▶ Memory Check (a component of Link Check)

▶ Version 5.1 - August 1996

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Contents for Memory Check Help

To learn how to use Help, please press F1.

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 What's New

Major changes from Version 5.00 to Version 5.10

- Unload now unloads all instances of the selected module
- Hassle-free registration via an electronic key
- Improved Help
- Added sizing of the Version details listbox and the main listbox
- Support added for executables from 12 different National Languages
- Added more version information

This is basically a maintenance release but also introduces the possibility of getting the retail version within minutes of registering thanks to the electronic key.

Due to this form of registration, the 32-bit versions of **Link Check** are now available as separate products and registration for them is handled exactly in the same way as for this 16-bit version.

See Also Available for more information.

Introduction

Memory Check (part of a suite of three (3) diagnostic programs called **Link Check**) allows the user to view, load and unload modules currently in memory. You may also view the current status of memory, including the amount of free memory left.

Important version information about each module can be displayed and you may create and print a summary report of the state of the system.

Memory Check really comes into play when some program has ended abnormally and has left modules lying around in memory. The system might behave irratically or more to the point, those modules take up valuable memory. In these situations you can use Memory Check to unload those modules and save yourself a reboot of Windows.

Warning: Sometimes a clean unload is not possible and you may find yourself unceremoniously dumped back on to the C: prompt, so please do use care when unloading.

You may also verify exactly which version of a module is currently loaded in memory. Sometimes some programs will not run because a wrong version of a particular module (.DLL) has already been loaded into memory by some other application. Windows does not load a new copy of a file with the same file name but will simply increase the "usage count" of the module already in memory. These "usage counts" are displayed by Memory Check as a number in parenthesis () next to the file name.

System Requirements

Memory Check requires Windows 3.1* or later or Windows for Workgroups 3.11*.

* See Trademarks

Memory Check uses **TOOLHELP.DLL** for most of its work. TOOLHELP.DLL is the Windows Tool Helper Library and ships with Windows.
See the **Link Check** help file for more information on all files required.

Keyboard Support

The main window supports the keyboard as well as the mouse.

Key actions in the main window are as follows:

Tab	Switch between the main window and the Version/Key windows.
Enter	View version information window.
Spacebar	Select a module.
Arrow keys	Navigate up/down the list of modules or Version/Key windows.
Control+O	Load an executable into memory.
Delete	Unload an executable from memory.
Control+V	Display Version Information window.
Control+K	Display Key window.
Control+C	Create Memory report.
Control+P	Print Memory report.
Control+T	Set Filters for the main window.
F1	View Help.
F2	Check function calls in the selected module.
F3	Check links for the selected module.
F5	Refresh main window.
F6	Memory status dialog.
Alt+F4	Quit Memory Check.

Menu Options

Please select one of the following:

File:
Load
Unload
Create Memory Report
Print Memory Report
Exit

Options:
Display Version Information
Display Key to Symbols
Check Function Calls
Check Links to Other Modules
Refresh
Memory Status
Set Filters

Preferences:
Show Lowercase File Names
Show Toolbar Tips
Show Toolbar
Show Status Bar
Show Settings Now
Save Settings on Exit

Help:
Contents
Search for Help on
How to Use Help
About Memory Check

Dialog Boxes

Please select one of the following:

Set Filters dialog
Memory Status dialog

Set Filters Dialog

This dialog box is invoked from the **Set Filters** menu option under the **Options** menu.

In this dialog, enter the file extensions that you would only like to see in the main window.

Separate each extension with a semi-colon (;). You may include the dot (.) in the extension even though it's not necessary.

Example: **DLL;EXE;FON**

Leave the entry field **blank** to view **all** modules in memory.

Click on **OK** to view only the modules which have the specified extensions.

Click on **Cancel** to return to the main window without any further action.

Memory Status Dialog

This dialog box is invoked from the **Memory Status** menu option under the **Options** menu.

The **Largest Free Block** field displays the largest free block of contiguous linear memory in the system, in bytes.

The **Max. Pages Available** field specifies the maximum number of pages that could be allocated in the system (the value of the Largest Free Block divided by the value of Page Size).

