCheckChars(Txt, charSet)' status = FALSE
```

**See also :** [String](#)

# RemoveBlockChar, RemoveOneChar

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[RemoveBlockChar](#) remove a block of chars at the specified position in a string.

[RemoveOneChar](#) remove one char at the specified position in a string.

## Declare Syntax :

Declare Function cRemoveBlockChar Lib "[time2win.dll](#)" (Txt As String, ByVal Position As Long, ByVal Length As Long) As String

Declare Function cRemoveOneChar Lib "[time2win.dll](#)" (Txt As String, ByVal Position As Long) As String

## Call Syntax :

Test\$ = cRemoveBlockChar(Txt\$, Position&, Length&)

Test\$ = cRemoveOneChar(Txt\$, Position&)

## Where :

Txt\$	is the string to proceed.
Position&	is the starting position to remove the char(s).
Length&	is the number of chars to remove
Test\$	is the result

## Comments :

## Examples :

```
Txt$ = "This is an another test"
Debug.Print cRemoveBlockChar(Txt$, 10, 9)           ' "This is a test"
```

```
Txt$ = "This is an test"
Debug.Print cRemoveOneChar(Txt$, 10)               ' "This is  test"
```

**See also :** [String](#)

# Reverse

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[Reverse](#) reverse all chars in a gived string.

## **Declare Syntax :**

Declare Function cReverse Lib "time2win.dll" (Txt As String) As String

## **Call Syntax :**

Test\$ = cReverse(Txt\$)

## **Where :**

Txt\$	is the specified string
Test\$	is the string reversed

## **Comments :**

## **Examples :**

Test\$ = cReverse("TIME TO WIN")                      ' "NIW OT EMIT"

**See also :** [String](#)

# ScrollL, ScrollR

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ScrollL](#) scroll one char to the left of a specified string.

[ScrollR](#) scroll one char to the right of a specified string.

## Declare Syntax :

Declare Function cScrollL Lib "time2win.dll" (Txt As String) As String

Declare Function cScrollR Lib "time2win.dll" (Txt As String) As String

## Call Syntax :

test\$ = cScrollL(Txt\$)

test\$ = cScrollR(Txt\$)

## Where :

Txt\$ is the string to scroll.

test\$ is the string scrolled to the left or to the right.

## Comments :

The size of the string must be greater than 1.

## Examples :

Txt\$ = "TIME TO WIN "

test\$ = cScrollL(Txt\$) "IME TO WIN T"

test\$ = cScrollR(Txt\$) " TIME TO WIN"

**See also :** [String](#)

# Count

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**Count** count the number of a specified char in a string.

## Declare Syntax :

Declare Function cCount Lib "time2win.dll" (Txt As String, Separator As String) As Integer

## Call Syntax :

test = cCount(Txt, Separator)

## Where :

Txt	the string to proceed
Separator	the char to be counted
test	the total number of Separator in the string

## Comments :

## Examples :

```
Txt = "A/BC/DEF/G"  
Separator = "/"  
test = cCount(Txt, Separator)      ' test = 3
```

**See also :** [String](#)

# ResizeString, ResizeStringAndFill

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ResizeString](#) resize the size of a string to a new length.

[ResizeStringAndFill](#) resize the size of a string to a new length and fill it with chars if the new length is greater than the current length.

## Declare Syntax :

```
Declare Function cResizeString Lib "time2win.dll" (Txt As String, ByVal newLength As Integer) As String
Declare Function cResizeStringAndFill Lib "time2win.dll" (Txt As String, ByVal newLength As Integer, Fill As String) As String
```

## Call Syntax :

```
Test$ = cResizeString(Txt$, Length%)
Test$ = cResizeStringAndFill(Txt$, Length%, Fill$)
```

## Where :

Txt\$	is the specified string.
Length%	is the new length (can be shorter than the current length).
Fill\$	is a char or a string to use to fill the new string.
Test\$	is the new string.

## Comments :

For cResizeString :

The new length can be greater than the current length. In this case, chr\$(0) is used to fill the rest of the string.

For cResizeStringAndFill :

The new length can be greater than the current length. In this case, the fill string is used to fill the rest of the string.

## Examples :

Test\$ = cResizeString("TIME TO WIN", 7)	' "TIME TO"
Test\$ = cResizeStringAndFill("TIME TO WIN", 21, "@")	' "TIME TO WIN@@@@@@@@@@@@@"
Test\$ = cResizeStringAndFill("TIME TO WIN", 21, "time")	' "TIME TO WINtimetimeteti"

**See also :** [String](#)

# SwapD, SwapI, SwapL, SwapS, SwapStr

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[SwapD](#) swap two Double values.

[SwapI](#) swap two Integer values.

[SwapL](#) swap two Long values.

[SwapS](#) swap two Single values.

[SwapStr](#) swap two strings.

## Declare Syntax :

Declare Sub cSwapD Lib "[time2win.dll](#)" (swap1 As Double, swap2 As Double)

Declare Sub cSwapI Lib "[time2win.dll](#)" (swap1 As Integer, swap2 As Integer)

Declare Sub cSwapL Lib "[time2win.dll](#)" (swap1 As Long, swap2 As Long)

Declare Sub cSwapS Lib "[time2win.dll](#)" (swap1 As Single, swap2 As Single)

Declare Sub cSwapStr Lib "[time2win.dll](#)" (swap1 As String, swap2 As String)

## Call Syntax :

Call cSwapD(swap1, swap2)

Call cSwapI(swap1, swap2)

Call cSwapL(swap1, swap2)

Call cSwapS(swap1, swap2)

Call cSwapStr(swap1, swap2)

## Where :

swap1                first Double/Integer/Long/Single/String value.

swap2                second Double/Integer/Long/Single/String value.

## Comments :

## Examples :

swap1 = 2345.12

swap2 = 5432.21

Call cSwapD(swap1, swap2)                                ' swap1 = 5432.21; swap2 = 2345.12

swap1 = "Hello"

swap2 = "World"

Call cSwapStr(swap1, swap2)                                ' swap1 = "World"; swap2 = "Hello"

**See Also :** [Miscellaneous](#)

# CreateAndFill

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[CreateAndFill](#) create a string with the specified size and fill it with some chars.

## Declare Syntax :

Declare Function cCreateAndFill Lib "time2win.dll" (ByVal Length As Integer, Txt As String) As String

## Call Syntax :

```
test = cCreateAndFill(Length, Txt)
```

## Where :

Length	the length of the result string
Txt	the chars to fill in the result string
test	the result

## Comments :

## Examples :

```
Length = 14  
Txt = "aBc"  
test = cCreateAndFill(Length, Txt)      ' test = "aBcaBcaBcaBcaB"
```

**See also :** [String](#)



# Fill

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[Fill](#) fill a string with some chars.

## Declare Syntax :

Declare Sub cFill Lib "[time2win.dll](#)" (Txt As String, Fill As String)

## Call Syntax :

Call cCreateAndFill(Txt, Fill)

## Where :

Txt	the string to proceed
Fill	the chars to fill in the string

## Comments :

This routine is a superset of String\$. In fact, STRING\$ can only use a char to fill a string.

## Examples :

```
Txt = space$(14)
Fill = "AbC"
Call cFill(Txt, Fill)      ' test = "AbCAbCAbCAbCAb"
```

**See also :** [String](#)

# Lrc

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

Lrc calculate the LRC of a gived string.

## Declare Syntax :

Declare Function cLrc Lib "time2win.dll" (Txt As String) As String

## Call Syntax :

test\$ = cLrc(Txt)

## Where :

Txt	the string to proceed
test\$	the LRC calculated

## Comments :

The LRC is always an Hexa string of two chars.  
This function is used for communication between a program and a clocking terminal

## Examples :

test\$ = cLrc(chr\$(2) & "0a12721536")                      ' "54"

**See also :** [String](#)

# Compact, Uncompact

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**Compact** compact a string composed of numeric chars.

**Uncompact** uncompact a string composed of numeric chars.

## Declare Syntax :

Declare Function cCompact Lib "time2win.dll" (Txt As String) As String

Declare Function cUncompact Lib "time2win.dll" (Txt As String) As String

## Call Syntax :

test = cCompact(Txt)

test = cUncompact(Txt)

## Where :

Txt is the string (only numeric chars) to compact/uncompact.

test return the string compacted/uncompact.

## Comments :

For Compact :

If the size of the string is not a multiple of 2, the size used is the nearest below multiple of 2.

For Uncompact :

The size of the returned string is always a multiple of 2.

## Examples :

Txt = "39383736353433323130"

test = cCompact(Txt)

' test = "9876543210"

Txt = "0123456789"

test = cUncompact(Txt)

' test = "30313233343536373839"

**See also :** [String](#)

# MixChars

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**MixChars** will mix all chars in a gived string in a random position.

## Declare Syntax :

Declare Function cMixChars Lib "time2win.dll" (Txt As String) As String

## Call Syntax :

test\$ = cMixChars(Txt)

## Where :

Txt	is the string to mix all chars.
test\$	is the returned mixed string.

## Comments :

MixChars use a random number generator to perform the mix of the chars.  
The starting random number is depending of the actual date and time.

If the passed string is an EMPTY string, the returned string is an EMPTY string.

## Examples :

test1\$ = cMixChars("TIME TO WIN")	' "ON EI WMTIT"
test2\$ = cMixChars("Nothing can beat the fox")	' "Nt honn ia ttechx baefog"

**See also :** [String](#)

# Align

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[Align](#) align a give string (left, center, right) into an another new string.

## Declare Syntax :

Declare Function cAlign Lib "time2win.dll" (Txt As String, ByVal TypeAlign As Integer, ByVal NewLength As Integer) As String

## Call Syntax :

Test\$ = cAlign(Txt\$, TypeAlign%, NewLength%)

## Where :

Txt\$	is the specified string
TypeAlign%	< 0 : left align, = 0 : center align, > 0 : right align.
NewLength%	the length of the new string
Test\$	is the string aligned

## Comments :

If NewLength is below that the length of the string, the left part of the string is returned.  
The new string is padded with spaces.

## Examples :

Test\$ = cAlign("TIME TO WIN", -1, 20)	' "TIME TO WIN          "
Test\$ = cAlign("TIME TO WIN", 0, 20)	' "      TIME TO WIN    "
Test\$ = cAlign("TIME TO WIN", 1, 20)	' "          TIME TO WIN"

**See also :** [String](#)

# ProperName

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**ProperName** convert the first letter of each word separated by a space in a string to upper case.

## Declare Syntax :

Declare Function cProperName Lib "time2win.dll" (Txt As String) As String

## Call Syntax :

Test\$ = cProperName(Txt\$)

## Where :

Txt\$	is the specified string.
Test\$	is the returned string.

## Comments :

## Examples :

macdonald	becomes	Macdonald
mac donald	becomes	Mac Donald
John fitz,jr	becomes	John Fitz,jr
john Fitz, jr	becomes	John Fitz, Jr

**See also :** [String](#)

# ProperName2

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ProperName2](#) convert the first letter of some words separated by a space or punctuation in upper letter case.

## Declare Syntax :

Declare Function cProperName2 Lib "time2win.dll" (Txt As String, ByVal TokenToUse As String, ByVal Options As Integer) As String

## Call Syntax :

Test\$ = cProperName2(Txt\$, TokenToUse\$, Options%)

## Where :

Txt\$	is the text to convert.
TokenToUse\$	is the token list that can't be converted.
Options%	PN_UPPERCASE, works with upper case text.
	PN_PUNCTUATION, separator can be a space or a punctuation.
	PN_KEEP_ORIGINAL, keep case letter in the token list.
	PN_ONLY_LEADER_SPACE, don't use the leader trailer space for search in the token list.

## Comments :

TokenToUse can be empty.

TokenToUse is a list of all words (separated by '/') which can't be converted (b.e. : "the/and/a/an/or/of")

## Examples :

ProperName2 of 'JOHN FITZ,JR' is 'John Fitz,Jr'  
ProperName2 of 'john Fitz,jr' is 'John Fitz,Jr'  
ProperName2 of 'macdonald' is 'Macdonald'  
ProperName2 of 'mac donald' is 'Mac Donald'  
ProperName2 of 'a.l. greene jr.' is 'A.L. Greene Jr.'  
ProperName2 of 'shale and sandstone and till' is 'Shale and Sandstone and Till'  
ProperName2 of 'a sandstone or a shale' is 'a Sandstone or a Shale'

**See also :** [String](#)

# DecrI, DecrL

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[DecrI](#) auto-decrement an integer value by 1.

[DecrL](#) auto-decrement a long value by 1.

## Declare Syntax :

Declare Sub cDecrI Lib "time2win.dll" (Value As Integer)

Declare Sub cDecrL Lib "time2win.dll" (Value As Long)

## Call Syntax :

Call cDecrI(Value%)

Call cDecrL(Value&)

## Where :

Value% is the integer value to auto-decrement.

Value& is the long value to auto-decrement.

## Comments :

These routines are slower than the VB equivalent : Value = Value - 1 but are shorter to type.

## Examples :

Dim Value As Integer

Value = 5

Call cDecrI(Value) ' 4

Call cDecrI(Value) ' 3

**See also :** Miscellaneous



# StringSAR

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**StringSAR** search and replace a string by an another in the specified string.

## Declare Syntax :

Declare Function cStringSAR Lib "time2win.dll" (ByVal Txt As String, ByVal Search As String, ByVal Replace As String, ByVal Sensitivity As Integer) As String

## Call Syntax :

Test\$ = cStringSAR(Txt\$, Search\$, Replace\$, Sensitivity%)

## Where :

Txt\$	the string to proceed.
Search\$	the string to be searched.
Replace\$	the replacement string.
Sensitivity%	TRUE if the search must be case-sensitive, FALSE if the search is case-insensitive.
Test\$	the returned string with replacement.

## Comments :

If the search string is an EMPTY string, the returned string is the passed string.

If an error occurs when creating buffer, the returned string is the passed string.

The length of the replace string can be > or < of the search string.

The replace string can be an EMPTY string. In this case, the search string is removed from the file.

## Examples :

```
Dim Txt           As String
Dim Search        As String
Dim Replace       As String
Dim Test          As String
```

```
Txt = "TIME TO WIN, TIME TO WIN IS A DLL"
```

```
Search = "TIME TO WIN"
Replace = "TIME2WIN"
Test = cStringSAR(Txt, Search, Replace, False)
```

```
Debug.Print Test           ' "TIME2WIN, TIME2WIN IS A DLL"
```

```
Search = "TIME to WIN"
Replace = "TIME2WIN"
Test = cStringSAR(Txt, Search, Replace, True)
```

```
Debug.Print Test           ' "TIME TO WIN, TIME TO WIN IS A DLL"
```

```
Search = " TO "
Replace = "2"
Test = cStringSAR(Txt, Search, Replace, True)
```

```
Debug.Print Test           ' "TIME2WIN, TIME2WIN IS A DLL"
```

**See also :** [String](#)

## Miscellaneous : Overview

[BaseConversion](#) convert a number string (long integer) from a radix to another radix.

[Between](#) check to see if a value is between two other values.

[Combination](#) compute  $C(n,m)$  which is the number of combinations of  $n$  items, taken  $m$  at a time.

[DecrI](#) auto-decrement an integer value by 1.

[DecrL](#) auto-decrement a long value by 1.

[Fraction](#) return a value into the form of a fraction.

[IncrI](#) auto-increment an integer value by 1.

[IncrL](#) auto-increment a long value by 1.

[Max](#) return the highest value of the two VARIANT value (INTEGER or LONG).

[Min](#) return the smallest value of the two VARIANT value (INTEGER or LONG).

[SpellMoney](#) spell money value with hundredth.

[TrueBetween](#) check to see if a value is fully between two other values.

# PatternMatch

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**PatternMatch** search if a gived pattern can be found is a gived string.

## Declare Syntax :

Declare Function cPatternMatch Lib "time2win.dll" (ByVal Txt As String, ByVal Pattern As String) As Integer

## Call Syntax :

test% = cPatternMatch(Txt, Pattern)

## Where :

Txt	the string to proceed
Pattern	the pattern to match
test%	TRUE if the pattern match
	FALSE if the pattern not match

## Comments :

The char '?' is used to match a single char.  
The char '\*' is used to match a block of char.  
The matching of all chars (not '?', '\*') is case-sensitive.

## Examples :

test% = cPatternMatch("Under the blue sky, the sun lights", "**")	' is TRUE
test% = cPatternMatch("Under the blue sky, the sun lights", "**??*??*??")	' is TRUE
test% = cPatternMatch("Under the blue sky, the sun lights", "**Under**")	' is TRUE
test% = cPatternMatch("Under the blue sky, the sun lights", "**sky**")	' is TRUE
test% = cPatternMatch("Under the blue sky, the sun lights", "**lights")	' is TRUE
test% = cPatternMatch("Under the blue sky, the sun lights", "Under**")	' is TRUE
test% = cPatternMatch("Under the blue sky, the sun lights", "??der*sky*ligh??")	' is TRUE
test% = cPatternMatch("Under the blue sky, the sun lights", "Under?the * s?? **")	' is TRUE
test% = cPatternMatch("Under the blue sky, the sun lights", "**under**")	' is FALSE
test% = cPatternMatch("Under the blue sky, the sun lights", "Under*sun")	' is FALSE
test% = cPatternMatch("Under the blue sky, the sun lights", "Under t??e**")	' is FALSE

**See also :** [String](#)

# PatternExtMatch

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[PatternExtMatch](#) search if a gived pattern can be found is a gived string.

## Declare Syntax :

Declare Function cPatternExtMatch Lib "time2win.dll" (ByVal Txt As String, ByVal Pattern As String) As Integer

## Call Syntax :

test% = cPatternExtMatch(Txt, Pattern)

## Where :

Txt	the string to proceed
Pattern	the pattern to match
test%	TRUE if the pattern match, <> TRUE if the pattern not match or if an <u>error</u> has occurs

## Comments :

PatternExtMatch is a superset of PatternMatch and is a little bit faster.

The char '?' is used to match a single char.

The char '\*' is used to match a block of char.

The construct [x-y] is used to match a single char in range of chars (b.e. : [a-m], [n-z], [abcABC], [abgx-y]).

The construct [!x-y] or [^x-y] is used to match a single char not in range of chars (b.e. : [!A-Z], [^ - Z], [!abcABC], [^abgx-y]).

The hexa '~xy' is used to match a hexa char (b.e. : ~FF, ~A0, ~78, ~4, ~0A, ~0D).

The matching of all others chars is case-sensitive.

If you want to suppress the special syntactic significance of any of '[ ] \* ? ! ^ - \ ~', and match the character exactly, precede it with a '\'.

The returned value can be the following :

MATCH_HEXA	match failure on hexa char &xy
MATCH_INTERNAL_ERROR	internal error
MATCH_PATTERN	bad pattern
MATCH_LITERAL	match failure on literal match
MATCH_RANGE	match failure on [...] construct
MATCH_ABORT	premature end of text string
MATCH_END	premature end of pattern string
MATCH_VALID	valid match
PATTERN_VALID	valid pattern
PATTERN_INVALID	invalid pattern
PATTERN_ESC	literal escape at end of pattern
PATTERN_RANGE	malformed range in [...] construct
PATTERN_CLOSE	no end bracket in [...] construct
PATTERN_EMPTY	[...] contstruct is empty
PATTERN_INTERNAL_ERROR	internal error
PATTERN_MATCH	bad hexa in ~xy

## Examples :

Dim Txt	As String
---------	-----------

Txt = "Under the blue sky, the sun lights"

test% = cPatternExtMatch(Txt, "")	' is TRUE
test% = cPatternExtMatch(Txt, "**?*??*?")	' is TRUE
test% = cPatternExtMatch(Txt, "**Under*")	' is TRUE
test% = cPatternExtMatch(Txt, "**sky*")	' is TRUE
test% = cPatternExtMatch(Txt, "**lights")	' is TRUE
test% = cPatternExtMatch(Txt, "Under*")	' is TRUE
test% = cPatternExtMatch(Txt, "??der*sky*ligh??")	' is TRUE
test% = cPatternExtMatch(Txt, "Under?the * s?? **")	' is TRUE
test% = cPatternExtMatch(Txt, "[U-U][a-z][a-z][a-z][a-z]?the **")	' is TRUE
test% = cPatternExtMatch(Txt, "[U-U][!A-Z][^A-Z][^A-Z][!A-Z]?the *[s-s]")	' is TRUE
test% = cPatternExtMatch(Txt, "~55~6E*~73")	' is TRUE
test% = cPatternExtMatch(Txt, "[Uu][Nn][dD][eE][opqrst]?the *[rstu]")	' is TRUE
test% = cPatternExtMatch(Txt, "Under?the *[~72~73~74~75]")	' is TRUE
test% = cPatternExtMatch(Txt, "**under*")	' is MATCH_ABORT
test% = cPatternExtMatch(Txt, "Under*sun")	' is MATCH_ABORT
test% = cPatternExtMatch(Txt, "Under t??e*")	' is MATCH_LITERAL
test% = cPatternExtMatch(Txt, "[U-U][!a-z][^A-Z][^A-Z][!A-Z]?the *[!s-s]")	' is MATCH_RANGE
test% = cPatternExtMatch(Txt, "~55~6G*~73")	' is MATCH_HEX
test% = cPatternExtMatch(Txt, "[Uu][Nn][dD][eE][opqrst]?the *[rStu]")	' is MATCH_ABORT
test% = cPatternExtMatch(Txt, "Under?the *[~72~53~74~75]")	' is MATCH_ABORT

**See also :** [String](#)

' definition for error type for PATTERNMATCHEXT

Public Const MATCH\_HEX = 17

Public Const MATCH\_INTERNAL\_ERROR = 16

Public Const MATCH\_PATTERN = 15

Public Const MATCH\_LITERAL = 14

Public Const MATCH\_RANGE = 13

Public Const MATCH\_ABORT = 12

Public Const MATCH\_END = 11

Public Const MATCH\_VALID = -1

Public Const PATTERN\_VALID = 0

Public Const PATTERN\_INVALID = 1

Public Const PATTERN\_ESC = 2

Public Const PATTERN\_RANGE = 3

Public Const PATTERN\_CLOSE = 4

Public Const PATTERN\_EMPTY = 5

Public Const PATTERN\_INTERNAL\_ERROR = 6

Public Const PATTERN\_HEX = 7

```
' definition for error type for PROPERNAME2  
Public Const PN_UPPERCASE = 1  
Public Const PN_PUNCTUATION = 2  
Public Const PN_KEEP_ORIGINAL = 4  
Public Const PN_ONLY_LEADER_SPACE = 8
```



# CheckNumericity

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[CheckNumericity](#) check if a string is a numeric string.

## **Declare Syntax :**

Declare Function cCheckNumericity Lib "time2win.dll" (Txt As String) As Integer

## **Call Syntax :**

Test% = cCheckNumericity(Txt\$)

## **Where :**

Txt\$	is the specified string
Test%	TRUE : if the string is numeric
	FALSE : if the string is not numeric

## **Comments :**

## **Examples :**

```
Test% = cCheckNumericity("123456789")      ' TRUE
Test% = cCheckNumericity("A0B1")          ' FALSE
```

**See also :** [String](#)

# Morse

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

**Purpose :**

**Morse** convert a string to a morse string.

### Declare Syntax :

Declare Function cMorse Lib "time2win.dll" (ByVal morse As String) As String

### Call Syntax :

```
test$ = cMorse(morse$)
```

**Where :**

morse\$	is the string to proceed
test\$	is the returned string in morse

**Comments :**

Only the following chars are valid :

```
space
,-./ 0123456789?ABCDEFGHIJKLMNOPQRSTUVWXYZ
```

All other chars are filtered.

Each morse char is separated by a letter space (' ').  
Each block of char is separated by a word space('~').

These 2 chars (' ', '~') are not part of the morse coding. It will be used to facilitate the reading of the morse coding.

### Examples :

```
test$ = cMorse("SOS")           ' "___ ... ___"
test$ = cMorse("TIME TO WIN")   ' ". _.. _.. ~. ... ~ _.. _.. _."
```

**See also :** [String](#)

# Max, Min

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**Max** return the highest value of the two VARIANT value (INTEGER or LONG).

**Min** return the smallest value of the two VARIANT value (INTEGER or LONG).

## Declare Syntax :

Declare Function cMax Lib "time2win.dll" (Var1 As Variant, Var2 As Variant) As Variant

Declare Function cMin Lib "time2win.dll" (Var1 As Variant, Var2 As Variant) As Variant

## Call Syntax :

test = cMax(Var1, Var2)

test = cMin(Var1, Var2)

## Where :

Var1                the first value.

Var2                the second value.

test                the highest/smallest value of the two.

## Comments :

## Examples :

test = cMax(1234, 4321)                ' 4321

test = cMin(1234, 4321)                ' 1234

**See Also :** Miscellaneous

# IncrI, IncrL

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[IncrI](#) auto-increment an integer value by 1.

[IncrL](#) auto-increment a long value by 1.

## Declare Syntax :

Declare Sub cIncrI Lib "time2win.dll" (Value As Integer)

Declare Sub cIncrL Lib "time2win.dll" (Value As Long)

## Call Syntax :

Call cIncrI(Value%)

Call cIncrL(Value&)

## Where :

Value% is the integer value to auto-increment.

Value& is the long value to auto-increment.

## Comments :

These routines are slower than the VB equivalent : Value = Value + 1 but are shorter to type.

## Examples :

Dim Value As Integer

Value = 5

Call cIncrI(Value) ' 6

Call cIncrI(Value) ' 7

**See also :** [Miscellaneous](#)

Rnd, RndInit, RndD, RndI, RndL, RndS

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

**Purpose :**

**RndInit** initialize the random generator.

RndD return a double random number.

RndI return an integer random number.

RndL return a long random number.

**RndS** return a single random number.

**Rnd** return a double random number between 0.0 and 1.0.

### Declare Syntax :

Declare Sub cRndInit Lib "time2win.dll" (ByVal nRnd As Long)

Declare Function cRndD Lib "time2win.dll" () As Double

Declare Function cRnd1 Lib "time2win.dll" () As Integer

Declare Function cRndL Lib "time2win.dll" () As Long

```
Declare Function cRndS Lib "time2win.dll" () As Single
```

Declare Function cRnd Lib "time2win.dll" () As Double

### Call Syntax :

Call `cRndInit(nRnd&)`

Test% = cRndI()

```
Test& = cRndL()
```

Test! = cRndS()

```
Test# = cRndD()
```

Test# = cRnd()

**Where :**

nRnd < 0 : initialization with the current date and time.  
> 0 : initialization with the passed value.

Test? the returned random number.

**Comments :**

### Examples :

Call cRndInit(-1)

```
Debug.Print cRndI()      ' 316
Debug.Print cRndL()      ' 45980750
Debug.Print cRndS()      ' 1,330308E+38
Debug.Print cRndD()      ' 1,87044922807943E+304
Debug.Print cRnd()       ' 1,87044922807943E+304
```

**See Also :** Miscellaneous

# SpellMoney

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[SpellMoney](#) spell money value with hundredth.

## **Declare Syntax :**

Declare Function cSpellMoney Lib "time2win.dll" (ByVal Value As Double, ByVal Units As String, ByVal Cents As String) As String

## **Call Syntax :**

Test\$ = cSpellMoney(Value#, Units\$, Cents\$)

## **Where :**

Value#	is the money value to spell.
Units\$	is the text string for units part.
Cents\$	is the text string for cents part.
Test\$	is the returned spelled money value.

## **Comments :**

## **Examples :**

Test\$ = cSpellMoney("98765.43", "dollars", "cents")

SpellMoney of '4.12' is 'Four dollars and Twelve cents'

SpellMoney of '16' is 'Sixteen dollars'

SpellMoney of '25' is 'Twenty-Five dollars'

SpellMoney of '34' is 'Thirty-Four dollars'

SpellMoney of '43' is 'Forty-Three dollars'

SpellMoney of '61' is 'Sixty-One dollars'

SpellMoney of '98765.43' is 'Ninety-Eight Thousand Seven Hundred Sixty-Five dollars and Forty-Three cents'

SpellMoney of '123456789.75' is 'One Hundred Twenty-Three Million Four Hundred Fifty-Six Thousand Seven Hundred Eighty-Nine dollars and Seventy-Five cents'

**See also :** [Miscellaneous](#)

# Fraction

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[Fraction](#) return a value into the form of a fraction.

## Declare Syntax :

Declare Function cFraction Lib "[time2win.dll](#)" (ByVal nValue As Double, nNumerator As Double, nDenominator As Double) As Double

## Call Syntax :

Test# = cFraction(Value#, Numerator#, Denominator#)

## Where :

Value#	is the value to proceed.
Numerator#	is the returned numerator.
Denominator#	is the returned denominator.
Test#	is the returned value (Numerator# / Denominator#).

## Comments :

## Examples :

```
Dim Value           As Double
Dim Numerator       As Double
Dim Denominator As Double
Dim CalculatedValue As Double
```

```
Value = 0.75
CalculatedValue = cFraction(Value, Numerator, Denominator)
```

```
' Numerator = 3
' Denominator = 4
' CalculatedValue = 0.75
```

```
Value = 3.14159265
CalculatedValue = cFraction(Value, Numerator, Denominator)
```

```
' Numerator = 3017882801
' Denominator = 960621932
' CalculatedValue = 3,14159265
```

**See also :** [Miscellaneous](#)

# Between, TrueBetween

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[Between](#) check to see if a value is between two other values.

[TrueBetween](#) check to see if a value is fully between two other values.

## Declare Syntax :

Declare Function cBetween Lib "[time2win.dll](#)" (Var As Variant, Var1 As Variant, Var2 As Variant) As Integer

Declare Function cTrueBetween Lib "[time2win.dll](#)" (Var As Variant, Var1 As Variant, Var2 As Variant) As Integer

## Call Syntax :

test = cBetween(var, var1, var2)

## Where :

var	value to test
var1	first value
var2	second value
test	TRUE if var is between/fully between var1 and var2
	FALSE if var is not between/fully between var1 and var2

## Comments :

var, var1, var2 are Variant value.

In this routine, only Integer, Long, Single, Double are supported.

## Examples :

```
var = 5
var1 = 1
var2 = 10
test = cBetween(var, var1, var2)      ' test = TRUE
test = cTrueBetween(var, var1, var2)  ' test = TRUE

var = 10
test = cBetween(var, var1, var2)      ' test = TRUE
test = cTrueBetween(var, var1, var2)  ' test = FALSE
```

**See Also :** [Miscellaneous](#)



# Type : Overview

[TypesCompare](#)  
[CompareTypeString](#)  
[CompareStringType](#)

compare two Type'd variable.  
compare a Type'd to a String.  
compare a String to a Type'd.

[TypeClear](#)  
[TypeMid](#)

clear a Type'd variable.  
extract information from a Type'd variable.

[TypesCopy](#)  
[TypeTransfert](#)

copy a Type'd variable into a variable.  
transfer a Type'd variable into a String.

[StringToType](#)  
[TypeToString](#)

copy a String to a Type'd variable.  
copy a Type'd variable to a String.

# Type.X

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[TypesCompare](#) compare two Type'd variable.

[CompareTypeString](#) compare a Type'd to a String.

[CompareStringType](#) compare a String to a Type'd.

[TypeClear](#) clear a Type'd variable.

[TypeMid](#) extract information from a Type'd variable.

[TypesCopy](#) copy a Type'd variable into a variable.

[TypeTransfert](#) transfer a Type'd variable into a String.

[StringToType](#) copy a String to a Type'd variable.

[TypeToString](#) copy a Type'd variable to a String.

## Declare Syntax :

```
Declare Function cTypesCompare Lib "time2win.dll" (Type1 As Any, Type2 As Any, ByVal lenType1 As Integer) As Integer
```

```
Declare Function cCompareTypeString Lib "time2win.dll" Alias "cTypesCompare" (TypeSrc As Any, ByVal Dst As String, ByVal lenTypeSrc As Integer) As Integer
```

```
Declare Function cCompareStringType Lib "time2win.dll" Alias "cTypesCompare" (ByVal Src As String, TypeDst As Any, ByVal lenTypeSrc As Integer) As Integer
```

```
Declare Sub cTypeClear Lib "time2win.dll" (TypeSrc As Any, ByVal lenTypeSrc As Integer)
```

```
Declare Function cTypeMid Lib "time2win.dll" (TypeSrc As Any, ByVal Offset As Integer, ByVal Length As Integer) As String
```

```
Declare Sub cTypesCopy Lib "time2win.dll" (TypeSrc As Any, TypeDst As Any, ByVal lenTypeSrc As Integer)
```

```
Declare Function cTypeTransfert Lib "time2win.dll" (TypeSrc As Any, ByVal lenTypeSrc As Integer) As String
```

```
Declare Sub cStringToType Lib "time2win.dll" Alias "cTypesCopy" (ByVal Src As String, TypeDst As Any, ByVal lenTypeSrc As Integer)
```

```
Declare Sub cTypeToString Lib "time2win.dll" Alias "cTypesCopy" (TypeSrc As Any, ByVal Dst As String, ByVal lenTypeSrc As Integer)
```

## Call Syntax :

```
test% = cTypesCompare(Type1, Type2, len(Type1))
```

```
test% = cCompareTypeString(TypeSrc, Dst, len(TypeSrc))
```

```
test% = cCompareStringType(Src, TypeDst, len(TypeDst))
```

```
Call cTypeClear(TypeSrc, len(TypeSrc))
```

```
test$ = cTypeMid(TypeSrc, Offset, Length)
```

```
Call cTypesCopy(TypeSrc, TypeDst, len(TypeSrc))
```

```
test$ = cTypeTransfert(TypeSrc, len(TypeSrc))
```

```
Call cStringToType(Src, TypeDst, len(TypeDst))
```

```
Call cTypeToString(TypeSrc, Dst, len(TypeSrc))
```

## Where :

Type1, Type2, TypeSrc, TypeDst

the Type'd variable

Src, Dst,

the String variable

Offset

the offset in the Type'd variable

Length

the length in the Type'd variable

test%	TRUE if the variables to compare are the same
test\$	FALSE if the variables to compare are not the same
	the result

**Comments :**

Only Type'd variable mixed with INTEGER, LONG, SINGLE, DOUBLE, CURRENCY and FIXED STRING can be used.

When you compare 2 Type'd variables or 1 Type'd variable and 1 string, the size of each variable must be same.  
When you copy 1 Type'd variable into a string or a string into Type'd variable, the size of each variable must be same.

**Examples :**

**See also :** Type

# BaseConversion

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[BaseConversion](#) convert a number string (long integer) from a radix to another radix.

## Declare Syntax :

Declare Function cBaseConversion Lib "time2win.dll" (ByVal Num As String, ByVal RadixIn As Integer, ByVal RadixOut As Integer) As String

## Call Syntax :

test\$ = cBaseConversion(Num\$, RadixIn%, RadixOut%)

## Where :

Num\$	is the number string to convert
RadixIn%	is the base of the radix
RadixOut%	is the new base of the radix
test\$	is the result

## Comments :

If the number string can be converted, the returned string is an EMPTY string.

## Examples :

Convert '1234567' base 10 to base 2 is 100101101011010000111  
Convert '1234567' base 10 to base 3 is 2022201111201  
Convert '1234567' base 10 to base 4 is 10231122013  
Convert '1234567' base 10 to base 5 is 304001232  
Convert '1234567' base 10 to base 6 is 42243331  
Convert '1234567' base 10 to base 7 is 13331215  
Convert '1234567' base 10 to base 8 is 4553207  
Convert '1234567' base 10 to base 9 is 2281451  
Convert '1234567' base 10 to base 10 is 1234567  
Convert '1234567' base 10 to base 11 is 773604  
Convert '1234567' base 10 to base 12 is 4b6547  
Convert '1234567' base 10 to base 13 is 342c19  
Convert '1234567' base 10 to base 14 is 241cb5  
Convert '1234567' base 10 to base 15 is 195be7  
Convert '1234567' base 10 to base 16 is 12d687  
Convert '1234567' base 10 to base 17 is ed4ea  
Convert '1234567' base 10 to base 18 is bdc71  
Convert '1234567' base 10 to base 19 is 98ig4  
Convert '1234567' base 10 to base 20 is 7e687

**See also :** [Miscellaneous](#)

# DBFileCopy, PBFileCopy

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**PBFileCopy** copy a file to an another file and display a progress bar a client standard control.

**DBFileCopy** copy a file to an another file and display a dialog box with title, captions, progress bar and cancel button

## Declare Syntax :

Declare Function cPBFileCopy Lib "time2win.dll" (ByVal hWndParent As Long, ByVal FileNameIn As String, ByVal FileNameOut As String) As Integer

Declare Function cDBFileCopy Lib "time2win.dll" (ByVal Title As String, ByVal CaptionFrom As String, ByVal CaptionTo As String, ByVal CaptionButton As String, ByVal FileNameIn As String, ByVal FileNameOut As String) As Integer

## Call Syntax :

intResult% = cPBFileCopy(hWndParent&, FileNameIn\$, FileNameOut\$)

intResult% = cDBFileCopy(Title\$, CaptionFrom\$, CaptionTo\$, CaptionButton\$, FileNameIn\$, FileNameOut\$)

## Where :

hWndParent&	is the .hWnd of the standard control or of the form.
FileNameIn\$	is the file to be copied.
FileNameOut\$	is the file copied.

Title\$	is the title of the dialog box.
CaptionFrom\$	is the caption for the file to be copied.
CaptionTo\$	is the caption for the file copied.
CaptionButton\$	is the caption for the 'cancel' button.

intResult%	= TRUE : no error
	= FALSE : an error has occurred

## Comments :

## Examples :

For cPBFileCopy :

```
Dim intResult      As Long
Dim strResult      As String
Dim strDisplay As String
```

