



LibCheck: Introduction

LibCheck is an easy to use utility that allows you to quickly search your system for duplicate system files. I have found that the vast majority of application conflicts in Windows have arisen from the wrong version of a system file (such as a DLL) being loaded into memory.

Sophtech developed this utility because we got tired of manually comparing these files for a large number of directories every time an application was installed or updated (*especially* on a network!) Not only was this time consuming, but error prone as well.

Because most Windows applications rely upon common DLLs, they often supply copies of these files with each copy of the software. This means that the version of SuperTurbo2+ you just installed may have saved a version of COMMDLG.DLL in its directory that is older than that installed by Excel in WINDOWS\SYSTEM. When you run SuperTurbo2+ before Excel the older DLL is loaded into memory, therefore, when you now load Excel it hangs (or gives an error message) because the older DLL does not support a call made by the application expecting a newer version of the library. Ever load a few applications in a defined sequence and have the system run fine, but change the load sequence and have the system crash? DLL conflicts are generally the culprit.

This is where LibCheck comes in. It allows anyone from a network administrator to a stand alone user to quickly and easily track down potential problems arising from duplicate system files. It should be noted however, that because Microsoft has not developed a naming standard for DLLs, this utility is only able to determine if files with the *same name* are present in each directory. **This does not mean that these files have the same functionality.** Unfortunately, the effects of having *functionally* different DLLs with the same file name (Windows cannot tell the difference either so when an application asks that a file be loaded into memory, it grabs the first one matching the requested name and loads it.) is *worse* than having multiple versions of the same file. Fortunately, this has yet to be a major issue. Nevertheless, LibCheck can help you resolve either problem.

Finally, LibCheck is a very powerful application. It not only allows you to track down errant files, but can also **load and unload system files from memory upon request.** This is not a trivial process and must be considered carefully before implementing because it could cause unpredictable results (e.g. removing a DLL that is expected to be loaded by an application without reloading the same DLL will corrupt Windows memory address space and will lead to the inevitable reboot.) On the other hand, once you get the hang of what you can or cant (or shouldnt) do, I believe that LibCheck will quickly become an indispensable part of your tool box as it has ours.

Any comments, questions or suggestions are appreciated. You can mail responses to the address below, or contact me at 70262.1267@compuserve.com. Enjoy.

Bill Parducci
President





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LibCheck: File Menu

Exit

Choosing this menu selection closes LibCheck.



LibCheck:

LibCheck Menu

Loaded Modules

Choosing this menu selection calls up the Loaded Modules screen.

Duplicate Modules

Choosing this menu selection calls up the Duplicate Modules screen.

Search Path

Choosing this menu selection calls up the Search Path screen.

Compare Dirs

Choosing this menu selection calls up the Compare Dirs screen.

Compare Drives

Choosing this menu selection calls up the Compare Drives screen.



LibCheck: Options Menu

Confirmations (registered only)

Choosing this menu selection calls up a dialog box allowing the user to turn on/off notifications given prior to performing each file function.

Restart Windows

Choosing this menu selection tells LibCheck to restart Windows.



LibCheck: Window Menu

Cascade

Choosing this menu selection tells the system to arrange all open windows within the LibCheck application.

Arrange Icons

Choosing this menu selection tells the system to arrange all icons within the LibCheck application.

Close All

Choosing this menu selection tells the system to close all windows within the LibCheck application.



LibCheck: Help Menu

Help

Choosing this menu selection calls up this Help file.

About

Choosing this menu selection calls up the About dialog box. [Note: This dialog box not only provides information about the application, but also provides a means by which it may be registered \(by pressing on the Sophtech logo in the top right corner of the screen\).](#)



LibCheck: Drop Boxes

LibCheck uses drop boxes to perform most of its file functions. Dragging a file from one of the list boxes in the Loaded Modules, Duplicate Modules, Search Path, Compare Dirs and Compare Drives screens will initiate the action of each drop box. It should be noted that not all files may be dragged onto all drop boxes (e.g. loaded modules must be unloaded from memory before they may be copied, deleted or moved.)