The **Max. Pages Lockable** field specifies the maximum number of pages that could be allocated and locked.

The **Total Linear Space** field specifies the size of the total linear address space, in pages.

The **Total Unlocked Pages** field specifies the number of unlocked pages in the system. This value includes free pages.

The **Free Pages** field specifies the number of pages that are not in use.

The **Total Pages** field specifies the total number of pages the virtual-memory manager manages. This value includes free, locked, and unlocked pages.

The **Free Linear Space** field specifies the amount of free memory in the linear address space, in pages.

The **Swap File Pages** field specifies the number of pages in the system swap file.

The **Page Size** field specifies the system page size, in bytes.

The **Free Memory** field specifies the amount of free memory, in bytes. This is equivalent to what Program Manager reports via its About dialog.

Click on the **Refresh** pushbutton to update the current memory status.

 Guide to the Main Window

The **Memory Check** main window shows all modules currently loaded in memory.

If you select any one of the shown modules and **double-click** it with the mouse, **Memory Check** reveals version information for the selected module.

This is identical to selecting it with the mouse and choosing the **Display Version Information** menu option under **Options**. In both cases a version information window will appear at the bottom of the main window.

Each module is prefixed with a symbol identifying the module type. To find out what these symbols mean, please select the **Display Key to Symbols** menu option under **Options**. The key window will appear at the bottom of the main window.

A number (usage count) is shown in brackets **()** which indicates the number of references made to that module by others in the system.

To view only certain file types, you may select the **Set Filters** menu option under **Options**. For further information please see Set Filters dialog box.

To hide the version or the key windows, please re-select the same menu items as for invoking them. Alternatively, **right-click** with the mouse on top of these windows and select the **Hide** menu option from the popup menu that follows.

As a short cut, you may also **right-click** on the main window to access the options in the **Options** menu.

If you prefer to use the keyboard, please see Keyboard Support for the key assignments.

▲ File: Load

Click on this menu option or on the short cut on the Toolbar to load an executable into memory.

▼ File: Unload

Click on this menu option or on the short cut on the Toolbar to unload an executable from memory.

WARNING: Unloading a module from memory can cause damage to your system. This option should be used with the utmost of care and is intended for use only when a program has ended abnormally and has left module(s) lying around in memory.

Karri Software Limited is in **NO WAY RESPONSIBLE for any damage done** and **the user must assume the FULL RISK** on using it.

You will be warned before this action is executed and you will need to confirm this action.

File: Create Memory Report

Click on this menu option or click on the short cut on the Toolbar to create a report listing all of the modules currently shown in the main window with dates, times, sizes and version numbers.

Select Sample Memory Report to view a sample report.

▣ File: Print Memory Report

Click on this menu option or click on the short cut on the Toolbar to print a report listing all of the modules currently shown in the main window with dates, times, sizes and version numbers.

Select Sample Memory Report to view a sample report.