```
Dim i              As Long
```

```
Dim File1          As String
Dim File2          As String
```

```
strResult = ""
strDisplay = ""
```

```
File1 = cGetWindowsDirectory() + "\" + "system.dat"
File2 = "system.pbcopy"
```

```
strDisplay = strDisplay & "PB File Copy " & File1 & " to " & File2 & " is " & cPBFileCopy(Me.hWnd, File1, File2) & vbCrLf & vbCrLf
```

```
Debug.Print strDisplay
```

For cDBFileCopy :

```
Dim intResult      As Long
Dim strResult      As String
Dim strDisplay As String
```

```
Dim i              As Long
```

```
Dim File1          As String
Dim File2          As String
```

```
strResult = ""
strDisplay = ""
```

```
File1 = cGetWindowsDirectory() + "\" + "system.dat"
File2 = "system.dbcopy"
```

```
strDisplay = strDisplay & "DB File Copy " & File1 & " to " & File2 & " is " & cDBFileCopy("", "", "", "", File1, File2) &
vbCrLf & vbCrLf
```

```
File1 = cGetWindowsDirectory() + "\" + "command.com"
File2 = "command.dbcopy"
```

```
strDisplay = strDisplay & "DB File Copy " & File1 & " to " & File2 & " is " & cDBFileCopy("", "", "", "", File1, File2) &
vbCrLf & vbCrLf
```

```
Debug.Print strDisplay
```

**See also :** [Windows 95](#)

# Combination

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**Combination** compute  $C(n,m)$  which is the number of combinations of  $n$  items, taken  $m$  at a time.

## Declare Syntax :

Declare Function cCombination Lib "time2win.dll" (ByVal nItems As Integer, ByVal mTimes As Integer) As Double

## Call Syntax :

Test# = cCombination(nItems%, mTimes%)

## Where :

nItems	the number of items.
mTimes%	the number taken.
Test#	the result.

## Comments :

If nItems is below 0 or if mTimes is not between 0 and nItems, the result is -1.  
Beware of using too big nItems and/or mTimes, this gives an overflow.

## Examples :

Debug.Print cCombination(42, 0)	' 1
Debug.Print cCombination(42, 1)	' 42
Debug.Print cCombination(42, 2)	' 861
Debug.Print cCombination(42, 42)	' 1
Debug.Print cCombination(42, 41)	' 42
Debug.Print cCombination(42, 40)	' 861

**See also :** Miscellaneous

# Windows 95 : Overview

[DBFileCopy](#)

cancel button.

[MemoryStatus](#)

[PBFileCopy](#)

[TaskBarAddIcon](#)

[TaskBarDeleteIcon](#)

[TaskBarModifyIcon](#)

copy a file to an another file and display a dialog box with title, captions, progress bar and

retrieve the actual state of the memory.

copy a file to an another file and display a progress bar a client standard control.

add an icon for an application in the tray of the task bar.

delete the tray icon from an application in the task bar.

modify an icon for an application in the tray of the task bar.



# GetRegistry, KillRegistry, PutRegistry

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetRegistry](#) return a key setting value from an application's Windows registry entry.

[KillRegistry](#) delete a section or key setting from the Windows registry entry.

[PutRegistry](#) save or create an application entry in the Windows registry entry.

## Declare Syntax :

```
Declare Function cGetRegistry Lib "time2win.dll" (ByVal IpSection As String, ByVal IpKey As String, ByVal IpDefault As String) As String
Declare Function cPutRegistry Lib "time2win.dll" (ByVal IpSection As String, ByVal IpKey As String, ByVal IpValue As String) As Integer
Declare Function cKillRegistry Lib "time2win.dll" (ByVal IpSection As String, ByVal IpKey As String) As Integer
```

## Call Syntax :

```
retCode% = cPutRegistry(IpSection$, IpKey$, IpValue$)
retData$ = cGetRegistry(IpSection$, IpKey$, IpDefault$)
retCode% = cKillRegistry(IpSections$, IpKey$)
```

## Where :

IpSection\$        string expression containing the name of the section where the key setting is being saved.  
IpKey\$            string expression containing the name of the key setting being saved.  
IpValue\$ string expression containing the value that key is being set to.  
IpDefault\$        a string that specifies the default value for the given entry if the entry cannot be found in the specified section.  
retCode%          error/success code.

## Comments :

## Examples :

```
Debug.Print cPutRegistry("under the fox", "", "no key")           ' -1
(RK_NO_ERROR)
Debug.Print cPutRegistry("under the fox", "key1", "test key1")    ' -1
(RK_NO_ERROR)
Debug.Print cPutRegistry("under the fox", "key2", "test key2")    ' -1
(RK_NO_ERROR)
Debug.Print cPutRegistry("under the fox\time2win", "ID", "25")    ' -1
(RK_NO_ERROR)
Debug.Print cPutRegistry("under the fox\time2win", "Name", "MR")  ' -1
(RK_NO_ERROR)
Debug.Print cPutRegistry("under the fox\time2win", "", "license") ' -1
(RK_NO_ERROR)

Debug.Print cPutRegistry("software\The MCR Company\TIME TO WIN for VB 4.0", "", "Code name") ' -1
(RK_NO_ERROR)
Debug.Print cPutRegistry("software\The MCR Company\TIME TO WIN for VB 4.0", "Name", "James") ' -1
(RK_NO_ERROR)
Debug.Print cPutRegistry("software\The MCR Company\TIME TO WIN for VB 4.0", "Id", "Donb")    ' -1
(RK_NO_ERROR)
Debug.Print cPutRegistry("software\The MCR Company\TIME TO WIN for VB 4.0", "N°", "007")     ' -1
(RK_NO_ERROR)
```

Debug.Print cGetRegistry("software\The MCR Company\TIME TO WIN for VB 4.0", "", "?1")	' Code
name	
Debug.Print cGetRegistry("software\The MCR Company\TIME TO WIN for VB 4.0", "RegName", "?2")	' James
Debug.Print cGetRegistry("software\The MCR Company\TIME TO WIN for VB 4.0", "RegId", "?3")	' Donb
Debug.Print cGetRegistry("software\The MCR Company\TIME TO WIN for VB 4.0", "RegN°", "?4")	' 007
Debug.Print cKillRegistry("under the fox", "")	' -1
Debug.Print cKillRegistry("software\The MCR Company", "")	' -1

**See also :** [Registry key](#)

' structure for windows 95 memory

Type tagMEMORYSTATUS

dwLength	As Long	' sizeof(MEMORYSTATUS)
dwMemoryLoad	As Long	' percent of memory in use
dwTotalPhys	As Long	' bytes of physical memory
dwAvailPhys	As Long	' free physical memory bytes
dwTotalPageFile	As Long	' bytes of paging file
dwAvailPageFile	As Long	' free bytes of paging file
dwTotalVirtual	As Long	' user bytes of address space
dwAvailVirtual	As Long	' free user bytes

End Type

```
Public Const RK_NO_ERROR = -1
Public Const RK_KEY_IS_EMPTY = 1
Public Const RK_UNABLE_TO_CREATE_KEY = 2
Public Const RK_UNABLE_TO_OPEN_KEY = 3
Public Const RK_UNKNOWN_DISPOSITION = 4
Public Const RK_CANNOT_SET_THE_VALUE = 5
Public Const RK_UNABLE_TO_QUERY_KEY = 6
```

# MemoryStatus

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**MemoryStatus** retrieve the actual state of the memory.

## Declare Syntax :

Declare Sub cMemoryStatus Lib "time2win.dll" (MEMORYSTATUS As tagMEMORYSTATUS)

## Call Syntax :

Call cMemoryStatus(MEMORYSTATUS)

## Where :

MEMORYSTATUS is the type'd variable to receive the actual memory status.

## Comments :

MEMORYSTATUS.dwMemoryLoad :

Specifies a number between 0 and 100 that gives a general idea of current memory utilization, in which 0 indicates no memory use and 100 indicates full memory use.

MEMORYSTATUS.dwTotalPhys :

Indicates the total number of bytes of physical memory.

MEMORYSTATUS.dwAvailPhys :

Indicates the number of bytes of physical memory available.

MEMORYSTATUS.dwTotalPageFile :

Indicates the total number of bytes that can be stored in the paging file. Note that this number does not represent the actual physical size of the paging file on disk.

MEMORYSTATUS.dwAvailPageFile :

Indicates the number of bytes available in the paging file.

MEMORYSTATUS.dwTotalVirtual :

Indicates the total number of bytes that can be described in the user mode portion of the virtual address space of the calling process.

MEMORYSTATUS.dwAvailVirtual :

Indicates the number of bytes of unreserved and uncommitted memory in the user mode portion of the virtual address space of the calling process.

## Examples :

Dim strDisplay As String

Dim MSS                      As tagMEMORYSTATUS

strDisplay = ""

Call cMemoryStatus(MSS)

```
strDisplay = strDisplay & "dwMemoryLoad = " & MSS.dwMemoryLoad & vbCrLf
strDisplay = strDisplay & "dwTotalPhys = " & MSS.dwTotalPhys & vbCrLf
strDisplay = strDisplay & "dwAvailPhys = " & MSS.dwAvailPhys & vbCrLf
strDisplay = strDisplay & "dwTotalPageFile = " & MSS.dwTotalPageFile & vbCrLf
strDisplay = strDisplay & "dwAvailPageFile = " & MSS.dwAvailPageFile & vbCrLf
strDisplay = strDisplay & "dwTotalVirtual = " & MSS.dwTotalVirtual & vbCrLf
strDisplay = strDisplay & "dwAvailVirtual = " & MSS.dwAvailVirtual & vbCrLf
```

Debug.Print strDisplay

**See also :** [Windows 95](#)

## Swap : Overview

[SwapD](#)

swap two Double values.

[SwapI](#)

swap two Integer values.

[SwapL](#)

swap two Long values.

[SwapS](#)

swap two Single values.

[SwapStr](#)

swap two strings.

# Matrix : Overview

<a href="#"><u>MatrixAdd</u></a>	add two square matrix.
<a href="#"><u>MatrixCoFactor</u></a>	calculate the CoFactor of an element in a square matrix.
<a href="#"><u>MatrixCompare</u></a>	compare two square matrix.
<a href="#"><u>MatrixCopy</u></a>	copy a square matrix.
<a href="#"><u>MatrixDet</u></a>	calculate the Determinant of a square matrix.
<a href="#"><u>MatrixFill</u></a>	fill a square matrix (matrix zero, matrix unit).
<a href="#"><u>MatrixInv</u></a>	invert a square matrix (determinant can't be nul).
<a href="#"><u>MatrixMinor</u></a>	calculate the Minor of an element in a square matrix.
<a href="#"><u>MatrixMul</u></a>	multiply two square matrix.
<a href="#"><u>MatrixSub</u></a>	substract two square matrix.
<a href="#"><u>MatrixSymToeplitz</u></a>	create a symmetrical Toeplitz matrix.
<a href="#"><u>MatrixTranspose</u></a>	transpose a square matrix.



## Random : Overview

<a href="#"><u>Rnd</u></a>	return a double random number between 0.0 and 1.0.
<a href="#"><u>RndD</u></a>	return a double random number.
<a href="#"><u>RndI</u></a>	return an integer random number.
<a href="#"><u>RndInit</u></a>	initialize the random generator.
<a href="#"><u>RndL</u></a>	return a long random number.
<a href="#"><u>RndS</u></a>	return a single random number.

# Matrix

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[MatrixAdd](#) add two square matrix.

[MatrixCoFactor](#) calculate the CoFactor of an element in a square matrix.

[MatrixCompare](#) compare two square matrix.

[MatrixCopy](#) copy a square matrix.

[MatrixDet](#) calculate the Determinant of a square matrix.

[MatrixFill](#) fill a square matrix (matrix zero, matrix unit).

[MatrixInv](#) invert a square matrix (determinant can't be nul).

[MatrixMinor](#) calculate the Minor of an element in a square matrix.

[MatrixMul](#) multiply two square matrix.

[MatrixSub](#) subtract two square matrix.

[MatrixSymToeplitz](#) create a symmetrical Toeplitz matrix.

[MatrixTranspose](#) transpose a square matrix.

## Declare Syntax :

```
Declare Sub cMatrixAdd Lib "time2win.dll" (ByVal Size As Integer, ArrayA() As Double, ArrayB() As Double, ArrayC()  
As Double)  
Declare Function cMatrixCoFactor Lib "time2win.dll" (ByVal Size As Integer, ArrayA() As Double, ByVal Row As  
Integer, ByVal Col As Integer) As Double  
Declare Function cMatrixCompare Lib "time2win.dll" (ByVal Size As Integer, ArrayA() As Double, ArrayC() As Double)  
As Integer  
Declare Sub cMatrixCopy Lib "time2win.dll" (ByVal Size As Integer, ArrayA() As Double, ArrayC() As Double)  
Declare Function cMatrixDet Lib "time2win.dll" (ByVal Size As Integer, ArrayA() As Double) As Double  
Declare Function cMatrixFill Lib "time2win.dll" (ByVal Size As Integer, ArrayA() As Double, ByVal nInit As Integer) As  
Integer  
Declare Function cMatrixInv Lib "time2win.dll" (ByVal Size As Integer, ArrayA() As Double, ArrayC() As Double) As  
Integer  
Declare Function cMatrixMinor Lib "time2win.dll" (ByVal Size As Integer, ArrayA() As Double, ByVal Row As Integer,  
ByVal Col As Integer) As Double  
Declare Sub cMatrixMul Lib "time2win.dll" (ByVal Size As Integer, ArrayA() As Double, ArrayB() As Double, ArrayC()  
As Double)  
Declare Sub cMatrixSub Lib "time2win.dll" (ByVal Size As Integer, ArrayA() As Double, ArrayB() As Double, ArrayC()  
As Double)  
Declare Function cMatrixSymToeplitz Lib "time2win.dll" (ByVal Size As Integer, ArrayA() As Double, ArrayC() As  
Double) As Integer  
Declare Sub cMatrixTranspose Lib "time2win.dll" (ByVal Size As Integer, ArrayA() As Double, ArrayC() As Double)
```

## Call Syntax :

```
Call cMatrixAdd(Size%, ArrayA(), ArrayB(), ArrayC())  
Test# = cMatrixCoFactor(Size%, ArrayA(), Row, Col)  
Test% = cMatrixCompare(Size%, ArrayA(), ArrayC())  
Call cMatrixCopy(Size%, ArrayA(), ArrayC())  
Test# = cMatrixDet(Size%, ArrayA())  
Test% = cMatrixFill(Size%, ArrayA(), nInit%)  
Test% = cMatrixInv(Size%, ArrayA(), ArrayC())  
Test# = cMatrixMinor(Size%, ArrayA(), Row, Col)  
Call cMatrixMul(Size%, ArrayA(), ArrayB(), ArrayC())  
Call cMatrixSub(Size%, ArrayA(), ArrayB(), ArrayC())  
Test% = cMatrixSymToeplitz(Size%, ArrayA(), ArrayC())  
Call cMatrixTranspose(Size%, ArrayA(), ArrayB(), ArrayC())
```

## Where :

Size%                    is the size for the matrixes.

ArrayA()	is the first square matrix (only double value).
ArrayB()	is the second square matrix (only double value).
ArrayC()	is the result square matrix (only double value).
nInit%	MATRIX_ZERO or MATRIX_UNIT.
Test%	= True, matrixes are the same, = False, matrixes are not the same.

**Comments :**

These matrixes functions doesn't check if the matrix is really square and if the size is ok.  
All matrixes must be the same square (N x N).

**Examples :**

See the demo file.

**See also :**

# File : Overview

<a href="#"><u>AllSubDirectories</u></a>	retrieve all sub-directories from a specified directory (root or sub-directory).
<a href="#"><u>ChDir</u></a>	change the directory.
<a href="#"><u>ChDrive</u></a>	change the drive.
<a href="#"><u>CmpFileAttribute</u></a>	compare the attribute of two files.
<a href="#"><u>CmpFileContents</u></a>	compare the contents of two files.
<a href="#"><u>CmpFileSize</u></a>	compare the size of two files.
<a href="#"><u>CmpFileTime</u></a>	compare the date and time of two files.
<a href="#"><u>CountDirectories</u></a>	count the total directory in a specified directory.
<a href="#"><u>CountFiles</u></a>	count the total files founded in a specified directory.
<a href="#"><u>EnumOpenFiles</u></a>	enumerate all open files and/or all unmovable open files.
<a href="#"><u>FileChangeChars</u></a>	replace all chars in a char set by a new char set.
<a href="#"><u>FileCompressTab</u></a>	compress a number of spaces specified into a TAB char (horizontal tab).
<a href="#"><u>FileExpandTab</u></a>	expand a TAB char (horizontal tab) into a number of spaces.
<a href="#"><u>FileCopy</u></a>	copy one file to an another file.
<a href="#"><u>FileCopy2</u></a>	copy one file to an another file.
<a href="#"><u>FileDateCreated</u></a>	retrieve the date when the file has been created.
<a href="#"><u>FileLastDateAccess</u></a>	retrieve the date when the file has been last accessed.
<a href="#"><u>FileLastDateModified</u></a>	retrieve the date when the file has been last modified.
<a href="#"><u>FileTimeCreated</u></a>	retrieve the time when the file has been created.
<a href="#"><u>FileLastTimeAccess</u></a>	retrieve the time when the file has been last accessed.
<a href="#"><u>FileLastTimeModified</u></a>	retrieve the time when the file has been last modified.
<a href="#"><u>FileDrive</u></a>	extract the drive on which the file is present.
<a href="#"><u>FileFilter</u></a>	copy one file to an another file but filters some chars.
<a href="#"><u>FileFilterNot</u></a>	copy one file to an another file but filters chars not present in the filter.
<a href="#"><u>FileGetAttrib</u></a>	retrieves in one call, all attributes of a file.
<a href="#"><u>FileLineCount</u></a>	count the total number of lines in an ASCII file.
<a href="#"><u>FileMerge</u></a>	merge two files in one.
<a href="#"><u>FileMove</u></a>	move/rename a file in the same or in an another directory.
<a href="#"><u>FilePathExists</u></a>	verify if the specified file is present.
<a href="#"><u>FileResetAllAttrib</u></a>	reset all attributes of a file.
<a href="#"><u>FileResetArchive</u></a>	reset the archive attribute of a file.
<a href="#"><u>FileResetHidden</u></a>	reset the hidden attribute of a file.
<a href="#"><u>FileResetReadOnly</u></a>	reset the read-only attribute of a file.
<a href="#"><u>FileResetSystem</u></a>	reset the system attribute of a file.
<a href="#"><u>FileResetFlag</u></a>	reset the specified attributes of a file.
<a href="#"><u>FileSearch</u></a>	search a string in a gived TEXT file.
<a href="#"><u>FileSearchCount</u></a>	count the occurrence of a string in a gived TEXT file.
<a href="#"><u>FileSearchAndReplace</u></a>	search and replace a string by an another in the specified TEXT file.
<a href="#"><u>FileSetAllAttrib</u></a>	set all attributes of a file.
<a href="#"><u>FileSetArchive</u></a>	set the archive attribute of a file.
<a href="#"><u>FileSetHidden</u></a>	set the hidden attribute of a file.
<a href="#"><u>FileSetReadOnly</u></a>	set the read-only attribute of a file.
<a href="#"><u>FileSetSystem</u></a>	set the system attribute of a file.
<a href="#"><u>FileSetFlag</u></a>	set the specified attributes of a file.
<a href="#"><u>FileSetAttrib</u></a>	set in one call, attributes of a gived file.
<a href="#"><u>FilesInDirectory</u></a>	retrieve each file in the specified directory.
<a href="#"><u>FilesInDirOnDisk</u></a>	write all files from a specified directory into a file on disk.
<a href="#"><u>FilesInDirToArray</u></a>	read all files from a specified directory into an array.
<a href="#"><u>FilesInfoInDir</u></a>	retrieve each file in the specified directory and returns name, size, scalar date, scalar time, attribute.
<a href="#"><u>FileSize</u></a>	return the size of the specified file.
<a href="#"><u>FileSort</u></a>	sort an ASCII file or a BINARY file in ascending or descending order with case sensitive or not.
<a href="#"><u>FilesSize</u></a>	return the logical size of all files specified by file mask.
<a href="#"><u>FilesSizeOnDisk</u></a>	return the physical size of all files specified by file mask.
<a href="#"><u>FilesSlack</u></a>	return in one call, the slack from all files specified by file mask, the logical size and the physical size.
<a href="#"><u>FileStatistics</u></a>	count the lines, words and chars in a specified file.
<a href="#"><u>FileToLower</u></a>	convert a file to a file with lower case.
<a href="#"><u>FileToUpper</u></a>	convert a file to a file with upper case.

<a href="#"><u>FullPath</u></a>	convert a partial path stored in path to a fully qualified path.
<a href="#"><u>GetDiskFree</u></a>	retrieve the free disk space of a disk (hard disk or floppy disk).
<a href="#"><u>GetDiskSpace</u></a>	retrieve the size of a disk (hard disk or floppy disk).
<a href="#"><u>GetDiskUsed</u></a>	retrieve the part used of a disk (hard disk or floppy disk).
<a href="#"><u>GetDiskClusterSize</u></a>	retrieve the size of a cluster on a disk (hard disk or floppy disk).
<a href="#"><u>GetDriveType</u></a>	determine whether a disk drive is removable, fixed, or remote.
<a href="#"><u>KillDir</u></a>	delete the specified empty directory.
<a href="#"><u>KillDirs</u></a>	delete the specified directory and its associated directories.
<a href="#"><u>KillDirFilesAll</u></a>	delete all files specified by a mask in the specified directory and its associated sub-dir.
<a href="#"><u>KillFile</u></a>	delete the specified filename.
<a href="#"><u>KillFileAll</u></a>	delete the specified filename with any attribute.
<a href="#"><u>KillFiles</u></a>	delete all files specified by a file mask.
<a href="#"><u>KillFilesAll</u></a>	delete all files specified by a file mask even if some files are READ-ONLY files.
<a href="#"><u>MakeDir</u></a>	create the specified directory.
<a href="#"><u>MakeMultipleDir</u></a>	create a multiple directory in one call.
<a href="#"><u>MakePath</u></a>	create a single path, composed of a drive letter, directory path, filename, and filename extension.
<a href="#"><u>RcsCountFileDir</u></a>	count the total directories or files in a specified directory (with recursivity or not).
<a href="#"><u>RcsFilesSize</u></a>	return the logical size of files by file mask in a specified directory (with recursivity or not).
<a href="#"><u>RcsFilesSizeOnDisk</u></a>	return the physical size of files by file mask in a specified directory (with recursivity or not).
<a href="#"><u>RcsFilesSlack</u></a>	return, in one call, the slack from files, the logical size and the physical size (with recursivity or not).
<a href="#"><u>RenameFile</u></a>	rename a file or moves a file from one path to an other path.
<a href="#"><u>SearchFile</u></a>	perform a file match starting with a specified path.
<a href="#"><u>SplitPath</u></a>	break a full path into its four components.
<a href="#"><u>SubDirectory</u></a>	retrieve all sub-directories from the specified mask.
<a href="#"><u>TruncatePath</u></a>	truncate a long path with filename.
<a href="#"><u>UniqueFileName</u></a>	create a unique filename by modifying a gived template argument.

# AllSubDirectories

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[AllSubDirectories](#) retrieve all sub-directories from a specified directory (root or sub-directory).

## Declare Syntax :

Declare Function cAllSubDirectories Lib "time2win.dll" (ByVal lpBaseDirectory As String, nDir As Integer) As String

## Call Syntax :

test\$ = AllSubDirectories(lpBaseDirectory, nDir)

## Where :

lpBaseDirectory\$	is the specified directory
nDir%	< 0 if an error has occurred, > 0 the number of directories founded
test\$	return the directories in one string. Each directory is separated by a CR.

## Comments :

Don't forget that this function can handle a maximum of 700 directories of 70 chars long each.  
The returned string is always automatically sorted in ascending order.

The returned value in 'nDir' can be negative and have the following value :

-32760	allocation error for memory buffer 1.
-32761	allocation error for memory buffer 2.

## Examples :

test = cAllSubDirectories("C:",nDir)

**See also :** [File](#)

# ChDir

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ChDir](#) change the directory.

## Declare Syntax :

Declare Function cChDir Lib "time2win.dll" (ByVal lpDir As String) As Integer

## Call Syntax :

status = cChDir(lpDir)

## Where :

lpDir	is the new directory
status	TRUE is all is OK
	<> TRUE is an error occurs

## Comments :

This fonction is the same that ChDir but doesn't generate an VB Error if a problem occurs.

**See also :** [File](#)

# ChDrive

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[ChDrive](#) change the drive.

## **Declare Syntax :**

Declare Function cChDrive Lib "[time2win.dll](#)" (ByVal lpDrive As String) As Integer

## **Call Syntax :**

status = cChDrive(lpDrive)

## **Where :**

lpDrive	is the new drive
status	TRUE is all is OK
	<> TRUE is an error occurs

## **Comments :**

This fonction is the same that ChDrive but doesn't generate an Error if a problem occurs.

**See also :** [File](#)



# FileCompressTab, FileExpandTab

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileCompressTab](#) compress a number of spaces specified into a TAB char (horizontal tab).

[FileExpandTab](#) expand a TAB char (horizontal tab) into a number of spaces.

## Declare Syntax :

Declare Function cFileCompressTab Lib "time2win.dll" (ByVal file1 As String, ByVal file2 As String, ByVal nTab As Integer) As Long

Declare Function cFileExpandTab Lib "time2win.dll" (ByVal file1 As String, ByVal file2 As String, ByVal nTab As Integer) As Long

## Call Syntax :

test& = cFileCompressTab(file1, file2, nTab)

test& = cFileExpandTab(file1, file2, nTab)

## Where :

file1\$	is the source file.
file2\$	is the destination file.
nTab%	is the number of spaces corresponding to a TAB char (horizontal tab).
test&	> 0 if all is OK (the returned value is the total bytes copied), < 0 if an error has occurred.

## Comments :

The number of spaces to compress/expand a TAB must be 2 minimum.

Beware of the fact, that if the original file you want to compress spaces contains embedded TAB char, the expanded file is bigger than the original file.

The returned value can be negative and have the following value :

-1	number of spaces is below 2.
-2	overflow error in the expanding buffer for FileExpandTab.
-32720	the number of chars in a block for writing differs from the number of chars for reading.
-32730	reading error for file 1.
-32740	writing error for file 2.
-32750	opening error for file 1.
-32751	opening error for file 2.
-32760	allocation error for memory buffer 1.
-32761	allocation error for memory buffer 2.

## Examples :

test& = cFileCompressTab("c:\autoexec.bat", "c:\autoexec.tb1", 3)

test& = cFileExpandTab("c:\autoexec.tb1", "c:\autoexec.tb2", 3)

**See also :** [File](#)

# FileCopy

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileCopy](#) copy one file to an another file.

## Declare Syntax :

Declare Function cFileCopy Lib "[time2win.dll](#)" (ByVal file1 As String, ByVal file2 As String) As Long

## Call Syntax :

test& = cFileCopy(file1, file2)

## Where :

file1\$	is the source file.
file2\$	is the destination file.
test&	> 0 if all is OK (the returned value is the total bytes copied), < 0 if an error has occurred.

## Comments :

The returned value can be negative and have the following value :

-32720	the number of chars in a block for writing differs from the number of chars for reading.
-32730	reading error for file 1.
-32740	writing error for file 2.
-32750	opening error for file 1.
-32751	opening error for file 2.
-32760	allocation error for memory buffer.

## Examples :

test& = cFileCopy("c:\autoexec.bat", "c:\autoexec.tab")

**See also :** [File](#)

# FileMove

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileMove](#) move/rename a file in the same or in an another directory.

## Declare Syntax :

Declare Function cFileMove Lib "[time2win.dll](#)" (ByVal File1 As String, ByVal File2 As String) As Long

## Call Syntax :

test& = cFileMove(File1, File2)

## Where :

File1	is the source file
File2	is the destination file
test&	>= 0 : the length of the file
	< 0 : an error has occurred.

## Comments :

## Examples :

**See also :** [File](#)

# FileFilter, FileFilterNot

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileFilter](#) copy one file to an another file but filters some chars.

[FileFilterNot](#) copy one file to an another file but filters chars not present in the filter.

## Declare Syntax :

Declare Function cFileFilter Lib "[time2win.dll](#)" (ByVal file1 As String, ByVal file2 As String, Filter As String) As Long  
Declare Function cFileFilterNot Lib "[time2win.dll](#)" (ByVal file1 As String, ByVal file2 As String, Filter As String) As Long

## Call Syntax :

test& = cFileFilter(file1, file2, filter)  
test& = cFileFilterNot(file1, file2, filternot)

## Where :

file1\$	is the source file.
file2\$	is the destination file.
filter\$	is the filter to use to remove chars from the source file.
filternot\$	is the filter to use to remove chars not present in the filter from the source file.
test&	> 0 if all is OK (the returned value is the total bytes copied), < 0 if an error has occurred.

## Comments :

The returned value can be negative and have the following value :

-1	the filter is an EMPTY string.
-32730	reading error for file 1.
-32740	writing error for file 2.
-32750	opening error for file 1.
-32751	opening error for file 2.
-32760	allocation error for memory buffer 1.
-32761	allocation error for memory buffer 2.

## Examples :

```
test& = cFileFilter("c:\autoexec.bat", "c:\autoexec.tab",  
"ABCDEFGHJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz")  
test& = cFileFilterNot("c:\autoexec.bat", "c:\autoexec.tab",  
"ABCDEFGHJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz")
```

**See also :** [File](#)

# FileSize

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[FileSize](#) return the size of the specified file.

## **Declare Syntax :**

Declare Function cFileSize Lib "time2win.dll" (ByVal lpFilename As String) As Long

## **Call Syntax :**

test& = cFileSize(lpFilename)

## **Where :**

lpFilename	the file to proceed
test&	the size of the file

## **Comments :**

If the file is not present or if an error occurs when accessing the file, the return value is 0

**See also :** [File](#)

# FileLineCount

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[FileLineCount](#) count the total number of lines in an ASCII file.

## **Declare Syntax :**

Declare Function cFileLineCount Lib "[time2win.dll](#)" (ByVal lpFilename As String) As Long

## **Call Syntax :**

```
test& = cFileLineCount(lpFilename$)
```

## **Where :**

lpFilename\$	is the name of the file.
test&	is the total number of lines.

## **Comments :**

Each line is determined only if a CR is ending the line.

The returned value can be negative and have the following value :

- |    |   |
|----|---|
| -1 | error opening file (not exist, not a valid filename). |
| -2 | error reading file.                                   |
| -3 | error when allocating memory buffer.                  |

## **Examples :**

```
test& = cFileLineCount("c:\autoexec.bat")
```

On my system :

```
test& = 31
```

**See also :** [File](#)

# FileToLower, FileToUpper

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileToLower](#) convert a file to a file with lower case.

[FileToUpper](#) convert a file to a file with upper case.

## Declare Syntax :

Declare Function cFileToLower Lib "time2win.dll" (ByVal file1 As String, ByVal file2 As String) As Long

Declare Function cFileToUpper Lib "time2win.dll" (ByVal file1 As String, ByVal file2 As String) As Long

## Call Syntax :

test& = cFileToLower(file1, file2)

test& = cFileToUpper(file1, file2)

## Where :

file1\$ is the source file.

file2\$ is the destination file.

test& > 0 if all is OK (the returned value is the total bytes copied),

< 0 if an error has occurred.

## Comments :

The returned value can be negative and have the following value :

-32720 the number of chars in a block for writing differs from the number of chars for reading.

-32730 reading error for file 1.

-32740 writing error for file 2.

-32750 opening error for file 1.

-32751 opening error for file 2.

-32760 allocation error for memory buffer 1.

-32761 allocation error for memory buffer 2.

## Examples :

test& = cFileToLower("c:\autoexec.bat", "c:\autoexec.lwr")

test& = cFileToUpper("c:\autoexec.bat", "c:\autoexec.upr")

**See also :** [File](#)

# FileMerge

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileMerge](#) merge two files in one.

## Declare Syntax :

Declare Function cFileMerge Lib "[time2win.dll](#)" (ByVal file1 As String, ByVal file2 As String, ByVal fileTo As String) As Long

## Call Syntax :

test& = cFileMerge(file1, file2, fileTo)

## Where :

file1\$	is the first file.
file2\$	is the second file.
fileTo\$	is the destination file.
test&	> 0 if all is OK (the returned value is the total bytes copied), < 0 if an error has occurred.

## Comments :

The returned value can be negative and have the following value :

-32720	the number of chars in a block for writing differs from the number of chars for reading file 1.
-32721	the number of chars in a block for writing differs from the number of chars for reading file 2.
-32730	reading error for file 1.
-32731	reading error for file 2.
-32740	writing error for file To.
-32750	opening error for file 1.
-32751	opening error for file 2.
-32752	opening error for file To.
-32760	allocation error for memory buffer.

## Examples :

test& = cFileMerge("c:\autoexec.bat", "c:\config.sys", "c:\merge.by")

**See also :** [File](#)



# FileSearchAndReplace

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileSearchAndReplace](#) search and replace a string by an another in the specified TEXT file.

## Declare Syntax :

Declare Function cFileSearchAndReplace Lib "time2win.dll" (ByVal nFileName As String, ByVal Search As String, ByVal Replace As String, ByVal nFileTemp As String, ByVal Sensitivity As Integer) As Long

## Call Syntax :

test& = cFileSearchAndReplace(nFilename\$, Search\$, Replace\$, nFileTemp\$, Sensitivity%)

## Where :

nFilename\$	the ASCII file.
Search\$	the string to be searched.
Replace\$	the replacement string.
nFileTemp\$	a temporary file.
Sensitivity%	TRUE if the search must be case-sensitive, FALSE if the search is case-insensitive.
test&	> 0 if all is OK (the returned value is the total bytes copied), < 0 if an error has occurred.

## Comments :

cFileSearchAndReplace can handle lines with a maximum of 2304 chars.

If the nFilename string is an EMPTY string, the returned value is FALSE.

If the search string is an EMPTY string, the returned value is FALSE.

The length of the replace string can be > or < of the search string.

The replace string can be an EMPTY string. In this case, the search string is removed from the file.

If the nFileTemp is an EMPTY string, a default temporary file is used.

The returned value can be negative and have the following value :

-32730	reading error for file 1.
-32740	writing error for file 2.
-32750	opening error for file 1.
-32751	opening error for file 2.

## Examples :

test& = cFileCopy("c:\autoexec.bat","c:autoexec.tab")

test& = cFileSearchAndReplace("c:\autoexec.tab", "path", " PATH ", "", False)

**See also :** [File](#)

# FileSearch, FileSearchCount

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**FileSearch** search a string in a gived TEXT file.

**FileSearchCount** count.the occurence of a string in a gived TEXT file.

## Declare Syntax :

Declare Function cFileSearch Lib "time2win.dll" (ByVal nFileName As String, ByVal Search As String, ByVal sensitivity As Integer) As Long

Declare Function cFileSearchCount Lib "time2win.dll" (ByVal nFileName As String, ByVal Search As String, ByVal sensitivity As Integer) As Long

## Call Syntax :

test& = cFileSearch(nFilename\$, Search\$, Sensitivity%)

test& = cFileSearchCount(nFilename\$, Search\$, Sensitivity%)

## Where :

nFilename\$	the ASCII file.
Search\$	the string to be searched.
Sensitivity%	TRUE if the search must be case-sensitive, FALSE if the search is case-insensitive.
test&	> 0 if all is OK (the returned value is the total bytes copied), < 0 if an error has occurred.

## Comments :

cFileSearch and cFileSearchCount can handle lines with a maximum of 2304 chars.

For cFileSearch, the returned value is TRUE if the string is found and FALSE if not.

For cFileSearchCount, the returned value is the number of occurrence of the specified string.

If the nFilename string is an EMPTY string, the returned value is FALSE.

If the search string is an EMPTY string, the returned value is FALSE.

The returned value can be negative and have the following value :

-32730	reading error for file 1.
-32750	opening error for file 1.

## Examples :

test1& = cFileSearch("c:\autoexec.bat", "rEm", False)

test2& = cFileSearchCount("c:\autoexec.bat", "ReM", False)

On my system :

test1& = 3
test2& = 3

**See also :** [File](#)

# FileSort

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**FileSort** sort an ASCII file or a BINARY file in ascending or descending order with case sensitive or not.

## Declare Syntax :

Declare Function cFileSort Lib "time2win.dll" (ByVal FileIn As String, ByVal FileOut As String, ByVal SortMethod As Integer, ByVal RecordLength As Long, ByVal KeyOffset As Long, ByVal KeyLength As Long, rRecords As Integer) As Long

## Call Syntax :

Test% = cFileSort(FileIn\$, FileOut\$, SortMethod%, RecordLength&, KeyOffset&, KeyLength&, rRecords%)

## Where :

FileIn\$	the input file.
FileOut\$	the output file.
SortMethod%	a combination of <u>sorting</u> constants :
RecordLength&	-1 for an ASCII file, > 0 for a BINARY file.
KeyOffset&	-1 for an ASCII file, >= 0 for a BINARY file.
KeyLength&	-1 for an ASCII file, > 0 for a BINARY file.
rRecords	the number of records treated.
Test&	> 0 if all is OK (the returned value is the total bytes copied), < 0 if an error has occurred.

## Comments :

The returned value can be negative and have the following value :

- 1 file 1 is invalid (empty name).
- 2 file 2 is invalid (empty name).
- 3 KeyOffset must be specified (RecordLength is used).
- 4 KeyOffset must be >= 0 (RecordLength is used).
- 5 KeyLength must be > 0 (RecordLength is used).
- 6 (KeyOffset + KeyLength) must be <= to RecordLength.
- 7 filename 1 must be different of filename 2.
- 8 unable to open file 1.
- 9 unable to open file 2.
- 10 can't allocate memory buffer for no fixed length
- 11 can't allocate memory buffer for pointers.
- 12 can't read first record.
- 13 can't read a record.
- 14 too many records (about > 16384).
- 15 can't expand memory buffer for pointers.
- 16 can't write a record (disk full, disk failure, ...).

FileSort uses memory to perform the sort. You're limited to the memory available and a maximum of about 16384 records.

## Examples :

Dim rRec                      As Integer

