This Windows Help file was written by Graham Plowman using HelpBuilder Version 1.05 and refers to:

Setup Version 3.03 / 28-11-1994

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## Chdir

**Format** Chdir("Directory")

**Purpose** Changes the current drive and/or directory

### Parameters

• String name of directory to change to

**Return Value** The %ERROR% variable hold the error status:

- TRUE Error directory not found
- FALSE Success

### Comments

Unlike the DOS equivalent, this command changes both the drive and directory if they are specified

Example CHDIR("C:\SETUP")

See Also <u>Mkdir</u>, <u>Rmdir</u>

### CheckExists

Format CheckExists("filename") CheckExists("filename", "message")

### Purpose

Checks for the presence of the file 'filename'.

In its second form this function checks for the existence of the parameter file and displays a message box if the file is not found. The message box continues to be displayed until a disk is inserted which contains the specified file

### Parameters

- String name of file to check for
- Optional message to display if the file is not found

### **Return Value**

The %ERROR% variable contains the return value: Method 1:

- TRUE File(s) exist(s)
- FALSE File(s) do/does not exist

#### Method 2:

- IDOK File(s) exist(s)
- IDCANCEL File(s) not found and user has pressed Cancel

### Comments

The file name may contain wildcards, drive and directory specifications.

This function can be used to check whether the correct disk in an installation suite has been inserted in the diskette drive

### Example

CHECKEXISTS("C:\AUTOEXEC.BAT") CHECKEXISTS("A:\DISK01", "Please insert DISK #1")

See Also CheckLabel, GetModuleInUse

### CheckLabel

### Format

CheckLabel("drive", "label", "message")

### Purpose

Checks the disk 'drive' to see if it has the label 'label' and if not, displays a message box containing the parameter message

### Parameters

- String drive letter
- String label of diskette to compare against
- String message to display if the diskette label does not match the specified label

### **Return Value**

Sets the %ERROR% variable according to which key the user pressed to terminate the message box:

- IDOK User pressed the Ok button or the disk had the correct label
- IDCANCEL User pressed the Cancel button to quit

### Example

CHECKLABEL("A:", "DISK1", "Insert disk labelled DISK1")

### CloseIn

**Format** CloseIn()

**Purpose** Closes the file currently open for reading

**Parameters** None

Return Value None

**Comments** If there is no file open, this function is ignored

### Example

This example reads the CONFIG.SYS file and writes it out to TEMP.DAT having changed the FILES entry to 100

OpenIn("C:\CONFIG.SYS") IF %ERROR% == TRUE GOTO :OPENERROR

OpenOut("C:\TEMP.DAT") :NEXTLINE ReadLine(%Buffer%) IF %ERROR% == EOF GOTO :EOF

SET %Ptr% = Instr(1, %Buffer%, "FILES=") IF %Ptr% == 0 GOTO :NOTFOUND

Set %Buffer% = "FILES=100"

:NOTFOUND WriteLine(%Buffer%) GOTO :NEXTLINE

:EOF CloseIn() CloseOut()

•

:OPENERROR

See Also CloseOut, OpenIn, OpenOut

### CloseOut

**Format** CloseOut()

**Purpose** Closes the file currently open for writing

**Parameters** None

Return Value None

**Comments** If there is no file open, this function is ignored

### Example

This example reads the CONFIG.SYS file and writes it out to TEMP.DAT having changed the FILES entry to 100

OpenIn("C:\CONFIG.SYS") IF %ERROR% == TRUE GOTO :OPENERROR

OpenOut("C:\TEMP.DAT") :NEXTLINE ReadLine(%Buffer%) IF %ERROR% == EOF GOTO :EOF

SET %Ptr% = Instr(1, %Buffer%, "FILES=") IF %Ptr% == 0 GOTO :NOTFOUND

Set %Buffer% = "FILES=100"

:NOTFOUND WriteLine(%Buffer%) GOTO :NEXTLINE

:EOF CloseIn() CloseOut()

•

:OPENERROR

See Also CloseIn, OpenIn, OpenOut

# **Command Directory**

<u>IF</u>	Comparison command
<u>GOTO</u>	Control branching command
<u>SET</u>	Variable assignment command

## **Predefined Constants**

The interpreter supports the following predefined constants whose numeric equivalents are listed. The constant or its numeric value may be used in any place where a numeric parameter is permitted.

Message Box Keys		
MB_OK		0
MB_OKCANCEL		1
MB_ABORTRETRYIGNORE	2	
MB YESNOCANCEL	3	
MB_YESNO		4
MB_RETRYCANCEL	5	
Message Box Icons		
MB_ICONSTOP		16
MB_ICONQUESTION	32	
MB_ICONEXCLAMATION		48
MB_ICONINFORMATION		64

### Return Keys from MessageBox / DialogBox functions

IDOK	1
IDCANCEL	2
IDABORT	3
IDRETRY	4
IDIGNORE	5
IDYES	6
IDNO	7
IDBACK	10
IDBUTTON1	11
IDBUTTON2	12
IDBUTTON3	13
IDBUTTON4	14
IDBUTTON5	15
Logical Values	
TRUE	1
FALSE	0
End Of File	
EOF	2

## **Contents for Setup Script Help**

Setup is a utility program for providing Windows-hosted procedures for installing Applications. Press the F1 key for for Help on using Windows Help.

What is Setup ?

Creating a setup procedure

<u>Standards and Notations</u> <u>Command Directory</u> <u>Function Directory</u>

Error Message Directory Predefined Variables Predefined Constants

Suggestions for use

About this help file

## CopyFile

### Format

This command has two formats:

Method 1 CopyFile("source file name", "target directory")

Method 2 CopyFile(n) "source file name", "target directory", "message"

### Purpose

Copies file(s) from one location to another.