Sample Memory Report

Sample output (only a part is shown):

```
==========================================================================
                       Memory Check Report
==========================================================================

   Module     Date    Time      Size    File Ver   Prod Ver  Filename
(Usage Count)
--------------------------------------------------------------------------
---------
   APP850  26/05/95  10:57     36672       3.10        3.10  C:\WINDOWS\
SYSTEM\APP850.FON (1)
 CGA40850  26/05/95  10:57      6352       3.10        3.10  C:\WINDOWS\
SYSTEM\CGA40850.FON (1)
 CGA80850  26/05/95  10:57      4320       3.10        3.10  C:\WINDOWS\
SYSTEM\CGA80850.FON (1)
     COMM  01/11/93  03:11      5968       3.11        3.11  C:\WINDOWS\
SYSTEM\COMM.DRV (11)
  COMMDLG  01/11/93  03:11     97936       3.11        3.11  C:\WINDOWS\
SYSTEM\COMMDLG.DLL (2)
    COURE  26/05/95  10:57     23408       3.10        3.10  C:\WINDOWS\
SYSTEM\COURE.FON (1)
   CTL3DV2  16/08/93  00:00    21648       2.05     2,0,5,0  C:\WINDOWS\
SYSTEM\CTL3DV2.DLL (1)
   DISPLAY  13/10/94  09:00    225712   3.10.061    3.10.061  C:\WINDOWS\
SYSTEM\S3TRIO.DRV (12)
 EGA40850  26/05/95  10:57      8384       3.10        3.10  C:\WINDOWS\
SYSTEM\EGA40850.FON (1)
 EGA80850  26/05/95  10:57      5328       3.10        3.10  C:\WINDOWS\
SYSTEM\EGA80850.FON (1)
 FIXFONTS  26/05/95  10:57      5360       3.10        3.10  C:\WINDOWS\
SYSTEM\VGAFIX.FON (1)
    FONTS  26/05/95  10:57      7280       3.10        3.10  C:\WINDOWS\
SYSTEM\VGASYS.FON (2)
      GDI  01/11/93  03:11    220800       3.11        3.11  C:\WINDOWS\
SYSTEM\GDI.EXE (11)
  GRABBER  27/04/92  02:21     15360       3.10        3.10  C:\WINDOWS\
SYSTEM\S3911GRB.3GR (2)
    KBDUK  01/11/93  03:11      1428          -           -  C:\WINDOWS\
SYSTEM\KBDUK.DLL (1)
--------------------------------------------------------------------------
---------

 15 modules listed.
```

File: Exit

Click on this menu option or click on the short cut on the Toolbar to exit **Memory Check**.

Options: Display Version Information

Click on this menu option to show the **Version window** at the bottom of the main window.

This window will show version and file details of the selected module and can also be invoked from the popup menu by **right-clicking** with the mouse anywhere over the main window.

You may hide this window either by **right-clicking** on the mouse whilst over this window or by re-selecting the same menu option.

Options: Display Key to Symbols

Click on this menu option to show the **Key window** at the bottom of the main window.

This window will show an explanation to the symbols used in the main window and can also be invoked from the popup menu by **right-clicking** with the mouse anywhere over the main window.

You may hide this window either by **right-clicking** on the mouse whilst over this window or by re-selecting the same menu option.

 Options: Check Function Calls

Click on this menu option or on the short cut on the Toolbar to launch **Function Check (WFCHECK.EXE)** component of **Link Check**.

You can examine all of the function calls in the module as well as the ones that it requires to be present in the system to run properly.

This menu option can also be invoked by **right-clicking** with the mouse anywhere in the main window or by pressing **F2**.

![icon] Options: Check Links to Other Modules

Click on this menu option or on the short cut on the Toolbar to launch **Link Check (WLCHECK.EXE)**.

You can view a list of all of the modules that the selected one is linked to in the system.

This menu option can also be invoked by **right-clicking** with the mouse anywhere in the main window or by pressing **F3**.

Options: Refresh

Click on this menu option to refresh the main window with updated information.

This menu option can also be invoked by **right-clicking** with the mouse anywhere in the main window or by pressing **F5**.

Options: Memory Status

Click on this menu option to display the Memory Status dialog box.

This menu option can also be invoked by **right-clicking** with the mouse anywhere in the main window or by pressing **F6**.

Options: Set Filters

Click on this menu option to display the Set Filters dialog box.

This menu option can also be invoked by **right-clicking** with the mouse anywhere in the main window or by pressing **Control+T**.

Preferences: Show Lowercase File Names

Click on this menu option to draw the file names in the main window in lowercase or as is.

If this menu option is checked, then the file names will be in lowercase, otherwise as is.

Preferences: Show Toolbar Tips

Use this menu option to turn the Toolbar button explanations/hints on and off.

 Preferences: Show Toolbar

Use this menu option to show or hide the Toolbar.

 Preferences: Show Status Bar

Use this menu option to show or hide the Status Bar.

 Preferences: Save Settings Now

Select this menu option if you want **Memory Check** to save the current position and size of the main window plus all other settings now to the file **WMCHECK.INI**.

When you restart **Memory Check**, it will reposition, size and configure itself to the saved values.

 Preferences: Save Settings on Exit

Select this menu option if you want **Memory Check** to save the current position and size of the main window plus all other settings when you exit the program to the file **WMCHECK.INI**.