```
Debug.Print cFileSort("c:\autoexec.bat", "c:\ae1.bat", SORT_ASCENDING + SORT_CASE_INSENSITIVE, -1, -1, -1, rRec)
```

**See also :** [File](#)

# FileChangeChars

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileChangeChars](#) replace all chars in a char set by a new char set.

## Declare Syntax :

Declare Function cFileChangeChars Lib "[time2win.dll](#)" (ByVal nFileName As String, CharSet As String, NewCharSet As String, ByVal nFileTemp As String) As Long

## Call Syntax :

test& = cFileChangeChars(nFilename\$, CharSet\$, NewCharSet\$, nFileTemp\$)

## Where :

nFilename\$	the ASCII file.
CharSet\$	the string to be searched.
NewCharSet\$	the replacement string.
nFileTemp\$	a temporary file.
test&	> 0 if all is OK (the returned value is the total bytes copied), < 0 if an error has occurred.

## Comments :

If the nFilename string is an EMPTY string, the returned value is FALSE.

If the char set string is an EMPTY string, the returned value is FALSE.

If the new char set string is an EMPTY string, the returned value is FALSE.

If the length of char set is different of the length of new char set, the minimum length is used.

If the nFileTemp is an EMPTY string, a default temporary file is used.

The returned value can be negative and have the following value :

-32730	reading error for file 1.
-32740	writing error for file 2.
-32750	opening error for file 1.
-32751	opening error for file 2.

## Examples :

test& = cFileCopy("c:\autoexec.bat", "c:\autoexec.tab")

test& = cFileChangeChars("c:\autoexec.tab", "path", " PATH ", "", False)

**See also :** [File](#)

# KillDir, KillDirs

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**KillDir** delete the specified empty directory.

**KillDirs** delete the specified directory and its associated directories.

## Declare Syntax :

Declare Function cKillDir Lib "time2win.dll" (ByVal lpDir As String) As Integer

Declare Function cKillDirs Lib "time2win.dll" (ByVal lpDir As String, ByVal HeaderDirectory As Integer) As Integer

## Call Syntax :

test% = cKillDir(lpDir\$)

test% = cKillDirs(lpDir\$)

## Where :

lpDir\$	is the directory to proceed
HeaderDirectory%	specify if lpDir\$ must be delete also
test%	see below

## Comments :

For KillDir :

The directory must be empty, and it must not be the current working directory or the root directory.  
The returned value is TRUE if all is OK, <> TRUE if an error has occurred.

For KillDirs :

Don't forget that this function can handle a maximum of 700 directories of 70 chars long each.

The returned value can be negative :  
-32760      allocation error for memory buffer.

This function doesn't generates an VB Error if the specified dir not exists.

## Examples :

Dim Path            As String

Path = "c:\this"                            ' initialize the directory

Debug.Print cMakeDir(Path)                ' create the directory  
Debug.Print cKillDir(Path)                ' remove the directory

Path = "c:\this1\this2\this3\this4"       ' initialize the directories

Debug.Print cMakeMultipleDir(Path)       ' create the directories  
Debug.Print cKillDirs(Path, True)        ' remove the sub-directories and the header

Debug.Print cMakeMultipleDir(Path)       ' recreate the directories  
Debug.Print cKillDirs(Path, False)       ' remove the sub-directories only

**See also :** [File](#)

# KillDirFilesAll

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[KillDirFilesAll](#) delete all files specified by a mask in the specified directory and its associated sub-dir.

## Declare Syntax :

Declare Function cKillDirFilesAll Lib "time2win.dll" (ByVal lpDir As String, ByVal lpMask As String) As Integer

## Call Syntax :

test% = cKillDirFilesAll(lpDir\$, lpMask\$)

## Where :

lpDir\$	is the starting directory
lpMask\$	is the file mask to use
test%	>= 0 if all is OK. The returned value specified the total files deleted, < 0 if an error has occurred

## Comments :

Don't forget that this function can handle a maximum of 700 directories of 70 chars long each.

This function doesn't generates an VB Error if the specified dir not exists.

The returned value can be negative :

-32760            allocation error for memory buffer.

**See also :** [File](#)



# KillFile, KillFileAll

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[KillFile](#) delete the specified filename.

[KillFileAll](#) delete the specified filename with any attribute.

## Declare Syntax :

Declare Function cKillFile Lib "[time2win.dll](#)" (ByVal lpFilename As String) As Integer

Declare Function cKillFileAll Lib "[time2win.dll](#)" (ByVal lpFilename As String) As Integer

## Call Syntax :

test% = cKillFile(lpFilename)

test% = cKillFileAll(lpFilename)

## Where :

lpFileName	the filename to proceed
test%	TRUE if all is OK
	<> TRUE if an error has occurred

## Comments :

If the file is a combination of READ-ONLY or SYSTEM or HIDDEN attribute, you must use cKillFileAll to remove it.

If the file is an opened file, the returned value is always <> TRUE.

If the file not exist, the returned value is always = TRUE.

This function doesn't generates an VB Error if the specified file not exists.

**See also :** [File](#)

# KillFiles, KillFilesAll

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[KillFiles](#) delete all files specified by a file mask.

[KillFilesAll](#) delete all files specified by a file mask even if some files are READ-ONLY files.

## Declare Syntax :

Declare Function cKillFiles Lib "[time2win.dll](#)" (ByVal lpFilename As String) As Integer

Declare Function cKillFilesAll Lib "[time2win.dll](#)" (ByVal lpFilename As String) As Integer

## Call Syntax :

test% = cKillFiles(lpFilename)

test% = cKillFilesAll(lpFilename)

## Where :

lpFilename	the mask file to proceed
test%	> 0 if all is OK. The returned value specified the total files deleted. = 0 if an error has occurred

## Comments :

If some files are a combination of READ-ONLY or SYSTEM or HIDDEN attributes, you must use cKillFilesAll to remove it.

If the mask is invalid or if the file not exists or if an error occurs when accessing the files, the return value is 0.

This function doesn't generates an VB Error if the specified files not exists.

**See also :** [File](#)

# MakeDir, MakeMultipleDir

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[MakeDir](#) create the specified directory.

[MakeMultipleDir](#) create a multiple directory in one call.

## Declare Syntax :

Declare Function cMakeDir Lib "[time2win.dll](#)" (ByVal lpFilename As String) As Integer

Declare Function cMakeMultipleDir Lib "[time2win.dll](#)" (ByVal lpFilename As String) As Integer

## Call Syntax :

test% = cMakeDir(lpFilename)

test% = cMakeMultipleDir(lpFilename)

## Where :

lpFilename	the path for the new directory
test%	TRUE if all is OK
	<> TRUE if an error has occurred

## Comments :

The MakeDir function creates a new directory with the specified dirname. Only one directory can be created at a time, so only the last

component of dirname can name a new directory.

The MakeDir function does not do any translation of path delimiters. All operating systems accept either " or "/" internally as valid delimiters within paths.

This fonction is the same that Mkdir but doesn't generate an VB Error if a problem occurs.

The MakeMultipleDir function creates a new multiple directory with the specified dirname. MakeMultipleDir doesn't return an error if a sub-directory in the multiple directory is already present. The only final test is the existence of the full multiple directory when it was been created.

## Examples :

test% = cMakeDir("C:\")	' 13 (<> TRUE => an error has occurred)
test% = cMakeDir("C:\~~TEST~~")	' TRUE (no error, the directory has been created)
test% = cMakeMultipleDir("C:\~~TEST~~\TEST\TMP")	' TRUE (no error, the directory has been created)

**See also :** [File](#)

# GetDiskFree, GetDiskSpace, GetDiskUsed, GetDiskClusterSize

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetDiskFree](#) retrieve the free disk space of a disk (hard disk or floppy disk).

[GetDiskSpace](#) retrieve the size of a disk (hard disk or floppy disk).

[GetDiskUsed](#) retrieve the part used of a disk (hard disk or floppy disk).

[GetDiskClusterSize](#) retrieve the size of a cluster on a disk (hard disk or floppy disk).

## Declare Syntax :

```
Declare Function cGetDiskFree Lib "time2win.dll" (ByVal lpDrive As String) As Double
Declare Function cGetDiskSpace Lib "time2win.dll" (ByVal lpDrive As String) As Double
Declare Function cGetDiskUsed Lib "time2win.dll" (ByVal lpDrive As String) As Double
Declare Function cGetDiskClusterSize Lib "time2win.dll" (ByVal lpDrive As String) As Double
```

## Call Syntax :

```
test# = cGetDiskFree(lpDrive)
test# = cGetDiskSpace(lpDrive)
test# = cGetDiskUsed(lpDrive)
test# = cGetDiskClusterSize(lpDrive)
```

## Where :

lpDrive	is the letter for the disk
test#	is the result.

## Comments :

If the disk is not present or if the disk is not available or if an error occurs when accessing the disk, the returned value is always -1.

This function works with local disk (hard, floppy or cd-rom) als well on remote disk (network).

## Examples :

```
Dim diskFree    As Double
Dim diskSpace   As Double
Dim diskUsed    As Double
Dim clusterSize As Double

diskFree = cGetDiskFree("C")           ' 268197888
diskSpace = cGetDiskSpace("C")         ' 527654912
diskUsed = cGetDiskUsed("C")           ' 259457024
clusterSize = cGetDiskClusterSize("C") ' 8192
```

**See also :** [File](#)

# RcsCountFileDir

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[RcsCountFileDir](#) count the total directories or files in a specified directory (with recursivity or not).

## Declare Syntax :

Declare Function cRcsCountFileDir Lib "time2win.dll" (ByVal FileOrDir As Integer, ByVal FirstFileOrDir As String, ByVal MaskDir As String, ByVal Recurse As Integer) As Integer

## Call Syntax :

test% = cRcsCountFileDir(FileOrDir%, FirstFileOrDir\$, MaskDir\$, Recurse%)

## Where :

FileOrDir%	FALSE for directories TRUE for files
FirstFileOrDir\$	the starting directory (root or sub-dir) or file
MaskDir\$	the mask for performing the search (If this is an empty string, "**.*" is used)
Recurse%	FALSE for no recursivity TRUE for recursivity
test%	the number of sub-dirs or files founden in the specified directory

## Comments :

This function is a superset function of cCountDirectories and cCountFiles

For directory :

The internal '.' in each directory is not counted.  
The root directory is not counted.

For file :

The mask is the standard search mask (\*, ?, letters, ciphers).

**See also :** [File](#)

# RcsFileSize, RcsFileSizeOnDisk, RcsFilesSlack

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[RcsFileSize](#) return the logical size of files by file mask in a specified directory (with recursivity or not).

[RcsFileSizeOnDisk](#) return the physical size of files by file mask in a specified directory (with recursivity or not).

[RcsFilesSlack](#) return in one call, the slack from files by file mask in a specified directory (with recursivity or not), the logical size and the physical size.

## Declare Syntax :

Declare Function cRcsFileSize Lib "time2win.dll" (ByVal FirstDir As String, ByVal MaskDir As String, ByVal Recurse As Integer) As Double

Declare Function cRcsFileSizeOnDisk Lib "time2win.dll" (ByVal FirstDir As String, ByVal MaskDir As String, ByVal Recurse As Integer) As Double

Declare Function cRcsFilesSlack Lib "time2win.dll" (ByVal FirstDir As String, ByVal MaskDir As String, ByVal Recurse As Integer, Size1 As Double, Size2 As Double) As Integer

## Call Syntax :

test# = cRcsFileSize(FirstDir\$, MaskDir\$, Recurse%)

test# = cRcsFileSizeOnDisk(FirstDir\$, MaskDir\$, Recurse%)

test% = cRcsFilesSlack(FirstDir\$, MaskDir\$, Recurse%, Size1, Size2)

## Where :

FirstDir\$	the starting directory (root or sub-dir).
MaskDir\$	the mask for performing the search (If this is an empty string, "**.*" is used)
Recurse%	FALSE for no recursivity TRUE for recursivity
test#	is the size of all files fouden with the file mask.
test%	is the slack for all files fouden with the file mask.
Size1	is the logical size of all files fouden with the file mask.
Size2	is the physical size of all files fouden with the file mask.

## Comments :

If the mask is invalid or if the file not exists or if an error occurs when accessing the file, the return value is 0  
The slack of a file or files by file mask is the % of all spaces not used on all last clusters.

## Examples :

Dim Size	As Double
Dim Slack	As Integer

Size = cRcsFileSize("C:\", "**.*", True)	' on my system, 437,896,805 bytes
Size = cRcsFileSize("C:\", "**.*", False)	' on my system, 87,141,863 bytes

Size = cRcsFileSizeOnDisk("C:\", "**.*", True)	' on my system, 487,784,448 bytes
Size = cRcsFileSizeOnDisk("C:\", "**.*", False)	' on my system, 87,343,104 bytes

Slack = cRcsFilesSlack("C:\", "**.*", True, 0, 0)	' on my system, 10 %
Slack = cRcsFilesSlack("C:\", "**.*", False, 0, 0)	' on my system, 0 %

**See also :** [File](#)

# FileSize, FileSizeOnDisk, FilesSlack

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**FileSize** return the logical size of all files specified by file mask.

**FileSizeOnDisk** return the physical size of all files specified by file mask.

**FilesSlack** return in one call, the slack from all files specified by file mask, the logical size and the physical size.

## Declare Syntax :

Declare Function cFileSize Lib "time2win.dll" (ByVal lpFilename As String) As Double

Declare Function cFileSizeOnDisk Lib "time2win.dll" (ByVal nFileName As String) As Double

Declare Function cFilesSlack Lib "time2win.dll" (ByVal nFileName As String, Size1 As Double, Size2 As Double) As Integer

## Call Syntax :

test# = cFileSize(nFilename)

test# = cFileSizeOnDisk(nFilename)

test% = cFilesSlack(nFilename, Size1, Size2)

## Where :

nFilename is the mask file to proceed.

test# is the size of all files founden with the file mask.

test% is the slack for all files founden with the file mask.

Size1 is the logical size of all files founden with the file mask.

Size2 is the physical size of all files founden with the file mask.

## Comments :

If the mask is invalid or if the file not exists or if an error occurs when accessing the file, the return value is 0

The slack of a file or files by file mask is the % of all spaces not used on all last clusters.

## Examples :

Dim Size As Double

Dim Slack As Integer

Size = cFileSize("\*. \*") ' on my system, 5607689 bytes

Size = cFileSizeOnDisk("\*. \*") ' on my system, 5890048 bytes

Slack = cFilesSlack("\*. \*", 0, 0) ' on my system, 4 %

**See also :** [File](#)

# RUBYencrypt, RUBYdecrypt

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[RUBYencrypt](#) encode a string with a password using the RUBY algorithm (7 modes).

[RUBYdecrypt](#) decode a string with a password using the RUBY algorithm (7 modes).

## Declare Syntax :

Declare Function cRUBYencrypt Lib "time2win.dll" (Text As String, Key As String, ByVal Mode As Integer) As String

Declare Function cRUBYdecrypt Lib "time2win.dll" (Text As String, Key As String, ByVal Mode As Integer) As String

## Call Syntax :

testE = cRUBYencrypt(Text, Key)

testD = cRUBYdecrypt(Text, Key)

## Where :

Text	is the string to encrypt/decrypt	
Key	is the key to use for encryption/decryption	
Mode	Public Const RUBY_MODE_MINIMUM = 1	' speed is of the essence, security
secondary.	Public Const RUBY_MODE_DESK_LOCK = 2	' reasonable compromise of speed vs
security.	Public Const RUBY_MODE_DEAD_BOLT = 4	' default = probably good enough for most
things.	Public Const RUBY_MODE_PORTABLE_SAFE = 5	' security is more important than speed.
	Public Const RUBY_MODE_ANCHORED_SAFE = 8	' speed isn't much of a concern.
	Public Const RUBY_MODE_BANK_VAULT = 10	' your pentium has nothing better to do,
anyway.	Public Const RUBY_MODE_FORT_KNOX = 16	' be cool.
test	is the string encrypted/decrypted	

## Comments :

The Key is case sensitive.

The length of Text can be any size.

The length of Key must be greater or equal to 6 characters.

## Examples :

```
Dim Text As String
Dim Key As String
Dim Enc As String
Dim Dec As String
```

Text = "Under the blue sky, the sun is yellow"

Key = "a new encryption"

Enc = cRUBYencrypt(Text, Key, RUBY\_MODE\_DESK\_LOCK)

Dec = cRUBYdecrypt(Enc, Key, RUBY\_MODE\_DESK\_LOCK)

**See also :** [Encryption](#)



# CountFiles

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[CountFiles](#) count the total files founded in a specified directory.

## **Declare Syntax :**

Declare Function cCountFiles Lib "time2win.dll" (ByVal lpFilename As String) As Integer

## **Call Syntax :**

test = cCountFiles(lpFilename)

## **Where :**

lpFilename	the directory (root or sub-dir).
test	the number of files in the specified directory.

## **Comments :**

**See also :** [File](#)

# CountDirectories

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[CountDirectories](#) count the total directory in a specified directory.

## **Declare Syntax :**

Declare Function cCountDirectories Lib "time2win.dll" (ByVal lpFilename As String) As Integer

## **Call Syntax :**

test = cCountDirectories(lpFilename)

## **Where :**

lpFilename	the directory (root or sub-dir).
test	the number of sub-dir founded in the specified directory.

## **Comments :**

**See also :** [File](#)

# TruncatePath

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[TruncatePath](#) truncate a long path with filename.

## Declare Syntax :

Declare Function cTruncatePath Lib "time2win.dll" (ByVal nFilename As String, ByVal NewLength As Integer) As String

## Call Syntax :

Test\$ = cTruncatePath(nFilename, NewLength%)

## Where :

nFilename	is the path.
NewLength%	is the new length of the path.
Test\$	is the returned truncated path.

## Comments :

If 'nFilename' is an invalid file, the returned path is always an EMPTY string.  
If 'NewLength' is below to 25, the returned path is always an EMPTY string.  
If the length of 'nFilename' is below 25, the 'nFilename' is returned.

## Examples :

```
Dim Tmp           As String
Dim Test          As String
Dim NewLength     As Integer
```

NewLength = 25

```
Tmp = "time2win.bas"
Debug.Print cTruncatePath(Tmp, NewLength)      ' time2win.bas
```

```
Tmp = "windows\system\time2win.bas"
Debug.Print cTruncatePath(Tmp, NewLength)      ' windows.....time2win.bas
```

```
Tmp = "c:\windows\system\time2win.bas"
Debug.Print cTruncatePath(Tmp, NewLength)      ' c:\windows...time2win.bas
```

```
Tmp = "c:\windows\system\vb\time2win\time2win.bas"
Debug.Print cTruncatePath(Tmp, NewLength)      ' c:\windows...time2win.bas
```

```
Tmp = "c:\windows\system\vb\source\time2win\time2win.bas"
Debug.Print cTruncatePath(Tmp, NewLength)      ' c:\windows...time2win.bas
```

**See also :** [File](#)

# SplitPath

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[SplitPath](#) break a full path into its four components.

## Declare Syntax :

Declare Function cSplitPath Lib "[time2win.dll](#)" (ByVal nFilename As String, SPLITPATH As Any) As Integer

## Call Syntax :

test% = cSplitPath(nFilename, SPLITPATH)

## Where :

nFilename	is the name of a file containing the full path to access it.
SPLITPATH	is the type'd variable ' <a href="#">tagSPLITPATH</a> ' to receive the four components.
test%	TRUE if all is OK, FALSE if an error occurs.

## Comments :

If the file is not available or if an error occurs when accessing the file, the returned value is always 0.

The four components are :

nDrive	Contain the drive letter followed by a colon (:) if a drive is specified in path.
nDir	Contain the path of subdirectories, if any, including the trailing slash.
nName	Contain the base filename without any extensions.
nExt	Contain the filename extension, if any, including the leading period (.).

The return parameters in SPLITPATH will contain empty strings for any path components not found in path.

## Examples :

[Dim SPLITPATH](#)            [As tagSPLITPATH](#)

[Call cSplitPath](#)("C:\AUTOEXEC.BAT", SPLITPATH)

On my system :

SPLITPATH.nDrive	is "C"
SPLITPATH.nDir	is "\"
SPLITPATH.nName	is "AUTOEXEC"
SPLITPATH.nExt	is ".BAT"

**See also :** [File](#)

# MakePath

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**MakePath** create a single path, composed of a drive letter, directory path, filename, and filename extension.

## Declare Syntax :

Declare Function cMakePath Lib "time2win.dll" (ByVal nDrive As String, ByVal nDir As String, ByVal nFilename As String, ByVal Ext As String) As String

## Call Syntax :

test\$ = cMakePath(nDrive, nDir, nFilename, Ext)

## Where :

### nDrive

The nDrive argument contains a letter (A, B, etc.) corresponding to the desired drive and an optional trailing colon. MakePath routine will insert the colon automatically in the composite path if it is missing. If drive is a null character or an empty string, no drive letter and colon will appear in the composite path string.

### nDir

The nDir argument contains the path of directories, not including the drive designator or the actual filename. The trailing slash is optional, and either forward slashes (/) or backslashes (\) or both may be used in a single dir argument. If a trailing slash ( / or \ ) is not specified, it will be inserted automatically. If dir is a null character or an empty string, no slash is inserted in the composite path string.

### nFilename

The nFilename argument contains the base filename without any extensions. If nFilename is an EMPTY string, no filename is inserted in the composite path string.

### Ext

The Ext argument contains the actual filename extension, with or without a leading period (.). MakePath routine will insert the period automatically if it does not appear in ext. If ext is a null character or an empty string, no period is inserted in the composite path string.

## Comments :

## Examples :

```
test1$ = cMakePath("c","tmp","test","dat")
test2$ = cMakePath("c","\tmp","test","dat")
test3$ = cMakePath("c","tmp","test","")
test4$ = cMakePath("c","","test","dat")
```

On my system :

```
test1$ = "c:tmp\test.dat"
test2$ = "c:\tmp\test.dat"
test3$ = "c:tmp\test"
```

```
test4$ = "c:test.dat"
```

**See also :** [File](#)

# FullPath

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FullPath](#) convert a partial path stored in path to a fully qualified path.

## Declare Syntax :

Declare Function cFullPath Lib "time2win.dll" (ByVal nFilename As String) As String

## Call Syntax :

```
test$ = cFullPath(nFilename)
```

## Where :

nFilename	is the partial path.
test\$	is the returned full qualified path.

## Comments :

If the file is not available or if an error occurs when accessing the file, the returned path is always an EMPTY string.

## Examples :

```
tmp$ = cFilesInDirectory(cGetDefaultCurrentDir() + "\*.*", True) 'retrieves the first file in the default current directory  
test$ = cFullPath(tmp$)
```

On my system :

```
tmp$ = "AWARE.BAS"  
test$ = "M:\VB\AWARE.BAS"
```

**See also :** [File](#)

# RenameFile

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[RenameFile](#) rename a file or moves a file from one path to an other path.

## Declare Syntax :

Declare Function cRenameFile Lib "time2win.dll" (ByVal lpFilename1 As String, ByVal lpFilename2 As String) As Integer

## Call Syntax :

test% = cRenameFile(lpFilename1, lpFilename2)

## Where :

lpFileName1	the old filename to rename
lpFileName2	the new filename to be used
test%	TRUE if all is OK
	<> TRUE if an error has occurred

## Comments :

The rename function renames the file or directory specified by lpFilename1 to the name given by lpFilename2. The lpFilename1 must be the

path of an existing file or directory. The lpFilename1 must not be the name of an existing file or directory.

The rename function can be used to move a file from one directory to another by giving a different path in the lpFilename2 argument.

However, files cannot be moved from one device to another (for example, from drive A to drive B). Directories can only be renamed, not moved.

This function doesn't generates an VB Error if the specified old filename not exists.

## Examples :

**See also :** [File](#)



# UniqueFileName

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**UniqueFileName** create a unique filename by modifying the given template argument. The template argument must be a string with two chars maximum.

## Declare Syntax :

Declare Function cUniqueFileName Lib "time2win.dll" (Txt As String) As String

## Call Syntax :

test\$ = cUniqueFileName(Txt)

## Where :

Txt                      the filename pattern. If the size is greater than 2, the default pattern is used.  
test\$                    the unique filename in the form of the chars specifen in Txt plus one char and five digits.

## Comments :

The alphanumeric character is 0 ('0') the first time cUniqueFileName is Called with a given template. In subsequent Calls from the same process with copies of the same template, cUniqueFileName checks to see if previously returned names have been used to create files. If no file exists for a given name, cUniqueFileName returns that name. If files exist for all previously returned names, cUniqueFileName creates a new name by replacing the alphanumeric character in the name with the next available lowercase letter. For example, if the first name returned is t012345 and this name is used to create a file, the next name returned will be ta12345. When creating new names, cUniqueFileName uses, in order, '0' and then the lowercase letters 'a' through 'z'.

Note that the original template is modified by the first Call to cUniqueFileName. If you then Call the cUniqueFileName function again with the same template (i.e., the original one), you will get an error.

The cUniqueFileName function generates unique filenames but does not create or open files. If the filename returned is not created, each subsequent Calls returns the same filename.

If the filename pattern is not specified (by passing an EMPTY string), the default pattern '~~' is used.

## Examples :

```
Dim Tmp      As String

Tmp = cUniqueFileName("MC")                      ' "MC040201"
Debug.Print Tmp
Close #1
Open "c:\" + Tmp For Output Shared As #1
Close #1

Tmp = cUniqueFileName("MC")                      ' "MCa40201"
Debug.Print Tmp
Close #1
Open "c:\" + Tmp For Output Shared As #1
Close #1

Tmp = cUniqueFileName("MC")                      ' "MCb40201"
Debug.Print Tmp
Close #1
Open "c:\" + Tmp For Output Shared As #1
```

Close #1

If you don't create the file, the same filename is returned, see below :

Tmp = cUniqueFileName("MC")	' "MCc40201"
Tmp = cUniqueFileName("MC")	' "MCc40201"
Tmp = cUniqueFileName("MC")	' "MCc40201"

**See also :** [File](#)

# FilesInDirectory

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FilesInDirectory](#) retrieve each file in the specified directory.

## Declare Syntax :

Declare Function cFilesInDirectory Lib "[time2win.dll](#)" (ByVal nFilename As String, ByVal firstnext As Integer) As String

## Call Syntax :

test\$ = cFilesInDirectory(nFilename, firstnext )

## Where :

nFilename	the directory to proceed with the file mask (*. * for all)
firstnext	TRUE for the first file
	FALSE for each next file
test\$	the returned file

## Comments :

## Examples :

```
Dim i           As Integer
Dim Tmp         As String

i = 0
Tmp = cFilesInDirectory("c:\*.*", True)

Debug.Print "The first 7 files in C:\ are : "

Do While (Len(Tmp) > 0)
    Debug.Print Tmp
    Tmp = cFilesInDirectory("c:\*.*", False)
    i = i + 1
    If (i >= 7) Then Exit Do
Loop
```

On my system:

The first 7 files in C:\ are :

```
863DATA
WINA20.386
AUTOEXEC.BAT
COMMAND.COM
IMAGE.DAT
BOOTSECT.DOS
ACD.IDX
```

**See also :** [File](#)

# SubDirectory

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[SubDirectory](#) retrieve all sub-directories from the specified mask.

## Declare Syntax :

Declare Function cSubDirectory Lib "[time2win.dll](#)" (ByVal nFilename As String, ByVal firstnext As Integer) As String

## Call Syntax :

test\$ = cSubDirectory(nFilename, firstnext)

## Where :

nFilename	the specified mask
firstnext	TRUE to retrieve the first directory FALSE to retrieve the next directory
test\$	the retrieved directory

## Comments :

To retrieve all sub-directory is a directory, you must Call first this function with the firstnext argument on TRUE and set it to FALSE for all next directory

## Examples :

```
Dim Test      As String
```

```
Test = cSubDirectory("c:\*.*", True)
```

```
Do Until (Len(Test) = 0)
```

```
    Debug.Print Test
```

```
    Test = cSubDirectory("c:\*.*", False)
```

```
Loop
```

Directories with "c:\\*.\*" argument are :

```
DOS  
TEMP  
TMP  
BAD.DIR
```

**See also :** [File](#)

# FileSet.X

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileSetAllAttrib](#) set all attributes of a file.  
[FileSetArchive](#) set the archive attribute of a file.  
[FileSetHidden](#) set the hidden attribute of a file.  
[FileSetReadOnly](#) set the read-only attribute of a file.  
[FileSetSystem](#) set the system attribute of a file.  
[FileSetFlag](#) set the specified attributes of a file.  
[FileSetAttrib](#) set in one call, attributes of a given file.

## Declare Syntax :

```
Declare Function cFileSetAllAttrib Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function cFileSetArchive Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function cFileSetHidden Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function cFileSetReadOnly Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function cFileSetSystem Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function cFileSetFlag Lib "time2win.dll" (ByVal nFilename As String, ByVal nStatus As Integer) As Integer
```

```
Declare Function cFileSetAttrib Lib "time2win.dll" (ByVal nFilename As String, nFileAttribute As Any) As Integer
```

## Call Syntax :

```
status = cFileSetAllAttrib(nFilename)
status = cFileSetArchive(nFilename)
status = cFileSetHidden(nFilename)
status = cFileSetReadOnly(nFilename)
status = cFileSetSystem(nFilename)
status = cFileSetFlag(nFilename, nStatus)

test% = cFileSetAttrib(nFilename, nFileAttribute)
```

## Where :

nFilename	is the filename to change the attributes
nStatus	is a combination of <a href="#">attributes</a>
nFileAttribute	the type variable ' <a href="#">FileAttributeType</a> ' (only for cFileSetAttrib)
status	TRUE if all is OK. FALSE if an error has been detected.

## Comments :

## Examples :

```
nFilename = "tmp.tmp"
nStatus = A_RDONLY or A_SYSTEM or A_HIDDEN

status = cFileSetAllAttrib(nFilename)
status = cFileSetFlag(nFilename, nStatus)
```

**See also :** [File](#)

# FileReset.X

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileResetAllAttrib](#) reset all attributes of a file.  
[FileResetArchive](#) reset the archive attribute of a file.  
[FileResetHidden](#) reset the hidden attribute of a file.  
[FileResetReadOnly](#) reset the read-only attribute of a file.  
[FileResetSystem](#) reset the system attribute of a file.  
[FileResetFlag](#) reset the specified attributes of a file.

## Declare Syntax :

```
Declare Function cFileResetAllAttrib Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function cFileResetArchive Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function cFileResetHidden Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function cFileResetReadOnly Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function cFileResetSystem Lib "time2win.dll" (ByVal nFilename As String) As Integer
Declare Function cFileResetFlag Lib "time2win.dll" (ByVal nFilename As String, ByVal nStatus As Integer) As Integer
```

## Call Syntax :

```
status = cFileResetAllAttrib(nFilename)
status = cFileResetArchive(nFilename)
status = cFileResetHidden(nFilename)
status = cFileResetReadOnly(nFilename)
status = cFileResetSystem(nFilename)
status = cFileResetFlag(nFilename, nStatus)
```

## Where :

nFilename	is the filename to change the attributes
nStatus	is a combination of <a href="#">attributes</a>
status	TRUE if all is OK. FALSE if an error has been detected.

## Comments :

## Examples :

```
nFilename = "tmp.tmp"
nStatus = A_RDONLY or A_SYSTEM or A_HIDDEN

status = cFileResetAllAttrib(nFilename)
status = cFileResetFlag(nFilename, nStatus)
```

**See also :** [File](#)

# FileDrive

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileDrive](#) extract the drive on which the file is present.

## Declare Syntax :

Declare Function cFileDrive Lib "time2win.dll" (ByVal lpFilename As String) As String

## Call Syntax :

test\$ = cFileDrive(lpFilename)

## Where :

lpFilename	the file to proceed
test\$	EMPTY is the file not exist or an error occurs when accessing the file DRIVE LETTER for the file

## Comments :

## Examples :

**See also :** [File](#)

# FilesInDirOnDisk

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FilesInDirOnDisk](#) write all files from a specified directory into a file on disk.

## Declare Syntax :

Declare Function cFilesInDirOnDisk Lib "[time2win.dll](#)" (ByVal nFile As String, ByVal nFilename As String, ByVal nAttribute As Integer) As Integer

## Call Syntax :

test% = cFilesInDirOnDisk(nFile\$, nFilename\$, nAttribute)

## Where :

nFile\$	the file on disk
nFilename	the directory to proceed with the file mask (if this is an empty string, '*' is used)
nAttribute	the attribute to search (see Constants and Types declaration)
test%	the number of files founded

## Comments :

When nAttribute is a positive value, the search is based on an OR test. If one or more attributes of file is founded, the file is taken.

When nAttribute is a negative value, the search is based on an AND test. If all attributes of files are founded, the file is taken.

## Examples :

Dim i As Integer

i = cFilesInDirOnDisk("c:\test.tmp", "\*", A\_ALL)

**See also :** [File](#)



# FilesInDirToArray

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FilesInDirToArray](#) read all files from a specified directory into an array.

## Declare Syntax :

Declare Function cFilesInDirToArray Lib "[time2win.dll](#)" (ByVal nFilename As String, ByVal nAttribute As Integer, array() As Any) As Integer

## Call Syntax :

test% = cFilesInDirToArray(nFilename\$, nAttribute%, Array())

## Where :

nFilename	the directory to proceed with the file mask (if this is an empty string, *.* is used)
nAttribute	the attribute to search (see Constants and Types declaration)
Array()	is the variable array string with one dimension.
test%	>=0 is the number of file in the specified directory, < 0 is an error occurs (error n° is the negative value of all DA_x values, see Constants and Types declaration ).

## Comments :

When nAttribute is a positive value, the search is based on an OR test. If one or more attributes of file is founded, the file is taken.

When nAttribute is a negative value, the search is based on an AND test. If all attributes of files are founded, the file is taken.

This function can handle only a variable type'd string derived from tagVARSTRING (see below).

Don't forget that if you use the 'ReDim' statement at the procedure level without have declared the array als Global, you must initialize the array before using this function (see below). You must initialize the array with enough space to handle the size of the file This is due to a VB limitation.