### Parameters

Method 1

- String source file name which may include paths and wildcards
- String name of target directory. This must not contain wildcards or new file names

### Method 2

The number of files to be copied. This is so that the gauge knows how many files it is to represent and does not affect the actual number of files copied. It does not matter if you get the number wrong, but you might find the gauge visually fills up before you expected it to or not to fully fill up. The file name parameters are listed in the lines after the command:

- String source file name which may include paths and wildcards
- String name of target directory. This must not contain wildcards or new file names
- String message which can be used to tell the user in the 'copy dialog' what files are being copied

### **Return Value**

The %ERROR% variable holds the error number

### Comments

Method (1) performs a straight copy whereas method (2) displays a 'gauge' to show copy progress. The number 10 in the example below would represent the number of files being copied. This is used purely for the purpose of the fuel gauge to know how many files it should represent. If it is incorrect, it doesn't matter, but you may find the gauge finishes too soon or not at all! It does not affect the number of files copied.

Note that source file names may contain drive, path and wildcard specifications.

Target file names MUST only contain a target path name and NO filename(s). They may end with a but this will be appended automatically if not supplied. It is not possible to rename a file using the CopyFile function. The 'Description' parameter is optional and may be left off, but if supplied will be displayed at the top of the copy files dialog to inform the user of what is being copied.

The CopyFile function will handle files compressed using the Microsoft COMPRESS.EXE utility. In this situation CopyFile will automatically read in the compressed file and write it out in its expanded form (ie uncompressed form).

Example Method 1 CopyFile("A:\\*.BAT", "C:\BATCH")

Method 2 CopyFile(10) "A:\\*.BAT", "C:\BATCH", "Copying: Program batch files"

### Creating a setup procedure

To create a setup procedure three components are required, although only two are required in certain situations:

- The SETUP.EXE installer program
- The INST.EXE interpreter program
- A user written setup script (.INF) file

There are two configurations in which the Setup utility may be used:

### **Running from Diskette**

In this case all three of the above files are required on the first diskette of your installation suite.

The SETUP.EXE program copies the INST.EXE program and the SETUP.INF file to the WINDOWS directory of the machine on which the program is running. SETUP.EXE then runs the INST.EXE interpreter program which runs the script file from the hard disk. This is necessary since install procedures often request diskette changes in which case the Setup executables would not run.

INST.EXE does not remove itself or SETUP.INF from the hard disk when it has completed however you can place commands in a script yourself to do this.

WARNING: If SHARE.EXE is running and your script file attempts to delete INST.EXE or SETUP.INF you will get a 'Share violation error' from Windows.

### Running from a hard disk or network drive

In this case only INST.EXE and a .INF file are required. Note that INST.EXE takes the name of the script file as its parameter so the script file can have any name whereas SETUP.EXE above always assumes a name of SETUP.INF.

You may place INST.EXE on the Windows Program manager as an icon with the script file name as a parameter. You can also set up a file association with the File Manager such that double-clicking on a script file will cause INST.EXE to run it. This is optionally set up for you when you install the Setup utility software on your machine.

### Procedure for creating install suites

In order to create a successful windows hosted software installation procedure it is adviseable that you carry out the following steps:

- Plan what is to be installed
- Plan what options the user is to be given
- Plan the layout of files on the disk / diskettes
- Ensure that the installation procedure is as simple as possible users do not expect to see technical terms
- Ensure that the user is given feedback on what is being or has been installed
- Above all, ensure that your script is bug-free by testing it in as many environments as possible

#### Creating a script file

A setup script file is purely an ASCII text file which may be created with any ASCII file editor. Alternatively you can use the Setup Builder application to automatically build a setup script and the appropriate diskettes for you.

Be warned that Windows Notepad has an error in it which causes a file not to have a carriage return placed on the last line of the file unless you explicitly place blank lines at the end. This can cause problems with setup and with many other ASCII file editors since the end of the file is found on reading before an end of line marker

## Delete

**Format** Delete("File name")

**Purpose** Deletes a file

### Parameters

• String name of file(s) to be deleted

### **Return Value**

The %ERROR% variable hold the error status:

- TRUE Error file not found or deleted
- FALSE Success

### Comments

The file name may contain both wild cards and/or drive/path specifications

### Example

Delete("C:\AUTOEXEC.BAT") Delete("C:\ABC.BAT")

## DeleteGroup

### Format

DeleteGroup("group name")

### Purpose

Deletes a program group from Windows Program Manager

### Parameters

• String name of group to be deleted

Return Value None

### Comments

The group name is the name which appears in the caption of the group when it is displayed by Program Manager

Example DeleteGroup("TEST")

See Also <u>MakeGroup</u>

## DeleteIcon

**Format** DeleteIcon("name")

**Purpose** Deletes an icon within the currently selected program group

### Parameters

• String name of icon to delete

Return Value None

**Comments** The icon name is the text which appears below the icon in Program Manager

Example DeleteIcon("Editor")

See Also MakeIcon

### **DialogBox**

#### Format

DialogBox("dialog name")

#### Purpose

Activates one of the predefined dialog boxes.

#### Parameters

• String name of dialog to display

### **Return Value**

The %ERROR% variable contains the push/command button which terminated the dialog:

- IDOK
- IDCANCEL
- IDBACK
- IDBUTTON1
- IDBUTTON2
- IDBUTTON3
- IDBUTTON4
- IDBUTTON5

Any data entered in fields or buttons is returned in the following variables:

- %BUTTON1% For CHECKBOXn dialog boxes to %BUTTON6%
   %RADIOBUTTON% For RADIOBn dialog boxes
- %EF\_1% or
   For INPUTBOXn dialog boxes
- %EF\_2%

#### Comments

The dialog name may be one of the following:

•	"WELCOME"	Display the Welcome to setup dialog
		with an icon
•	"ASKPATH"	Display dialog to ask user install path
•	"OKBOX"	Display a standard Ok confirmation dialog
		with icon
•	"CHECKBOX1"	Display a dialog with 1 checkbox
•	"CHECKBOX2"	Display a dialog with 2 checkboxes
•	"CHECKBOX3"	Display a dialog with 3 checkboxes
•	"CHECKBOX4"	Display a dialog with 4 checkboxes
•	"CHECKBOX5"	Display a dialog with 5 checkboxes
•	"CHECKBOX6"	Display a dialog with 6 checkboxes
•	"RADIOB1"	Display a dialog with 1 radio button
•	"RADIOB2"	Display a dialog with 2 radio buttons
•	"RADIOB3"	Display a dialog with 3 radio buttons
•	"RADIOB4"	Display a dialog with 4 radio buttons
•	"RADIOB5"	Display a dialog with 5 radio buttons
•	"RADIOB6"	Display a dialog with 6 radio buttons
•	"INPUTBOX1"	Display a dialog with 1 input field
•	"INPUTBOX2"	Display a dialog with 2 input fields