Copy Me

Dropping a file into this drop box will call up a dialog box allowing you to copy this file to a specific directory.

Move Me

Dropping a file into this drop box will call up a dialog box allowing you to move this file to a specific directory.

Note: Moving a file that is currently loaded in memory requires that it to first be **unloaded**. This can be done by double clicking on the file in the Loaded Modules screen, however, as with any process that directly alters processes that may be in use, **unload files with care**.

Delete Me

Dropping a file into this drop box will delete the selected file. Note: Moving a file that is currently loaded in memory requires that it to first be **unloaded**. This can be done by double clicking on the file in the Loaded Modules screen, however, as with any process that directly alters processes that may be in use, **unload files with care**.

Describe Me

Dropping a file into this drop box will call up an Information window describing the files name, location on disk, creation date and version (if available) information. [Note: only file location information may be retrieved for files that are currently loaded.](#)



LibCheck: Loaded Modules

Loaded Tasks & Modules

Tasks and Modules

- BWCC
- CLIPSRV
- COMM
- COMMDLG
- COMPOBJ
- COURE
- COURF
- CTL3DV2
- DASH
- DBAPPS
- DBCLOCK

c:\windows\system\bwcc.dll
Size:153Kb, Date:4/20/94
ver:2.2.2

total files: 88

Refresh

Cancel

Help

Loaded Library List

This list box displays all system files currently loaded in memory. This will generally include DLL, 386, DRV, FON files, etc. **Note:** each file is represented by its Windows module name, therefore you may see what appear to be duplicates, but are in fact multiple files with the same module name (e.g. OEMFONTS for vgaoem.fon *and* 8514oem.fon).

These files may be dragged and dropped onto the Describe Me drop box to get create a window displaying file information.

A file may be **unloaded from memory** by double clicking on it. **Note:** as with any action that directly alters processes that may be in use, **unload files with care.**

Library Information

This field contains all pertinent information concerning the file selected in the Loaded Library List. The files location, file name, size, creation date and version (if available) are listed.

Refresh

Pressing this button refreshes the Loaded Library List. This list is automatically refreshed whenever a change is made from within LibCheck. However, because Windows allows multiple applications to load and unload code at will (hence the term *dynamic* in DLL) this list should be updated before use if it has been open for more than a minute or so.



LibCheck: Duplicate Loaded Modules

Loaded Modules Duplicates

Loaded Modules

BWCC

c:\windows\system\bwcc.dll
Size:153Kb, Date:4/20/94
ver:2.2.2

total loaded: 1

Duplicates Found

BWCC

c:\dos\bwcc.dll
Size:153Kb, Date:4/20/94
ver:2.2.2

total duplicates: 1

Path

set Dir

WARNING
Duplicates with different versions may crash system!

Cancel

Help

Primary Library List

This list box displays the **first** system file that matches a file currently loaded in memory. This will generally include DLL, 386, DRV, FON files, etc. **Note:** each file is represented by its Windows module name, therefore you may see what appear to be duplicates, but are in fact multiple files with the same module name (e.g. OEMFONTS for vgaem.fon *and* 8514oem.fon).

These files may be dragged and dropped onto one of the drop boxes.

A file may be **unloaded from memory** by double clicking on it.

Note: as with any action that directly alters processes that may be in use, **unload files with care**. If you want to see what happens when a module that is actually being used when it is unloaded, double click on the BWCC DLL (its used by LibCheck).

Primary Library Information

This field contains all pertinent information concerning the file selected in the Primary Library List. The files location, file name, size, creation date and version (if available) are listed.

Secondary Library List

This list box displays the **all** system files (**except the first**) that match a file currently loaded in memory. This will generally include DLL, 386, DRV, FON files, etc. **Note:** each file is represented by its Windows module name, therefore you may see what appear to be duplicates, but are in fact multiple files with the same module name (e.g. OEMFONTS for vgaem.fon *and* 8514oem.fon).

These files may be dragged and dropped onto one of the drop boxes.