```
Type tagVARSTRING
    Contents          As String
End Type
```

## Examples :

```
ReDim AD(-999 To 1000)          As tagVARSTRING
```

```
For i = -999 To 1000
    AD(i).Contents = Space$(256)
Next i
```

```
Debug.Print cFilesInDirToArray("c:\*.*", A_ALL, AD())
```

```
Debug.Print AD(-999).Contents
Debug.Print AD(-998).Contents
```

**See also :** [File](#)

# FileDate.X, FileTime.X

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileDateCreated](#) retrieve the date when the file has been created.

[FileLastDateAccess](#) retrieve the date when the file has been last accessed.

[FileLastDateModified](#) retrieve the date when the file has been last modified.

[FileTimeCreated](#) retrieve the time when the file has been created.

[FileLastTimeAccess](#) retrieve the time when the file has been last accessed.

[FileLastTimeModified](#) retrieve the time when the file has been last modified.

## Declare Syntax :

Declare Function cFileDateCreated Lib "time2win.dll" (ByVal lpFilename As String) As String

Declare Function cFileLastDateAccess Lib "time2win.dll" (ByVal lpFilename As String) As String

Declare Function cFileLastDateModified Lib "time2win.dll" (ByVal lpFilename As String) As String

Declare Function cFileTimeCreated Lib "time2win.dll" (ByVal lpFilename As String) As String

Declare Function cFileLastTimeAccess Lib "time2win.dll" (ByVal lpFilename As String) As String

Declare Function cFileLastTimeModified Lib "time2win.dll" (ByVal lpFilename As String) As String

## Call Syntax :

test = cFileDateCreated(lpFilename)

test = cFileLastDateAccess(lpFilename)

test = cFileLastDateModified(lpFilename)

test = cFileTimeCreated(lpFilename)

test = cFileLastTimeAccess(lpFilename)

test = cFileLastTimeModified(lpFilename)

## Where :

lpFileName	the file to read date and/or time
test	HH:MM for time
	DD/MM/YYYY for date

## Comments :

For TIME2WIN, T2WIN-16 :

The created, access, modified time/date are the same because Win 3.xx don't handle the different date/time information.

## Examples :

**See also :** [File](#)

# GetDriveType

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetDriveType](#) determine whether a disk drive is removable, fixed, or remote.

## Declare Syntax :

Declare Function cGetDriveType Lib "time2win.dll" (ByVal lpDrive As String) As Integer

## Call Syntax :

test% = cGetDriveType(lpDrive\$)

## Where :

lpDrive\$	is the letter disk to proceed
test%	is the returned <u>drive type</u>

## Comments :

## Examples :

On my system :

test% = cGetDriveType("A")	' DRIVE_REMOVABLE
test% = cGetDriveType("C")	' DRIVE_FIXED
test% = cGetDriveType("X")	' DRIVE_CDROM
test% = cGetDriveType("Z")	' DRIVE_REMOTE

**See also :** [File](#)

# FileStatistics

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**FileStatistics** count the lines, words and chars in a specified file.

## Declare Syntax :

Declare Function cFileStatistics Lib "time2win.dll" (ByVal nFilename As String, nLines As Long, nWords As Long, nChars As Long) As Long

## Call Syntax :

test& = cFileStatistics(nFilename\$, nLines, nWords, nChars)

## Where :

nFilename\$	is the file to proceed
nLines&	is the returned number of lines
nWords&	is the returned number of words
nChars&	is the returned number of chars
test&	> 0 if all is OK (the returned value is the total bytes in the file), < 0 if an error has occurred.

## Comments :

If all is ok, the returned value must be equal to nChars.

The returned value can be negative and have the following value :

-32730	reading error for file.
-32750	opening error for file.
-32760	allocation error for memory buffer.

## Examples :

test& = cFileStatistics("c:\autoexec.bat", nLines&, nWords&, nChars&)

On my system :

nLines&	is 90
nWords&	is 282
nChars&	is 2212
test&	is 2212

test& = cFileStatistics("c:\config.sys", nLines&, nWords&, nChars&)

On my system :

nLines&	is 15
nWords&	is 44
nChars&	is 506
test&	is 506

**See also :** [File](#)

# FilePathExists

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FilePathExists](#) verify if the specified file is present.

## Declare Syntax :

Declare Function cFilePathExists Lib "[time2win.dll](#)" (ByVal lpFilename As String) As Integer

## Call Syntax :

test% = cFilePathExists(lpFilename)

## Where :

lpFilename	the file to proceed
test%	TRUE is the file exists <> TRUE if the file not exists or if an error occurs when accessing the file.

## Comments :

## Examples :

**See also :** [File](#)

# SearchFile

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[SearchFile](#) perform a file match starting with a specified path.

## Declare Syntax :

Declare Function cSearchFile Lib "time2win.dll" (ByVal lpStartPath As String, ByVal lpFileMask As String, ByVal lpFileResult As String) As Long

## Call Syntax :

lngResult& = cSearchFile(lpStartPath\$, lpFileMask\$, lpFileResult\$)

## Where :

lpStartPath\$	is the starting path to begin the search.
lpFileMask\$	is the file mask to match.
lpFileResult\$	is the file with the result of the search (cSearchFile).
lngResult&	is the number of files founded.

## Comments :

## Examples :

```
Debug.Print cSearchFile("c:\", "time2win.dll", "c:\tmp\test.sch")
```

**See also :** [File](#)

# CmpFile.X

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[CmpFileAttribute](#) compare the attribute of two files.  
[CmpFileContents](#) compare the contents of two files.  
[CmpFileSize](#) compare the size of two files.  
[CmpFileTime](#) compare the date and time of two files.

## Declare Syntax :

```
Declare Function cCmpFileAttribute Lib "time2win.dll" (ByVal file1 As String, ByVal file2 As String) As Integer
Declare Function cCmpFileContents Lib "time2win.dll" (ByVal file1 As String, ByVal file2 As String, ByVal sensitivity
As Integer) As Integer
Declare Function cCmpFileSize Lib "time2win.dll" (ByVal file1 As String, ByVal file2 As String) As Integer
Declare Function cCmpFileTime Lib "time2win.dll" (ByVal file1 As String, ByVal file2 As String) As Integer
```

## Call Syntax :

```
test% = cCmpFileAttribute(file1, file2)
test% = cCmpFileContents(file1, file2, sensitivity)
test% = cCmpFileSize(file1, file2)
test% = cCmpFileTime(file1, file2)
```

## Where :

file1\$	is the first file.
file2\$	is the second file.
sensitivity%	TRUE for case sensitive, FALSE for no case sensitive.
test%	-1 if file1 < file2 for the specified function, 0 if file1 = file2 for the specified function, 1 if file1 > file2 for the specified function.

## Comments :

When using cCmpFileAttribute, only -1 (attribute are the same) or 0 (attribute are different) or -2 (error) is returned.

When using cCmpFileContents

-1	files are the same
0	files are not the same, or file size differs
-32740	reading error for files.
-32750	opening error for file 1.
-32751	opening error for file 2.
-32760	allocation error for memory buffer 1.
-32761	allocation error for memory buffer 2.

## Examples :

```
test% = cCmpFileAttribute("c:\command.com", "c:\dos\command.com")
test% = cCmpFileContents("c:\command.com", "c:\dos\command.com", True)
test% = cCmpFileContents("c:\command.com", "c:\dos\command.com", False)
test% = cCmpFileSize("c:\command.com", "c:\dos\command.com")
test% = cCmpFileTime("c:\command.com", "c:\dos\command.com")
```

**See also :** [File](#)

' structure for split path

Type tagSPLITPATH

    nDrive        As String

    nDir          As String

    nName         As String

    nExt          As String

End Type



# FileGetAttrib

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileGetAttrib](#) set in one call, attributes of a gived file.

## Declare Syntax :

Declare Function cFileGetAttrib Lib "[time2win.dll](#)" (ByVal nFilename As String, nFileAttribute As Any) As Integer

## Call Syntax :

status% = cFileGetAttrib(nFilename, nFileAttribute)

## Where :

nFilename	is the filename to change the attributes
nFileAttribute	the type'd variable ' <a href="#">FileAttributeType</a> '
status	TRUE if all is OK. FALSE if an error has been detected.

## Comments :

## Examples :

**See also :** [File](#)

# FileCopy2

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileCopy2](#) copy one file to an another file.

## Declare Syntax :

Declare Function cFileCopy2 Lib "time2win.dll" (ByVal file1 As String, ByVal file2 As String) As Long

## Call Syntax :

test& = cFileCopy2(file1, file2)

## Where :

file1\$	is the source file.
file2\$	is the destination file.
test&	= True : if all is OK, > 0 : if an error has occurred.

## Comments :

This function use the standard 'CopyFile' function from Win32 SDK.  
However, this function is not a speedy function.

## Examples :

test& = cFileCopy2("c:\autoexec.bat", "c:\autoexec.tab")

**See also :** [File](#)

' definition for file attributes

Public Const A_RDONLY = &H1	' Read only file
Public Const A_HIDDEN = &H2	' Hidden file
Public Const A_SYSTEM = &H4	' System file
Public Const A_SUBDIR = &H10	' Subdirectory
Public Const A_ARCHIVE = &H20	' Archive file
Public Const A_NORMAL = &H80	' Normal file - No read/write restrictions
Public Const A_COMPRESSED = &H800	' Compressed file
Public Const A_NORMAL_ARCHIVE = &HFE	' Normal, Archive
Public Const A_ALL = &HFF	' Normal, Archive, Read-Only, Hidden, System

' definition for drive type

Public Const DRIVE\_UNKNOWN = 0

' drive type can't be founded, drive not present or unknow.

Public Const DRIVE\_NO\_ROOT\_DIR = 1

' drive type can't be founded, drive not present or unknow (Win95).

Public Const DRIVE\_REMOVABLE = 2

' disk can be removed from the drive.

Public Const DRIVE\_FIXED = 3

' disk cannot be removed from the drive.

Public Const DRIVE\_REMOTE = 4

' drive is a remote, or network, drive.

Public Const DRIVE\_CDROM = 5

' drive is a cd-rom.

Public Const DRIVE\_RAMDISK = 6

' drive is a ram disk.

' definition for file sort

Public Const SORT\_ASCENDING = 1

Public Const SORT\_DESCENDING = 2

Public Const SORT\_CASE\_SENSITIVE = 4

Public Const SORT\_CASE\_INSENSITIVE = 8

```
' definition for file uucp  
Public Const MODE_UUENCODE = 0  
Public Const MODE_UUDECODE = 1
```

# FileUUCP

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**FileUUCP** uuencode/uudecode a file (this is can be usefull for Internet).

## Declare Syntax :

Declare Function cFileUUCP Lib "time2win.dll" (ByVal lpFileName1 As String, ByVal lpFileName2 As String, ByVal EncodeDecode As Integer) As Long

## Call Syntax :

lngResult& = cFileUUCP(lpFileName1\$, lpFileName2\$, EncodeDecode%)

## Where :

lpFileName1\$	is the file to be uuencoded/uudecoded
lpFileName2\$	is the file uuencoded/uudecoded
EncodeDecode	is the <u>mode</u> for encoding/decoding
lngResult&	< 0 : an error has occurred >= 0 : the size of the file uuencoded/uudecoded

## Comments :

## Examples :

```
Dim lngResult      As Long
Dim strResult      As String
Dim strDisplay     As String
```

```
Dim File1          As String
Dim File2          As String
Dim File3          As String
```

```
strResult = ""
strDisplay = ""
```

```
File1 = "c:\win95\system.dat"
File2 = "system.uuencoded"
File3 = "system.uudecoded"
```

```
strDisplay = strDisplay & "File UUencode " & File1 & " to " & File2 & " is " & cFileUUCP(File1, File2,
MODE_UUENCODE) & vbCrLf
strDisplay = strDisplay & "File UUdecode " & File2 & " to " & File3 & " is " & cFileUUCP(File2, File3,
MODE_UUDECODE) & vbCrLf
strDisplay = strDisplay & "Compare File contents (not sensitive) " & File1 & " with " & File3 & " is " &
IIf(cCmpFileContents(File1, File3, False) = -1, "same", "not same") & vbCrLf & vbCrLf
```

```
File1 = "c:\autoexec.bat"
File2 = "autoexec.uuencoded"
File3 = "autoexec.uudecoded"
```

```
strDisplay = strDisplay & "File UUencode " & File1 & " to " & File2 & " is " & cFileUUCP(File1, File2,
MODE_UUENCODE) & vbCrLf
strDisplay = strDisplay & "File UUdecode " & File2 & " to " & File3 & " is " & cFileUUCP(File2, File3,
MODE_UUDECODE) & vbCrLf
```

```
strDisplay = strDisplay & "Compare File contents (not sensitive) '" & File1 & "' with '" & File3 & "' is " &  
IIf(cCmpFileContents(File1, File3, False) = -1, "same", "not same") & vbCrLf & vbCrLf
```

```
Debug.Print strDisplay
```

**See also :** [UUCP](#)



## File I/O from C : Overview

<a href="#"><u>Fopen</u></a>	open a file for I/O.
<a href="#"><u>Fclose</u></a>	close an open stream.
<a href="#"><u>Fgetc</u></a>	read a single character from a stream.
<a href="#"><u>Fputc</u></a>	write a single character to a stream.
<a href="#"><u>Fputs</u></a>	write a line of characters to a stream.
<a href="#"><u>Fgets</u></a>	read a line of characters from a stream.
<a href="#"><u>Fwrite</u></a>	write an arbitrary number of characters to a stream.
<a href="#"><u>Fread</u></a>	read an arbitrary number of characters from a stream.
<a href="#"><u>Fcloseall</u></a>	close all files opened with fopen.
<a href="#"><u>Fflush</u></a>	flush buffered I/O to a particular stream to disk.
<a href="#"><u>Fflushall</u></a>	flush buffered I/O for all open streams to disk.
<a href="#"><u>FEOF</u></a>	test for end-of-file on a stream.
<a href="#"><u>Ferror</u></a>	test for an error on a stream.
<a href="#"><u>Fclearerr</u></a>	reset the error indicator for a stream.
<a href="#"><u>Fseek</u></a>	move the file pointer to a specified location.
<a href="#"><u>Ftell</u></a>	get the current position of a file pointer.
<a href="#"><u>Frewind</u></a>	move the file pointer to the beginning of a file.
<a href="#"><u>FProcessAsciiFile</u></a>	read the offset of each line from an ASCII file (CR/LF line terminated) into an array.
<a href="#"><u>FgotoRecord</u></a>	move the file pointer to the beginning of the specified line in an ASCII file (CR/LF line terminated).

# FileIO

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**Fopen** open a file for I/O.  
**Fclose** close an open stream.  
**Fgetc** read a single character from a stream.  
**Fputc** write a single character to a stream.  
**Fputs** write a line of characters to a stream.  
**Fgets** read a line of characters from a stream.  
**Fwrite** write an arbitrary number of characters to a stream.  
**Fread** read an arbitrary number of characters from a stream.  
**Fcloseall** close all files opened with fopen.  
**Fflush** flush buffered I/O to a particular stream to disk.  
**Fflushall** flush buffered I/O for all open streams to disk.  
**Feof** test for end-of-file on a stream.  
**Ferror** test for an error on a stream.  
**Fclearerr** reset the error indicator for a stream.  
**Fseek** move the file pointer to a specified location.  
**Ftell** get the current position of a file pointer.  
**Frewind** move the file pointer to the beginning of a file.  
**FProcessAsciiFile** read the offset of each line from an ASCII file (CR/LF line terminated) into an array.  
**FGotoRecord** move the file pointer to the beginning of the specified line in an ASCII file (CR/LF line terminated).

## Declare Syntax :

```
Declare Function cFopen Lib "time2win.dll" (ByVal File As String, ByVal Mode As String) As Long
Declare Function cFclose Lib "time2win.dll" (ByVal IOstream As Long) As Integer
Declare Function cFgetc Lib "time2win.dll" (ByVal IOstream As Long) As Integer
Declare Function cFputc Lib "time2win.dll" (ByVal char As Integer, ByVal IOstream As Long) As Integer
Declare Function cFputs Lib "time2win.dll" (ByVal Txt As String, ByVal IOstream As Long) As Integer
Declare Function cFgets Lib "time2win.dll" (Txt As String, ByVal Length As Integer, ByVal IOstream As Long) As Integer
Declare Function cFwrite Lib "time2win.dll" (Txt As String, ByVal IOstream As Long) As Integer
Declare Function cFread Lib "time2win.dll" (Txt As String, ByVal Length As Integer, ByVal IOstream As Long) As Integer
Declare Function cFcloseall Lib "time2win.dll" () As Integer
Declare Function cFflush Lib "time2win.dll" (ByVal IOstream As Long) As Integer
Declare Function cFflushall Lib "time2win.dll" () As Integer
Declare Function cFeof Lib "time2win.dll" (ByVal IOstream As Long) As Integer
Declare Function cFerror Lib "time2win.dll" (ByVal IOstream As Long) As Integer
Declare Sub cFclearerr Lib "time2win.dll" (ByVal IOstream As Long)
Declare Function cFseek Lib "time2win.dll" (ByVal IOstream As Long, ByVal offset As Long, ByVal Origin As Integer) As Integer
Declare Function cFtell Lib "time2win.dll" (ByVal IOstream As Long) As Long
Declare Sub cFrewind Lib "time2win.dll" (ByVal IOstream As Long)
Declare Function cFProcessAsciiFile Lib "time2win.dll" (ByVal IOstream As Long, AsciiOffset() As Long) As Long
Declare Function cFGotoRecord Lib "time2win.dll" (ByVal IOstream As Long, AsciiOffset() As Long, ByVal Record As Long) As Integer
```

## Call Syntax :

see above

## Where :

File\$	the name to use for streaming.
Mode\$	the open mode for the file (see comments).
IOstream&	the returned stream or the stream to use to perform file management.

Char%	the char to write/read in decimal.
Txt\$	the string to write/read.
Length%	the length to read a string.
Offset&	the new seek position in the stream.
Origin%	the seeking method (see definition for file I/O in Constants and Types
declaration)	

#### Comments :

Code returned by these routines :

Fopen	>= 0	: I/O stream in a long integer.
Fclose	= 0 < 0	: all is OK, : error.
Fgetc	>= 0 < 0	: the char readed, : error.
Fputc	>= 0 < 0	: the char writed, : error.
Fputs	>= 0 < 0	: all is OK, : error.
Fgets	= 0 < 0	: all is OK, : error.
Fwrite	>= 0 < 0	: all is OK, : error.
Fread	>= 0 < 0	: all is OK, : error.
Fcloseall	= 0	: all is OK, < 0 : error.
Fflush	= 0 < 0	: all is OK, : error.
Fflushall	= 0	: all is OK < 0 : error.
Feof	= 0 = -1	: not EOF, : EOF.
Ferror	= 0 <>0	: no error, : error number.
Fseek	= 0 < 0	: all is OK, : error.
Ftell	>= 0 < 0	: the pointer position, : error.
FProcessAsciiFile	> 0	: the number of lines in the ASCII file (CR/LF terminated),
16384 characters),	= 0 < 0	: error : can't allocate memory buffer (each line can't be longer than : error.
FGotoRecord	= -1 = 0	: all is ok, : record is outside of the limits of the array,

< 0 : error.

The character string mode specifies the type of access requested for the file, as follows:

"r"	Opens for reading. If the file does not exist or cannot be found, the fopen call will fail.
"w"	Opens an empty file for writing. If the given file exists, its contents are destroyed.
"a"	Opens for writing at the end of the file (appending); creates the file first if it doesn't exist.
"r+"	Opens for both reading and writing. (The file must exist.)
"w+"	Opens an empty file for both reading and writing. If the given file exists, its contents are destroyed.
"a+"	Opens for reading and appending; creates the file first if it doesn't exist.

When a file is opened with the "a" or "a+" access type, all write operations occur at the end of the file. Although the file pointer can be repositioned using *cFseek* or *cFrewind*, the file pointer is always moved back to the end of the file before any write operation is carried out. Thus, existing data cannot be overwritten.

When the "r+", "w+", or "a+" access type is specified, both reading and writing are allowed (the file is said to be open for "update"). However, when you switch between reading and writing, there must be an intervening *cFflush*, *cFseek*, or *cFrewind* operation. The current position can be specified for the *cFseek* operation, if desired. In addition to the values listed above, the following characters can be included in mode to specify the translation mode for newline characters:

"t"

Open in text (translated) mode. In this mode, carriage-return-line-feed (CR-LF) combinations are translated into single line feeds (LF) on input and LF characters are translated to CR-LF combinations on output. Also, CTRL+Z is interpreted as an end-of-file character on input. In files opened for reading or for reading/writing, cFopen checks for a CTRL+Z at the end of the file and removes it, if possible. This is done because using the *cFseek* and *cFtell* functions to move within a file that ends with a CTRL+Z may cause cFseek to behave improperly near the end of the file.

"b"

Open in binary (untranslated) mode; the above translations are suppressed.

#### Examples :

see FileIO.MAK

**See also :**

# HugeStrAdd

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**HugeStrAdd** add a VB string into a Huge String.

## Declare Syntax :

Declare Function cHugeStrAdd Lib "time2win.dll" (ByVal hsHandle As Long, hsText As String) As Integer

## Call Syntax :

hsReturn% = cHugeStrAdd(hsHandle%, hsText\$)

## Where :

hsHandle%	is the Handle for all functions for Huge String.
hsText\$	is the VB string to add into the Huge String.
hsReturn%	TRUE : if all is ok FALSE : if length of the VB string is 0, or if the VB string can't be fitted into the Huge String.

## Comments :

The length of hsText must be between 1 and 64,000 chars.  
The position of hsText into the Huge String is depending of the Write Pointer.  
If you don't set manually the Write Pointer, the VB String is always appended to previous chars.

## Examples :

Dim hsHandle	As Integer
Dim hsSize	As Long
Dim hsReturn	As Integer
Dim hsLength	As Long

```
hsSize = 512 & * 1024
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
Else
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
End If
```

```
hsReturn = cHugeStrAdd(hsHandle, "This is TIME TO WIN version 4.0")
```

```
hsLength = cHugeStrLength(hsHandle)
```

```
MsgBox "Huge String (" & hsHandle & ") had a length of " & hsLength
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
Else
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
End If
```

## See also :

# Interest rate

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

AtoF : annuity to future value.  
AtoFC : annuity to future value continuous compounding.  
AtoP : annuity to present value.  
AtoPC : annuity to present value continuous compounding.  
FtoA : future value to annuity.  
FtoAC : future value to annuity continuous compounding.  
FtoP : future value to present value.  
FtoPC : future value to present value continuous compounding.  
PtoA : present value to annuity.  
PtoAC : present value to annuity continuous compounding.  
PtoF : present value to future value.  
PtoFC : present value to future value continuous compounding.

## Declare Syntax :

```
Declare Function cAtoF Lib "time2win.dll" (ByVal Interest As Double, ByVal N As Integer) As Double
Declare Function cAtoFC Lib "time2win.dll" (ByVal Rates As Double, ByVal N As Integer) As Double
Declare Function cAtoP Lib "time2win.dll" (ByVal Interest As Double, ByVal N As Integer) As Double
Declare Function cAtoPC Lib "time2win.dll" (ByVal Rates As Double, ByVal N As Integer) As Double
Declare Function cFtoA Lib "time2win.dll" (ByVal Interest As Double, ByVal N As Integer) As Double
Declare Function cFtoAC Lib "time2win.dll" (ByVal Rates As Double, ByVal N As Integer) As Double
Declare Function cFtoP Lib "time2win.dll" (ByVal Interest As Double, ByVal N As Integer) As Double
Declare Function cFtoPC Lib "time2win.dll" (ByVal Rates As Double, ByVal N As Integer) As Double
Declare Function cPtoA Lib "time2win.dll" (ByVal Interest As Double, ByVal N As Integer) As Double
Declare Function cPtoAC Lib "time2win.dll" (ByVal Rates As Double, ByVal N As Integer) As Double
Declare Function cPtoF Lib "time2win.dll" (ByVal Interest As Double, ByVal N As Integer) As Double
Declare Function cPtoFC Lib "time2win.dll" (ByVal Rates As Double, ByVal N As Integer) As Double
```

## Call Syntax :

## Where :

In all functions, N is the number of periods.

AtoF	:	Interest is the effective interest rate per period.
AtoFC	:	Interest is the nominal interest rate per period.
AtoP	:	Interest is effective interest rate per period.
AtoPC	:	Interest is the nominal interest rate per period.
FtoA	:	Interest is the effective interest rate per period.
FtoAC	:	Interest is the nominal interest rate per period.
FtoP	:	Interest is the effective interest rate per period.
FtoPC	:	Interest is the nominal interest rate per period.
PtoA	:	Interest is the effective interest rate per period.
PtoAC	:	Interest is the nominal interest rate per period.
PtoF	:	Interest is the effective interest rate per period.
PtoFC	:	Interest is the nominal interest rate per period.

## Comments :

If Interest is 0 or N is below or equal to 0, the returned value is -1.

## Examples :

**See also :**

## Interest rate : Overview

<a href="#"><u>AtoF</u></a>	: annuity to future value.
<a href="#"><u>AtoFC</u></a>	: annuity to future value continuous compounding.
<a href="#"><u>AtoP</u></a>	: annuity to present value.
<a href="#"><u>AtoPC</u></a>	: annuity to present value continuous compounding.
<a href="#"><u>FtoA</u></a>	: future value to annuity.
<a href="#"><u>FtoAC</u></a>	: future value to annuity continuous compounding.
<a href="#"><u>FtoP</u></a>	: future value to present value.
<a href="#"><u>FtoPC</u></a>	: future value to present value continuous compounding.
<a href="#"><u>PtoA</u></a>	: present value to annuity.
<a href="#"><u>PtoAC</u></a>	: present value to annuity continuous compounding.
<a href="#"><u>PtoF</u></a>	: present value to future value.
<a href="#"><u>PtoFC</u></a>	: present value to future value continuous compounding.



# GetIni

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetIni](#) retrieve an item in a section of an INI file.

## Declare Syntax :

Declare Function cGetIni Lib "time2win.dll" (ByVal AppName As String, ByVal szItem As String, ByVal szDefault As String, ByVal InitFile As String) As String

## Call Syntax :

```
test$ = cGetIni(AppName, szItem, szDefault, InitFile)
```

## Where :

AppName	a string that specifies the section containing the entry.
szItem	a string containing the entry whose associated string is to be retrieved.
szDefault	a string that specifies the default value for the given entry if the entry cannot be found in the initialization file.
InitFile	a filename. If this parameter does not contain a full path, Windows searches for the file in the Windows directory.

## Comments :

The function searches the file for an entry that matches the name specified by the szItem parameter under the section heading specified by the AppName parameter. If the entry is found, its corresponding string is returned. If the entry does not exist, the default character string specified by the szDefault parameter is copied. A string entry in the initialization file must have the following form:

```
[section]  
entry=string
```

## Examples :

```
test$ = cGetIni("Desktop","IconTitleFaceName","MS Sans Serif","WIN.INI")
```

**See also :** [Windows](#)

# HugeStrAddress

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HugeStrAddress](#) return the memory address of a Huge String.

## Declare Syntax :

Declare Function cHugeStrAddress Lib "time2win.dll" (ByVal hsHandle As Long) As Long

## Call Syntax :

hsAddress& = cHugeStrLength(hsHandle%)

## Where :

hsHandle%        is the Handle for all functions for Huge String.  
hsAddress&      is the memory address of the Huge String.

## Comments :

## Examples :

```
Dim hsHandle        As Integer
Dim hsSize          As Long
Dim hsReturn        As Integer
Dim hsAddress       As Long
```

```
hsSize = 512& * 1024
```

```
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
```

```
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
```

```
Else
```

```
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
```

```
End If
```

```
hsReturn = cHugeStrAdd(hsHandle, "This is TIME TO WIN version 4.0")
```

```
hsAddress = cHugeStrAddress(hsHandle)
```

```
MsgBox "Huge String (" & hsHandle & ") had an address of " & hsAddress
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
```

```
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
```

```
Else
```

```
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
```

```
End If
```

## See also :

# HugeStrAppend

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**HugeStrAppend** append a VB string into a Huge String.

## Declare Syntax :

Declare Function cHugeStrAppend Lib "time2win.dll" (ByVal hsHandle As Long, hsText As String) As Integer

## Call Syntax :

hsReturn% = cHugeStrAppend(hsHandle%, hsText\$)

## Where :

hsHandle%	is the Handle for all functions for Huge String.
hsText\$	is the VB string to append into the Huge String.
hsReturn%	TRUE : if all is ok FALSE : if length of the VB string is 0, or if the VB string can't be fitted into the Huge String.

## Comments :

The length of hsText must be between 1 and 64,000 chars.

The position of hsText into the Huge String is NOT depending of the Write Pointer. The VB string is appended without regards and whitout change of the Write Pointer.

## Examples :

Dim hsHandle	As Integer
Dim hsSize	As Long
Dim hsReturn	As Integer
Dim hsLength	As Long

```
hsSize = 512 & * 1024
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
Else
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
End If
```

```
hsReturn = cHugeStrAdd(hsHandle, "This is TIME TO WIN version 4.0")
hsReturn = cHugeStrSetWP(hsHandle, 10)
hsReturn = cHugeStrAppend(hsHandle, ", No price change.")
```

```
hsLength = cHugeStrLength(hsHandle)
```

```
MsgBox "Huge String (" & hsHandle & ") had a length of " & hsLength
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
Else
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
End If
```

**See also :**

# HugeStrBlocks

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HugeStrBlocks](#) return the number of blocks of 64,000 chars into a Huge String.

## Declare Syntax :

Declare Function cHugeStrBlocks Lib "time2win.dll" (ByVal hsHandle As Long) As Long

## Call Syntax :

hsBlocks& = cHugeStrBlocks(hsHandle%)

## Where :

hsHandle%        is the Handle for all functions for Huge String.  
hsBlocks&        is the number of blocks of 64,000 chars.

## Comments :

If the size of a Huge String is a multiple of 64,000, the returned blocks will be always the quotient of the division.  
If the size of a Huge String is not a multiple of 64,000, the returned blocks will be the quotient of the division plus one.

## Examples :

```
Dim hsHandle        As Integer
Dim hsSize          As Long
Dim hsReturn        As Integer
Dim hsBlocks        As Long
```

```
hsSize = 512 & * 1024
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
Else
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
End If
```

```
hsReturn = cHugeStrAdd(hsHandle, String$(64000, "A"))
hsReturn = cHugeStrAdd(hsHandle, String$(64000, "B"))
hsReturn = cHugeStrAdd(hsHandle, String$(32000, "C"))
```

```
hsBlocks = cHugeStrBlocks(hsHandle)
```

```
MsgBox "Huge String (" & hsHandle & ") had " & hsBlocks & " blocks"
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
Else
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
End If
```

## See also :

# HugeStrClear

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**HugeStrClear** clear the contents of a Huge String.

## Declare Syntax :

Declare Function cHugeStrClear Lib "time2win.dll" (ByVal hsHandle As Long) As Integer

## Call Syntax :

hsReturn% = cHugeStrClear(hsHandle%)

## Where :

hsHandle%	is the Handle for all functions for Huge String.
hsReturn%	is the returned code,
	TRUE : the Huge String has been cleared.
	FALSE : the Huge String can't be cleared.

## Comments :

## Examples :

```
Dim hsHandle      As Integer
Dim hsSize        As Long
Dim hsReturn      As Integer
```

```
hsSize = 512 & * 1024
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
Else
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
End If
```

```
hsReturn = cHugeStrClear(hsHandle)
```

```
If (hsReturn = TRUE) Then
    MsgBox "Huge String (" & hsHandle & ") has been cleared."
Else
    MsgBox "Huge String (" & hsHandle & ") can't be cleared."
End If
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
Else
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
End If
```

## See also :

# HugeStrCreate

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HugeStrCreate](#) create and reserve enough memory space for the required Huge String.

## Declare Syntax :

Declare Function cHugeStrCreate Lib "time2win.dll" (ByVal hsSize As Long) As Integer

## Call Syntax :

hsHandle% = cHugeStrCreate(hsSize&)

## Where :

hsSize&            is the size for the Huge String (TIME2WIN add 12 bytes for header).  
hsHandle%        is the Handle for all functions for Huge String.

## Comments :

The Handle can be '0' if the Huge String can't be created. In this case, you can't use any functions for Huge String.

## Examples :

```
Dim hsHandle            As Integer
Dim hsSize              As Long

hsSize = 512& * 1024
hsHandle = cHugeStrCreate(hsSize)

If (hsHandle <> 0) Then
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
Else
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
End If
```

## See also :

# HugeStrFree

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HugeStrFree](#) free a Huge String created with cHugeStrCreate.

## Declare Syntax :

Declare Function cHugeStrFree Lib "time2win.dll" (ByVal hsHandle As Long) As Integer

## Call Syntax :

hsReturn% = cHugeStrFree(hsHandle%)

## Where :

hsHandle%	is a handle returned by the cHugeStrCreate function.
hsReturn%	is the returned code,
	TRUE : the Huge String has been destroyed.
	FALSE : the Huge String can't be destroyed.

## Comments :

In the case of the Huge String can't be destroyed, the memory will be restablish when 'TIME TO WIN (32-Bit)' will be unloaded.

## Examples :

Dim hsHandle	As Integer
Dim hsSize	As Long
Dim hsReturn	As Integer

```
hsSize = 512& * 1024
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
Else
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
End If
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
Else
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
End If
```

## See also :



# HugeStrGetNP

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HugeStrGetNP](#) return the Next Pointer of a Huge String.

## Declare Syntax :

Declare Function cHugeStrGetNP Lib "[time2win.dll](#)" (ByVal hsHandle As Long) As Long

## Call Syntax :

hsPtr& = cHugeStrGetNP(hsHandle%)

## Where :

hsHandle%        is the Handle for all functions for Huge String.  
hsPtr&            is the readed Next Pointer.

## Comments :

## Examples :

```
Dim hsHandle        As Integer
Dim hsSize          As Long
Dim hsReturn        As Integer
Dim hsLength        As Long
```

```
hsSize = 512& * 1024
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
Else
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
End If
```

```
hsReturn = cHugeStrAdd(hsHandle, "This is TIME TO WIN version 4.0")
hsReturn = cHugeStrSetWP(hsHandle, 9)
```

```
hsLength = cHugeStrLength(hsHandle)
```

```
MsgBox "Huge String (" & hsHandle & ") had a length of " & hsLength
```

```
MsgBox "The contents of the next 11 chars is " & cHugeStrNext(hsHandle, 11)
```

```
MsgBox "The Next Pointer is " & cHugeStrGetNP(hsHandle)
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
Else
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
End If
```

## See also :

# HugeStrGetWP

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HugeStrGetWP](#) return the Write Pointer of a Huge String.

## Declare Syntax :

Declare Function cHugeStrGetWP Lib "time2win.dll" (ByVal hsHandle As Long) As Long

## Call Syntax :

hsPtr& = cHugeStrGetWP(hsHandle%)

## Where :

hsHandle%        is the Handle for all functions for Huge String.  
hsPtr&            is the readed Write Pointer.

## Comments :

## Examples :

```
Dim hsHandle        As Integer
Dim hsSize          As Long
Dim hsReturn        As Integer
Dim hsLength        As Long
```

```
hsSize = 512& * 1024
```

```
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
```

```
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
```

```
Else
```

```
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
```

```
End If
```

```
hsReturn = cHugeStrAdd(hsHandle, "This is TIME TO WIN version 4.0")
```

```
hsReturn = cHugeStrSetWP(hsHandle, 9)
```

```
hsReturn = cHugeStrAdd(hsHandle, "time to win")
```

```
hsLength = cHugeStrLength(hsHandle)
```

```
MsgBox "Huge String (" & hsHandle & ") had a length of " & hsLength
```

```
MsgBox "The contents of the first block is " & cHugeStrRead(hsHandle, 1)
```

```
MsgBox "The Write Pointer is " & cHugeStrGetWP(hsHandle)
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
```

```
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
```

```
Else
```

```
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
```

```
End If
```

**See also :**

# HugeStrLength

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HugeStrLength](#) return the length of used chars in a Huge String.

## Declare Syntax :

Declare Function cHugeStrLength Lib "[time2win.dll](#)" (ByVal hsHandle As Long) As Long

## Call Syntax :

hsLength% = cHugeStrLength(hsHandle%)

## Where :

hsHandle%        is the Handle for all functions for Huge String.  
hsLength%        is the length of used chars.

## Comments :

## Examples :

```
Dim hsHandle        As Integer
Dim hsSize          As Long
Dim hsReturn        As Integer
Dim hsLength        As Long
```

```
hsSize = 512 & * 1024
```

```
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
```

```
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
```

```
Else
```

```
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
```

```
End If
```

```
hsReturn = cHugeStrAdd(hsHandle, "This is TIME TO WIN version 4.0")
```

```
hsLength = cHugeStrLength(hsHandle)
```

```
MsgBox "Huge String (" & hsHandle & ") had a length of " & hsLength
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
```

```
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
```

```
Else
```

```
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
```

```
End If
```

## See also :

# HugeStrMid

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**HugeStrMid** return the X chars from a position from a Huge String.

## Declare Syntax :

Declare Function cHugeStrMid Lib "time2win.dll" (ByVal hsHandle As Long, ByVal hsStart As Long, ByVal hsLength As Long) As String

## Call Syntax :

hsText\$ = cHugeStrMid(hsHandle%, hsStart&, hsLength&)

## Where :

hsHandle%        is the Handle for all functions for Huge String.  
hsStart& is the starting position (1 to Length of the Huge String).  
hsLength&        is the length of the desired string (1 to 64,000).  
hsText\$           is the readed string.

## Comments :

## Examples :

```
Dim hsHandle        As Integer
Dim hsSize           As Long
Dim hsReturn        As Integer
Dim hsLength        As Long
```

```
hsSize = 512& * 1024
```

```
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
Else
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
End If
```

```
hsReturn = cHugeStrAdd(hsHandle, "This is TIME TO WIN version 4.0")
```

```
hsLength = cHugeStrLength(hsHandle)
```

```
MsgBox "Huge String (" & hsHandle & ") had a length of " & hsLength
```

```
MsgBox "The contents of the 11 chars from the position 9 is " & cHugeStrMid(hsHandle, 9, 11)
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
Else
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
End If
```

## See also :

# HugeStrNext

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HugeStrNext](#) return the X next chars from the Next Pointer in a Huge String.

## Declare Syntax :

Declare Function cHugeStrNext Lib "[time2win.dll](#)" (ByVal hsHandle As Long, ByVal hsNext As Long) As String

## Call Syntax :

hsText\$ = cHugeStrNext(hsHandle%, hsNext&)

## Where :

hsHandle%	is the Handle for all functions for Huge String.
hsNext&	is the number of next chars to read (1 to 64,000).
hsText\$	is the readed string.

## Comments :

## Examples :

Dim hsHandle	As Integer
Dim hsSize	As Long
Dim hsReturn	As Integer
Dim hsLength	As Long

```
hsSize = 512 & * 1024
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
Else
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
End If
```

```
hsReturn = cHugeStrAdd(hsHandle, "This is TIME TO WIN version 4.0")
hsReturn = cHugeStrSetWP(hsHandle, 9)
```