•	"LICENSE"	Display licensing dialog
•	"PUSHB2"	Display a dialog with 2 push button

- "PUSHB2" Display a dialog with 2 push buttons
   "PUSHB3" Display a dialog with 3 push buttons
- "PUSHB4" Display a dialog with 4 push buttons
- "PUSHB5" Display a dialog with 5 push buttons

Each of the dialogs has predefined text fields which you may change by setting the following variables:

•	%CAPTION%	Caption of the dialog
•	%MESSAGE1%	First static text field within the dialog
	%MESSAGE6%	Last static text field within the dialog (depends on dialog)
•	%INSTALLPATH%	Sets the default prepopulated value
•	%BUTTON1%	Preset status of check boxes in CHECKBOX dialogs A 'l' signifies
	%BUTTON6%	a check ie on.
•	%RADIOBUTTON%	Also used to return the states of the buttons on exit from the dialog Holds the initially active radio button within the RADIOB dialogs. The first button is 1, the last 6,
•	%INIFILE%	depending on the dialog. Also used to return the selected button. Controls the .INI file to which the Licensing dialog writes the name/company entered by the user
•	%PUSHB_1% to %PUSHB_5%	Holds the text to be displayed on the push buttons within the PUSHB dialogs. The first button is 1, the last 5,
		depending on the dialog.

Note: The ASKPATH dialog automatically checks the path entered by the user by attempting to create the directory. Therefore the base install directory is automatically created and the programmer need not create it, only any directories required under it

**Example** DialogBox("OKBOX")

See Also MessageBox, Predefined Constants

### **Error Message Directory**

### 01 Invalid command

This error occurs when a command or function is encountered which the interpreter does not recognise. See <u>Command Directory</u>, <u>Function Directory</u>

### 02 Invalid parameters

This error occurs when the wrong 'type' of parameter is given to a command or function, for example a number given where a string is expected

### 03 Variable not found

This error occurs when an undefined variable is passed as a parameter. In future versions of Setup this error message will no longer occur because undefined variables will default to an empty string

### 04 Invalid variable name

A variable name must start with and end with a % character. If the trailing % is left off, this error will result. See <u>Variables</u>

### 05 Label not found

A GOTO command is attempting to pass control to a label which cannot be found within the script file. Check that the label starts with a colon : both after the GOTO command and on the line to be branched to

### 06 Invalid string

A string must start with and end with a " character. If the trailing " is left off, this error will result. See <u>Variables</u>

### 07 Label too long

A label may be a maximum of 20 characters. This error results if an attempt is made to use longer name. Check that the label ends with a space character, end of line or that there is at least one space after it before a comment.

See Labels

#### 08 String stack full

Too many strings have been defined within a command. The limit is 20. No Setup command or function should reach this limit, so if this error occurs it is likely that you have a severe syntax error!

#### 09 Numeric stack full

The same applies to numbers as in error 08

### 10 Variable name too long

A variable name may be up to 20 characters long. This error occurs when an attempt is made to use a longer name or if the trailing % sign is left off of the variable name. See <u>Variables</u>

#### 11 Text too long

Text strings may be up to 254 characters long. This error occurs when an attempt is made to use a string (with no embedded variables) which is longer than 254 characters or the trailing " character has been left off. See <u>Strings</u>

### 12 Invalid label

This error occurs when an invalid label is passed as a parameter to the GOTO command. You cannot supply strings or variables to this command

### 13 Invalid template name

An attempt has been made to use the DialogBox() function but an invalid dialog template name was supplied. See <u>DialogBox</u>

### 14 String concat too long

A string may be a maximum of 254 characters. This error usually results when embedded variables in a string are used to concatenate strings and the resulting string is longer than 254 characters. See <u>Strings/Variables</u>

### 15 No space on target drive

The CopyFile() function has been called to copy a file and there is not enough space on the target drive for the file

### 16 Source file not found

The CopyFile() function has been called to copy a file but the file could not be found

### 17 Failure while copying

The CopyFile() function failed while copying. This usually occurs if the user removes a diskette while copying from it or if a disk read failure occurs

### 18 Out of variable space

Setup allows up to 50 variables to be defined at a time. This error occurs when an attempt is made to create more variables. Assign variables to empty strings to clear space

### **19** Source and target file names the same

The CopyFile() function has been called and both the source and target file names are the same - you cannot copy a file onto itself

#### 20 Invalid string parameter

A function has been called which expects a string parameter in the indicated position

### 21 Invalid numeric parameter

A function has been called which expects a numeric parameter in the indicated position

#### 22 Missing variable name

This error occurs when the target return variable parameter is left off of the GetPrivateProfileString() function

#### 23 Invalid comparison operator

The IF command has been supplied with an invalid comparison operator. See IF

#### 24 Invalid comparison value

This error occurs when the two values for comparison by an IF command are not of the same type. See  $\underline{IF}$ 

#### 25 Invalid date format specified

This error occurs when an invalid date format is specified to the date functions. See <u>GetDate</u>, <u>GetFileDate</u>

#### 26 Invalid arithmetic operator. Operator must be + - \* or /

This error occurs with the SET statement when arithmetic operations are being performed. Setup only supports addition, subtraction, multiplication and division of integer numbers. See <u>Set</u>

### 27 String subscript out of range

This error occurs with the string handling functions when a position within a string is specified which doesn't exist.