A file may be **deleted** by double clicking on it.

Dragging a file from this list to the Primary Library List will **replace the currently loaded** module with the file dropped onto it.

Note: as with any action that directly alters processes that may be in use, **unload files with care**. If you want to see what happens when a module that is actually being used when it is unloaded, double click on the BWCC DLL (its used by LibCheck) and get ready to restart Windows.

Secondary Library Information

This field contains all pertinent information concerning the file selected in the [Secondary Library List](#). The files location, file name, size, creation date and version (if available) are listed.

Search Path

Pressing this button tells the system to search the current path and compare the system files found there with those currently loaded in memory. Duplicate files will be listed in the Secondary Library List while the corresponding file loaded in memory will be listed in the Primary Library List.

Search Dir

Pressing this button tells the system to search a specified directory and compare the system files found there with those currently loaded in memory. Duplicate files will be listed in the Secondary Liberia List while the corresponding file loaded in memory will be listed in the Primary Library List.



LibCheck: Search Path

Path Duplicates

Filter:
*.dll

Scan

BWCC.DLL
FAXCODEC.DLL
MSAJT200.DLL
TRNSCHED.DLL

c:\dos\bwcc.dll
Size:153Kb, Date:4/20/94
ver:2.2.2

total files: 4

BWCC.DLL
FAXCODEC.DLL
MSAJT200.DLL
TRNSCHED.DLL

c:\windows\system\bwcc.dll
Size:153Kb, Date:4/20/94
ver:2.2.2

total files: 4

Cancel

Help

Primary Library List

This list box displays the **first** system file found in the path that has a duplicate file elsewhere in the path. This will only include files matching the filter type displayed in the Filter drop down box. **Note:** each file is represented by its Windows module name, therefore you may see what appear to be duplicates, but are in fact multiple files with the same module name (e.g. OEMFONTS for vgaem.fon *and* 8514oem.fon).

These files may be dragged and dropped onto any of the drop boxes.

A file may be **deleted** by double clicking on it.

Note: as with any action that directly alters processes that may be in use, **unload files with care**. If you want to see what happens when a module that is actually being used when it is unloaded, double click on the BWCC DLL (its used by LibCheck) and get ready to restart Windows.

Primary Library Information

This field contains all pertinent information concerning the file selected in the [Primary Library List](#). The files location, file name, size, creation date and version (if available) are listed.

Secondary Library List

This list box displays the **all** system files found in the path (**except the first**) that have a duplicate file elsewhere in the path. This will only include files matching the filter type displayed in the Filter drop down box. **Note:** each file is represented by its Windows module name, therefore you may see what appear to be duplicates, but are in fact multiple files with the same module name (e.g. OEMFONTS for vgaem.fon *and* 8514oem.fon).

These files may be dragged and dropped onto any of the drop boxes.

A file may be **deleted** by double clicking on it.

Secondary Library Information

This field contains all pertinent information concerning the file selected in the Secondary Library List. The files location, file name, size, creation date and version (if available) are listed.

Filter

This field determines which file types are searched when the Scan file is pressed.

Scan

Pressing this button searches the path for duplicate files (as specified in the Filter field) and displays the information in the Primary and Secondary Library Lists.



LibCheck: Compare Directories

Compare Directories

C:\LIBCHECK

	\
	--
	[-A-]
	[-C-]

total files: 0

C:\LIBCHECK

	\
	--
	[-A-]
	[-C-]

total files: 0

Filter:

Primary Library List

This list box displays the system file(s) found in the directory specified by the Primary Directory and are also found in the directory specified by the Secondary Directory. This will only include files matching the filter type displayed in the Filter drop down box. **Note:** each file is represented by its Windows module name, therefore you may see what appear to be duplicates, but are in fact multiple files with the same module name (e.g. OEMFONTS for vgoem.fon *and* 8514oem.fon).

These files may be dragged and dropped onto any of the drop boxes.

A file may be **deleted** by double clicking on it.

A file may be copied between the Primary and Secondary Library Lists by using drag and drop from one list to the other.