When you restart **Memory Check**, it will reposition, size and configure itself to the saved values.

![icon] **Toolbar**

The Toolbar contains the following short cuts:

![icon] Load

![icon] Unload

![icon] Create Memory Report

![icon] Print Memory Report

![icon] Check Function Calls

![icon] Check Links to Other Modules

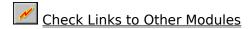![icon] Memory Status

![icon] Set Filters

![icon] Exit Program

![icon] Help Contents

⚅ Help: Contents

This menu item shows the Contents page of the help file.

Alternatively, click on the short cut on the Toolbar or press **F1**.

 Help: Search for Help on

This menu item shows the Search dialog box for the help file.

 Help: How to Use Help

This menu item shows how to use Help.

Help: About Memory Check

Use this dialog box to view the copyright information for this program.

How to Register/Order

Link Check now includes online registration facilities. Please click on the **Register** pushbutton in the **About dialog** and follow the dialog boxes.

Once finished, the registration process will create an order form **(WLCHECK.ORD)** for you based on the details given. This order form will be created in your Windows directory and Notepad will be launched for you to view it.

VERY IMPORTANT: We will create an **electronic key** from the order form so please follow the instructions on the form and send/fax/email it to us. The order form includes details of our fax number, postal address and email id.

Once we receive the order form we will send/fax/email/phone you the key along with details on how to unlock **Link Check** for the full retail version. We will get the key to you as soon as possible (usually within 24 hours).

Payment Details:

Price: 29 US Dollars or 18 Pounds Sterling

To have your registration added to your CompuServe bill, **GO SWREG** and follow the instructions.

Please use the registration ID **7160**, unless...

IMPORTANT: If you are a VAT registered company residing in the European Union (EU) (and not in the UK), please use the registration ID **10094**.

You will see details on all other forms of payment through the registration process/dialogs.

Please click on Registered Version Details for information on the retail version.

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Memory Check 5.1
Function Check 5.1
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 <ins>Acknowledgements</ins>

Karri Software Ltd. would like to **THANK ALL** of the registered users of **Link Check** for supporting the **Shareware** concept. Without you **Shareware** would not exist.

Special thanks to **Bob Henderson** for his many suggestions, and for spending his own time testing **Link Check** and providing useful feedback.

Registered Version Details

Link Check is shareware and not available for free. You are allowed a 21-day evaluation period free of charge for this program and then you should either register it with the author or remove it from your disk(s). Should you use it after the 21-day evaluation period, you are violating US and international copyright laws and treaties.

For details on how to register this program, please click on <u>How to Register/Order</u>.

The registered version of Memory Check includes:

1. Full unrestricted version
2. All references to "Unregistered Shareware" removed
3. Your name in the "About" dialog box

The 32-bit versions of **Link Check** (WLCHK95.ZIP and WLCHKNT.ZIP) are also available.

As a registered user of **Link Check**, you will receive the following benefits:

1. Free technical support over the telephone and Email
2. Free upgrades via the electronic key

Currently (Aug 96) we have no plans to charge for upgrades. Once registered with the electronic key, any upgrades will be seamless. All you need to do is to obtain/download a new copy and install over the old version. The key will unlock the retail version automatically so you need to register **only once**.

 Other Products

Link Check for Windows 95* (WLCHK95.ZIP):

This is the 32-bit native version of Link Check for the Windows 95 platform.

Link Check for Windows NT 3.51* (WLCHKNT.ZIP):

This is the 32-bit native version of Link Check for the Windows NT platform.

Software Check 3.24 (WACHECK.ZIP):

Software Check is a program which scans your local and network drive(s) for specified or all executable files and gathers information about them for software licensing purposes.

You may also use **Software Check** to identify any unwanted software on your disks/drives.

Information can be gathered, saved to a log and processed later. You may also export the information to another application for further processing.

You may run multiple copies of **Software Check** and scan more than one drive at the same time.

Individual directories may also be logged.

The shareware version of **Software Check** supports floppy and local hard drives only. The full retail version adds support for CD ROM and network/remote drives.

* See Trademarks