This may be because the value specified is negative or because the value is greater than the maximum length that a string is allowed to be (ie 254 characters)

See Left, Right, Mid, Instr

### **ExitWindows**

**Format** ExitWindows(numstate)

**Purpose** Restarts Windows or reboots the machine

### Parameters

A numeric which is either TRUE or 1 to reboot the machine or FALSE or 0 just to restart Windows

### **Return Value**

The %ERROR% variable holds the return value of the standard Windows ExitWindows function ie 0 if any applications fail to terminate otherwise there is no return.

### Comments

WARNING: This function should be used with care since it can cause loss of data

Example

ExitWindows(TRUE)

### **Function Directory**

### **Date/Time Functions**

Get the system date
Get the system time
Get file date
Get file time
Set file date
Set file time

### **Disk & Directory Functions**

<u>Chdir</u> <u>CheckLabel</u> <u>GetDiskSpace</u> <u>Mkdir</u> <u>Rmdir</u> Change current drive/directory Check disk label Get free disk space Make a new directory Remove a directory

### **File Related Functions**

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CheckExists	Check if file exists
CloseIn	Close the input file
CloseOut	Close the output file
CopyFile	Copy file(s) from one location to another
Delete	Delete a file
GetFileAttr	Get file attributes
<u>GetFileLength</u>	Get file length
OpenIn	Open a file for reading
<u>OpenOut</u>	Open a file for reading
ReadLine	Read a line from the input file
Rename	Rename a file to another name
<u>SetFileAttr</u>	Set file attributes
WriteLine	Write a line to the output file

### **Program Manager Functions**

<u>DeleteGroup</u>
DeleteIcon
<u>MakeGroup</u>
<b>MakeGroupFromFile</b>
MakeIcon
Reload
ShowGroup

Delete a Program Manager group Delete a Program Manager Icon Make/Select a Program Manager group Make a Program Manager group Make a Program Manager Icon Reload Program Manager groups Display a Program Manager group

#### **String Manipulation Functions**

<u>Instr</u>	Find one string in another
LCase	Convert string to lower case
Left	Get left n characters of a string
Len	Get length of string
Mid	Get a sub-string from a string
<u>Right</u>	Get the right n characters of a string
UCase	Convert a string to upper case

### Windows Interface/API Functions

<u>DialogBox</u>	Use an inbuilt dialog
<b>ExitWindows</b>	Terminate Windows

GetModuleInUse GetProfileString MessageBox Release SendKey WinExec WriteProfileString Check if Windows is using a file Get an .INI file string Pop up a message box Release control to Windows Send key strokes Execute another program Write an .INI file string

## GetDate

**Format** GetDate(%varname%) GetDate(%varname%, format)

### Purpose

Gets the system date into a variable

### Parameters

- Variable to store the result in
- Optional date format required which may be:
  - 0 For dd/mm/yy
  - 1 For yy/mm/dd

### **Return Value**

None

### Comments

The date format specifier is optional, the default being 0. If an invalid date format is specified a run time error will occur

### Example

GetDate(%Date%)	// 21/10/93
GetDate(%Date%, 1)	// 93/10/21

See Also GetTime

## GetDiskSpace

### Format

GetDiskSpace("drive letter")

### Purpose

Retrieves the amount of space available on a disk.

### Parameters

٠

String containing the letter of the drive to be chacked. The text case is not important

### **Return Value**

The %ERROR% variable contains the number of free bytes on the specified disk

### Comments

Example GetDiskSpace("A:")

## GetFileAttr

Format GetFileAttr("filename", %varname%)

Purpose

Gets the attributes of a file into a variable

### Parameters

- String name of file to get the attributes of Variable to store the result in ٠
- •

### **Return Value**

The %ERROR% variable holds the error status:

- TRUE Error - file not found •
- FALSE Success

### Comments

The file name must NOT contain wildcards

### Example

GetFileAttr("C:\AUTOEXEC.BAT", %Attribs%)

## GetFileDate

Format

GetFileDate("filename", %varname%) GetFileDate("filename", %varname%, format)

### Purpose

Gets the date of a file into a variable

### Parameters

- String name of file to get the date of
- Variable to store the result in
- Optional date format required which may be:
  - 0 For dd/mm/yy
  - 1 For yy/mm/dd

### **Return Value**

The %ERROR% variable hold the error status:

- TRUE Error file not found
  FALSE Success
- FALSE 5

### Comments

The date format specifier is optional, the default being 0. If an invalid date format is specified a run time error will occur

### Example

GetFileDate("C:\AUTOEXEC.BAT", %Date%) // 29/03/92 GetFileDate("C:\AUTOEXEC.BAT", %Date%, 1) // 92/03/29

See Also

<u>GetFileTime</u>

## GetFileLength

**Format** GetFileLength("filename")

**Purpose** Gets the length of a file

**Parameters** None

**Return Value** The %ERROR% variable contains the length of the file if successful or -1 if an error occured

Comments

**Example** GetFileLength("C:\AUTOEXEC.BAT")

## GetFileTime

Format GetFileTime("filename", %varname%)

Purpose Gets the time of a file into a variable

### Parameters

- String name of file to get the time of Variable to store the result in ٠
- •

### **Return Value**

The %ERROR% variable hold the error status:

- TRUE Error - file not found •
- FALSE Success

### Comments

The file name must NOT contain wildcards

### Example

GetFileTime("C:\AUTOEXEC.BAT", %Time%)

See Also **GetFileDate** 

## GetModuleInUse

### Format

GetModuleInUse("filename")

### Purpose

Determines whether a module is in use by Windows ie it is already running. This can be used to prevent installation of an executable which is being presently run by Windows

### Parameters

• String name of file to be checked

### **Return Value**

The %ERROR% variable holds the state:

•	TRUE	Module is in use
•	FALSE	Module is not in use

### Comments

It is worth using this function within an installation script since the CopyFile() function will abort with an error message and terminate an installation script if an attempt is made to overwrite a file which is in use. This function enables the programmer to retain control over this situation

### Example

GetModuleInUse("progman.exe")

## GetPrivateProfileString GetProfileString

### Format

GetProfileString("section", "entry", "default", "file name", %varname%)

### Purpose

Reads a string from a Windows .INI file into a variable

### Parameters

- String [Section] of .INI file to read from
- String entry within the section to read
- String default if entry not found
- String name of .INI file to read from
- String name of variable to place the string read

### **Return Value**

None

### Comments

Along with the standard windows function, if no path is specified in the .INI file name, reading defaults to the Windows directory.