```
hsLength = cHugeStrLength(hsHandle)
```

```
MsgBox "Huge String (" & hsHandle & ") had a length of " & hsLength
```

```
MsgBox "The contents of the next 11 chars is " & cHugeStrNext(hsHandle, 11)
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
Else
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
End If
```

## See also :

# Object : Overview

<a href="#"><u>DisableCtlRedraw</u></a>	disable the redraw of a object (by Control).
<a href="#"><u>DisableFl</u></a>	disable mouse and keyboard input to the given form (by Object).
<a href="#"><u>DisableForm</u></a>	disable mouse and keyboard input to the given form (by hWnd).
<a href="#"><u>DisableRedraw</u></a>	disable the redraw of a object (by hWnd).
<a href="#"><u>EnableCtlRedraw</u></a>	enable the redraw of a object (by Control).
<a href="#"><u>EnableFl</u></a>	enable mouse and keyboard input to the given form (by Object).
<a href="#"><u>EnableForm</u></a>	enable mouse and keyboard input to the given form (by hWnd).
<a href="#"><u>EnableRedraw</u></a>	enable the redraw of a object (by hWnd).
<a href="#"><u>GetCtlCaption</u></a>	return the .Caption property.
<a href="#"><u>GetCtlClass</u></a>	return the class name defined in the properties windows in the design-mode of VB.
<a href="#"><u>GetCtlContainer</u></a>	return the name of the container did contains the control.
<a href="#"><u>GetCtlDataField</u></a>	return the .DataField property.
<a href="#"><u>GetCtlForm</u></a>	return the name of the form did contains the control.
<a href="#"><u>GetCtlIndex</u></a>	return the .Index property.
<a href="#"><u>GetCtlName</u></a>	return the .Name of the control.
<a href="#"><u>GetCtlNameIndex</u></a>	return the name and the of the control.
<a href="#"><u>GetCtlPropCaption</u></a>	return the position of the .Caption property in the definition table of the control.
<a href="#"><u>GetCtlPropDataField</u></a>	return the position of the .DataField property in the definition table of the control.
<a href="#"><u>GetCtlPropText</u></a>	return the position of the .Text property in the definition table of the control.
<a href="#"><u>GetCtlTag</u></a>	return the .Tag property of the control.
<a href="#"><u>GetCtlTagSized</u></a>	return the full .Tag property of the control.
<a href="#"><u>GetCtlText</u></a>	return the .Text property of the control.
<a href="#"><u>GetHwnd</u></a>	return the .hWnd of the control.
<a href="#"><u>GetObjCaption</u></a>	
<a href="#"><u>GetObjClassName</u></a>	
<a href="#"><u>GetObjContainer</u></a>	
<a href="#"><u>GetObjDataField</u></a>	
<a href="#"><u>GetObjDataSource</u></a>	
<a href="#"><u>GetObjIndex</u></a>	
<a href="#"><u>GetObjName</u></a>	
<a href="#"><u>GetObjNameIndex</u></a>	
<a href="#"><u>GetObjParent</u></a>	
<a href="#"><u>GetObjTag</u></a>	
<a href="#"><u>GetObjText</u></a>	
<a href="#"><u>ObjDisableRedraw</u></a>	disable the redraw of a object (by Object).
<a href="#"><u>ObjEnableRedraw</u></a>	enable the redraw of a object (by Object).
<a href="#"><u>ObjectGetBoolean</u></a>	
<a href="#"><u>ObjectGetByte</u></a>	
<a href="#"><u>ObjectGetIndex</u></a>	
<a href="#"><u>ObjectGetInteger</u></a>	
<a href="#"><u>ObjectGetLong</u></a>	
<a href="#"><u>ObjectGetPropertyByName</u></a>	read data in properties (by name) from OCX custom controls.
<a href="#"><u>ObjectGetPropertyByPos</u></a>	read data in properties (by position) from OCX custom controls.
<a href="#"><u>ObjectGetString</u></a>	
<a href="#"><u>ObjectGetStringW</u></a>	
<a href="#"><u>ObjectGetVariant</u></a>	
<a href="#"><u>ObjectMethod</u></a>	
<a href="#"><u>ObjectMethodByName</u></a>	give the access of method (by name) of OCX custom controls.
<a href="#"><u>ObjectMethodByPos</u></a>	give the access of method (by position) of OCX custom controls.
<a href="#"><u>ObjectPutBoolean</u></a>	
<a href="#"><u>ObjectPutByte</u></a>	
<a href="#"><u>ObjectPutInteger</u></a>	
<a href="#"><u>ObjectPutLong</u></a>	
<a href="#"><u>ObjectPutPropertyByName</u></a>	write data in properties (by name) from OCX custom controls.
<a href="#"><u>ObjectPutPropertyByPos</u></a>	write data in properties (by position) in OCX custom controls.
<a href="#"><u>ObjectPutString</u></a>	
<a href="#"><u>ObjectPutVariant</u></a>	
<a href="#"><u>PutObjCaption</u></a>	
<a href="#"><u>PutObjDataField</u></a>	

PutObjDataSource

PutObjTag

PutObjText

SetCtlCaption

SetCtlDataField

SetCtlFocus

SetCtlPropString

control.

SetCtlTag

SetCtlText

set the .Caption property of the control.

set the .DataField property of the control.

give the Focus to a control.

set the specified property (founded with cGetCtlPropString function) of the

set the .Tag property of the control.

set the .Text property of the control.



# HugeStrOnDisk

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HugeStrOnDisk](#) read/write a Huge String from/to a file.

## Declare Syntax :

Declare Function cHugeStrOnDisk Lib "time2win.dll" (ByVal hsHandle As Long, ByVal hsFile As String, ByVal hsGetPut As Integer) As Long

## Call Syntax :

hsFileLength& = cHugeStrOnDisk(hsHandle%, hsFile\$, hsGetPut%)

## Where :

hsHandle%        is the Handle for all functions for Huge String.  
hsFile\$         is the name of the file to read/write the Huge String.  
hsGetPut%       PUT\_ARRAY\_ON\_DISK to put the array on disk,  
                  GET\_ARRAY\_ON\_DISK to get the array from disk.  
hsFileLength&   >=0 is the returned length of the file,  
                  < 0 is an error occurs (error n° is the negative value of all DA\_x values, see Constants and Types  
declaration ).

## Comments :

The file length is the size of the Huge String plus the 12 bytes header.

## Examples :

```
Dim hsHandle        As Integer
Dim hsSize          As Long
Dim hsReturn        As Integer
Dim hsLength        As Long
```

```
hsSize = 512& * 1024
```

```
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
```

```
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
```

```
Else
```

```
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
```

```
End If
```

```
hsReturn = cHugeStrAdd(hsHandle, "This is TIME TO WIN version 4.0")
```

```
hsLength = cHugeStrLength(hsHandle)
```

```
MsgBox "Huge String (" & hsHandle & ") had a length of " & hsLength
```

```
MsgBox "The length of the saved file is " & cHugeStrOnDisk(hsHandle, "c:\hugestr.tmp", PUT_ARRAY_ON_DISK)
```

```
hsReturn = cHugeStrClear(hsHandle)
```

```
MsgBox "The length of the readed file is " & cHugeStrOnDisk(hsHandle, "c:\hugestr.tmp", GET_ARRAY_ON_DISK)
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
Else
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
End If
```

**See also :**

# HugeStrRead

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HugeStrRead](#) read a block of 64,000 chars or a part of block in a Huge String.

## Declare Syntax :

Declare Function cHugeStrRead Lib "time2win.dll" (ByVal hsHandle As Long, ByVal hsBlock As Long) As String

## Call Syntax :

hsText\$ = cHugeStrRead(hsHandle%, hsBlock&)

## Where :

hsHandle%	is the Handle for all functions for Huge String.
hsBlock&	is a block number for reading into Huge String (must be between 1 and cHugeStrBlocks).
hsText\$	is the returned string (maximum 64,000 chars).

## Comments :

The length of hsText will be between 0 and 64,000 chars.

## Examples :

Dim hsHandle	As Integer
Dim hsSize	As Long
Dim hsReturn	As Integer
Dim hsLength	As Long

```
hsSize = 512 & * 1024
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
Else
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
End If
```

```
hsReturn = cHugeStrAdd(hsHandle, "This is TIME TO WIN version 4.0")
```

```
hsLength = cHugeStrLength(hsHandle)
```

```
MsgBox "Huge String (" & hsHandle & ") had a length of " & hsLength
```

```
MsgBox "The contents of the first block is " & cHugeStrRead(hsHandle, 1)
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
Else
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
End If
```

## See also :

# HugeStrSetNP

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HugeStrSetNP](#) set the Next Pointer of a Huge String.

## Declare Syntax :

Declare Function cHugeStrSetNP Lib "[time2win.dll](#)" (ByVal hsHandle As Long, ByVal hsPtr As Long) As Integer

## Call Syntax :

hsReturn% = cHugeStrSetNP(hsHandle% , hsPtr&)

## Where :

hsHandle%	is the Handle for all functions for Huge String.
hsPtr&	is the new Next Pointer.
hsReturn%	TRUE : if all is ok FALSE : if hsPtr is <=0 or > Length of the Huge String.

## Comments :

## Examples :

Dim hsHandle	As Integer
Dim hsSize	As Long
Dim hsReturn	As Integer
Dim hsLength	As Long

hsSize = 512 & \* 1024

hsHandle = cHugeStrCreate(hsSize)

If (hsHandle <> 0) Then

    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"

Else

    MsgBox "Huge String of " & hsSize & " bytes can't be created."

End If

hsReturn = cHugeStrAdd(hsHandle, "This is TIME TO WIN version 4.0")

hsReturn = cHugeStrSetNP(hsHandle, 9)

hsLength = cHugeStrLength(hsHandle)

MsgBox "Huge String (" & hsHandle & ") had a length of " & hsLength

MsgBox "The contents of the next 11 chars is " & cHugeStrNext(hsHandle, 11)

hsReturn = cHugeStrFree(hsHandle)

If (hsReturn = TRUE) Then

    MsgBox "Huge String (" & hsHandle & ") has been destroyed."

Else

    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."

End If

## See also :

# HugeStrSetWP

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**HugeStrSetWP** set the Write Pointer into a Huge String.

## Declare Syntax :

Declare Function cHugeStrSetWP Lib "time2win.dll" (ByVal hsHandle As Long, ByVal hsPtr As Long) As Integer

## Call Syntax :

hsReturn% = cHugeStrSetWP(hsHandle%, hsPtr&)

## Where :

hsHandle%	is the Handle for all functions for Huge String.
hsPtr&	is the new Write Pointer.
hsReturn%	TRUE : if all is ok FALSE : if hsPtr is <=0 or > Length of the Huge String.

## Comments :

## Examples :

Dim hsHandle	As Integer
Dim hsSize	As Long
Dim hsReturn	As Integer
Dim hsLength	As Long

```
hsSize = 512& * 1024
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
Else
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
End If
```

```
hsReturn = cHugeStrAdd(hsHandle, "This is TIME TO WIN version 4.0")
hsReturn = cHugeStrSetWP(hsHandle, 9)
hsReturn = cHugeStrAdd(hsHandle, "time to win")
```

```
hsLength = cHugeStrLength(hsHandle)
```

```
MsgBox "Huge String (" & hsHandle & ") had a length of " & hsLength
```

```
MsgBox "The contents of the first block is " & cHugeStrRead(hsHandle, 1)
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
Else
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
End If
```

**See also :**

# HugeStrSize

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[HugeStrSize](#) return the size of a Huge String.

## Declare Syntax :

Declare Function cHugeStrSize Lib "time2win.dll" (ByVal hsHandle As Long) As Long

## Call Syntax :

hsReadSize& = cHugeStrSize(hsHandle%)

## Where :

hsHandle%        is a handle returned by the cHugeStrCreate function.  
hsReadSize&    is the size of the Huge String.

## Comments :

The returned size is the size specified in the cHugeStrCreate function.

## Examples :

```
Dim hsHandle        As Integer
Dim hsSize          As Long
Dim hsReturn        As Integer
Dim hsReadSize      As Long
```

```
hsSize = 512& * 1024
hsHandle = cHugeStrCreate(hsSize)
```

```
If (hsHandle <> 0) Then
    MsgBox "Huge String of " & hsSize & " bytes has been created with handle (" & hsHandle & ")"
Else
    MsgBox "Huge String of " & hsSize & " bytes can't be created."
End If
```

```
hsReadSize = cHugeStrSize(hsHandle)
```

```
MsgBox "Huge String (" & hsHandle & ") had a size of " & hsReadSize
```

```
hsReturn = cHugeStrFree(hsHandle)
```

```
If (hsReturn = TRUE) Then
    MsgBox "Huge String (" & hsHandle & ") has been destroyed."
Else
    MsgBox "Huge String (" & hsHandle & ") can't be destroyed."
End If
```

## See also :

# Huge string : Overview

The functions/subs used in the Huge String routines handle Huge String. Huge String is a string from 1 to 16,711,680 chars.

An bigger advantage of Huge String is the speed.

The functions for adding or appending chars in a Huge String is faster than VB equivalent (20 times faster).

The maximum number of Huge String is 8192.

This number is a theoretical maximum and is depending of any application loaded in memory.

The following functions/subs are used to handle big sized arrays on disk :

<u>HugeStrAdd</u>	add a VB string into a Huge String.
<u>HugeStrAddress</u>	return a pointer for the first char of a Huge String.
<u>HugeStrAppend</u>	append a VB string into a Huge String.
<u>HugeStrBlocks</u>	return the number of block of 64,000 chars from a Huge String.
<u>HugeStrClear</u>	clear a Huge String.
<u>HugeStrCreate</u>	create a Huge String.
<u>HugeStrFree</u>	free a Huge String (destroy it).
<u>HugeStrGetNP</u>	get the Next Pointer of a Huge String.
<u>HugeStrGetWP</u>	get the Write Pointer of a Huge String.
<u>HugeStrLength</u>	return the length of data in a Huge String.
<u>HugeStrMid</u>	extract a VB sub-string from a Huge String.
<u>HugeStrNext</u>	read the next part of a Huge String.
<u>HugeStrOnDisk</u>	get/put a Huge String from/to a file on disk.
<u>HugeStrRead</u>	read a block of 64,000 chars or minder from a Huge String.
<u>HugeStrSetNP</u>	set the Next Pointer of a Huge String.
<u>HugeStrSetWP</u>	set the Write Pointer of a Huge String.
<u>HugeStrSize</u>	return the full size of a Huge String.

Don't forget that any Huge String must be destroyed before quitting the application.

If you not destroy all Huge String that you've created, the memory used will be only released when TIME2WIN.DLL will be unloaded from memory.



# SetCtl.X

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

The functions below applies to a custom control.

[SetCtlCaption](#) set the .Caption property of the control.

[SetCtlDataField](#) set the .DataField property of the control.

[SetCtlFocus](#) give the Focus to a control.

[SetCtlPropString](#) set the specified property (founded with cGetCtlPropString function) of the control.

[SetCtlTag](#) set the .Tag property of the control.

[SetCtlText](#) set the .Text property of the control.

## Declare Syntax :

```
Declare Sub cSetCtlCaption Lib "time2win.dll" (Obj As Object, ByVal Text As String)
```

```
Declare Sub cSetCtlDataField Lib "time2win.dll" (Obj As Object, ByVal Text As String)
```

```
Declare Sub cSetCtlFocus Lib "time2win.dll" (Obj As Object)
```

```
Declare Sub cSetCtlPropString Lib "time2win.dll" (Obj As Object, ByVal PropIndex As Integer, ByVal Text As String)
```

```
Declare Sub cSetCtlTag Lib "time2win.dll" (Obj As Object, ByVal Text As String)
```

```
Declare Sub cSetCtlText Lib "time2win.dll" (Obj As Object, ByVal Text As String)
```

## Call Syntax :

The purpose and the declare syntax are very explicite.

## Where :

Obj                    the name of the object to proceed

## Comments :

The advantage to use these routines is that these routines doesn't generates an error if the property not exists.

## Examples :

**See also :** [Object](#)

# GetCtl.X

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

The functions below applies to a custom control.

[GetCtlCaption](#) return the .Caption property.

[GetCtlClass](#) return the class name defined in the properties windows in the design-mode of VB.

[GetCtlContainer](#) return the name of the container did contains the control. The container can be the form or an another control.

[GetCtlDataField](#) return the .DataField property.

[GetCtlForm](#) return the name of the form did contains the control.

[GetCtlIndex](#) return the .Index property. If the control has no index, -1 is returned.

[GetCtlName](#) return the .Name of the control.

[GetCtlNameIndex](#) return the name and the of the control. The format is Name(x), if no index => Name is used.

[GetCtlPropCaption](#) return the position of the .Caption property in the definition table of the control.

[GetCtlPropDataField](#) return the position of the .DataField property in the definition table of the control.

[GetCtlPropText](#) return the position of the .Text property in the definition table of the control.

[GetCtlTag](#) return the .Tag property of the control. The returned string is limited to the first chr\$(0) founded.

[GetCtlTagSized](#) return the full .Tag property of the control.

[GetCtlText](#) return the .Text property of the control.

[GetHwnd](#) return the .hwnd of the control. If the control has no .hwnd, the returned value is 0.

## Declare Syntax :

```
Declare Function cGetCtlCaption Lib "time2win.dll" (Obj As Object) As String
Declare Function cGetCtlClass Lib "time2win.dll" (Obj As Object) As String
Declare Function cGetCtlContainer Lib "time2win.dll" (Obj As Object) As String
Declare Function cGetCtlDataField Lib "time2win.dll" (Obj As Object) As String
Declare Function cGetCtlForm Lib "time2win.dll" (Obj As Object) As String
Declare Function cGetCtlIndex Lib "time2win.dll" (Obj As Object) As Integer
Declare Function cGetCtlName Lib "time2win.dll" (Obj As Object) As String
Declare Function cGetCtlNameIndex Lib "time2win.dll" (Obj As Object) As String
Declare Function cGetCtlPropCaption Lib "time2win.dll" (Obj As Object) As Integer
Declare Function cGetCtlPropDataField Lib "time2win.dll" (Obj As Object) As Integer
Declare Function cGetCtlPropText Lib "time2win.dll" (Obj As Object) As Integer
Declare Function cGetCtlTag Lib "time2win.dll" (Obj As Object) As String
Declare Function cGetCtlTagSized Lib "time2win.dll" (Obj As Object) As String
Declare Function cGetCtlText Lib "time2win.dll" (Obj As Object) As String
Declare Function cGetHwnd Lib "time2win.dll" (Obj As Object) As Integer
```

## Call Syntax :

The purpose and the declare syntax are very explicite.

## Where :

Ctl                      the name of the control to proceed

## Comments :

The advantage to use these routines is that these routines doesn't generates an error if the property not exists.

## Examples :

**See also :** [Object](#)

# ObjectMethod, ObjectGetProperty, ObjectPutProperty

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ObjectMethodByPos](#) give the access of method (by position) of OCX custom controls.

[ObjectMethodByName](#) give the access of method (by name) of OCX custom controls.

[ObjectGetPropertyByPos](#) read data in properties (by position) from OCX custom controls.

[ObjectGetPropertyByName](#) read data in properties (by name) from OCX custom controls.

[ObjectPutPropertyByPos](#) write data in properties (by position) in OCX custom controls.

[ObjectPutPropertyByName](#) write data in properties (by name) from OCX custom controls.

## Declare Syntax :

```
Declare Sub cObjectMethodByPos Lib "time2win.dll" (Obj As Object, ByVal Property As Integer, lpPut As Variant)
Declare Function cObjectGetPropertyByPos Lib "time2win.dll" (Obj As Object, ByVal Property As Integer) As Variant
Declare Sub cObjectPutPropertyByPos Lib "time2win.dll" (Obj As Object, ByVal Property As Integer, lpPut As Variant)
Declare Sub cObjectMethodByName Lib "time2win.dll" (Obj As Object, ByVal Property As String, lpPut As Variant)
Declare Function cObjectGetPropertyByName Lib "time2win.dll" (Obj As Object, ByVal Property As String) As Variant
Declare Sub cObjectPutPropertyByName Lib "time2win.dll" (Obj As Object, ByVal Property As String, lpPut As Variant)
```

## Call Syntax :

```
Call cObjectMethodByPos(Obj, Property%, varPut)
Call cObjectMethodByName(Obj, Property$, varPut)
varGet = cObjectGetPropertyByPos(Obj, Property%)
varGet = cObjectGetPropertyByName(Obj, Property$)
Call cObjectPutPropertyByPos(Obj, Property%, varPut)
Call cObjectPutPropertyByName(Obj, Property$, varPut)
```

## Where :

Obj	is a valid object (Form, OCX custom control, VBX custom control);
Property%	is a constant for accessing the data (see Constants and Types declaration);
Property\$	is a valid property;
varPut	is a data in a type variant;
varGet	is the returned data in a type variant.

## Comments :

For cObjectGetProperty?, if the property don't exist the returned variant is EMPTY

## Examples :

```
Dim varGet As Variant

Call cObjectPutPropertyByPos(Frame1, OBJ_CAPTION, "this is a test")
varGet = cObjectGetPropertyByPos(Frame1, OBJ_CAPTION) '---> this is a test

Call cObjectPutPropertyByName(Frame1, "caption", "this is an another test")
varGet = cObjectGetPropertyByName(Frame1, "caption") '---> this is an another test

Call cObjectMethodByName(List1, "clear", Empty)
```

## See also :

# ObjectGet.X

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

```
Declare Function cObjectGetBoolean Lib "time2win.dll" (ByVal Obj As Object, ByVal Property As String) As Boolean
Declare Function cObjectGetByte Lib "time2win.dll" (ByVal Obj As Object, ByVal Property As String) As Byte
Declare Function cObjectGetInteger Lib "time2win.dll" (ByVal Obj As Object, ByVal Property As String) As Integer
Declare Function cObjectGetLong Lib "time2win.dll" (ByVal Obj As Object, ByVal Property As String) As Long
Declare Function cObjectGetString Lib "time2win.dll" (ByVal Obj As Object, ByVal Property As String) As String
Declare Function cObjectGetStringW Lib "time2win.dll" (ByVal Obj As Object, ByVal Property As String) As String
Declare Function cObjectGetVariant Lib "time2win.dll" (ByVal Obj As Object, ByVal Property As String) As Variant
Declare Function cObjectGetIndex Lib "time2win.dll" (ByVal Obj As Object) As Integer
```

# GetObj.X

```
Declare Function cGetObjCaption Lib "time2win.dll" (ByVal Obj As Object) As String
Declare Function cGetObjContainer Lib "time2win.dll" (ByVal Obj As Object) As String
Declare Function cGetObjParent Lib "time2win.dll" (ByVal Obj As Object) As String
Declare Function cGetObjTag Lib "time2win.dll" (ByVal Obj As Object) As String
Declare Function cGetObjText Lib "time2win.dll" (ByVal Obj As Object) As String
Declare Function cGetObjDataField Lib "time2win.dll" (ByVal Obj As Object) As String
Declare Function cGetObjDataSource Lib "time2win.dll" (ByVal Obj As Object) As String
Declare Function cGetObjName Lib "time2win.dll" (ByVal Obj As Object) As String
Declare Function cGetObjIndex Lib "time2win.dll" (ByVal Obj As Object) As Integer
Declare Function cGetObjNameIndex Lib "time2win.dll" (ByVal Obj As Object) As String
Declare Function cGetObjClassName Lib "time2win.dll" (ByVal Obj As Object) As String
```

# ObjectPut.X

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

```
Declare Sub cObjectPutBoolean Lib "time2win.dll" (ByVal Obj As Object, ByVal Property As String, ByVal Value As Boolean)
Declare Sub cObjectPutByte Lib "time2win.dll" (ByVal Obj As Object, ByVal Property As String, ByVal Value As Byte)
Declare Sub cObjectPutInteger Lib "time2win.dll" (ByVal Obj As Object, ByVal Property As String, ByVal Value As Integer)
Declare Sub cObjectPutLong Lib "time2win.dll" (ByVal Obj As Object, ByVal Property As String, ByVal Value As Long)
Declare Sub cObjectPutString Lib "time2win.dll" (ByVal Obj As Object, ByVal Property As String, ByVal Value As String)
Declare Sub cObjectPutVariant Lib "time2win.dll" (ByVal Obj As Object, ByVal Property As String, ByVal Value As Variant)
```

## PutObj.X

```
Declare Sub cPutObjCaption Lib "time2win.dll" (ByVal Obj As Object, ByVal Value As String)
Declare Sub cPutObjDataField Lib "time2win.dll" (ByVal Obj As Object, ByVal Value As String)
Declare Sub cPutObjDataSource Lib "time2win.dll" (ByVal Obj As Object, ByVal Value As String)
Declare Sub cPutObjTag Lib "time2win.dll" (ByVal Obj As Object, ByVal Value As String)
Declare Sub cPutObjText Lib "time2win.dll" (ByVal Obj As Object, ByVal Value As String)
```

# ObjectMethod

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

Declare Sub cObjectMethod Lib "time2win.dll" (ByVal Obj As Object, ByVal Method As String, ByVal Value As Variant)



# EnableFI, DisableFI

## Purpose :

EnableFI and DisableFI enable or disable mouse and keyboard input to the given form by sending a WM\_ENABLE message and displaying an invisible control such a picture or an image.

When input is disabled, the form ignore input such as mouse clicks and key presses.

When input is enabled, the form process all input.

## Declare Syntax :

Declare Sub cEnableFI Lib "time2win.dll" (Obj As Object)

Declare Sub cDisableFI Lib "time2win.dll" (Obj As Object)

## Call Syntax :

Call cEnableFI(Ctl)

Call cDisableFI(Ctl)

## Where :

Ctl                    the invisible control that you want become visible (cDisableFI) or invisible (cEnableFI).

## Comments :

I use this function with a picture control which contains a timer BMP.

If the enabled state of the form is changing, a WM\_ENABLE message is sent before this function returns. If a form is already disabled, all its child forms are implicitly disabled, although they are not sent a WM\_ENABLE message.

After some experience, I've noted that some custom controls doesn't answers correctly to this function. In fact, all controls can't receive the input when you Call cDisableFI.

Use this with caution.

**See also :** cEnableForm, cDisableForm

# EnableForm, DisableForm

## Purpose :

EnableForm and DisableForm enable or disable mouse and keyboard input to the given form by sending a WM\_ENABLE message.

When input is disabled, the form ignore input such as mouse click and key press.

When input is enabled, the form process all inputs.

## Declare Syntax :

Declare Sub cEnableForm Lib "time2win.dll" (ByVal hWnd As Long)

Declare Sub cDisableForm Lib "time2win.dll" (ByVal hWnd As Long)

## Call Syntax :

Call cEnableForm(Form.hWnd)

Call cDisableForm(Form.hWnd)

## Where :

Form.hWnd                      the .hWnd of the specified form

## Comments :

If the enabled state of the form is changing, a WM\_ENABLE message is sent before this function returns. If a form is already disabled, all its child forms are implicitly disabled, although they are not sent a WM\_ENABLE message.

Use this with caution.

**See also :** cEnableFI, cDisableFI

# EnableRedraw, DisableRedraw, EnableCtlRedraw, DisableCtlRedraw, ObjEnableRedraw, ObjDisableRedraw

## Purpose :

[EnableRedraw](#) and [DisableRedraw](#) send a WM\_SETREDRAW message from a hWnd of a control to allow change in that window to be redrawn or to prevent change in that window from being redrawn.

[EnableCtlRedraw](#) and [DisableCtlRedraw](#) send a WM\_SETREDRAW message to a control to allow change in that window to be redrawn or to prevent change in that window from being redrawn.

## Declare Syntax :

```
Declare Sub cEnableRedraw Lib "time2win.dll" (ByVal hWnd As Long)
Declare Sub cDisableRedraw Lib "time2win.dll" (ByVal hWnd As Long)
```

```
Declare Sub cEnableCtlRedraw Lib "time2win.dll" (Obj As Object)
Declare Sub cDisableCtlRedraw Lib "time2win.dll" (Obj As Object)
```

```
Declare Sub cObjEnableRedraw Lib "time2win.dll" (ByVal Obj As Object)
Declare Sub cObjDisableRedraw Lib "time2win.dll" (ByVal Obj As Object)
```

## Call Syntax :

```
Call cEnableRedraw(Ctl.hWnd)
Call cDisableRedraw(Ctl.hWnd)
```

```
Call cEnableCtlRedraw(Ctl)
Call cDisableCtlRedraw(Ctl)
```

## Where :

## Comments :

The WM\_SETREDRAW message can be used to set and clear the redraw flag for a window. This message is very useful for preventing a list box from being updated when many items are being added to it, and then allowing the list box to be redrawn when all of the changes have been made to its contents. Using this technique prevents a list box that is currently visible from flashing constantly as its contents are being updated.

This message sets or clears the redraw flag. If the redraw flag is cleared, the contents of the specified window will not be updated after each change, and the window will not be repainted until the redraw flag is set. For example, an application that needs to add several items to a list box can clear the redraw flag, add the items, and then set the redraw flag. Finally, the application can Call the InvalidateRect function to cause the list box to be repainted.

If the custom control doesn't have a .hWnd (Label control b.e.), you must use the XCtlRedraw routine.

## Printer : Overview

[EnumPrinterJobs](#) enumerate all pending jobs on a printer.

# Date and time : Overview

<a href="#"><u>AddTime</u></a>	retrieve only the part for hours on one day.
<a href="#"><u>CheckTime</u></a>	verify if an hour (in minutes) is between two others hours (in minutes).
<a href="#"><u>CurrentTime</u></a>	return the minutes elapsed since midnight.
<a href="#"><u>DateToScalar</u></a>	compute a scalar from all date parts.
<a href="#"><u>DayOfWeek</u></a>	calculate the day of the week.
<a href="#"><u>DayOfYear</u></a>	calculate the day of the year.
<a href="#"><u>DaysInMonth</u></a>	return the total days in a month.
<a href="#"><u>HourTo</u></a>	convert a time string to a VARIANT value in minutes (INTEGER or LONG).
<a href="#"><u>IntoBalance</u></a>	convert a VARIANT value (INTEGER or LONG) in a time string.
<a href="#"><u>IntoBalance</u></a>	convert a VARIANT value (INTEGER or LONG) in a time string with leading zero.
<a href="#"><u>IntoDate</u></a>	convert a date value into a date string specified the short date format order in the Control Panel.
<a href="#"><u>IntoDateFill</u></a>	convert a date value into a date string specified the short date format order in the Control Panel.
<a href="#"><u>IntoDateNull</u></a>	convert a date value into a date string specified the short date format order in the Control Panel.
<a href="#"><u>IntoFixHour</u></a>	is super-set for converting a VARIANT (INTEGER or LONG) into a fixed time string.
<a href="#"><u>IntoHour</u></a>	convert a VARIANT (INTEGER or LONG) into a hour string.
<a href="#"><u>IntoVarHour</u></a>	convert a VARIANT (INTEGER or LONG) into a hour string (variable length following the value).
<a href="#"><u>ScalarToDate</u></a>	decompose a scalar date into these components.
<a href="#"><u>ScalarToTime</u></a>	decompose a scalar time into these components.
<a href="#"><u>TimeBetween</u></a>	calculate the time (in minutes) between two hours (in minutes).
<a href="#"><u>TimeToScalar</u></a>	compute a scalar from all time parts.
<a href="#"><u>WeekOfYear</u></a>	calculate the week of the year.

# GetVersion

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[GetVersion](#) return the version number of 'TIME TO WIN'

## **Declare Syntax :**

Declare Function cGetVersion Lib "time2win.dll" () As Single

## **Call Syntax :**

version% = cGetVersion()

## **Where :**

## **Comments :**

This is usefull to avoid version conflict with old version.

## **Examples :**

version% = cGetVersion()                      ' 3.00

**See also :** [TIME2WIN](#)

# TIME2WIN : Overview

[GetVersion](#) return the version number of 'TIME TO WIN'.

# GetNetConnection

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetNetConnection](#) return the name of the network resource associated with the specified redirected local device.

## Declare Syntax :

Declare Function cGetNetConnection Lib "time2win.dll" (ByVal lpDrive As String, ErrCode As Integer) As String

## Call Syntax :

test\$ = cGetNetConnection(lpDrive, ErrCode)

## Where :

lpDrive	a string specifying the name of the redirected local device.
ErrCode	TRUE is all is ok <> TRUE if an error has occurred
test\$	the returned name of the remote network resource.

## Comments :

## Examples :

**See also :** [Network](#)



## Network : Overview

[GetNetConnection](#)  
device.

return the name of the network resource associated with the specified redirected local

# LngInpBox

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[LngInpBox](#) is a fully replacement of the standard function InputBox\$. It supports Multi-Language.

## Declare Syntax :

Declare Function cLngInpBox Lib "[time2win.dll](#)" (ByVal nLanguage As Integer, ByVal Message As String, ByVal Title As String, ByVal Default As String) As String

## Call Syntax :

test\$ = cLngInpBox(nLanguage, Message, Title, Default)

## Where :

nLanguage	is the language number.
Message	is the message to display.
Title	is the title of the message box.
Default	is the default string to display in the input part.
Test\$	is the returned data in the input part.

## Comments :

nLanguage must be a language number defined in Constants and Types declaration. If the language number is not correct, the french language is always returned.

The returned data can be an EMPTY string if the 'Cancel' button is pushed. If the 'OK' button is pushed the contents of the input part is returned.

## Examples :

test\$ = cLngInpBox(LNG\_FRENCH, "This a new InputBox in French", "TIME TO WIN ", " INPUT BOX IN FRENCH")

**See also :** [Multi language message box - input box](#)

# LngBoxMsg, LngMsgBox

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[LngBoxMsg](#) is a fully replacement of the standard sub MsgBox. It supports Multi-Language and add some new parameters.

[LngMsgBox](#) is a fully replacement of the standard function MsgBox. It supports Multi-Language and add some new parameters.

## Declare Syntax :

```
Declare Sub cLngBoxMsg Lib "time2win.dll" Alias "cLngMsgBox" (ByVal nLanguage As Integer, ByVal Message As String, ByVal Button As Long, ByVal Title As String)
Declare Function cLngMsgBox Lib "time2win.dll" (ByVal nLanguage As Integer, ByVal Message As String, ByVal Button As Long, ByVal Title As String) As Integer
```

## Call Syntax :

```
Call cLngBoxMsg(nLanguage, Message, Button, Title)
test% = cLngMsgBox(nLanguage, Message, Button, Title)
```

## Where :

nLanguage	is the language number.
Message	is the message to display.
Button	specifies the contents and behavior of the message box.
Title	This parameter is a combination of the standard MsgBox parameters
test%	is the title of the message box.
	is the button Id pushed (see VB MsgBox).

## Comments :

nLanguage must be a language number defined in Constants and Types declaration. If the language number is not correct, the french language is always returned.

Button adds two new parameters : MB\_MESSAGE\_CENTER (centering the message), MB\_MESSAGE\_RIGHT (right-justify the message).

Button adds four mixing timeout : 2, 4, 8, 16 seconds (The timeout can be : 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 seconds).

If a timeout occurs after no actions from the operator, cLngMsgBox returns the default button.

A timeout occurs even if the system menu of the message box is activated.

The default justification is MB\_MESSAGE\_LEFT.

The icons used a little different from the standard message box.

Beware when using TimeOut fonctionnality in the new message box, use only to display some low warning messages.

## Examples :

```
Call cLngBoxMsg(LNG_FRENCH, "This is new.", MB_ICONSTOP or MB_MESSAGE_CENTER or MB_YESNOCANCEL or MB_TIMEOUT_8, "TIME TO WIN")
test% = cLngMsgBox(LNG_FRENCH, "This is new.", MB_ICONSTOP or MB_MESSAGE_CENTER or MB_YESNOCANCEL or MB_TIMEOUT_12 or MB_DISPLAY_TIMEOUT, "TIME TO WIN")
```

**See also :** [Multi language message box - input box](#)

# Multi language message box - input box : Overview

LngInpBox is a fully replacement of the standard function InputBox\$. It supports Multi-Language.

LngBoxMsg is a fully replacement of the standard sub MsgBox. It supports Multi-Language and add some new parameters.

LngMsgBox is a fully replacement of the standard function MsgBox. It supports Multi-Language and add some new parameters.

# ReadCtlLanguage, SaveCtlLanguage

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ReadCtlLanguage](#) read a file which contains the text for supporting a language.

[SaveCtlLanguage](#) create or update a file which contains the text for supporting a language.

## Declare Syntax :

Declare Function cSaveCtlLanguage Lib "time2win.dll" (Obj As Object, ByVal Property As Integer, ByVal FileLanguage As String) As Integer

Declare Function cReadCtlLanguage Lib "time2win.dll" (Obj As Object, ByVal Property As Integer, ByVal FileLanguage As String) As Integer

## Call Syntax :

test% = cSaveCtlLanguage(Obj, Property, FileLanguage)

test% = cReadCtlLanguage(Obj, Property, FileLanguage)

## Where :

Obj	is any object on the form to use the text language.
Property	is an association of constants (RS_CAPTION, RS_TEXT, RS_DATAFIELD, RS_DATASOURCE, RS_TAG)
FileLanguage	is the file name to perform the language management.
test%	TRUE if all is ok FALSE is an error has occurred

## Comments :

These functions are very, VERY simple to use and your application can support multi-language very fast.

If a problem occurs when accessing the controls or if the filename is an EMPTY string, the returned value is FALSE. These functions doesn't test the validity of the file name.

Ctl can be any control on the form (also Label1).

Property can be RS\_CAPTION to use only controls did have a .Caption property.

can be RS\_TEXT to use only controls did have a .Text property.

can be RS\_DATAFIELD to use only controls did have a .DataField property.

can be RS\_DATASOURCE to use only controls did have a .DataSource property.

can be RS\_TAG to use only controls did have a .Tag property.

can be any 'OR' association of the four following constants :

RS\_CAPTION Or RS\_TEXT Or RS\_DATAFIELD Or RS\_DATASOURCE Or RS\_TAG

If you want to use all properties, you can pass the value 255.

If you use of RS\_DATAFIELD and/or RS\_DATASOURCE, you don't need to set the .DataField and/or .DataSource in the Properties Window is design mode. This is can be useful and is not memory hungry, and the EXE size of your application is minder.

FileLanguage is the name of the file to use to store or retrieve the Property. After the first saving, you translate the file (with NOTEPAD, b.e.) into an another language and save it to an other name. You can use the extension als follows .T?? with ?? is FR (for FRENch), UK (for United Kingdom, GE (for GERmany), IT (for ITaly), SP (for SPain), ... .

## Examples :

```
test% = cSaveCtlLanguage(Command1, RS_CAPTION Or RS_TEXT, "D:\TIME2WIN\DEMO\TIME2WIN.TUK")  
' translate it to French and save it in the file "D:\TIME2WIN\DEMO\TIME2WIN.TFR"
```