Primary Library Information

This field contains all pertinent information concerning the file selected in the Primary Library List. The files location, file name, size, creation date and version (if available) are listed.

Secondary Library List

This list box displays the system file(s) found in the directory specified by the Primary Directory and are also found in the directory specified by the Secondary Directory. This will only include files matching the filter type displayed in the Filter drop down box. **Note:** each file is represented by its Windows module name, therefore you may see what appear to be duplicates, but are in fact multiple files with the same module name (e.g. OEMFONTS for vgaem.fon *and* 8514oem.fon).

These files may be dragged and dropped onto any of the drop boxes.

A file may be **deleted** by double clicking on it.

Secondary Library Information

This field contains all pertinent information concerning the file selected in the [Secondary Library List](#). The files location, file name, size, creation date and version (if available) are listed.

Primary Directory

This list box (and drop down box for drive letters) is used to navigate to the directory that the system is to search for system files. The duplicate system files found in this directory are listed in the [Primary Library List](#). It is used in the same fashion as a standard Windows Open or Save As dialog box.

Secondary Directory

This list box (and drop down box for drive letters) is used to navigate to the directory that the system is to search for system files. The duplicate system files found in this directory are listed in the Secondary Library List. It is used in the same fashion as a standard Windows Open or Save As dialog box.

Filter

This field determines which file types are searched when the Scan file is pressed.

Scan

Pressing this button searches the path for duplicate files (as specified in the Filter, Primary and Secondary Directory fields) and displays the information in the Primary and Secondary Library Lists.



LibCheck: Compare Drives

Drive Duplicates

Filter:
*.dll

Scan

AMIFONT.DLL
AMIUCNT.DLL
BWCC.DLL
COMMDLG.DLL
CTL3D.DLL
DRAWMAN.DLL

c:\smartext\amifont.dll
Size:32Kb, Date:2/7/92

total files: 21

AMIFONT.DLL
AMIUCNT.DLL
BWCC.DLL
BWCC.DLL
COMMDLG.DLL
CTL3D.DLL

c:\ccmobile\amifont.dll
Size:26Kb, Date:1/7/94

total files: 28

Cancel

Help

Primary Library List

This list box displays the system file(s) found in the drive specified by the Primary Drive drop down box and are also found in the drive specified by the Secondary Drive drop down box. This will only include files matching the filter type displayed in the Filter drop down box. **Note:** each file is represented by its Windows module name, therefore you may see what appear to be duplicates, but are in fact multiple files with the same module name (e.g. OEMFONTS for vgaem.fon *and* 8514oem.fon).

These files may be dragged and dropped onto any of the drop boxes.

A file may be **deleted** by double clicking on it.

Primary Library Information

This field contains all pertinent information concerning the file selected in the Primary Library List. The files location, file name, size, creation date and version (if available) are listed.

Secondary Library List

This list box displays the system file(s) found in the drive specified by the Secondary Drive drop down box and are also found in the drive specified by the Primary Drive drop down box. This will only include files matching the filter type displayed in the Filter drop down box. **Note:** each file is represented by its Windows module name, therefore you may see what appear to be duplicates, but are in fact multiple files with the same module name (e.g. OEMFONTS for vgaem.fon *and* 8514oem.fon).

These files may be dragged and dropped onto any of the drop boxes.

A file may be **deleted** by double clicking on it.

Secondary Library Information

This field contains all pertinent information concerning the file selected in the [Secondary Library List](#). The files location, file name, size, creation date and version (if available) are listed.

Primary Drive

This drop down box is used to determine which drive the system is to search for system files. The duplicate system files found in this drive are listed in the [Primary Library List](#).

Secondary Directory

This drop down box is used to determine which drive the system is to search for system files. The duplicate system files found in this drive are listed in the [Secondary Library List](#).

Filter

This field determines which file types are searched when the Scan file is pressed.

Scan

Pressing this button searches the path for duplicate files (as specified in the Filter, Primary and Secondary Drive fields) and displays the information in the Primary and Secondary Library Lists.