The GetPrivateProfileString function is only supplied for compatibility with earlier versions of Setup. You should use the GetProfileString function.

### Example

GetProfileString("Windows", "Spooler", "yes", "win.ini", %spooler%)

See Also WriteProfileString

## GetTime

**Format** GetTime(%varname%)

**Purpose** Gets the system time into a variable

ParametersVariable to store the result in

Return Value None

**Comments** The time is in the format hh:mm:ss

Example GetTime(%Time%)

See Also GetDate

## **GOTO** command

**Format** GOTO :label

### Purpose

Causes a branch of execution of the script file to another line within the file. That line must start with the same label name preceded with a colon :

### Parameters

• A label

### **Return Value**

None

### Comments

A label cannot be a variable name. A run time error will occur if the parameter label cannot be found

### Example

GOTO :END

.

:END

See Also Standards and Notations

### IF command

### Format

IF <value> <comparison operator> <value> <statement>

### Purpose

Performs a comparison between two values

### Parameters

There are three parameters to this command:

- A numeric/string value
- A comparison operator
- A second numeric/string value

### **Return Value**

None

### Comments

Valid comparison operators are:

- == Equals
- != Not equals
- > Greater than
- < Less than
- >= Greater than or equal to
- <= Less than or equal to

Since Setup does not have a concept of variable 'types' the IF command follows certain rules depending on the comparison being performed.

If the first value is a numeric ie numeric digits or a variable name, then a numeric comparison is performed with the second value.

If the first value is a string ie text enclosed in quotes or text enclosing a variable name, then a string comparison is performed.

If the 'type' of the second parameter does not conform with the first parameter then a run time error will occur.

Any Setup command may follow the comparison and this will be executed if the result of the comparison is true

### Example

Numeric comparisons IF 1 < 2 GOTO :END IF %NUMBER% == 10 GOTO :TEN IF %ERROR% == IDBACK GOTO :BACK IF %ERROR% == TRUE GOTO :END

String comparisons IF "TEXT" == "TEST" GOTO :SAME IF "%INSTALLPATH%" != "C:\" GOTO :END

See Also Standards and Notations
## Instr

### Format

Instr(start, "SearchString", "FindString")

#### Purpose

Used in conjunction with the SET command, this function finds the position of one string within another string

#### Parameters

- Numeric position to start searching from (first character is 1)
- String to search
- String to search for

#### **Return Value**

The return value is the position within the string where the requested string was found. It is 0 if the string was not found or greater than 0 if it was found.

The return value is a numeric and is assigned to the variable in the SET statement

#### Example

Set %Var% = Instr(1, "Test String", "st") // %Var% holds 3

## LCase

**Format** LCase("String")

#### Purpose

Used in conjunction with the SET command, this function converts a string to lower case

#### Parameters

• String to convert

#### **Return Value**

The return value is a string and is assigned to the variable in the SET statement

### Example

Set %Var% = LCase("Test String") // %Var% holds 'test string'

See Also <u>UCase</u>

## Left

Format

Left("String", numchars)

## Purpose

Used in conjunction with the SET command, this function extracts the number of characters specified from the start of a string

### Parameters

- String to extract from
- Numeric number of characters to extract

## **Return Value**

The return value is a string and is assigned to the variable in the SET statement

## Example

Set %Var% = Left("Test String", 3) // %Var% holds 'Tes'

See Also <u>Mid</u>, <u>Right</u>

## Len

Format Len("String")

#### Purpose

Used in conjunction with the SET command, this function finds the length of a string in characters

#### Parameters

• String to obtain the length of

#### **Return Value**

The return value is a numeric and is assigned to the variable in the SET statement

### Example

Set %Var% = Len("Test String") // %Var% holds 11

## MakeGroup

Format MakeGroup("group name") MakeGroup("group name", "group file")

## Purpose

Creates a program group on Windows Program Manager

#### Parameters

- String name of group to be created or selected
- String name of group file to be created for the group

#### **Return Value**

None

#### Comments

The group name is the name which appears in the caption of the group when it is displayed by Program Manager.

The group file name may include drive/path specifiers.

Note that creating a group which already exists does not create a new group, instead it makes the existing group the current group. Therefore, this command can be used for selecting groups as well as creating them.

#### Example

MakeGroup("TEST") MakeGroup("TEST", "FILE.GRP")

See Also DeleteGroup

## MakeGroupFromFile

## Format

MakeGroupFromFile("group file name")

## Purpose

Creates a program group on Windows Program Manager from an existing group file

### Parameters

• String name of group file to be installed

## **Return Value**

None

## Comments

The group file name may include drive/path specifiers. Note that creating a group which already exists does not create a new group.

## Example

MakeGroupFromFile("C:\ABC\TEST.GRP")

See Also MakeGroup, DeleteGroup

## MakeIcon

## Format

MakeIcon("name", "file name")

## Purpose

Creates an icon within the currently selected program group

### Parameters

- String name of icon to create
- String containing command line to run the icon

#### **Return Value**

None

## Comments

The name appears below the icon in Program Manager. Note that it is not possible to create duplicate icons with the same name - the new overwrites the old

Example MakeIcon("Editor", "notepad.exe")

See Also DeleteIcon

## Mid

**Format** Mid("String", start, length)

## Purpose

Used in conjunction with the SET command, this function extract a substring from another string

#### Parameters

- String to obtain the substring from
- Numeric position to start extracting from (first character is 1)
- Numeric number of characters to extract

### **Return Value**

The return value is a string and is assigned to the variable in the SET statement

#### Example

Set %Var% = Mid("Test String", 2, 5) // %Var% holds 'est S'