```
test% = cReadCtlLanguage(Command1, RS_CAPTION Or RS_TEXT, "D:\TIME2WIN\DEMO\TIME2WIN.TFR")
```

**See also :** [Language control](#)

# Language control : Overview

[LngSysMenu](#)

change all text items in a system menu to one of six available language.

[ReadCtlLanguage](#)

read a file which contains the text for supporting a language.

[ReadCtlLanguageExt](#)

language.

read a generic file (one file per language) which contains the text for supporting a

[ReadMnuLanguage](#)

read a file which contains the text (menu) for supporting a language.

[SaveCtlLanguage](#)

create or update a file which contains the text for supporting a language.

[SaveCtlLanguageExt](#)

supporting a language.

create or update a generic file (one file par language) which contains the text for

[SaveMnuLanguage](#)

create or update a file which contains the text (menu) for supporting a language.

# LngSysMenu

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[LngSysMenu](#) change all text items in a system menu to one of six available language.

## **Declare Syntax :**

Declare Sub cLngSysMenu Lib "[time2win.dll](#)" (ByVal nLanguage As Integer, ByVal hWnd As Long)

## **Call Syntax :**

Call cLngSysMenu(nLanguage%, hWnd%)

## **Where :**

nLanguage%	is the language number.
hWnd%	is the .hWnd of the form.

## **Comments :**

This sub only changes the item text not the fonctionnality.  
This sub take care of the menu 'grayed'.

nLanguage must be a language number defined in Constants and Types declaration. If the language number is not correct, the french language is always returned.

## **Examples :**

Call cLngSysMenu(LNG\_FRENCH, Me.hWnd)

**See also :** [Language control](#)



# ReadMnuLanguage, SaveMnuLanguage

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[SaveMnuLanguage](#) create or update a file which contains the text (menu) for supporting a language.

[ReadMnuLanguage](#) read a file which contains the text (menu) for supporting a language.

## Declare Syntax :

Declare Function cReadMnuLanguage Lib "[time2win.dll](#)" (hCtlFirstMenu As Control, ByVal FileLanguage As String) As Integer

Declare Function cSaveMnuLanguage Lib "[time2win.dll](#)" (hCtlFirstMenu As Control, ByVal FileLanguage As String) As Integer

## Call Syntax :

test% = cSaveMnuLanguage(hCtlFirstMenu, FileLanguage)

test% = cReadMnuLanguage(hCtlFirstMenu, FileLanguage)

## Where :

hCtlFirstMenu	is the first menu control on the form.
FileLanguage\$	is the file name to perform the language management.
test%	TRUE if all is ok FALSE is an error has occurred

## Comments :

These functions are very, VERY simple to use and your application can support multi-language very fast.

If a problem occurs when accessing the menus or if the form has no menu or if the filename is an EMPTY string, the returned value is FALSE. These fonctions doesn't test the validity of the file name.

FileLanguage is the name of the file to use to store or retrieve the Property. After the first saving, you translate the file (with NOTEPAD, b.e.) into an another language and save it to an other name. You can use the extension als follows .T?? with ?? is FR (for FRench), UK (for United Kingdom, GE (for GERmany), IT (for ITaly), SP (for SPain), ... .

## Examples :

```
test% = cSaveMnuLanguage(mnu_File, "D:\TIME2WIN\DEMO\TIME2WIN.TUK")
      ' translate it to French and save it in the file "D:\TIME2WIN\DEMO\TIME2WIN.TFR"
test% = cReadMnuLanguage(mnu_File, "D:\TIME2WIN\DEMO\TIME2WIN.TFR")
```

**See also :** [Language control](#)

# FileToComboBox, FileToListBox

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FileToComboBox](#) read a file and append it to a Combo Box.

[FileToListBox](#) read a file and append it to a List Box.

## Declare Syntax :

Declare Function cFileToComboBox Lib "time2win.dll" (ByVal hWnd As Long, ByVal nFile As String) As Integer

Declare Function cFileToListBox Lib "time2win.dll" (ByVal hWnd As Long, ByVal nFile As String) As Integer

## Call Syntax :

Test% = cFileToComboBox(Combo1.hWnd, nFile\$)

Test% = cFileToListBox(List1.hWnd, nFile\$)

## Where :

Combo1.hWnd	the .hWnd of a Combo Box.
List1.hWnd	the .hWnd of a List Box.
nFile\$	the filename to read.
Test%	= True, if all is ok, <> True, if an error has occurred.

## Comments :

## Examples :

Debug.Print cFileToComboBox(Combo1.hWnd, "c:\tmp\cmb\_001.txt")

Debug.Print cFileToListBox(List1.hWnd, "c:\tmp\lst\_001.txt")

**See also :** [List box - combo box](#)

## List box - combo box : Overview

[ArrayToComboBox](#)

read an string array and append it to a Combo Box.

[ArrayToListBox](#)

read an string array and append it to a List Box.

[ComboFiles](#)

fill a Combo Box with files with the specified attribute and mask.

[ComboSearchFile](#)

perform a file match starting with a specified path and fill a standard combo box.

[FileToComboBox](#)

read a file and append it to a Combo Box.

[FileToListBox](#)

read a file and append it to a List Box.

[ListFiles](#)

fill a List Box with files with the specified attribute and mask.

[ListSearchFile](#)

perform a file match starting with a specified path and fill a standard list box.

[ListSetTabs](#)

set tabulation in a List Box.

# ArrayToComboBox, ArrayToListBox

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ArrayToComboBox](#) read an string array and append it to a Combo Box.

[ArrayToListBox](#) read an string array and append it to a List Box.

## Declare Syntax :

Declare Function cArrayToComboBox Lib "time2win.dll" (ByVal hWnd As Long, Array() As Any) As Integer

Declare Function cArrayToListBox Lib "time2win.dll" (ByVal hWnd As Long, Array() As Any) As Integer

## Call Syntax :

Test% = cArrayToComboBox(Combo1.hWnd, Array())

Test% = cArrayToListBox(List1.hWnd, Array())

## Where :

Combo1.hWnd	the .hWnd of a Combo Box.
List1.hWnd	the .hWnd of a List Box.
nFile\$	the filename to read.
Test%	= True, if all is ok, <> True, if an error has occurred.

## Comments :

This function can handle only a variable type'd string derived from tagVARSTRING (see below).

Don't forget that if you use the 'ReDim' statement at the procedure level without have declared the array als Global, you must initialize the array before using this function (see below). You must initialize the array with enough space to handle the List/Combo boxes This is due to a VB limitation.

This function can handle huge array (greater than 65535 bytes) (see the example below).

```
Type tagVARSTRING
    Contents           As String
End Type
```

## Examples :

```
ReDim AD(-999 To 999)           As tagVARSTRING
Dim i                           As Long
Dim r                           As Long
```

```
For i = -999 To 999
    AD(i).Contents = Space$(256)
Next i
```

```
Debug.Print cArrayToListBox(List1.hWnd, AD())
Debug.Print cArrayToComboBox(Combo1.hWnd, AD())
```

**See also :** [List box - combo box](#)

# Media ID - Volume : Overview

[DOSGetMediaID](#)

read the media ID (serial number, volume label, ...) from a disk.

[DOSGetVolumeLabel](#)

read the volume label of any disk.

[DOSSetMediaID](#)

change the existing media ID (serial number, volume label, ...) from a disk.

[DOSSetVolumeLabel](#)

create/change/delete the volume label of any disk.

# DOSGetMediaID, DOSSetMediaID

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**DOSGetMediaID** read the media ID (serial number, volume label, ...) from a disk.

**DOSSetMediaID** change the existing media ID (serial number, volume label, ...) from a disk.

## Declare Syntax :

Declare Function cDOSGetMediaID Lib "time2win.dll" (ByVal nDrive As String, DOSMEDIAID As tagDOSMEDIAID) As Integer

Declare Function cDOSSetMediaID Lib "time2win.dll" (ByVal nDrive As String, DOSMEDIAID As tagDOSMEDIAID) As Integer

## Call Syntax :

Test% = cDOSGetMediaID(nDrive\$, DOSMEDIAID)

Test% = cDOSSetMediaID(nDrive\$, DOSMEDIAID)

## Where :

nDrive\$	is the drive letter.
DOSMEDIAID	is the <u>type'd variable</u> to access the drive.
Test%	TRUE, all is ok FALSE, no media ID or an error has occurred.

## Comments :

If nDrive is empty, the default drive is used.

The informations returned by these routines are different from the GetMediaID and SetMediaID.

For T2WIN-32.DLL and T2WOFFIC.DLL :

To decode the 'InfoLevel', you must use cCVI function.  
To decode the 'SerialNumber', you must use the cCVL function.

## Examples :

```
Dim DOSMEDIAID As tagMEDIAID
```

```
test% = cDOSGetMediaID("A", DOSMEDIAID)
```

```
' Drive A : no media id
```

```
test% = cDOSGetMediaID("B", DOSMEDIAID)
```

```
' Drive B : no media id
```

```
test% = cDOSGetMediaID("C", DOSMEDIAID)
```

```
' Drive C :  
  ' InfoLevel : '0'                                (Hex$(cCVI(DOSMEDIAID.InfoLevel))  
  ' SerialNumber : '43361ECF'                        (Hex$(cCVL(DOSMEDIAID.SerialNumber))  
  ' VolLabel : 'UNICORN_7'  
  ' FileSysType : 'FAT16'
```

**See also :** [Media ID - Volume](#)

' structure for get/set DOS Media ID

Type tagDOSMEDIAID32

InfoLevel	As String * 2	'use cCVI for integer conversion
SerialNumber	As String * 4	'use cCVL for long conversion
VolLabel	As String * 11	
FileSysType	As String * 8	

End Type

' structure for get/set Media ID

Type tagMEDIAID16

InfoLevel	As Integer
SerialNumber	As Long
VolLabel	As String * 11
FileSysType	As String * 8

End Type

```
' structure for get/set Media ID
Type tagMEDIAID
    VolumeName      As String
    VolumeSerialNumber As Long
    SystemName      As String
    MaxNameLength   As Long
    FileSystemFlags  As Long
End Type
```



# DOSGetVolumeLabel, DOSSetVolumeLabel

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[DOSGetVolumeLabel](#) read the volume label of any disk.

[DOSSetVolumeLabel](#) create/change/delete the volume label of any disk.

## Declare Syntax :

Declare Function cDOSGetVolumeLabel Lib "time2win.dll" (ByVal nDrive As String) As String

Declare Function cDOSSetVolumeLabel Lib "time2win.dll" (ByVal nDrive As String, ByVal nVolumeLabel As String) As Integer

## Call Syntax :

VolLbl\$ = cDOSGetVolumeLabel(nDrive\$)

Test% = cDOSSetVolumeLabel(nDrive\$, NewVolLbl\$)

## Where :

nDrive\$	is the drive to use.
VolLbl\$	is the readed volume label.
NewVolLbl\$	is the new volume label.
Test%	= True, if all is ok
	<> True, if an error has occurred.

## Comments :

The length of a volume label can be 11 chars maximum.

The description of a volume label must respect the DOS filename convention.

## Examples :

```
Dim VolLbl As String
```

```
Dim TestAs Integer
```

```
VolLbl = cDOSGetVolumeLabel("A")
```

```
' VolLbl -> "TIME_TO_WIN"
```

```
Test = cDOSSetVolumeLabel("A", "NEW_VOLUME")
```

```
' Test -> -1 (True)
```

**See also :** [Media ID - Volume](#)

# IntoDate, IntoDateFill, IntoDateNull

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**IntoDate** convert a date value into a date string specified the short date format order in the Control Panel.

**IntoDateFill** convert a date value into a date string specified the short date format order in the Control Panel. But if the date is 0, the returned string is 10 spaces according to the maximum chars in the short date format ("dd/mm/yyyy" or "mm/dd/yyyy" or "yyyy/mm/dd").

**IntoDateNull** convert a date value into a date string specified the short date format order in the Control Panel. But if the date is 0, the returned string is an EMPTY string.

## Declare Syntax :

```
Declare Function clntoDate Lib "time2win.dll" (ByVal nDate As Long) As String
Declare Function clntoDateFill Lib "time2win.dll" (ByVal nDate As Long) As String
Declare Function clntoDateNull Lib "time2win.dll" (ByVal nDate As Long) As String
```

## Call Syntax :

```
test$ = clntoDate(nDate)
test$ = clntoDateFill(nDate)
test$ = clntoDateNull(nDate)
```

## Where :

nDate	the date to proceed
test\$	the date string returned

## Comments :

The date to be proceed is always a LONG.

This fonction take care of the date separator specified in the Control Panel.

## Examples :

test\$ = clntoDate(Int(Now))	' "09/12/1994"
test\$ = clntoDateFill(Int(Now))	' "09/12/1994"
test\$ = clntoDateNull(Int(Now))	' "09/12/1994"
test\$ = clntoDate(-1)	' "29/12/1899"
test\$ = clntoDateFill(-1)	' "29/12/1899"
test\$ = clntoDateNull(-1)	' "29/12/1899"
test\$ = clntoDate(0)	' "30/12/1899"
test\$ = clntoDateFill(0)	' " " "
test\$ = clntoDateNull(0)	' ""
test\$ = clntoDate(1)	' "31/12/1899"
test\$ = clntoDateFill(1)	' "31/12/1899"
test\$ = clntoDateNull(1)	' "31/12/1899"

**See also :** [Date and time](#)

# DayOfYear

## Purpose :

[DayOfYear](#) calculate the day of the year.

## Declare Syntax :

Declare Function cDayOfYear Lib "[time2win.dll](#)" (ByVal nYear As Integer, ByVal nMonth As Integer, ByVal nDay As Integer) As Integer

## Call Syntax :

Test% = cDayOfYear(nYear%, nMonth%, nDay%)

## Where :

nYear%	is the year.
nMonth%	is the month.
nDay%	is the day.
Test%	is the returned day of the year.

## Comments :

The returned value is 365 or 366 (for a leap year).

If the parameters are incorrect, the returned value is -1.

## Examples :

Dim Test As Integer

Test = cDayOfYear(1995, 1, 1)	' 1
Test = cDayOfYear(1995, 3, 25)	' 84
Test = cDayOfYear(1995, 12, 31)	' 365
Test = cDayOfYear(1996, 12, 31)	' 366

**See also :** [Date and time](#)

# DayOfWeek

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

DayOfWeek calculate the day of the week.

## Declare Syntax :

Declare Function cDayOfWeek Lib "time2win.dll" (ByVal nYear As Integer, ByVal nMonth As Integer, ByVal nDay As Integer, ByVal nISO As Integer) As Integer

## Call Syntax :

Test% = cDayOfWeek(nYear%, nMonth%, nDay%, nISO%)

## Where :

nYear%	is the year.
nMonth%	is the month.
nDay%	is the day.
nISO%	= True, for ISO specification, = False, for non-ISO specification.
Test%	is the returned day of the week.

## Comments :

Following the ISO specification, the returned day of the week will be 0 (Monday) to 6 (Sunday).  
Following the non-ISO specification, the returned day of the week will be 0 (Sunday) to 6 (Saturday).

If the parameters are incorrect, the returned value is -1.

## Examples :

Dim Test            As Integer

' For ISO specification

Test = cDayOfWeek(1995, 3, 25, True)	' 5 (Saturday)
Test = cDayOfWeek(1995, 3, 26, True)	' 6 (Sunday)
Test = cDayOfWeek(1995, 3, 27, True)	' 0 (Monday)

' For non-ISO specification

Test = cDayOfWeek(1995, 3, 25, False)	' 6 (Saturday)
Test = cDayOfWeek(1995, 3, 26, False)	' 0 (Sunday)
Test = cDayOfWeek(1995, 3, 27, False)	' 1 (Monday)

**See also :** [Date and time](#)

# WeekOfYear

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[WeekOfYear](#) calculate the week of the year.

## Declare Syntax :

Declare Function cWeekOfYear Lib "[time2win.dll](#)" (ByVal nYear As Integer, ByVal nMonth As Integer, ByVal nDay As Integer, ByVal nISO As Integer) As Integer

## Call Syntax :

Test% = cWeekOfYear(nYear%, nMonth%, nDay%)

## Where :

nYear%	is the year.
nMonth%	is the month.
nDay%	is the day.
nISO%	= True, for ISO specification, = False, for non-ISO specification.
Test%	is the returned week of the year.

## Comments :

ISO defines the first week with 4 or more days in it to be week #1

Following the ISO specification, the returned week of the year will be 0 to 52.

Following the non-ISO specification, the returned week of the year will be 1 to 53.

If the parameters are incorrect, the returned value is -1.

## Examples :

Dim Test            As Integer

' Following the ISO specification

Test = cWeekOfYear(1995, 12, 31, True)	' 52
Test = cWeekOfYear(1995, 1, 1, True)	' 0
Test = cWeekOfYear(1995, 1, 2, True)	' 1
Test = cWeekOfYear(1995, 3, 25, True)	' 12
Test = cWeekOfYear(1995, 3, 26, True)	' 12
Test = cWeekOfYear(1995, 12, 31, True)	' 52
Test = cWeekOfYear(1996, 1, 1, True)	' 1

' Following the non-ISO specification

Test = cWeekOfYear(1995, 12, 31, False)	' 53
Test = cWeekOfYear(1995, 1, 1, False)	' 1
Test = cWeekOfYear(1995, 1, 2, False)	' 1
Test = cWeekOfYear(1995, 3, 25, False)	" 12
Test = cWeekOfYear(1995, 3, 26, True)	' 13
Test = cWeekOfYear(1995, 12, 31, False)	' 53
Test = cWeekOfYear(1996, 1, 1, False)	' 1

**See also :** [Date and time](#)

# DateToScalar, ScalarToDate

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[DateToScalar](#) compute a scalar from all date parts.

[ScalarToDate](#) decompose a scalar date into these components.

## Declare Syntax :

Declare Function cDateToScalar Lib "time2win.dll" (ByVal nYear As Integer, ByVal nMonth As Integer, ByVal nDay As Integer) As Long

Declare Sub cScalarToDate Lib "time2win.dll" (ByVal Scalar As Long, nYear As Integer, nMonth As Integer, nDay As Integer)

## Call Syntax :

Scalar& = cDateToScalar(nYear%, nMonth%, nDay%)

Call cScalarToDate(Scalar&, nYear%, nMonth%, nDay%)

## Where :

nYear%	is the year.
nMonth%	is the month.
nDay%	is the day.
Scalar&	is the returned computed scalar.

## Comments :

For DateToScalar :

If the parameters are not correct, the returned value is -1.

## Examples :

```
Dim Scalar      As Long
Dim nYear       As Integer
Dim nMonth      As Integer
Dim nDay        As Integer
```

```
Test = cDateToScalar(1995, 3, 25)      ' 728377
```

```
Call cScalarToDate(728377, nYear%, nMonth%, nDay%)
```

```
' nYear%      ' 1995
' nMonth%     ' 3
' nDay%       ' 25
```

**See also :** [Date and time](#)

# DaysInMonth

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[DaysInMonth](#) return the total days in a month.

## Declare Syntax :

Declare Function cDaysInMonth Lib "[time2win.dll](#)" (ByVal nYear As Integer, ByVal nMonth As Integer) As Integer

## Call Syntax :

test = cDaysInMonth(nYear, nMonth)

## Where :

nYear                is the year with the century  
nMonth              is the month

## Comments :

## Examples :

```
nYear = 1994
nMonth = 12
test = cDaysInMonth(nYear, nMonth)       ' 31

nYear = 1995
nMonth = 2
test = cDaysInMonth(nYear, nMonth)       ' 28
```

**See also :** [Date and time](#)

# ScalarToTime, TimeToScalar

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ScalarToTime](#) decompose a scalar time into these components.

[TimeToScalar](#) compute a scalar from all time parts.

## Declare Syntax :

Declare Sub cScalarToTime Lib "time2win.dll" (ByVal Scalar As Long, nHour As Integer, nMin As Integer, nSec As Integer)

Declare Function cTimeToScalar Lib "time2win.dll" (ByVal nHour As Integer, ByVal nMin As Integer, ByVal nSec As Integer) As Long

## Call Syntax :

Call cScalarToTime(Scalar&, nHour%, nMin%, nSec%)

Scalar& = cTimeToScalar(nHour%, nMin%, nSec%)

## Where :

Scalar&	is a scalar time.
nHour%	is the returned hour.
nMin%	is the returned minute.
nSec%	is the returned second.

## Comments :

For TimeToScalar :

The parameter Hour can be between 0 to 32767.

If the parameters are not correct, the returned value is -1.

## Examples :

Dim Scalar	As Long
Dim nHour	As Integer
Dim nMin	As Integer
Dim nSec	As Integer

Scalar = cTimeToScalar(16, 50, 30) ' 60630

Call cScalarToTime(60630, nHour%, nMin%, nSec%)

' nHour%	16
' nMin%	50
' nSec%	30

**See also :** [Date and time](#)



# IntoFixHour, IntoHour, IntoVarHour

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[IntoFixHour](#) is super-set for converting a VARIANT (INTEGER or LONG) into a fixed time string.

[IntoHour](#) convert a VARIANT (INTEGER or LONG) into a hour string.

[IntoVarHour](#) convert a VARIANT (INTEGER or LONG) into a hour string (variable length following the value).

## Declare Syntax :

Declare Function clntoFixHour Lib "time2win.dll" (Var As Variant, ByVal Length As Integer, ByVal fillZero As Integer, ByVal Hundreds As Integer) As String

Declare Function clntoHour Lib "time2win.dll" (Var As Variant) As String

Declare Function clntoVarHour Lib "time2win.dll" (Var As Variant) As String

## Call Syntax :

test\$ = clntoFixHour(Var, Length, fillZero, Hundreds)

test\$ = clntoHour(Var)

test\$ = clntoVarHour(Var)

## Where :

Var	the VARIANT value (LONG or INTEGER) to proceed
Length	the length of the returned time string
fillZero	TRUE if the time string must be filled with zero 0, FALSE if it not
Hundreds	TRUE if the minutes must be converted in Hundreds, FALSE if it not. (This is useful for making calculation)
test\$	the returned time string

## Comments :

For the clntoFixHour function, if the value can be fitted in the length specified, the return string is filled with '?'

The maximum format for the returned time string is HHHHHHHH:MM

## Examples :

Convert 12345 minutes into fixed hour :

Length	fillZero = TRUE	fillZero = FALSE
0	""	""
1	"?"	"?"
2	"?"	"?"
3	"?"	"?"
4	"?"	"?"
5	"?"	"?"
6	"205:45"	"205:45"
7	"0205:45"	" 205:45"
8	"00205:45"	" 205:45"
9	"000205:45"	" 205:45"
10	"0000205:45"	" 205:45"
11	"00000205:45"	" 205:45"

**See also :** [Date and time](#)

# IntoBalance, IntoBalanceFill

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[IntoBalance](#) convert a VARIANT value (INTEGER or LONG) in a time string.

[IntoBalance](#) convert a VARIANT value (INTEGER or LONG) in a time string with leading zero.

## Declare Syntax :

Declare Function cIntoBalance Lib "time2win.dll" (Var As Variant) As String

Declare Function cIntoBalanceFill Lib "time2win.dll" (Var As Variant) As String

## Call Syntax :

test\$ = cIntoBalance(Var)

test\$ = cIntoBalanceFill(Var)

## Where :

Var                      the value to convert

test\$                    the time string

## Comments :

For a positive value :

The format returned for the time string is "HHHHHH:MM"

For a negative value :

The maximum format and the minimum format returned for the time string is "-HHHHHH:MM"

## Examples :

IntoBalanceFill	IntoBalance
1234 is "00020:34"	" 20:34"
1235 is "00020:35"	" 20:35"
1236 is "00020:36"	" 20:36"
1237 is "00020:37"	" 20:37"
1238 is "00020:38"	" 20:38"
1239 is "00020:39"	" 20:39"
1240 is "00020:40"	" 20:40"
1241 is "00020:41"	" 20:41"
1242 is "00020:42"	" 20:42"
1243 is "00020:43"	" 20:43"
1244 is "00020:44"	" 20:44"
1245 is "00020:45"	" 20:45"

**See also :** [Date and time](#)

# CurrentTime

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[CurrentTime](#) return the minutes elapsed since midnight.

## Declare Syntax :

Declare Function cCurrentTime Lib "[time2win.dll](#)" () As Integer

## Call Syntax :

test% = cCurrentTime()

## Where :

test%                      the minutes

## Comments :

## Examples :

test% = cCurrentTime()                      ' 1234

**See also :** [Date and time](#)

# Bitmap : Overview

DIBSaveScreen

save the screen (entire desktop) in a file (DIB format).

DIBSaveWindow

save a window in a file (DIB format).

TileBitmapOnWindow

tile a bitmap (DDB or DIB format) on a window.

# TimeBetween

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[TimeBetween](#) calculate the time (in minutes) between two hours (in minutes).

## Declare Syntax :

Declare Function cTimeBetween Lib "[time2win.dll](#)" (ByVal Hr1 As Integer, ByVal Hr2 As Integer) As Integer

## Call Syntax :

test% = cTimeBetween(Hr1, Hr2)

## Where :

Hr1	the first time (0 to 1439)
Hr2	the second time (0 to 1439)

## Comments :

## Examples :

test% = cTimeBetween(600, 721)	' 121
test% = cTimeBetween(1438, 62)	' 64

**See also :** [Date and time](#)

# AddTime

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[AddTime](#) retrieve only the part for hours on one day.

## Declare Syntax :

Declare Function cAddTime Lib "[time2win.dll](#)" (ByVal Hr As Integer) As Integer

## Call Syntax :

test = cAddTime(Hr)

## Where :

Hr	is the total minutes
test	is the result value.

## Comments :

## Examples :

test = cAddTime(1439+2)	' 1
test = cAddTime(2-4)	' 1438

**See also :** [Date and time](#)

# CheckTime

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[CheckTime](#) verify if an hour (in minutes) is between two others hours (in minutes).

## Declare Syntax :

Declare Function cCheckTime Lib "[time2win.dll](#)" (ByVal Hr As Integer, ByVal Hr1 As Integer, ByVal Hr2 As Integer) As Integer

## Call Syntax :

test = cCheckTime(Hr, Hr1, Hr2)

## Where :

Hr	the hour (in minutes) to test
Hr1	the first hour
Hr2	the second value
test	TRUE if Hr is between Hr1 and Hr2

## Comments :

## Examples :

Hr = 1439	' (23:59)
Hr1 = 1400	' (23:20)
Hr2 = 10	' (00:10)

test = cCheckTime(Hr, Hr1, Hr2)    ' TRUE

Hr = 120                                ' (02:00)

test = cCheckTime(Hr, Hr1, Hr2)    ' FALSE

**See also :** [Date and time](#)

# AddTwoTimes

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[AddTwoTimes](#) add two time string to form a third time string.

## Declare Syntax :

Declare Function cAddTwoTimes Lib "[time2win.dll](#)" (ByVal Time1 As String, ByVal Time2 As String) As String

## Call Syntax :

Test\$ = cAddTwoTimes(Time1\$, Time2\$)

## Where :

Time1\$	is the first time string (format is HH:MM:SS).
Time2\$	is the second time string (format is HH:MM:SS).
Test\$	is the result (format is HH:MM:SS).

## Comments :

The length of each time string must be absolutely 8 characters.

The format of each time string must be absolutely HH:MM:SS.

If the sum of the two time string exceed 24:00:00, the returned string is calculated from 00:00:00.

## Examples :

```
Dim Time1 As String
Dim Time2 As String
Dim Time3 As String
```

```
Time1 = "23:58:58"
Time2 = "01:02:01"
```

```
Time3 = cAddTwoTimes(Time1$, Time2$) ' "01:00:59"
```

**See also :** [Date and time](#)



# HourTo

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**HourTo** convert a time string to a VARIANT value in minutes (INTEGER or LONG).

## Declare Syntax :

Declare Function cHourTo Lib "time2win.dll" (Txt As String) As Variant

## Call Syntax :

test = cHourTo(Txt)

## Where :

Txt	the time to convert
test	the time in minutes

## Comments :

The maximum format is for positive time "HHHHHHH:MM" and for negative time "-HHHHHH:MM"  
The returned value is a VARIANT (INTEGER or LONG).

## Examples :

The time "123:45"	is 7425 minutes
The time "23:58"	is 1438 minutes
The time "7:36"	is 456 minutes
The time ":-24"	is 24 minutes
The time ":-4"	is 4 minutes
The time ":-"	is 0 minutes

The time "-123:45"	is -7425 minutes
The time "-23:58"	is -1438 minutes
The time "-7:36"	is -456 minutes
The time ":-24"	is -24 minutes
The time ":-4"	is -4 minutes
The time ":-"	is 0 minutes

**See also :** Date and time

# DIBSaveScreen, DIBSaveWindow

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[DIBSaveScreen](#) save the screen (entire desktop) in a file.

[DIBSaveWindow](#) save a window in a file.

## Declare Syntax :

```
Public Const DIB_SAVE_WINDOW = True
```

```
Public Const DIB_SAVE_CLIENT = False
```

```
Declare Function cDIBSaveScreen Lib "time2win.dll" (ByVal lpFileName As String) As Integer
```

```
Declare Function cDIBSaveWindow Lib "time2win.dll" (ByVal hWnd As Long, ByVal SaveArea As Integer, ByVal lpFileName As String) As Integer
```

## Call Syntax :

```
intResult% = cDIBSaveScreen(lpFileName$)
```

```
intResult% = cDIBSaveWindow(hWnd&, SaveArea%, lpFileName$)
```

## Where :

lpFileName\$	is the name of the file to save the DIB (Device-Independent Bitmap)
hWnd&	is the .hWnd property of a form or a control
SaveArea%	DIB_SAVE_WINDOW : save the client area and the non-client area
	DIB_SAVE_CLIENT : save only the client area
intResul%	True : all is OK
	False : an error has occurred

## Comments :

All files saved with these functions can be used with the .LoadPicture property.

## Examples :

```
debug.print cDIBSaveScreen("c:\test\save_scr.bmp")
debug.print cDIBSaveWindow(Me.hWnd, DIB_SAVE_WINDOW, "c:\test\save_win.bmp")
debug.print cDIBSaveWindow(Me.hWnd, DIB_SAVE_CLIENT, "c:\test\save_cli.bmp")
```

**See also :** [Bitmap](#)

# InstallHookKeyboard

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[InstallHookKeyboard](#) install a hook of the keyboard to handle special keys for special tasks.

## Declare Syntax :

Declare Function cInstallHookKeyboard Lib "[time2win.dll](#)" (ByVal InstallRemove As Integer) As Integer

## Call Syntax :

intResult% = cInstallHookKeyboard(InstallRemove%)

## Where :

InstallRemove%	TRUE to add the hook FALSE to remove the hook
intResult%	TRUE : the hook has been successfully installed FALSE : an error has occurred or the hook has been already installed

## Comments :

Press ALT+CTRL+SHIFT+F11 to open a dialog box for save the screen in a file to be selected.  
Press ALT+CTRL+SHIFT+F12 to open a dialog box for save the window in a file to be selected.

There is no need to call this function with the FALSE parameter when you stop your program. The hook of the keyboard will be automatically removed when T2WIN-32.DLL will be removed from the memory

## Examples :

```
debug.print cInstallHookKeyboard(TRUE)
```

' Press ALT+CTRL+SHIFT+F11 : for save the screen in a file to be selected.  
' Press ALT+CTRL+SHIFT+F12 : for save the active window in a file to be selected.

**See also :** [Hook keyboard](#)

# TileBitmapOnWindow

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[TileBitmapOnWindow](#) tile a bitmap (DDB or DIB format) on a window.

## Declare Syntax :

Declare Function cTileBitmapOnWindow Lib "[time2win.dll](#)" (ByVal hWnd As Long, ByVal lpFileName As String) As Integer

## Call Syntax :

intResult% = cTileBitmapOnWindow(hWnd&, lpFileName\$)

## Where :

hWnd&            is the .hWnd property of a form or a control  
lpFileName\$     is the name of the file to read the DDB (Device-Dependent Bitmap) or DIB (Device-Independent Bitmap)

intResult%      TRUE : all is OK  
                 FALSE : lpFileName\$ not exist

## Comments :

The function take care of the state of the form.

You must set the .AutoRedraw property to False.

To perform an autoredraw, you must do this :

```
Private Sub Form_Paint()  
  
    Dim intResult      As Integer  
  
    intResult = cTileBitmapOnWindow(Me.hWnd, App.Path + "\time2win.dib")  
  
End Sub
```

## Examples :

```
debug.print cTileBitmapOnWindow(Me.hWnd, "c:\test\time2win.dib")
```

**See also :** [Bitmap](#)

# Hook keyboard : Overview

InstallHookKeyboard

install a hook keyboard to save the screen or the active window in a file (DIB format).

# Registry key : Overview

[GetRegistry](#)

return a key setting value from an application's Windows registry entry.

[KillRegistry](#)

delete a section or key setting from the Windows registry entry.

[PutRegistry](#)

save or create an application entry in the Windows registry entry.

# RegistrationKey, RegistrationKey2, RegistrationKey3

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[RegistrationKey](#) perform the calculation of a key from a name and one code.

[RegistrationKey2](#) perform the calculation of a key from a name and two code.

[RegistrationKey3](#) perform the calculation of a key from a name and three code.

## Declare Syntax :

Declare Function cRegistrationKey Lib "time2win.dll" (ByVal RegText As String, ByVal RegKey1 As Long) As Long

Declare Function cRegistrationKey2 Lib "time2win.dll" (ByVal RegText As String, ByVal RegKey1 As Long, ByVal RegKey2 As Long) As Long

Declare Function cRegistrationKey3 Lib "time2win.dll" (ByVal RegText As String, ByVal RegKey1 As Long, ByVal RegKey2 As Long, ByVal RegKey3 As Long) As Long

## Call Syntax :

Key& = cRegistrationKey(RegString\$, RegCode&)

## Where :

RegText\$	the name for the registration.
RegKey1&	the basis code for generating the registration
RegKey2&	the first extended code for generating the registration
RegKey3&	the second extended code for generating the registration
Key&	= 0, if length of RegText is < 10 or if RegKey1 is 0, <>0, the key calculated from RegText and RegKey1.

## Comments :

Using this registration key system, you can easily and quickly generate and verify the validity of numerical registration keys that correspond to a person who has purchased your program. Thus, when someone who already has a shareware or demo version of your program wishes to purchase the program, you need only send them a simple registration key number, instead of sending an entire registered version. You can simply use this package to generate a unique registration key number which corresponds to the user's name (or any other string you wish to use). The user will then be able to enter this number into your software's configuration file / configuration program. When your program begins, it will be able to read this number from the configuration file, and again using this package, determine whether it is a valid registration key corresponding to the user's name. If the registration key is valid, your program can switch into "registered mode", and if not, can run in its unregistered "unregistered mode". (Source from Brian Pirie).

## Examples :

```
Dim Key           As Long
Dim RegText       As String
```

```
RegText = "this is a testthis is a test"
```

```
Key = cRegistrationKey(Tmp, 123456789)           ' 590573797
```

```
Key = cRegistrationKey3(Tmp, 123456789, 864297531, 12344321) ' 132616468
```

**See also :** [Protection](#)

## Protection : Overview

[HashMD5](#)

perform the hash algorithm (MD5) to a specified string.

[RegistrationKey](#)

perform the calculation of a key from a name and one code.

[RegistrationKey2](#)

perform the calculation of a key from a name and two code.

[RegistrationKey3](#)

perform the calculation of a key from a name and three code.



# ReadCtlLanguageExt, SaveCtlLanguageExt

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[SaveCtlLanguageExt](#) create or update a generic file (one file par language) which contains the text for supporting a language.

[ReadCtlLanguageExt](#) read a generic file (one file per language) which contains the text for supporting a language.

## Declare Syntax :

Declare Function cSaveCtlLanguageExt Lib "time2win.dll" (Obj As Object, ByVal Property As Integer, ByVal FileLanguage As String) As Integer

Declare Function cReadCtlLanguageExt Lib "time2win.dll" (Obj As Object, ByVal Property As Integer, ByVal FileLanguage As String) As Integer

## Call Syntax :

test% = cSaveCtlLanguage(Obj, Property, FileLanguage)

test% = cReadCtlLanguage(Obj, Property, FileLanguage)

## Where :

Obj	is any object on the form to use the text language.
Property	is an association of constants (RS_CAPTION, RS_TEXT, RS_DATAFIELD, RS_DATASOURCE, RS_TAG)
FileLanguage	is the file name to perform the language management.
test%	TRUE if all is ok FALSE is an error has occurred

## Comments :

These functions are very, VERY simple to use and your application can support multi-language very fast.

If a problem occurs when accessing the controls or if the filename is an EMPTY string, the returned value is FALSE. These fonctions doesn't test the validity of the file name.

Ctl can be any control on the form (also Label1).

Property can be RS\_CAPTION to use only controls did have a .Caption property.  
can be RS\_TEXT to use only controls did have a .Text property.  
can be RS\_DATAFIELD to use only controls did have a .DataField property.  
can be RS\_DATASOURCE to use only controls did have a .DataSource property.  
can be RS\_TAG to use only controls did have a .Tag property.  
can be any 'OR' association of the four following constants :  
RS\_CAPTION Or RS\_TEXT Or RS\_DATAFIELD Or RS\_DATASOURCE Or RS\_TAG

If ypu want to use all properties, you can pass the value 255.

If you use of RS\_DATAFIELD and/or RS\_DATASOURCE, you don't need to set the .DataField and/or .DataSource in the Properties Window is design mode. This is can be useful and is not memory hungry, and the EXE size of your application is minder.

FileLanguage is the name of the file to use to store or retrieve the Property. After the first saving, you translate the file (with NOTEPAD, b.e.) into an another language and save it to an other name. You can use the extension als follows .T?? with ?? is FR (for FRench), UK (for United Kingdom, GE (for GERmany), IT (for ITaly), SP (for SPain), ... .

## Examples :