OK/Close/Cancel

Pressing this button closes the current window.

Help

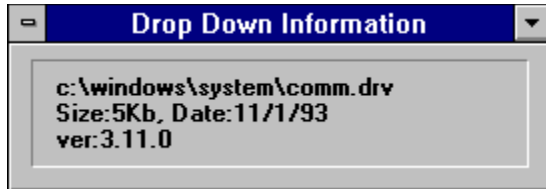
Pressing this button calls up this Help file.



LibCheck: Module Information

This window is created by dragging a file into the Describe Me drop box. It contains the files location, file name, size, creation date and version (if available) information.

This window may be dragged onto the drop boxes to perform file functions upon the file it references.





LibCheck: Common Questions

- Q: I have many DLLs/FONs/VBXs/EXEs on my system. Some are duplicates, with various versions/sizes/dates. I hesitate to delete them, fearing that some of my programs will stop working. How should I proceed?
- A: First, list what which applications you have on your system. If everything is working fine, and you are just planning to get rid of old VBXs/DLLs/etc. then the VBXs/DLLs/etc. you are running are the latest version of these files (there is a later question concerning problems with different versions). Now, to figure out which copy you are NOT running (those are the ones you want to get rid of) - activate the Duplicate Loaded Modules screen. This screen will show you the modules that are running and the duplicates for those files in the path or other places in your system.
- Try this once for every program you use frequently. When you do find duplicates, you can move them, copy them, or delete them using the drop boxes on the bottom of LibChecks main window. If you want to test a file by replacing the loaded version (see note about this in the [Overview](#)) just drag the file you wish to run onto the Loaded Modules list box. This option allows you to check out different versions of a system file live without having to restart Windows. If there are more than two duplicates on your system you can use the Describe Me drop box to present the file information continuously while you are checking on other files. You can then drag this window to one of the drop boxes to copy/move/delete the file it references.
- Q: Which DLLs does my system need? I have some pretty old DLLs and I'm not sure if anything is using them. Also, how do I find out which DLLs/VBXs a specific program requires?
- A: You can find out what DLLs your bare system needs by running the Loaded Modules screen, it lists all the DLLs currently loaded in memory. This screen also allows you to unload/reload DLLs directly. Comparing the list generated by the bare system with that generated with a specific application loaded you can determine which DLLs that application requires (and where they are).
- Q: I installed a new application. Now, one of my old applications keeps bombing on me.
- A: Your new application has probably replaced/copied to path an older/different version of the same DLL (one of the most common problems of installation programs) that was being used by the older application. You can use the Drive Duplicates or the Duplicate Loaded Modules screens to find duplicate DLLs in the system. Specifically try and look for files running out of the path or the new application directory. Look for duplicate DLLs with different version numbers/sizes/dates. As a rule of thumb always delete older versions of system files (or, if you are unsure, zip them into an archive file).
- Q: I have tons of duplicate DLLs/VBXs/EXEs/FONs in various directories on the network/hard drive. How do I minimize the number of copies?
- A: First, find out where the DLLs you really need are running from. You can *move* these to the Windows directory to obtain the minimum overhead for Windows (that's where Windows looks for system files first). Second, look for duplicates through the Compare Drives screen (compare C: with C:, then C: with D:, C: with F:, etc.) to locate all duplicate system files.
- Q: I have two directories which contain conflicting libraries how can I find out which are newer so that I can kill off the older ones?
- A: Use the Compare Dirs screen to look for duplicates within two specific directories. You can then compare the versions and remove those you do not need.



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Sophisticated Technologies, Inc.
2785 Pacific Coast Highway #284
Torrance, CA 90505 USA

or by calling our office at (310) 530-6350 or faxing a request to (310) 530-6203. Payment may be either American Express, Visa, MasterCard or check. Upon receipt of payment we will send you a letter with your registration information, including your registration number.

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LibCheck MUST be copied in an unmodified form and MUST contain the following files:

- LibCheck.exe
- BWCC.dll
- LibCheck.hlp

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