See Also Left, <u>Right</u>

## Mkdir

**Format** MkDir("directory name")

**Purpose** Creates a new directory on a disk

#### Parameters

**Return Value** The %ERROR% variable hold the error status:

- TRUE Error directory exists or could not be created
- FALSE Success

Example RmDir("C:\TEST")

See Also <u>Rmdir</u>, <u>Chdir</u>

## **MessageBox**

**Format** MessageBox("message", "caption", buttons, icon)

#### Purpose

Provides the ability to pop-up a standard Windows message box

#### Parameters

- String message to be displayed
- String caption of message box
- Button setting:

MB\_OKCANCEL MB\_OK MB\_ABORTRETRYIGNORE MB\_YESNOCANCEL MB\_YESNO MB\_RETRYCANCEL

Icon required:

0 - no icon MB\_ICONQUESTION MB\_ICONEXCLAMATION MB\_ICONINFORMATION MB\_ICONSTOP

#### **Return Value**

The %ERROR% variable holds the button pressed:

- IDOK
- IDCANCEL
- IDABORT
- IDRETRY
- IDIGNORE
- IDYES
- IDNO
- IDBACK

#### Comments

By convention you should use message boxes and dialog boxes to ask the user simple questions and give them the ability to perform selective or special installations.

Always use a message box to ask the user to confirm loss of data!

## Example

MessageBox("A test message", "Test", MB\_OK, MB\_ICONQUESTION)

See Also DialogBox, Predefined Constants

## OpenIn

**Format** OpenIn("filename")

**Purpose** Opens a file on a disk for reading

#### Parameters

String name of the file to open

## **Return Value**

The %ERROR% variable holds the error status:

- TRUE Error failed to open file
- FALSE Success

## Comments

The file name must be a standard DOS format name which may contain drive and/or path specifications

#### Example

This example reads the CONFIG.SYS file and writes it out to TEMP.DAT having changed the FILES entry to 100

OpenIn("C:\CONFIG.SYS") IF %ERROR% == TRUE GOTO :OPENERROR

OpenOut("C:\TEMP.DAT") :NEXTLINE ReadLine(%Buffer%) IF %ERROR% == EOF GOTO :EOF

SET %Ptr% = Instr(1, %Buffer%, "FILES=") IF %Ptr% == 0 GOTO :NOTFOUND

Set %Buffer% = "FILES=100"

:NOTFOUND WriteLine(%Buffer%) GOTO :NEXTLINE

:EOF CloseIn() CloseOut()

•

:OPENERROR

See Also CloseIn, CloseOut, OpenOut

## **OpenOut**

**Format** OpenOut("filename")

**Purpose** Opens a file on a disk for writing

#### Parameters

• String name of the file to open for writing

### **Return Value**

The %ERROR% variable holds the error status:

- TRUE Error failed to open file
- FALSE Success

## Comments

The file name must be a standard DOS format name which may contain drive and/or path specifications. If the file already exists, its contents are destroyed. If the file does not exist, it is created

#### Example

This example reads the CONFIG.SYS file and writes it out to TEMP.DAT having changed the FILES entry to 100

OpenIn("C:\CONFIG.SYS") IF %ERROR% == TRUE GOTO :OPENERROR

OpenOut("C:\TEMP.DAT") :NEXTLINE ReadLine(%Buffer%) IF %ERROR% == EOF GOTO :EOF

SET %Ptr% = Instr(1, %Buffer%, "FILES=") IF %Ptr% == 0 GOTO :NOTFOUND

Set %Buffer% = "FILES=100"

:NOTFOUND WriteLine(%Buffer%) GOTO :NEXTLINE

:EOF CloseIn() CloseOut()

•

:OPENERROR

See Also CloseIn, CloseOut, OpenIn

## **Predefined Variables**

## CAPTION

This variable holds the text which is used as the caption for all of the predefined dialogs. It defaults to 'Setup'.

## CURRENTDIRECTORY

This variable holds the full drive and path name of the current directory, complete with a trailing backslash character:

eg: C:\MAIN\TEST\

## CURRENTDRIVE

A:

This variable holds the current drive letter:

eg:

Note that along with CURRENTDIRECTORY, this variable is automatically updated when the ChDir() function is used.

## ERROR

This variable is the 'accumulator' for return values. All functions which return a value set this variable. The contents of this variable are numeric and may be any positive number. For example a call to MessageBox() will place the value of IDOK (1) or IDCANCEL (2) in the ERROR variable whereas GetDiskSpace() will place the number of bytes free on the specified disk in the ERROR variable.

## INSTALLPATH

This variable is used by the AskPath dialog and should be used as the target path for any copying

## INSTALLDRIVE

This variable holds the drive letter portion of the INSTALLPATH variable.

## PROGRAMFILE

This variable holds the fully qualified file name (including drive and path name) of the interpreter program.

## SCRIPTFILE

This variable holds the fully qualified file name of the script file currently being executed.

## SYSTEMDIRECTORY

This variable contains the drive and path of the Windows System directory which is normally C:\WINDOWS\ SYSTEM\

## WINDOWSDIRECTORY

This variable contains the drive and path of the Windows directory which is normally C:\WINDOWS\ This variable is normally used when a .INI file is to be copied / installed into the Windows directory during a Setup procedure.

## NOTE:

The predefined variables are treated in exactly the same way as any user variable and can therefore be 'nullified' to free up the variable space, however, some will automatically recreate themselves when certain commands or functions are used!

If required, they can be assigned values although this defeats the object of some of them displaying the current system state. It is most likely that you might wish to do this with CAPTION and ERROR.