```
test% = cSaveCtlLanguageExt(Command1, RS_CAPTION Or RS_TEXT, "D:\TIME2WIN\DEMO\TIME2WIN.TUK")  
      ' translate it to French and save it in the file "D:\TIME2WIN\DEMO\TIME2WIN.TFR"  
test% = cReadCtlLanguageExt(Command1, RS_CAPTION Or RS_TEXT, "D:\TIME2WIN\DEMO\TIME2WIN.TFR")
```

**See also :** [Language control](#)

# HashMD5

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**HashMD5** perform the hash algorithm (MD5) to a specified string.

## Declare Syntax :

Declare Function cHashMD5 Lib "time2win.dll" (Text As String) As String

## Call Syntax :

Hash\$ = cHashMD5(Text\$)

## Where :

Text\$	the specified string (length between 1 to 32767).
Hash\$	the returned hashed string.

## Comments :

A hash algorithm such as MD5 is often used in cryptosystems to "reduce" a user-supplied passphrase into a sufficient number of bits to use as a key to the system. The following is taken from the Executive Summary section of the Internet RFC that proposes MD5 as a standard.

The [MD5] algorithm takes as input an input message of arbitrary length and produces as output a 128-bit "fingerprint" or "message digest" of the input. It is conjectured that it is computationally infeasible to produce two messages having the same message digest, or to produce any message having a given prespecified target message digest. The MD5 algorithm is intended for digital signature applications, where a large file must be "compressed" in a secure manner before being encrypted with a private (secret) key under a public-key cryptosystem such as RSA. (Source from Andy Brown).

HashMD5 is derived from the RSA \*\* \*\* Data Security, Inc. MD5 Message-Digest Algorithm.

## Examples :

Dim Hash            As String

Hash = cHashMD5("TIME TO WIN")            ' \$Ei"é£,%~"3□iXA'

**See also :** Protection

# Windows : Overview

<a href="#"><u>ArrangeDesktopIcons</u></a>	arrange all desktop icons.
<a href="#"><u>CenterWindow</u></a>	center a window in the screen.
<a href="#"><u>EXENameActiveWindow</u></a>	retrieve the full filename (path and file) of the active window.
<a href="#"><u>EXENameTask</u></a>	retrieve the full path and filename of the executable file from which the specified module was loaded.
<a href="#"><u>EXENameWindow</u></a>	retrieve the full filename (path and file) of the specified window.
<a href="#"><u>ExitWindowsAndExecute</u></a>	terminate Windows, runs a specified MS-DOS application, and then restarts Windows.
<a href="#"><u>GetClassName</u></a>	retrieve the full class name of a window.
<a href="#"><u>GetCountry</u></a>	return the country name.
<a href="#"><u>GetCountryCode</u></a>	return the country code.
<a href="#"><u>GetCurrency</u></a>	return the currency.
<a href="#"><u>GetCurrentDrive</u></a>	return the current default drive.
<a href="#"><u>GetDateFormat</u></a>	return the format for the date.
<a href="#"><u>GetDateSeparator</u></a>	return the separator for the date.
<a href="#"><u>GetDefaultPrinter</u></a>	return the default printer in the [windows] section of Win.INI
<a href="#"><u>GetDevices</u></a>	return all devices founden in the [devices] section in the Win.INI
<a href="#"><u>GetDriveCurrentDir</u></a>	retrieve the current dir on the specified drive.
<a href="#"><u>GetHourFormat</u></a>	return the format for the hour.
<a href="#"><u>GetIni</u></a>	retrieve an item in a section of an INI file.
<a href="#"><u>GetLanguage</u></a>	return the letters for the language.
<a href="#"><u>GetListSeparator</u></a>	return the separator for list.
<a href="#"><u>GetPrinterPorts</u></a>	return all printers set in the [printerports] section in the Win.INI
<a href="#"><u>GetSectionItems</u></a>	retrieve all items founden in a section of a specified INI file.
<a href="#"><u>GetSystemDirectory</u></a>	retrieve the full path of the System directory for Windows.
<a href="#"><u>GetTimeSeparator</u></a>	return the separator for the date.
<a href="#"><u>GetWindowsDirectory</u></a>	retrieve the full path for the Windows directory.
<a href="#"><u>GetWinINI</u></a>	return the information for a gived item.
<a href="#"><u>PutIni</u></a>	save an item in a section of an INI file.
<a href="#"><u>RebootSystem</u></a>	reboot your system.
<a href="#"><u>RestartWindows</u></a>	restart your Windows.
<a href="#"><u>ShowWindow</u></a>	show a window after an exploded/imploded focus rectangle has been displayed.
<a href="#"><u>WalkThruWindow</u></a>	walk in the window's list of all windows at a gived moment.

# PutIni

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[PutIni](#) save an item in a section of an INI file.

## Declare Syntax :

Declare Sub cPutIni Lib "time2win.dll" (ByVal AppName As String, ByVal szItem As String, ByVal szDefault As String, ByVal InitFile As String)

## Call Syntax :

Call cPutIni(AppName, szItem, szDefault, InitFile)

## Where :

AppName	a string that specifies the section to which the string will be copied. If the section does not exist, it is created.
szItem	a string containing the entry to be associated with the string. If the entry does not exist in the specified section, it is created.
szDefault	If this parameter is NULL, the entire section, including all entries within the section, is deleted. a string to be written to the file. If this parameter is NULL, the entry specified by the szItem parameter is deleted.
InitFile	a filename that names the initialization file.

## Comments :

To improve performance, Windows keeps a cached version of the most-recently accessed initialization file. If that filename is specified and the other three parameters are NULL, Windows flushes the cache.

Sections in the initialization file have the following form:

```
[section]
entry=string
```

## Examples :

Call cPutIni("Desktop","IconTitleFaceName","MS Sans Serif","WIN.INI")

**See also :** [Windows](#)

# GetSeparator.X

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

All values returned are read from the Win.INI file.

[GetCountry](#) return the country name.

[GetCountryCode](#) return the country code.

[GetCurrency](#) return the currency.

[GetDateFormat](#) return the format for the date.

[GetDateSeparator](#) return the separator for the date.

[GetHourFormat](#) return the format for the hour.

[GetLanguage](#) return the letters for the language.

[GetListSeparator](#) return the separator for list.

[GetTimeSeparator](#) return the separator for the date.

[GetWinINI](#) return the information for a given item.

## Declare Syntax :

```
Declare Function cGetCountry Lib "time2win.dll" () As String
Declare Function cGetCountryCode Lib "time2win.dll" () As String
Declare Function cGetCurrency Lib "time2win.dll" () As String
Declare Function cGetDateFormat Lib "time2win.dll" () As String
Declare Function cGetDateSeparator Lib "time2win.dll" () As String
Declare Function cGetHourFormat Lib "time2win.dll" () As String
Declare Function cGetLanguage Lib "time2win.dll" () As String
Declare Function cGetListSeparator Lib "time2win.dll" () As String
Declare Function cGetTimeSeparator Lib "time2win.dll" () As String
Declare Function cGetWinINI Lib "time2win.dll" (ByVal Info As Integer) As String
```

## Call Syntax :

The purpose and the declare syntax are very explicit.

## Where :

Info                      the number of the desired item

## Comments :

The advantage to use these routines is that these routines are very fast and don't use the WINDOWS API in VB.

## Examples :

GetDateSeparator	is '/'
GetTimeSeparator	is ':'
GetListSeparator	is ','
GetDateFormat	is 'dd/mm/yyyy'
GetHourFormat	is 'hh:nn'
GetCurrency	is 'FB'
GetLanguage	is 'fra'
GetCountry	is 'Belgium (French)'
GetCountryCode	is '32'

**See also :** [Windows](#)

' definition for win.ini section

```
Public Const GET_TIME_SEPARATOR = 1
Public Const GET_DATE_SEPARATOR = 2
Public Const GET_TIME_FORMAT = 3
Public Const GET_DATE_FORMAT = 4
Public Const GET_CURRENCY = 5
Public Const GET_LANGUAGE = 6
Public Const GET_COUNTRY = 7
Public Const GET_COUNTRY_CODE = 8
Public Const GET_LIST_SEPARATOR = 9
Public Const GET_DEFAULT_PRINTER = 10
```

# GetWindowsDirectory

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[GetWindowsDirectory](#) retrieve the full path for the Windows directory.

## **Declare Syntax :**

Declare Function cGetWindowsDirectory Lib "time2win.dll" () As String

## **Call Syntax :**

test\$ = cGetWindowsDirectory()

## **Where :**

test\$                    is the full path

## **Comments :**

## **Examples :**

test\$ = cGetWindowsDirectory()                    ' "K:\WIN95"

**See also :** [Windows](#)



# GetSystemDirectory

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[GetSystemDirectory](#) retrieve the full path of the System directory for Windows.

## **Declare Syntax :**

Declare Function cGetSystemDirectory Lib "[time2win.dll](#)" () As String

## **Call Syntax :**

test\$ = cGetSystemDirectory()

## **Where :**

test\$                      the full path of the System directory

## **Comments :**

## **Examples :**

test\$ = cGetSystemDirectory()                      ' "K:\WIN95\SYSTEM"

**See also :** [Windows](#)

# GetTaskName

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[GetTaskName](#) read the name of the task. You see the name in the Task Manager by pressing the CTRL + ESC keys.

## **Declare Syntax :**

Declare Function cGetTaskName Lib "[time2win.dll](#)" (ByVal hWnd As Long) As String

## **Call Syntax :**

```
test$ = cGetTaskName(Form.hWnd)
```

## **Where :**

Form.hWnd	is the hWnd of your application
test\$	is the old task name of the application

## **Comments :**

This is useful to retrieve the task name.

## **Examples :**

```
Dim TaskName As String
```

```
TaskName = cGetTaskName(Me.hWnd)  
MsgBox TaskName ' "Microsoft Visual Basic"
```

**See also :** [Task - File version](#)

# GetSectionItems

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetSectionItems](#) retrieve all items founden in a section of a specified INI file.

## Declare Syntax :

Declare Function cGetSectionItems Lib "time2win.dll" (ByVal Section As String, ByVal InitFile As String, nItems As Integer) As String

## Call Syntax :

test\$ = cGetSectionItems(Section, InitFile, nItems)

## Where :

Section	the section to proceed
InitFile	the INI file to proceed.
nItems	the total items founden in the section
test\$	the items in the specified section

## Comments :

If the section don't exists, the returned file is an EMPTY string and nItems is 0.  
The InitFile is any file which have a INI structure.  
Each item in the section is separated by a chr\$(13).

## Examples :

Dim n As Integer

Debug.Print cGetSectionItems("desktop", "win.ini", n)

Debug.Print "Total Items founded in this section is " & n

On my system :

```
Pattern=(None)
GridGranularity=0
IconSpacing=77
TileWallPaper=1
IconTitleFaceName=MS Sans Serif
IconTitleSize=-11
IconTitleStyle=0
IconVerticalSpacing=72
wallpaper=(None)
```

Total Items founded in this section is = 9

Debug.Print cGetSectionItems("intl", "win.ini", n)

Debug.Print "Total Items founded in this section is " & n

```
sLanguage=fra
sCountry=Belgium (French)
iCountry=32
iDate=1
iTime=1
```

iTLZero=0  
iCurrency=3  
iCurrDigits=2  
iNegCurr=8  
iLzero=0  
iDigits=2  
iMeasure=0  
s1159=  
s2359=  
sCurrency=FB  
sThousand=.  
sDecimal=,  
sDate=/  
sTime=:  
sList=;  
sShortDate=d/MM/yy  
sLongDate=dddd d MMMM yyyy  
sFrameNum=#mmjk`sdnm

Total Items founded in this section is = 23

**See also :** [Windows](#)

# GetPrinterPorts

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[GetPrinterPorts](#) return all printers set in the [printerports] section in the Win.INI

## **Declare Syntax :**

Declare Function cGetPrinterPorts Lib "[time2win.dll](#)" () As String

## **Call Syntax :**

test\$ = cGetPrinterPorts()

## **Where :**

test\$                      all printer founded separated by a chr\$(13).

## **Comments :**

Use the cGetIn function to extract each printer

**See also :** [Windows](#)

# ChangeTaskName

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ChangeTaskName](#) change the name of the task. You see change in the Task Manager by pressing the CTRL + ESC keys.

## Declare Syntax :

Declare Sub cChangeTaskName Lib "time2win.dll" (ByVal hWnd As Long, ByVal Text As String)

## Call Syntax :

Call cChangeTaskName(Form.hWnd, Text)

## Where :

Form.hWnd	is the hWnd of your application
Text	is the new task name to given at your application

## Comments :

This is useful to set a particular task name at your application.

## Examples :

Call cChangeTaskName(Me.hWnd, "Hello world")  
' press the CTRL + ESC keys to see the change in the Task Manager

**See also :** [Task - File version](#)

# ShowWindow

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ShowWindow](#) show a window after an exploded/imploded focus rectangle has been displayed.

## Declare Syntax :

Declare Sub cShowWindow Lib "[time2win.dll](#)" (ByVal hWnd As Long, ByVal method As Integer, ByVal interval As Integer)

## Call Syntax :

Call cShowWindow(hWnd%, method%, interval%)

## Where :

hWnd%	is the handle of a form.
method%	0 : explode the form starting at center of the form. 1 : implode the form starting at external.
interval%	0 : faster 699 : lower

## Comments :

The interval is a modulo of 700 and is calculated in millisecond.

## Examples :

Call cShowWindow(Form1.hWnd, 0, 250)

**See also :** [Windows](#)

# GetChangeTaskName

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetChangeTaskName](#) get and change the name of the task. You see change in the Task Manager by pressing the CTRL + ESC keys.

## Declare Syntax :

Declare Function cGetChangeTaskName Lib "[time2win.dll](#)" (ByVal hWnd As Long, ByVal Text As String) As String

## Call Syntax :

```
test$ = cGetChangeTaskName(Form.hWnd, Text)
```

## Where :

Form.hWnd	is the hWnd of your application
Text	is the new task name to given at your application
test\$	is the old task name of the application

## Comments :

This is useful to set a particular task name at your application and backups the old task name. This function is a mix of cGetTaskName and cChangeTaskName.

## Examples :

```
Dim OldTaskName As String
```

```
OldTaskName = cGetChangeTaskName(Me.hWnd, "Hello world")
```

```
MsgBox OldTaskName
```

```
    ' press the CTRL + ESC keys to see the change in the Task Manager
```

```
    ' OldTaskName is "Microsoft Visual Basic"
```

```
' if you repeat the test
```

```
    ' OldTaskName is "Hello world"
```

**See also :** [Task - File version](#)



# TaskBarAddIcon, TaskBarDeletelcon, TaskBarModifylcon

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[TaskBarAddIcon](#) add an icon for an application in the tray of the task bar.

[TaskBarDeletelcon](#) delete the tray icon from an application in the task bar.

[TaskBarModifylcon](#) modify an icon for an application in the tray of the task bar.

## Declare Syntax :

Declare Function cTaskBarAddIcon Lib "time2win.dll" (ByVal hWnd As Long, ByVal hIcon As Long, ByVal lpszTip As String) As Integer

Declare Function cTaskBarDeletelcon Lib "time2win.dll" (ByVal hWnd As Long) As Integer

Declare Function cTaskBarModifylcon Lib "time2win.dll" (ByVal hWnd As Long, ByVal hIcon As Long, ByVal lpszTip As String) As Integer

## Call Syntax :

intResult% = cTaskBarAddIcon(hWnd&, hIcon&, lpszTip\$)

intResult% = cTaskBarDeletelcon(hWnd&)

intResult% = cTaskBarModifylcon(hWnd&, hIcon&, lpszTip\$)

## Where :

hWnd& is the .hWnd property of the form used to performe operation in the tray on task bar.

hIcon& is the .Icon property of the form used to performe operation in the tray on task bar.

lpszTip\$ is the tooltip message to display when the mouse moves over the icon in the tray

## Comments :

Don't forget to call cTaskBarDeletelcon when your application end.

Beware when you use CTRL+BREAK to stop your application.

Beware when you use END statement to stop your application.

## Examples :

in the Form\_Load event :

```
debug.print cTaskBarAddIcon(Me.hWnd, Me.Icon., "Form1 loaded")
```

in the Form\_Resize event :

```
debug.print cTaskBarModifylcon(Me.hWnd, Me.Icon., "Form1 minimized")
```

in the Form\_QueryUnload event :

```
debug.print cTaskBarDeletelcon(Me.hWnd)
```

**See also :** [Windows 95](#)

# GetClassName

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetClassName](#) retrieve the full class name of a window.

## Declare Syntax :

Declare Function cGetClassName Lib "time2win.dll" (ByVal hWnd As Long) As String

## Call Syntax :

```
test$ = cGetClassName(hWnd)
```

## Where :

hWnd	is the .hWnd of a control.
test\$	is the returned class name.

## Comments :

if the .hWnd is not exist, the returned string is an EMPTY string.

## Examples :

test\$ = cGetClassName(Me.hWnd)	-> "ThunderForm"
test\$ = cGetClassName(Command1.hWnd)	-> "ThunderCommandButton"
test\$ = cGetClassName(List1.hWnd)	-> "ThunderListBox"
test\$ = cGetClassName(Text1.hWnd)	-> "ThunderTextBox"

**See also :** [Windows](#)

# EXEnameActiveWindow

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[EXEnameActiveWindow](#) retrieve the full filename (path and file) of the active window.

## **Declare Syntax :**

Declare Function cEXEnameActiveWindow Lib "[time2win.dll](#)" () As String

## **Call Syntax :**

test\$ = cEXEnameActiveWindow()

## **Where :**

test\$                      is the name of the active window

## **Comments :**

## **Examples :**

test\$ = cEXEnameActiveWindow()

On my system : test\$ = "K:\WIN95\VB\VB.EXE"

**See also :** [Windows](#)

# EXEnameWindow

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[EXEnameWindow](#) retrieve the full filename (path and file) of the specified window.

## Declare Syntax :

Declare Function cEXEnameWindow Lib "[time2win.dll](#)" (ByVal hModule As Integer) As String

## Call Syntax :

```
test$ = cEXEnameWindow(Form.Hwnd)
```

## Where :

hModule	is the hWnd of the window
test\$	is the name of the specified window

## Comments :

## Examples :

```
test$ = cEXEnameWindow(Me.hWnd)
```

On my system : test\$ = "K:\WIN95\VB\VB.EXE"

**See also :** [Windows](#)

# EXEnameTask

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[EXEnameTask](#) retrieve the full path and filename of the executable file from which the specified module was loaded.

## Declare Syntax :

Declare Function cEXEnameTask Lib "[time2win.dll](#)" (ByVal nFileName As String) As String

## Call Syntax :

```
test$ = cEXEnameTask(nFileName)
```

## Where :

nFileName	is the task name as you fin when pressing CTRL + ESC keys
test\$	is the returned full path and filename

## Comments :

## Examples :

```
test$ = cEXEnameTask("PROGMAN")
```

On my system : test\$ = "K:\WIN95\PROGMAN.EXE"

**See also :** [Windows](#)

# ExitWindowsAndExecute, RebootSystem, RestartWindows

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ExitWindowsAndExecute](#) terminate Windows, runs a specified MS-DOS application, and then restarts Windows.

[RebootSystem](#) reboot your system.

[RestartWindows](#) restart your Windows.

## Declare Syntax :

Declare Function cExitWindowsAndExecute Lib "[time2win.dll](#)" (ByVal lpszExe As String, ByVal lpszParams As String) As Integer

Declare Function cRebootSystem Lib "[time2win.dll](#)" () As Integer

Declare Function cRestartWindows Lib "[time2win.dll](#)" () As Integer

## Call Syntax :

test% = cExitWindowsAndExecute(lpszExe, lpszParams)

test% = cRebootSystem()

test% = cRestartWindows()

## Where :

lpszExe	is the program to launch after exiting Windows.
lpszParams	are the associated parameter to pass to the program.
test%	= 0 if one or more applications refuse to terminate.

## Comments :

The ExitWindowsAndExecute function is typically used by installation programs to replace components of Windows which are active when Windows is running.

## Examples :

test% = cExitWindowsAndExecute("MENU.EXE", "/Z/V/C")

test% = cRebootSystem()

test% = cRestartWindows()

**See also :** [Windows](#)

# GetDefaultCurrentDir

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetDefaultCurrentDir](#) retrieve the current dir on the current drive.

## Declare Syntax :

Declare Function cGetDefaultCurrentDir Lib "[time2win.dll](#)" () As String

## Call Syntax :

test\$ = cGetDefaultCurrentDir()

## Where :

test\$                      the dir

## Comments :

The GetDefaultCurrentDir function gets the full path of the current working directory for the default drive . The integer  
The GetDefaultCurrentDir function returns a string that represents the path of the current working directory. If the current working directory is set to the root, the string will end with a backslash ( \ ). If the current working directory is set to a directory other than the root, the string will end with the name of the directory and not with a backslash.

## Examples :

**See also :** [Windows](#)

# GetDefaultPrinter

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[GetDefaultPrinter](#) return the default printer in the [windows] section of Win.INI

## **Declare Syntax :**

Declare Function cGetDefaultPrinter Lib "[time2win.dll](#)" () As String

## **Call Syntax :**

```
test$ = cGetDefaultPrinter()
```

## **Where :**

test\$                      is the default printer

## **Comments :**

## **Examples :**

```
test$ = cGetDefaultPrinter()                      -> "HP LASERJET III,HP PCL5MS,LPT1:"
```

**See also :** [Windows](#)



# GetDevices

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## **Purpose :**

[GetDevices](#) return all devices founden in the [devices] section in the Win.INI

## **Declare Syntax :**

Declare Function cGetDevices Lib "[time2win.dll](#)" () As String

## **Call Syntax :**

test\$ = cGetDevices()

## **Where :**

test\$                      all devices separated by a chr\$(13).

## **Comments :**

Use the cGetIn function to extract each device.

## **Examples :**

test\$ = cGetDevices()                      -> "HP LaserJet III=HPPCL5MS,LPT1:"

**See also :** [Windows](#)

# GetDriveCurrentDir

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetDriveCurrentDir](#) retrieve the current dir on the specified drive.

## Declare Syntax :

Declare Function cGetDriveCurrentDir Lib "[time2win.dll](#)" (ByVal lpDrive As String) As String

## Call Syntax :

```
test$ = cGetDefaultCurrentDir(lpDrive)
```

## Where :

lpDrive	the letter for the drive
test\$	the dir

## Comments :

The GetDriveCurrentDir function gets the full path of the current working directory on the specified drive  
The GetDriveCurrentDir function returns a string that represents the path of the current working directory on the specified drive. If the current working directory is set to the root, the string will end with a backslash (\). If the current working directory is set to a directory other than the root, the string will end with the name of the directory and not with a backslash.

If the disk is not present or if the disk is not available or if an error occurs when accessing the disk, the returned value is always an EMPTY string.

This function works with local disk (hard, floppy or cd-rom) als well on remote disk (network).

## Examples :

**See also :** [Windows](#)

# ComboSearchFile, ListSearchFile

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ComboSearchFile](#) perform a file match starting with a specified path and fill a standard combo box.

[ListSearchFile](#) perform a file match starting with a specified path and fill a standard list box.

## Declare Syntax :

```
Declare Function cListSearchFile Lib "time2win.dll" (ByVal hWnd As Long, ByVal lpStartPath As String, ByVal lpFileMask As String) As Long
Declare Function cComboSearchFile Lib "time2win.dll" (ByVal hWnd As Long, ByVal lpStartPath As String, ByVal lpFileMask As String) As Long
```

## Call Syntax :

```
lngResult& = cListSearchFile(hWnd&, lpStartPath$, lpFileMask$)
lngResult& = cComboSearchFile(hWnd&, lpStartPath$, lpFileMask$)
```

## Where :

lpStartPath\$	is the starting path to begin the search.
lpFileMask\$	is the file mask to match.
hWnd&	is the .hWnd property of a standard list or combo box.

## Comments :

## Examples :

```
debug.print cListSearchFile(List1.hWnd, "c:\", "time2win.dll")
debug.print cComboSearchFile(Combo1.hWnd, "c:\", "time2win.dll")
```

**See also :** [List box - combo box](#)

# ComboFiles, ListFiles

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ComboFiles](#) fill a Combo Box with files with the specified attribute and mask.

[ListFiles](#) fill a List Box with files with the specified attribute and mask.

## Declare Syntax :

Declare Function cComboFiles Lib "[time2win.dll](#)" (ByVal hWnd As Long, ByVal Attributes As Long, ByVal  
FilePathMask As String) As Integer

Declare Function cListFiles Lib "[time2win.dll](#)" (ByVal hWnd As Long, ByVal Attributes As Long, ByVal FilePathMask  
As String) As Integer

## Call Syntax :

## Where :

## Comments :

## Examples :

**See also :** [List box - combo box](#)

# ListSetTabs

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

**Purpose :**

ListSetTabs set tabulation in a List Box.

**Declare Syntax :**

Declare Function cListSetTabs Lib "time2win.dll" (ByVal hWnd As Long, TabArray() As Long) As Integer

**Call Syntax :**

**Where :**

**Comments :**

**Examples :**

**See also :** List box - combo box

## Task - File version : Overview

<a href="#"><u>ChangeTaskName</u></a>	change the name of the task.
<a href="#"><u>GetChangeTaskName</u></a>	get and change the name of the task.
<a href="#"><u>GetFileVersion</u></a>	return a partial information over a specified file.
<a href="#"><u>GetFileVersionInfo</u></a>	return a full information over a specified file in one call.
<a href="#"><u>GetTaskName</u></a>	read the name of the task.
<a href="#"><u>ModuleFind</u></a>	retrieve some parameters for a specified loaded module.
<a href="#"><u>Modules</u></a>	retrieve each loaded module one by one.

# GetFileVersion

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetFileVersion](#) return a partial information over a specified file.

## Declare Syntax :

Declare Function cGetFileVersion Lib "[time2win.dll](#)" (ByVal filename As String, ByVal nFonction As Integer) As String

## Call Syntax :

test\$ = cGetFileVersion(filename, nFonction)

## Where :

filename	is the file to proceed
<a href="#">nFonction</a>	is the partial information to retrieve.
test\$	is the returned information

## Comments :

The returned information can be an EMPTY string if the partial informations don't exists.

## Examples :

```
Dim i           As Integer
Dim Tmp         As String
```

```
For i = VER_VERSION_PRODUCT To VER_PRODUCT_VERSION
    Tmp = Tmp & i & " = " & cGetFileVersion("k:\windows\progman.exe", i) & Chr$(13)
Next i
```

MsgBox Tmp

' On my system :

```
' -1 = 3.10.0.103
' 0 = 3.10.0.103
' 1 = Microsoft Corporation
' 2 = Windows Program Manager application file
' 3 = 3.10
' 4 = PROGMAN
' 5 = Copyright © Microsoft Corp. 1991-1992
' 6 =
' 7 =
' 8 = Microsoft® Windows(TM) Operating System
```

**See also :** [Task - File version](#)

# GetFileVersionInfo

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetFileVersionInfo](#) return a full information over a specified file in one call.

## Declare Syntax :

Declare Function cGetFileVersionInfo Lib "[time2win.dll](#)" (ByVal filename As String, FILEVERSIONINFO As Any) As Integer

## Call Syntax :

test% = cGetFileVersion(filename, FILEVERSIONINFO)

## Where :

filename	is the file to proceed
FILEVERSIONINFO	is a typed variable ' <a href="#">tagFILEVERSIONINFO</a> ' which receives the full information
test%	TRUE if all is Ok FALSE if an error has occurred

## Comments :

## Examples :

```
Dim status As Integer
Dim FILEVERSIONINFO As tagFILEVERSIONINFO
```

```
status = cGetFileVersionInfo("k:\windows\system\krnl386.exe", FILEVERSIONINFO)
```

```
Debug.Print "FILEVERSIONINFO.VersionProduct = " & FILEVERSIONINFO.VersionProduct
Debug.Print "FILEVERSIONINFO.FileDescription = " & FILEVERSIONINFO.FileDescription
Debug.Print "FILEVERSIONINFO.FileVersion = " & FILEVERSIONINFO.FileVersion
Debug.Print "FILEVERSIONINFO.InternalName = " & FILEVERSIONINFO.InternalName
Debug.Print "FILEVERSIONINFO.LegalCopyright = " & FILEVERSIONINFO.LegalCopyright
Debug.Print "FILEVERSIONINFO.LegalTrademarks = " & FILEVERSIONINFO.LegalTrademarks
Debug.Print "FILEVERSIONINFO.Comments = " & FILEVERSIONINFO.Comments
Debug.Print "FILEVERSIONINFO.ProductName = " & FILEVERSIONINFO.ProductName
Debug.Print "FILEVERSIONINFO.ProductVersion = " & FILEVERSIONINFO.ProductVersion
```

' On my system :

```
' FILEVERSIONINFO.VersionProduct = 3.11.0.300
' FILEVERSIONINFO.FileDescription = Windows Kernel
' FILEVERSIONINFO.FileVersion = 3.11
' FILEVERSIONINFO.InternalName = KRNL386
' FILEVERSIONINFO.LegalCopyright = Copyright © Microsoft Corp. 1991-1993
' FILEVERSIONINFO.LegalTrademarks =
' FILEVERSIONINFO.Comments =
' FILEVERSIONINFO.ProductName = Microsoft® Windows(TM) Operating System
' FILEVERSIONINFO.ProductVersion = 3.11
```

**See also :** [Task - File version](#)



' definition for file version information

Public Const VER\_VERSION\_PRODUCT = -1

Public Const VER\_VERSION\_FILE = 0

Public Const VER\_COMPANY\_NAME = 1

Public Const VER\_FILE\_DESCRIPTION = 2

Public Const VER\_FILE\_VERSION = 3

Public Const VER\_INTERNAL\_NAME = 4

Public Const VER\_LEGAL\_COPYRIGHT = 5

Public Const VER\_LEGAL\_TRADEMARKS = 6

Public Const VER\_PRODUCT\_NAME = 7

Public Const VER\_PRODUCT\_VERSION = 8

' structure for file version information

Type tagFILEVERSIONINFO

VersionProduct As String

VersionFile As String

CompanyName As String

FileDescription As String

FileVersion As String

InternalName As String

LegalCopyright As String

LegalTrademarks As String

Comments As String

ProductName As String

ProductVersion As String

End Type

# WalkThruWindow

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[WalkThruWindow](#) walk in the window's list of all windows at a gived moment.

## Declare Syntax :

Declare Function cWalkThruWindow Lib "time2win.dll" (Class As String, Caption As String, OwnerHwnd As Integer, OwnerClass As String, OwnerCaption As String, ByVal FirstNext As Integer) As Integer

## Call Syntax :

hWnd% = cWalkThruWindow(Class\$, Caption\$, OwnerHwnd%, OwnerClass\$, OwnerCaption\$, FirstNext%)

## Where :

Class\$	is the returned Name of the Window's Class for the hWnd founded.
Caption\$	is the returned Caption of the Window for the hWnd founded.
OwnerHwnd%	is the returned hWnd of the Owner for the hWnd founded
OwnerClass\$	is the returned Name of the Window's Class for the Owner for the hWnd founded.
OwnerCaption\$	is the returned Caption of the Window for the Owner for the hWnd founded.
FirstNext%	TRUE to begin the search, FALSE to continue the search.
hWnd%	is the returned hWnd founded.

## Comments :

## Examples :

Dim nClass	As String
Dim nCaption	As String
Dim nOwnerClass	As String
Dim nOwnerCaption	As String
Dim nOwnerHwnd	As Integer

Dim nhWnd	As Integer
-----------	------------

nhWnd = cWalkThruWindow(nClass, nCaption, nOwnerHwnd, nOwnerClass, nOwnerCaption, True)

```
Do While (nhWnd <> 0)
    Debug.Print "Owner   = "; Hex$(nOwnerHwnd) & Chr$(9) & nOwnerCaption & " (" & nOwnerClass & ")"
    Debug.Print "Window = "; Hex$(nhWnd) & Chr$(9) & nCaption & " (" & nClass & ")"
    nhWnd = cWalkThruWindow(nClass, nCaption, nOwnerHwnd, nOwnerClass, nOwnerCaption, False)
Loop
```

' Part of the output on my system :

' Owner	= 42A4	Microsoft Visual Basic (ThunderMain)
' Window	= 41BC	Time To WIN (Demo) (ThunderForm)
' Owner	= 42A4	Microsoft Visual Basic (ThunderMain)
' Window	= 5878	(ToolsPalette)
' Owner	= 42A4	Microsoft Visual Basic (ThunderMain)
' Window	= 56D4	TIME2WIN.MAK (PROJECT)
' Owner	= 42A4	Microsoft Visual Basic (ThunderMain)
' Window	= 5B20	Debug Window [TIME2WIN.FRM] (OFEDT)
' Owner	= 42A4	Microsoft Visual Basic (ThunderMain)

' Window = 48AC	Microsoft Visual Basic [run] (wndclass_desked_gsk)
' Owner = 4A68	Properties (wndclass_pbrs)
' Window = 59A8	(CBar)
' Owner = 42A4	Microsoft Visual Basic (ThunderMain)
' Window = 4A68	Properties (wndclass_pbrs)
' Owner = 42A4	Microsoft Visual Basic (ThunderMain)
' Window = 5928	(CPal)
' Owner = 0	()
' Window = 42A4	Microsoft Visual Basic (ThunderMain)

**See also :** [Windows](#)

# ModuleFind

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ModuleFind](#) retrieve some parameters for a specified loaded module.

## Declare Syntax :

Declare Function cModuleFind Lib "[time2win.dll](#)" (MODULEENTRY As Any, ByVal ModuleName As String) As Integer

## Call Syntax :

test% = cModuleFind(MODULEENTRY, ModuleName)

## Where :

ModuleName	is the module to proceed
MODULEENTRY	is the type'd variable ' <a href="#">tagMODULEENTRY</a> ' which receives the parameters.
test%	TRUE if all is Ok FALSE if an error has occurred

## Comments :

dwSize	Specifies the size of the MODULEENTRY structure, in bytes.
szModule	Specifies the null-terminated string that contains the module name.
hModule	Identifies the module handle.
wcUsage	Specifies the reference count of the module. This is the same number returned by the GetModuleUsage function.
szExePath	Specifies the null-terminated string that contains the fully-qualified executable path for the module.
wNext	Specifies the next module in the module list. This member is reserved for internal use by Windows.

## Examples :

```
Dim status           As Integer
Dim MODULEENTRY      As tagMODULEENTRY
```

```
status = cModuleFind(MODULEENTRY, "KERNEL")
```

```
Debug.Print "MODULEENTRY.dwSize = " & MODULEENTRY.dwSize
Debug.Print "MODULEENTRY.szModule = " & MODULEENTRY.szModule
Debug.Print "MODULEENTRY.hModule = " & MODULEENTRY.hModule
Debug.Print "MODULEENTRY.wcUsage = " & MODULEENTRY.wcUsage
Debug.Print "MODULEENTRY.szExePath = " & MODULEENTRY.szExePath
Debug.Print "MODULEENTRY.wNext = " & MODULEENTRY.wNext
```

' On my system :

```
' MODULEENTRY.dwSize = 276
' MODULEENTRY.szModule = KERNEL
' MODULEENTRY.hModule = 295
' MODULEENTRY.wcUsage = 44
' MODULEENTRY.szExePath = K:\WIN95\SYSTEM\KRNL386.EXE
' MODULEENTRY.wNext = 279
```

**See also :** [Task - File version](#)

# Modules

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

Modules retrieve each loaded module one by one.

## Declare Syntax :

Declare Function cModules Lib "time2win.dll" (MODULEENTRY As Any, ByVal firstnext As Integer) As Integer

## Call Syntax :

test% = cModules(MODULEENTRY, firstnext)

## Where :

MODULEENTRY	is the type'd variable ' <u>tagMODULEENTRY</u> ' which receives the parameters.
firstnext	TRUE for the first module FALSE for each next module
test%	TRUE if all is Ok FALSE if an error has occured or if no more modules.

## Comments :

dwSize	Specifies the size of the MODULEENTRY structure, in bytes.
szModule	Specifies the null-terminated string that contains the module name.
hModule	Identifies the module handle.
wcUsage	Specifies the reference count of the module. This is the same number returned by the GetModuleUsage function.
szExePath	Specifies the null-terminated string that contains the fully-qualified executable path for the module.
wNext	Specifies the next module in the module list. This member is reserved for internal use by Windows.

## Examples :

```
Dim i                      As Integer
Dim status                 As Integer
Dim MODULEENTRY           As tagMODULEENTRY
```

```
i = 0
```

```
Close #1
Open "c:\tmp.tmp" For Output Shared As #1
```

```
Print #1, "dwSize"; Chr$(9);
Print #1, "szModule"; Chr$(9);
Print #1, "hModule"; Chr$(9);
Print #1, "wcUsage"; Chr$(9);
Print #1, "szExePath"; Chr$(9);
Print #1, "wNext"; Chr$(13)
```

```
status = cModules(MODULEENTRY, True)
```

```
Do While (status = True)
```

```
    Print #1, MODULEENTRY.dwSize; Chr$(9);
    Print #1, MODULEENTRY.szModule; Chr$(9);
    Print #1, MODULEENTRY.hModule; Chr$(9);
    Print #1, MODULEENTRY.wcUsage; Chr$(9);
    Print #1, MODULEENTRY.szExePath; Chr$(9);
    Print #1, MODULEENTRY.wNext
```