See Also Standards and Notations, DialogBox

## ReadLine

**Format** ReadLine(%Variable%)

#### Purpose

Reads a line from the currently open file into a variable

#### Parameters

• The variable into which to read the line

## **Return Value**

The %ERROR% variable holds the error status:

0 Duccess

- 1 File not open
- 2 End of file reached

#### Comments

The maximum length of line which can be read is 254 characters. This function will only handle ASCII text files with lines ending in CR/LF

#### Example

This example reads the CONFIG.SYS file and writes it out to TEMP.DAT having changed the FILES entry to 100

OpenIn("C:\CONFIG.SYS") IF %ERROR% == TRUE GOTO :OPENERROR

OpenOut("C:\TEMP.DAT") :NEXTLINE ReadLine(%Buffer%) IF %ERROR% == EOF GOTO :EOF

SET %Ptr% = Instr(1, %Buffer%, "FILES=") IF %Ptr% == 0 GOTO :NOTFOUND

Set %Buffer% = "FILES=100"

:NOTFOUND WriteLine(%Buffer%) GOTO :NEXTLINE

:EOF CloseIn() CloseOut()

:OPENERROR

See Also

CloseIn, CloseOut, OpenIn, OpenOut, WriteLine

## Release

**Format** Release()

#### Purpose

Relinquishes control to Windows in order to achieve multi-tasking

## Parameters

None

Return Value None

## Comments

The Setup program only performs multi-tasking during file copying and while dialog or message boxes are present on the screen.

Since Windows requires applications to relinquish control in order to achieve multi-tasking, this function provides multi-tasking ability to the Setup program

#### Example

This example waits for a file to be created by another process. It terminates when the file becomes present

:WAIT CheckExists("TEST.TXT") IF %ERROR% == TRUE GOTO :FOUND

Release() GOTO :WAIT

:FOUND

## Reload

Format Reload() Reload("group name")

### Purpose

Tells Program Manager to reload all its group files from those specified in PROGMAN.INI Tells Program Manager to reload a specific group file.

#### Parameters

• String name of the program group to reload.

Note that an empty string here will cause Program Manager to do nothing! If all groups are to be reloaded, use the first format of the command with no name between the brackets

#### **Return Value**

None

#### Comments

This function is useful when the PROGMAN.INI file has been changed manually via the WritePrivateProfileString() function

#### Example

Reload() Reload("Main")

## Rename

Format Rename("OldName", "NewName")

Purpose Renames a file to a new name

#### **Parameters**

- String name of file to be renamed String new name of file ٠
- •

### **Return Value**

The %ERROR% variable hold the error status:

- TRUE Error - file not found or renamed •
- FALSE Success

#### Comments

The file name may not contain wild cards or path/drive specifications which means that when renaming files, the file to be renamed must be in the current directory

#### Example

Rename("TEST.DAT", "DATA.DAT")

## Right

## Format

Right("String", numchars)

## Purpose

Used in conjunction with the SET command, this function extracts the number of characters specified from the end of a string

## Parameters

- String to extract from
- Numeric number of characters to extract

## **Return Value**

The return value is a string and is assigned to the variable in the SET statement

## Example

Set %Var% = Right("Test String", 3) // %Var% holds 'ing'

See Also

Left, Mid

# Rmdir

**Format** RmDir("directory name")

**Purpose** Removes a directory from a disk

### Parameters

• String name of directory to remove

## **Return Value**

The %ERROR% variable hold the error status:

•	TRUE	Error - directory not found or could not
		be removed possibly because it still contains files
•	FALSE	Success

Example RmDir("C:\SETUP")

See Also <u>Chdir</u>, <u>Mkdir</u>

## **Running a Script**

There are two ways in which the Setup utility may be run in order to execute a script file:

### Diskette

If Setup is to be run from a diskette then both the SETUP.EXE and INST.EXE programs will need to be copied to the diskette.

The script file must be named SETUP.INF

The SETUP.EXE program copies INST.EXE and SETUP.INF into the Windows directory and then runs the interpreter from there since the user may have requested some diskette changes within the script. This is a typical installation diskette suite.

### Fixed disk

If setup is to be run from a fixed disk then it can be set up as an icon on Windows Program Manager. In this case, only the INST.EXE program is required and the name of the script file to be executed should be passed as a parameter to the program.

The script file may have any name.

## SendKey

Format SendKey("keys")

**Purpose** Sends a sequence of key strokes to the currently active window

## Parameters

A text string containing the keys to be sent

# Return Value

None

## Comments

The key sequence is a string of ASCII characters to be sent. To send an ALT key, preceed the character with a  $\sim$  (tilde) character

#### Example

// Send Alt+W A for program manager Window/Arrange SendKey("~WA") Release() // Makes it happen!

# See Also

<u>Release</u>

## **SET command**

### Format

SET %varname% = "text" SET %varname% = number SET %varname% = %varname% SET %varname% = number + number

## Purpose

Assigns a value to a variable

## Parameters

- A string enclosed in double " quotes which in turn may include embedded variable names.
- An integer positive or negative number
- Another variable
- Arithmetic operators + \* and /
- A <u>Predefined Constant</u>

## **Return Value**

None

## Comments

The string may contain embedded variables.

Since numbers are held internally in their string form, they may be specified as string parameters. If an attempt is made to perform an arithmetic operation and one or more of the parameters is not a valid number, a run time error will occur

## Example

SET %varname% = "Some text" SET %varname% = 1024 SET %varname% = %othervar% SET %varname% = IDOK SET %newvar% = %varname% \* 3 SET %newvar% = 3 + 4 SET %newvar% = -2 \* %varname% SET %newvar% = "%varname%" / "2"

See Also

Standards and Notations

## SetFileAttr

Format SetFileAttr("filename", rdonly, hidden, system, archive)

Purpose

Sets the attributes of a file

## **Parameters**

- String name of file to set attributes on Numeric 1 or 0 to make file read only ٠
- •
- Numeric 1 or 0 to make file hidden •
- Numeric 1 or 0 to make file a system file •
- Numeric 1 or 0 to flag the file for archive •

### **Return Value**

None

Comments The file name must NOT contain wildcards

Example

SetFileAttr("C:\AUTOEXEC.BAT", TRUE, FALSE, FALSE, FALSE)

## **SetFileDate**

Format

SetFileDate("filename", "date")

Purpose Sets the date of a file

#### **Parameters**

- ٠
- String name of file to set the date of The new date in the format dd/mm/yy •

#### **Return Value**

The %ERROR% variable holds the error status:

- TRUE Error - file not found •
- FALSE Success

#### Comments

The file name must NOT contain wildcards

#### Example

SetFileDate("C:\AUTOEXEC.BAT", "01/12/92")

# SetFileTime

Format

SetFileTime("filename", "time")

Purpose Sets the time of a file

#### **Parameters**

- ٠
- String name of file to set the time of The new time in the format hh/mm/ss •

### **Return Value**

The %ERROR% variable holds the error status:

- TRUE Error - file not found •
- FALSE Success

#### Comments

The file name must NOT contain wildcards

#### Example

SetFileTime("C:\AUTOEXEC.BAT", "09:16:03")

## ShowGroup

#### Format

ShowGroup("group name", showflag)

#### Purpose

Displays an existing program group on Windows Program Manager

#### Parameters

- String name of group to be shown
- Numeric value of type of show which may be:
  - 1 Activates and displays the group window. If the window is minimized or maximized, Windows restores it to its original size and position.
  - 2 Activates the group window and displays it as an icon.
  - 3 Activates the group window and displays it as a maximized window.
  - 4 Displays the group window in its most recent size and position. The window that is currently active remains active.
  - 5 Activates the group window and displays it in its current size and position.
  - 6 Minimizes the group window.
  - 7 Displays the group window as an icon. The window that is currently active remains active.
  - 8 Displays the group window in its current state. The window that is currently active remains active.

## **Return Value**

None

## Comments

The group name is the full name which appears in the caption of the group when it is displayed by Program Manager including spaces.

This command can be used for selecting groups.

#### Example

ShowGroup("Main", 1) ShowGroup("Accessories", 2) ShowGroup("Visual Basic 3.0", 1)

## **Standards and Notations**

#### Commands

Commands/function/variable names are not case sensitive and with the exception of the open bracket on a function name, the user may use spaces as required between statements.

Whereever a string appears as a parameter to a function or command a variable may also be placed.

#### Variables

All variable names start with and end with a % character. A variable name may consist up up to 20 characters of the users choice. You may create up to 50 variables at any one time. To clear a variable from the variable space, set it to an empty "" string See Also Predefined Variables

#### Strings

Strings always start with and end with a " character. Within a string you may place any combination of characters you wish, however the | (vertical bar) symbol will be translated into a carriage return. This is useful for creating blank lines in message boxes etc. By placing text and/or several variables into a string, string concatenation is achieved:

"Here is a variable: %varname% more text"

It is also possible to insert special characters into a string by preceding the appropriate decimal ASCII code with a '\' character:

"Here is a character\13return before the \34return\34 word"

This would display as:

Here is a character return before the "return" word

#### Numbers

Both positive and negative integer numeric values are supported with a 32 bit range. See Also <u>Predefined Constants</u>

## Labels

Labels start with a : character and end with a space or the end of the line. Statements on the same line after a label are not executed.

## Comments

Comments may be placed in scripts using the standard 'C' language // notation.

## **Suggestions for Use**

The INST.EXE program is an interpreter program which may have many uses other than just installation scripts.

Here are some suggested uses for the Setup and Setup/Builder software products:

- ٠
- Application Installation Application De-installation ٠
- Windows hosted 'batch/script' programs ٠
- Network logon scripts •
- Software version upgrading (eg copying from a network) •

## UCase

**Format** UCase("String")

#### Purpose

Used in conjunction with the SET command, this function converts a string to upper case

#### **Parameters**

• String to convert

#### **Return Value**

The return value is a string and is assigned to the variable in the SET statement

### Example

Set %Var% = UCase("Test String") // %Var% holds 'TEST STRING'

See Also

<u>LCase</u>

## What is Setup ?

Setup is a utility program which can be used to interpret script files written by a user to install applications in a Windows-hosted environment.

It may also be used as a tool for automating configurations of software and as a 'Windows hosted batch file interpreter'.

# WinExec

**Format** WinExec("Filename")

**Purpose** Executes another program

ParametersString name of program file to be run

**Return Value** The %ERROR% variable holds the return value of the standard Windows WinExec function

Example WinExec("notepad.exe")

## WritePrivateProfileString WriteProfileString

### Format

WriteProfileString("section", "entry", "setting", "file name")

## Purpose

Writes a string to a Windows .INI file.

### Parameters

- String [Section] of .INI file to write to
- String entry within the section to write
- String data to be written for the entry
- String name of .INI file to write to

## **Return Value**

None

## Comments

Along with the standard windows function, if no path is specified in the .INI file name, writing defaults to the Windows directory

This function is useful for making changes to WIN.INI or SYSTEM.INI during your installation procedures.

The setup procedure which installs the Setup software for you will optionally use this function to create a File Manager file association for you.

The WritePrivateProfileString function is only supplied for compatibility with earlier versions of Setup. You should use the WriteProfileString function.

## Example

WriteProfileString("Extensions", "inf", "inst.exe ^.inf", "win.ini")

See Also GetProfileString
## WriteLine

Format
WriteLine("string")

**Purpose** Writes a line to the currently open output file

## Parameters

• The text to write to the file

**Return Value** The %ERROR% variable holds the error status:

•	0	Success
•	1	File not open

## Comments

The string may contain embedded variables. This function will only write to ASCII files and automatically appends a CR/LF after any text written to a file

## Example

This example reads the CONFIG.SYS file and writes it out to TEMP.DAT having changed the FILES entry to 100

OpenIn("C:\CONFIG.SYS") IF %ERROR% == TRUE GOTO :OPENERROR

OpenOut("C:\TEMP.DAT") :NEXTLINE ReadLine(%Buffer%) IF %ERROR% == EOF GOTO :EOF

SET %Ptr% = Instr(1, %Buffer%, "FILES=") IF %Ptr% == 0 GOTO :NOTFOUND

Set %Buffer% = "FILES=100"

:NOTFOUND WriteLine(%Buffer%) GOTO :NEXTLINE

:EOF CloseIn() CloseOut()

•

:OPENERROR

See Also CloseIn, CloseOut, OpenIn, OpenOut, ReadLine