```
status = cModules(MODULEENTRY, False)
```

```
i = i + 1
```

```
If (i >= 7) Then Exit Do
```

```
Loop
```

```
Close #1
```

'On my system, the first 7 modules are :

' dwSize	szModule	hModule	wcUsage	szExePath
wNext				
' 276	KERNEL	295	41	K:\WIN95\SYSTEM\KRNL386.EXE
279				
' 276	SYSTEM	279	32	K:\WIN95\SYSTEM\SYSTEM.DRV
343				
' 276	KEYBOARD	343	31	K:\WIN95\SYSTEM\KEYBOARD.DRV
367				
' 276	MOUSE	367	31	K:\WIN95\SYSTEM\MOUSE.DRV RV
463				
' 276	DISPLAY	463	32	K:\WIN95\SYSTEM\SVGA256.DRV
487				
' 276	SOUND	487	31	K:\WIN95\SYSTEM\MMSOUND.DRV
583				
' 276	COMM	583	31	K:\WIN95\SYSTEM\COMM.DRV RV
1271				

**See also :** [Task - File version](#)

# Tasks

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

Tasks retrieves all tasks currently in memory.

## Declare Syntax :

Declare Function cTasks Lib "time2win.dll" (TASKENTRY As Any, ByVal firstnext As Integer) As Integer

## Call Syntax :

test% = cTasks(TASKENTRY, firstnext)

## Where :

TASKENTRY	is the typed variable which receives the parameters 'tagTASKENTRY'
firstnext	TRUE for the first module FALSE for each next module
test%	TRUE if all is Ok FALSE if an error has occurred or if no more tasks

## Comments :

The hTask parameter is the task number founded by the cModuleFind or cModules functions.

dwSize	Specifies the size of the TASKENTRY structure, in bytes.
hTask	Identifies the task handle for the stack.
hTaskParent	Identifies the parent of the task.
hInst	Identifies the instance handle of the task. This value is equivalent to the task's DGROUP segment selector.
hModule	Identifies the module that contains the currently executing function.
wSS	Contains the value in the SS register.
wSP	Contains the value in the SP register.
wStackTop	Specifies the offset to the top of the stack (lowest address on the stack).
wStackMinimum	Specifies the lowest segment number of the stack during execution of the task.
wStackBottom	Specifies the offset to the bottom of the stack (highest address on the stack).
wcEvents	Specifies the number of pending events.
hQueue	Identifies the task queue.
szModule	Specifies the name of the module that contains the currently executing function.
wPSPOffset	Specifies the offset from the program segment prefix (PSP) to the beginning of the executable code segment.
hNext	Identifies the next entry in the task list. This member is reserved for internal use by Windows.

## Examples :

```
Dim status           As Integer
Dim TASKENTRY        As tagTASKENTRY
```

```
Close #1
Open "c:\tmp.tmp" For Output Shared As #1
```

```
Print #1, "dwSize"; Chr$(9);
Print #1, "hTask"; Chr$(9);
Print #1, "hTaskParent"; Chr$(9);
Print #1, "hInst"; Chr$(9);
Print #1, "hModule"; Chr$(9);
Print #1, "wSS"; Chr$(9);
Print #1, "wSP"; Chr$(9);
```



```

Print #1, "wStackTop"; Chr$(9);
Print #1, "wStackMinimum"; Chr$(9);
Print #1, "wStackBottom"; Chr$(9);
Print #1, "wcEvents"; Chr$(9);
Print #1, "hQueue"; Chr$(9);
Print #1, "szModule"; Chr$(9);
Print #1, "wPSPOffset"; Chr$(9);
Print #1, "hNext"; Chr$(13)

```

```

status = cTasks(TASKENTRY, True)
Do While (status = True)

```

```

    Print #1, TASKENTRY.dwSize; Chr$(9);
    Print #1, TASKENTRY.hTask; Chr$(9);
    Print #1, TASKENTRY.hTaskParent; Chr$(9);
    Print #1, TASKENTRY.hInst; Chr$(9);
    Print #1, TASKENTRY.hModule; Chr$(9);
    Print #1, TASKENTRY.wSS; Chr$(9);
    Print #1, TASKENTRY.wSP; Chr$(9);
    Print #1, TASKENTRY.wStackTop; Chr$(9);
    Print #1, TASKENTRY.wStackMinimum; Chr$(9);
    Print #1, TASKENTRY.wStackBottom; Chr$(9);
    Print #1, TASKENTRY.wcEvents; Chr$(9);
    Print #1, TASKENTRY.hQueue; Chr$(9);
    Print #1, TASKENTRY.szModule; Chr$(9);
    Print #1, TASKENTRY.wPSPOffset; Chr$(9);
    Print #1, TASKENTRY.hNext

```

```

    status = cTasks(TASKENTRY, False)

```

```

Loop

```

```

Close #1

```

On my system :

dwSize	hTask	hTaskParent	hInst	hModule	wSS	wSP	wStackTop	wStackMinimum
	wStackBottom	wcEvents		hQueue	szModule	wPSPOffset	hNext	
40	4231	1783	8246	4367		8247	-27238 30418	-28190
	27076	0		8263	ICONBAR	8279	4439	
40	4439	1783	4398	4463		4399	5850 1022	5992
	5992	0		4471	WINEXIT	4447	16279	
40	16279	4231	15878	16295		15879	-4188 -23384	10032
	-4054	0		16255	MSVC	16271	2087	
40	2087	1783	8030	2095		8031	29198 9004	29334
	29334	0		8047	FASTLOAD	8063	1783	
40	1783	335	5846	1799		5847	8202 2358	5950
	8304	0		2079	PROGMAN	791	7007	
40	7007	4231	9926	6767		9927	-23760 13124	23498
	-23562	1		6879	FOREHELP	6903	4431	
40	4431	1783	4278	4455		4279	7654 2844	6998
	7814	1		4359	FREEMEM	4375	12127	
40	12127	1783	9022	12143		9023	-29164 16534	-31948
	28672	0		9039	VB	9231	0	

See also : [Task - File version](#)

# TaskFind

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**TaskFind** retrieve some parameters for a specified loaded task.

## Declare Syntax :

Declare Function cTaskFind Lib "time2win.dll" (TASKENTRY As Any, ByVal hTask As Integer) As Integer

## Call Syntax :

test% = cTaskFind(TASKENTRY, hTask)

## Where :

hTask	is the task number
TASKENTRY	is the typed variable which receives the parameters 'tagTASKENTRY'
test%	TRUE if all is Ok FALSE if an error has occurred

## Comments :

The hTask parameter is the task number founded by the cModuleFind or cModules functions.

dwSize	Specifies the size of the TASKENTRY structure, in bytes.
hTask	Identifies the task handle for the stack.
hTaskParent	Identifies the parent of the task.
hInst selector.	Identifies the instance handle of the task. This value is equivalent to the task's DGROUP segment selector.
hModule	Identifies the module that contains the currently executing function.
wSS	Contains the value in the SS register.
wSP	Contains the value in the SP register.
wStackTop	Specifies the offset to the top of the stack (lowest address on the stack).
wStackMinimum	Specifies the lowest segment number of the stack during execution of the task.
wStackBottom	Specifies the offset to the bottom of the stack (highest address on the stack).
wcEvents	Specifies the number of pending events.
hQueue	Identifies the task queue.
szModule	Specifies the name of the module that contains the currently executing function.
wPSPOffset segment.	Specifies the offset from the program segment prefix (PSP) to the beginning of the executable code segment.
hNext	Identifies the next entry in the task list. This member is reserved for internal use by Windows.

## Examples :

```
Dim status As Integer
Dim MODULEENTRY As tagMODULEENTRY
```

```
status = cModuleFind(MODULEENTRY, "KERNEL")
```

```
Debug.Print "MODULEENTRY.dwSize = " & MODULEENTRY.dwSize
Debug.Print "MODULEENTRY.szModule = " & MODULEENTRY.szModule
Debug.Print "MODULEENTRY.hModule = " & MODULEENTRY.hModule
Debug.Print "MODULEENTRY.wcUsage = " & MODULEENTRY.wcUsage
Debug.Print "MODULEENTRY.szExePath = " & MODULEENTRY.szExePath
Debug.Print "MODULEENTRY.wNext = " & MODULEENTRY.wNext
```

' On my system :

```
' MODULEENTRY.dwSize = 276
' MODULEENTRY.szModule = KERNEL
' MODULEENTRY.hModule = 295
' MODULEENTRY.wcUsage = 44
' MODULEENTRY.szExePath = K:\WIN95\SYSTEM\KRNL386.EXE
' MODULEENTRY.wNext = 279
```

**See also :** [Task - File version](#)



' structure for modules

Type tagMODULEENTRY

dwSize	As Long
th32ModuleID	As Long
th32ProcessID	As Long
GblcntUsage	As Long
ProccntUsage	As Long
modBaseAddr	As Byte
modBaseSize	As Long
hModule	As Long
szModule	As String * 256
szExePath	As String * 260

End Type

# FilesInfoInDir

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[FilesInfoInDir](#) retrieve each file in the specified directory and returns name, size, scalar date, scalar time, attribute.

## Declare Syntax :

Declare Function cFilesInfoInDir Lib "[time2win.dll](#)" (ByVal nDir As String, FILEINFO As tagFILEINFO, ByVal FirstNext As Integer) As String

## Call Syntax :

test\$ = cFilesInfoInDir(nDir, FI, firstnext )

## Where :

nDir	the directory to proceed with the file mask (*. * for all)
FI	the type'd variable ' <a href="#">tagFILEINFO</a> '.
firstnext	TRUE for the first file
	FALSE for each next file
test\$	the returned file

## Comments :

If the nDir is invalid or if an error occurs when accessing a file, the returned filename is an empty string and all sub-variables in the type'd variable are -1.

## Examples :

```
Dim i           As Integer
Dim Tmp         As String
Dim FI          As tagFILEINFO
```

```
i = 0
Tmp = cFilesInfoInDir("c:\*. *", FI, True)
```

```
Debug.Print "The first 7 files in C:\ are : "
```

```
Do While (Len(Tmp) > 0)
    Debug.Print Tmp & ", " & FI.fSize & ", " & FI.fDate & ", " & FI.fTime & ", " & FI.fAttribute
    Tmp = cFilesInfoInDir("c:\*. *", FI, False)
    i = i + 1
    If (i >= 7) Then Exit Do
Loop
```

' On my system:

' The first 7 files in C:\ are :

```
' SUHDLOG.DAT, 5166, 728480, 76033, 3
' BOOTLOG.TXT, 22886, 728480, 78500, 2
' MSDOS.---, 22, 728480, 75079, 2
' DBLSPACE.001, 79036439, 728519, 48662, 7
' SYSTEM.1ST, 230144, 728480, 76027, 7
' WINA20.386, 9349, 727632, 21600, 0
' AUTOEXEC.BAK, 968, 728456, 78015, 0
```

**See also :** [File](#)

' structure for File Information

Type tagFILEINFO

fSize	As Long	'size of the file
fDate	As Long	'date of the file (scalar date)
fTime	As Long	'time of the file (scalar time)
fAttribute	As Integer	'attribute of the file

End Type

# CenterWindow

**QuickInfo :** [VB 3.0](#), [VB 4.0 \(16-Bit\)](#), [VB 4.0 \(32-Bit\)](#) {Win95/WinNT}, [MSOffice 95](#)

## **Purpose :**

[CenterWindow](#) center a window in the screen.

## **Declare Syntax :**

Declare Sub cCenterWindow Lib "[time2win.dll](#)" (ByVal hWnd As Long)

## **Call Syntax :**

Call cCenterWindow(hWnd%)

## **Where :**

hWnd% is the handle of a form.

## **Comments :**

## **Examples :**

Call cCenterWindow(Form1.hWnd)

**See also :** [Windows](#)



# ArrangeDesktopIcons

**QuickInfo :** [VB 3.0](#), [VB 4.0 \(16-Bit\)](#), [VB 4.0 \(32-Bit\)](#) {Win95/WinNT}, MSOffice 95

**Purpose :**

[ArrangeDesktopIcons](#) arrange all desktop icons.

**Declare Syntax :**

Declare Sub cArrangeDesktopIcons Lib "[time2win.dll](#)" ()

**Call Syntax :**

Call cArrangeDesktopIcons()

**Where :**

**Comments :**

**Examples :**

**See also :** [Windows](#)

# GetCurrentDrive

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GetCurrentDrive](#) return the current default drive.

## Declare Syntax :

Declare Function cGetCurrentDrive Lib "[time2win.dll](#)" () As String

## Call Syntax :

```
test$ = cGetCurrentDrive()
```

## Where :

test\$                    the drive in a letter

## Comments :

## Examples :

**See also :** [Windows](#)

# EnumOpenFiles

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[EnumOpenFiles](#) enumerate all open files and/or all unmovable open files.

## Declare Syntax :

Declare Function cEnumOpenFiles Lib "time2win.dll" (ByVal nDrive As String, ByVal EnumType As Integer, ByVal FirstNext As Integer, OpenFileName As String, OpenFileMode As Long, OpenFileType As Long) As Integer

## Call Syntax :

intResult% = cEnumOpenFiles(nDrive\$, EnumType%, FirstNext%, OpenFileName\$, OpenFileMode%, OpenFileType%)

## Where :

nDrive\$	is the drive letter on which you want to search open files. (use "" for the current drive).
EnumType%	ENUMERATE_ALL_OPEN_FILES ENUMERATE_ONLY_OPEN_UNMOVABLE_FILES
FirstNext%	True : to search the first open file False : to search the next open file
OpenFileName\$	is the returned open file name.
OpenFileMode&	is the returned open file mode.
OpenFileType&	is the returned open file type.
intResult%	NO_ERROR_OPEN_FILES NO_MORE_OPEN_FILES ERROR_LOCK_LOGICAL_VOLUME ERROR_ENUMERATE_OPEN_FILES ERROR_UNLOCK_LOGICAL_VOLUME

Kind of file to enumerate. This parameter can be ENUMERATE\_ALL\_OPEN\_FILES to enumerate all open files or ENUMERATE\_ONLY\_OPEN\_UNMOVABLE\_FILES to enumerate only open unmovable files, including open memory-mapped files and other open unmovable files (32-bit Windows-based DLLs and executables). : to enumerate all open files

## Comments :

### About Returned Value :

NO\_ERROR\_OPEN\_FILES : no error, you can continue the enumeration of open files.  
NO\_MORE\_OPEN\_FILES : no more open files, the enumeration is finish.  
ERROR\_LOCK\_LOGICAL\_VOLUME : can't lock the logical volume.  
ERROR\_ENUMERATE\_OPEN\_FILES : error when enumerating open files.  
ERROR\_UNLOCK\_LOGICAL\_VOLUME : can't unlock the logical volume.

### About EnumType :

Kind of file to enumerate. This parameter can be ENUMERATE\_ALL\_OPEN\_FILES to enumerate all open files or ENUMERATE\_ONLY\_OPEN\_UNMOVABLE\_FILES to enumerate only open unmovable files, including open memory-mapped files and other open unmovable files (32-bit Windows-based DLLs and executables).

### About OpenFileMode :

Mode that the file was opened in, which is a combination of access mode, sharing mode, and open flags. It can be one value each from the access and sharing modes and any combination of open flags.

#### Access modes

OPEN\_ACCESS\_READONLY (0000h)  
OPEN\_ACCESS\_WRITEONLY (0001h)  
OPEN\_ACCESS\_READWRITE (0002h)  
OPEN\_ACCESS\_RO\_NOMODLASTACCESS (0004h)

#### Share modes

OPEN\_SHARE\_COMPATIBLE (0000h)  
OPEN\_SHARE\_DENYREADWRITE (0010h)  
OPEN\_SHARE\_DENYWRITE (0020h)  
OPEN\_SHARE\_DENYREAD (0030h)  
OPEN\_SHARE\_DENYNONE (0040h)

#### Open flags

OPEN\_FLAGS\_NOINHERIT (0080h)  
OPEN\_FLAGS\_NO\_BUFFERING (0100h)  
OPEN\_FLAGS\_NO\_COMPRESS (0200h)  
OPEN\_FLAGS\_ALIAS\_HINT (0400h)  
OPEN\_FLAGS\_NOCRITERR (2000h)  
OPEN\_FLAGS\_COMMIT (4000h)

#### About OpenFileType :

- 0 For normal files
- 1 For a memory-mapped files (memory-mapped files are unmovable)
- 2 For any other unmovable files (32-bit Windows-based DLLs and executables)
- 4 For the swap file

Note that if a memory-mapped file is returned (OpenFileType = 1), the value returned in OpenFileMode is limited to the following values:

OPEN\_ACCESS\_READONLY (0000h)  
OPEN\_ACCESS\_READWRITE (0002h)

#### Examples :

```
Dim intResult      As Integer
Dim OpenFileName   As String
Dim OpenFileMode   As Long
Dim OpenFileType   As Long
```

```
intResult = cEnumOpenFiles("C", ENUMERATE_ALL_OPEN_FILES, True, OpenFileName, OpenFileMode,
OpenFileType)
```

```
While (intResult = NO_ERROR_OPEN_FILES)
    Debug.Print intResult, OpenFileName, OpenFileMode, OpenFileType
    intResult = cEnumOpenFiles("C", ENUMERATE_ALL_OPEN_FILES, False, OpenFileName, OpenFileMode,
OpenFileType)
Wend
```

```
intResult = cEnumOpenFiles("D", ENUMERATE_ALL_OPEN_FILES, True, OpenFileName, OpenFileMode,
OpenFileType)
```

```
While (intResult = NO_ERROR_OPEN_FILES)
```

```
        Debug.Print intResult, OpenFileName, OpenFileMode, OpenFileType
        intResult = cEnumOpenFiles("D", ENUMERATE_ALL_OPEN_FILES, False, OpenFileName, OpenFileMode,
OpenFileType)
    Wend

    intResult = cEnumOpenFiles("E", ENUMERATE_ALL_OPEN_FILES, True, OpenFileName, OpenFileMode,
OpenFileType)

    While (intResult = NO_ERROR_OPEN_FILES)
        Debug.Print intResult, OpenFileName, OpenFileMode, OpenFileType
        intResult = cEnumOpenFiles("E", ENUMERATE_ALL_OPEN_FILES, False, OpenFileName, OpenFileMode,
OpenFileType)
    Wend
```

**See also :** [File](#)

# DESencrypt, DESdecrypt

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[DESencrypt](#) encode a string with a password using the U.S. Data Encryption Standard cipher.

[DESdecrypt](#) decode a string with a password using the U.S. Data Encryption Standard cipher.

## Declare Syntax :

Declare Function cDESencrypt Lib "time2win.dll" (Text As String, Key As String) As String

Declare Function cDESdecrypt Lib "time2win.dll" (Text As String, Key As String) As String

## Call Syntax :

testE = cDESencrypt(Text, Key)

testD = cDESdecrypt(Text, Key)

## Where :

Text	is the string to encrypt/decrypt
Key	is the key to use for encryption/decryption
test	is the string encrypted/decrypted

## Comments :

The Key is case sensitive.

The length of Text can be any size.

The length of Key must be greater or equal to 8 characters.

The encrypted string is always a multiple of 8 characters + 1 character.

## Examples :

```
Dim Text As String
Dim Key           As String
Dim Enc As String
Dim Dec As String
```

Text = "Under the blue sky, the sun is yellow"

Key = "a new encryption"

Enc = cDESencrypt(Text, Key)

Dec = cDESdecrypt(Enc, Key)

**See also :** [Encryption](#)

# IDEAencrypt, IDEAdecrypt

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

IDEAencrypt encode a string with a password using the International Data Encryption Algorithm cipher.

IDEAdecrypt decode a string with a password using the International Data Encryption Algorithm cipher.

## Declare Syntax :

Declare Function cIDEAencrypt Lib "time2win.dll" (Text As String, Key As String) As String

Declare Function cIDEAdecrypt Lib "time2win.dll" (Text As String, Key As String) As String

## Call Syntax :

testE = cIDEAencrypt(Text, Key)

testD = cIDEAdecrypt(Text, Key)

## Where :

Text	is the string to encrypt/decrypt
Key	is the key to use for encryption/decryption
test	is the string encrypted/decrypted

## Comments :

The Key is case sensitive.

The length of Text can be any size.

The length of Key must be greater or equal to 16 characters.

The encrypted string is always a multiple of 8 characters + 1 character.

## Examples :

```
Dim Text As String
Dim Key           As String
Dim Enc As String
Dim Dec As String
```

Text = "Under the blue sky, the sun is yellow"

Key = "a new encryption"

Enc = cIDEAencrypt(Text, Key)

Dec = cIDEAdecrypt(Enc, Key)

**See also :** [Encryption](#)

# LZARlcompress, LZARlexpand

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

**LZARlcompress** compress a file into a compressed format using arithmetic compression.

**LZARlexpand** expand a compressed file into a normal format using arithmetic compression.

## Declare Syntax :

Declare Function cLZARlcompress Lib "time2win.dll" (ByVal FileIn As String, ByVal FileOut As String) As Long

Declare Function cLZARlexpand Lib "time2win.dll" (ByVal FileIn As String, ByVal FileOut As String) As Long

## Call Syntax :

Test& = cLZARlcompress(FileIn\$, FileOut\$)

Test& = cLZARlexpand(FileIn\$, FileOut\$)

## Where :

FileIn\$	is the original/compressed file.
FileOut\$	is the compressed/original file.
Test&	<0, an error has occurred.
	>=0, the length of the created file.

## Comments :

The following constants are used to explain the error code :

```
Public Const CMPEXP_FILEIN_CANT_BE_NULL = -1
' occurs when the FileIn is an empty string
Public Const CMPEXP_FILEOUT_CANT_BE_NULL = -2
' occurs when the FileOut is an empty string
Public Const CMPEXP_FILEIN_AND_FILEOUT_CANT_BE_THE_SAME = -3
' occurs when the FileIn and FileOut are the same
Public Const CMPEXP_FILEIN_CANT_BE_OPENED = -4
' occurs when the FileIn can't be opened (not valid, not exist or disk error)
Public Const CMPEXP_FILEOUT_CANT_BE_CREATED = -5
' occurs when the FileOut can't be created (not valid or disk error)
Public Const CMPEXP_COMPRESS_OR_EXPAND_ERROR = -6
' occurs when compression or expansion can't be performed (disk error)
Public Const CMPEXP_CANT_GET_FILEOUT_SIZE = -7
' occurs when the length of FileOut can be read (disk error)
```

## Examples :

```
Dim FileIn      As String
Dim FileOut     As String
Dim FileOut2    As String
Dim LengthIn   As Long
Dim LengthOut  As Long
```

```
FileIn = "c:\win95\system\msjt3032.dll"
FileOut = "c:\tmp\test.ari"
FileOut = "c:\tmp\test.unari"
```

```
LengthOut = cLZARlcompress(FileIn, FileOut)
LengthIn = cLZARlexpand(FileOut, FileOut2)
```



**See also :** [Compression](#)

# DIAMONDencrypt, DIAMONDdecrypt

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

DIAMONDencrypt encode a string with a password using the Diamond Encryption Algorithm (4 modes).

DIAMONDdecrypt decode a string with a password using the Diamond Encryption Algorithm (4 modes).

## Declare Syntax :

Declare Function cDIAMONDencrypt Lib "time2win.dll" (Text As String, Key As String, ByVal Mode As Integer) As String

Declare Function cDIAMONDdecrypt Lib "time2win.dll" (Text As String, Key As String, ByVal Mode As Integer) As String

## Call Syntax :

testE = cDIAMONDencrypt(Text, Key)

testD = cDIAMONDdecrypt(Text, Key)

## Where :

Text	is the string to encrypt/decrypt
Key	is the key to use for encryption/decryption
Mode	Public Const DIAMOND_FULL_MODE1 = 1 ' more strongest (slowest) Public Const DIAMOND_FULL_MODE2 = 3 ' more strong (slow) Public Const DIAMOND_LITE_MODE1 = 2 ' strongest (fast) Public Const DIAMOND_LITE_MODE2 = 4 ' strong (fastest)
test	is the string encrypted/decrypted

## Comments :

The Key is case sensitive.

The length of Text can be any size.

The length of Key must be greater or equal to 5 characters (best result with a key of 16 characters or more).

In FULL MODE, the length of the encrypted string is always a multiple of 16 characters + 1 character.

In LITE MODE, the length of the encrypted string is always a multiple of 8 characters + 1 character.

## Examples :

```
Dim Text As String
Dim Key As String
Dim Enc As String
Dim Dec As String
```

Text = "Under the blue sky, the sun is yellow"

Key = "a new encryption"

Enc = cDIAMONDencrypt(Text, Key, DIAMOND\_FULL\_MODE1)

Dec = cDIAMONDdecrypt(Enc, Key, DIAMOND\_LITE\_MODE1)

**See also :** [Encryption](#)

# GZIPFileCompress, GZIPFileExpand

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[GZIPFileCompress](#) compress a file into a compressed format using GZIP compression method.

[GZIPFileExpand](#) expand a compressed file into a normal format using GZIP compression method.

## Declare Syntax :

Declare Function cGZIPFileCompress Lib "[time2win.dll](#)" (ByVal FileIn As String, ByVal FileOut As String) As Long

Declare Function cGZIPFileExpand Lib "[time2win.dll](#)" (ByVal FileIn As String, ByVal FileOut As String) As Long

## Call Syntax :

Test& = cGZIPFileCompress(FileIn\$, FileOut\$)

Test& = cGZIPFileExpand(FileIn\$, FileOut\$)

## Where :

FileIn\$	is the original/compressed file.
FileOut\$	is the compressed/original file.
Test&	<0, an error has occurred.
	>=0, the length of the created file.

## Comments :

The following constants are used to explain the error code :

```
Public Const CMPEXP_FILEIN_CANT_BE_NULL = -1
' occurs when the FileIn is an empty string
Public Const CMPEXP_FILEOUT_CANT_BE_NULL = -2
' occurs when the FileOut is an empty string
Public Const CMPEXP_FILEIN_AND_FILEOUT_CANT_BE_THE_SAME = -3
' occurs when the FileIn and FileOut are the same
Public Const CMPEXP_FILEIN_CANT_BE_OPENED = -4
' occurs when the FileIn can't be opened (not valid, not exist or disk error)
Public Const CMPEXP_FILEOUT_CANT_BE_CREATED = -5
' occurs when the FileOut can't be created (not valid or disk error)
Public Const CMPEXP_COMPRESS_OR_EXPAND_ERROR = -6
' occurs when compression or expansion can't be performed (disk error)
Public Const CMPEXP_CANT_GET_FILEOUT_SIZE = -7
' occurs when the length of FileOut can be read (disk error)
```

## Examples :

```
Dim FileIn      As String
Dim FileOut     As String
Dim FileOut2    As String
Dim LengthIn   As Long
Dim LengthOut   As Long
```

```
FileIn = "c:\win95\system\msjt3032.dll"
FileOut = "c:\tmp\test.gzi"
FileOut = "c:\tmp\test.ugz"
```

```
LengthOut = cGZIPFileCompress(FileIn, FileOut)
LengthIn = cGZIPFileExpand(FileOut, FileOut2)
```

**See also :** [Compression](#)

# ASHFileCompress, ASHFileExpand

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[ASHFileCompress](#) compress a file into a compressed format using ASH arithmetic compression.

[ASHFileExpand](#) expand a compressed file into a normal format using ASH arithmetic compression.

## Declare Syntax :

Declare Function cASHFileCompress Lib "time2win.dll" (ByVal FileIn As String, ByVal FileOut As String, ByVal Order As Integer) As Long

Declare Function cASHFileExpand Lib "time2win.dll" (ByVal FileIn As String, ByVal FileOut As String, ByVal Order As Integer) As Long

## Call Syntax :

Test& = cASHFileCompress(FileIn\$, FileOut\$)

Test& = cASHFileExpand(FileIn\$, FileOut\$)

## Where :

FileIn\$	is the original/compressed file.
FileOut\$	is the compressed/original file.
Order%	is the compression order form 0 to 9.
Test&	<0, an error has occurred.
	>=0, the length of the created file.

## Comments :

The ASH compression method is very performant but is very slow. Use with care on large files.

The following constants are used to explain the error code :

```
Public Const CMPEXP_FILEIN_CANT_BE_NULL = -1
' occurs when the FileIn is an empty string
Public Const CMPEXP_FILEOUT_CANT_BE_NULL = -2
' occurs when the FileOut is an empty string
Public Const CMPEXP_FILEIN_AND_FILEOUT_CANT_BE_THE_SAME = -3
' occurs when the FileIn and FileOut are the same
Public Const CMPEXP_FILEIN_CANT_BE_OPENED = -4
' occurs when the FileIn can't be opened (not valid, not exist or disk error)
Public Const CMPEXP_FILEOUT_CANT_BE_CREATED = -5
' occurs when the FileOut can't be created (not valid or disk error)
Public Const CMPEXP_COMPRESS_OR_EXPAND_ERROR = -6
' occurs when compression or expansion can't be performed (disk error)
Public Const CMPEXP_CANT_GET_FILEOUT_SIZE = -7
' occurs when the length of FileOut can be read (disk error)
```

## Examples :

```
Dim FileIn      As String
Dim FileOut     As String
Dim FileOut2    As String
Dim LengthIn   As Long
Dim LengthOut  As Long
```

```
FileIn = "c:\win95\system\msjt3032.dll"
FileOut = "c:\tmp\test.ash"
```

```
FileOut = "c:\tmp\test.uah"
```

```
LengthOut = cASHFileCompress(FileIn, FileOut)
```

```
LengthIn = cASHFileExpand(FileOut, FileOut2)
```

**See also :** [Compression](#)

# IDEAencryptFile, IDEAdecryptFile

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[IDEAencryptFile](#) copy one file to an another file but with IDEA encryption.

[IDEAdecryptFile](#) copy one file to an another file but with IDEA decryption.

## Declare Syntax :

```
Declare Function cIDEAencryptFile Lib "time2win.dll" (ByVal FileIn As String, ByVal FileOut As String, Key As String) As Long
```

```
Declare Function cIDEAdecryptFile Lib "time2win.dll" (ByVal FileIn As String, ByVal FileOut As String, Key As String) As Long
```

## Call Syntax :

```
test& = cIDEAencryptFile(FileIn, FileOut, Key)
```

```
test& = cIDEAdecryptFile(FileIn, FileOut, Key)
```

## Where :

FileIn\$	is the source file.
FileOut\$	is the destination file.
Key	is the key to use for encryption/decryption.
test&	> 0 if all is OK (the returned value is the total bytes copied), < 0 if an error has occurred.

## Comments :

The Key is case sensitive.

The length of Text can be any size.

The length of Key must be greater or equal to 16 characters.

The encrypted file is always a multiple of 8 characters + 1 character.

If the returned code is a negative value, it take the following value :

```
Public Const CRYPTO_KEY_TOO_SMALL = -1
Public Const CRYPTO_CANT_INIT_KEY = -2
Public Const CRYPTO_CANT_INIT_BUFFER = -11
Public Const CRYPTO_CANT_OPEN_FILEIN = -21
Public Const CRYPTO_CANT_CREATE_FILEOUT = -22
Public Const CRYPTO_ERROR_READING_FILEIN = -31
Public Const CRYPTO_ERROR1_WRITING_FILEOUT = -41
Public Const CRYPTO_ERROR2_WRITING_FILEOUT = -42
Public Const CRYPTO_ERROR1_WRITING_LASTBYTE = -51
Public Const CRYPTO_ERROR2_WRITING_LASTBYTE = -52
Public Const CRYPTO_BAD_LASTBYTE = -61
```

## Examples :

```
Dim Test As Long
```

```
Test = cIDEAencryptFile("c:\autoexec.bat", "c:\autoexec.tb1", "Time To Win")
```

```
Test = cIDEAdecryptFile("c:\autoexec.tb1", "c:\autoexec.tb2", "Time To Win")
```

**See also :** [Encryption](#)

# DIAMONDencryptFile, DIAMONDdecryptFile

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

DIAMONDencryptFile copy one file to an another file but with Diamond Encryption Algorithm (4 modes).

DIAMONDdecryptFile copy one file to an another file but with Diamond Encryption Algorithm (4 modes).

## Description :

Diamond is a cipher designed to exceed DES in strength. Diamond uses a variable length key of at least 40 bits. The use of at least a 16 bytes key is recommended for long term protection of very sensitive data, as a hedge against the possibility of computing power increasing by several orders of magnitudes in the coming years.

It is conjectured that Diamond Lite (Mode 2) and a key length of 16 bytes is at least equivalent in security to the IDEA cipher, and more secure than the ageing DES algorithm.

## Declare Syntax :

Declare Function cDIAMONDencryptFile Lib "time2win.dll" (ByVal FileIn As String, ByVal FileOut As String, Key As String, ByVal Mode As Integer) As Long

Declare Function cDIAMONDdecryptFile Lib "time2win.dll" (ByVal FileIn As String, ByVal FileOut As String, Key As String, ByVal Mode As Integer) As Long

## Call Syntax :

test& = cDIAMONDencryptFile(FileIn, FileOut, Key, Mode)

test& = cDIAMONDdecryptFile(FileIn, FileOut, Key, Mode)

## Where :

FileIn\$	is the source file.
FileOut\$	is the destination file.
Key	is the key to use for encryption/decryption.
Mode	Public Const DIAMOND_FULL_MODE1 = 1 ' more strongest (slowest) Public Const DIAMOND_FULL_MODE2 = 3 ' more strong (slow) Public Const DIAMOND_LITE_MODE1 = 2 ' strongest (fast) Public Const DIAMOND_LITE_MODE2 = 4 ' strong (fastest)
test&	> 0 if all is OK (the returned value is the total bytes copied), < 0 if an error has occurred.

## Comments :

The Key is case sensitive.

The length of Text can be any size.

The length of Key must be greater or equal to 5 characters (best result with a key of 16 characters or more).

In FULL MODE, the length of the encrypted file is always a multiple of 16 characters + 1 character.

In LITE MODE, the length of the encrypted file is always a multiple of 8 characters + 1 character.

If the returned code is a negative value, it take the following value :

```
Public Const CRYPTO_KEY_TOO_SMALL = -1
Public Const CRYPTO_CANT_INIT_KEY = -2
Public Const CRYPTO_CANT_INIT_BUFFER = -11
Public Const CRYPTO_CANT_OPEN_FILEIN = -21
Public Const CRYPTO_CANT_CREATE_FILEOUT = -22
Public Const CRYPTO_ERROR_READING_FILEIN = -31
Public Const CRYPTO_ERROR1_WRITING_FILEOUT = -41
Public Const CRYPTO_ERROR2_WRITING_FILEOUT = -42
```



```
Public Const CRYPTO_ERROR1_WRITING_LASTBYTE = -51
Public Const CRYPTO_ERROR2_WRITING_LASTBYTE = -52
Public Const CRYPTO_BAD_LASTBYTE = -61
```

**Examples :**

```
Dim TestAs Long
```

```
Test = cDIAMONDencryptFile("c:\autoexec.bat", "c:\autoexec.tb1", "Time To Win", DIAMOND_FULL_MODE1)
Test = cDIAMONDdecryptFile("c:\autoexec.tb1", "c:\autoexec.tb2", "Time To Win", DIAMOND_LITE_MODE1)
```

**See also :** [Encryption](#)

# RUBYencryptFile, RUBYdecryptFile

**QuickInfo :** VB 3.0, VB 4.0 (16-Bit), VB 4.0 (32-Bit) {Win95/WinNT}, MSOffice 95

## Purpose :

[RUBYencryptFile](#) copy one file to an another file but with RUBY algorithm (7 modes).

[RUBYdecryptFile](#) copy one file to an another file but with RUBY algorithm (7 modes).

## Declare Syntax :

Declare Function cRUBYencryptFile Lib "time2win.dll" (ByVal FileIn As String, ByVal FileOut As String, Key As String, ByVal Mode As Integer) As Long

Declare Function cRUBYdecryptFile Lib "time2win.dll" (ByVal FileIn As String, ByVal FileOut As String, Key As String, ByVal Mode As Integer) As Long

## Call Syntax :

test& = cRUBYencryptFile(FileIn, FileOut, Key, Mode)

test& = cRUBYdecryptFile(FileIn, FileOut, Key, Mode)

## Where :

FileIn\$	is the source file.	
FileOut\$	is the destination file.	
Key	is the key to use for encryption/decryption.	
Mode	Public Const RUBY_MODE_MINIMUM = 1	' speed is of the essence, security
secondary.		
	Public Const RUBY_MODE_DESK_LOCK = 2	' reasonable compromise of speed vs
security.		
	Public Const RUBY_MODE_DEAD_BOLT = 4	' default = probably good enough for most
things.		
	Public Const RUBY_MODE_PORTABLE_SAFE = 5	' security is more important than speed.
	Public Const RUBY_MODE_ANCHORED_SAFE = 8	' speed isn't much of a concern.
	Public Const RUBY_MODE_BANK_VAULT = 10	' your pentium has nothing better to do,
anyway.		
	Public Const RUBY_MODE_FORT_KNOX = 16	' be cool.
test&	> 0 if all is OK (the returned value is the total bytes copied),	
	< 0 if an error has occurred.	

## Comments :

The Key is case sensitive.

The length of Text can be any size.

The length of Key must be greater or equal to 6 characters.

If the returned code is a negative value, it take the following value :

```
Public Const CRYPTO_KEY_TOO_SMALL = -1
Public Const CRYPTO_CANT_INIT_KEY = -2
Public Const CRYPTO_CANT_INIT_BUFFER = -11
Public Const CRYPTO_CANT_OPEN_FILEIN = -21
Public Const CRYPTO_CANT_CREATE_FILEOUT = -22
Public Const CRYPTO_ERROR_READING_FILEIN = -31
Public Const CRYPTO_ERROR1_WRITING_FILEOUT = -41
Public Const CRYPTO_ERROR2_WRITING_FILEOUT = -42
Public Const CRYPTO_ERROR1_WRITING_LASTBYTE = -51
Public Const CRYPTO_ERROR2_WRITING_LASTBYTE = -52
Public Const CRYPTO_BAD_LASTBYTE = -61
```

## Examples :

Dim TestAs Long

Test = cRUBYencryptFile("c:\autoexec.bat", "c:\autoexec.tb1", "Time To Win", RUBY\_MODE\_DESK\_LOCK)

Test = cRUBYdecryptFile("c:\autoexec.tb1", "c:\autoexec.tb2", "Time To Win", RUBY\_MODE\_DESK\_LOCK)

**See also :** [Encryption](#)



