Overview

Tech Support Assistant™ has been included with this application in order to help you detect and resolve many configuration-related problems.   Such problems include not satisfying the minimum system requirements, wrong or missing application extension files (DLLs, Active Xs, OCXs, drivers, etc.) and wrong or missing application settings (in Registry and INI files).   It does not attempt to help you understand how to use the application or fix problems with the application itself.

If you are not having problems with this application, you do not need to run Tech Support Assistant.

If you are having problems, Tech Support Assistant will check your system configuration and report any problems.   Hopefully it will help you find the problem, but if not you can use the report generated by Tech Support Assistant to help the technical support personnel diagnose your problem.   You should always run Tech Support Assistant before contacting technical support.

What Tech Support Assistant Does

Tech Support Assistant will do the following:

- ask you a series of questions to determine the type of problem
- verify that your system satisfies the minimum requirements
- verify that the application components and settings match those specified by the vendor
- verify that the application components load properly
- determine if there are any recent configuration changes
- give you additional advice on how to track down the problem
- give you instructions on how to contact technical support

Don't worry if you don't understand much about computers or software. Tech Support Assistant will walk you through a series of steps that clearly indicate if there are any problems. If a problem is found, just follow the instructions. Most steps have a **Notes** column that describes what the problem is, a **Details** button that provides additional information, and a **Fix** button that will try to fix the problem, if possible. In many cases, you can have Tech Support Assistant solve the problem by just clicking the **Fix** button.

General Advice: Newer Files are Generally Better, but Not Always

Tech Support Assistant tries to resolve file-related configuration problems by replacing older program files with newer ones. All good setup programs also replace older program files with newer ones. Generally speaking, newer files are better and more reliable than older files since newer files hopefully fix bugs found in older files.

Unfortunately, this is not always true. In some cases, newer files actually introduce problems. For example, we have found that the OLEAUT32.DLL versions 2.10.3024.1 and 2.20.4008.1 would cause problems with some applications that use OLE automation that older versions did not. Also, some Windows Service Packs appear to introduce new problems.

Therefore, the safest approach is to upgrade your application extensions only if you are having problems or if you are confident that the new versions are reliable.

Quick Tips

This section presents a few quick tips that will help you get the most out of Tech Support Assistant.

- Close all applications before running Tech Support Assistant. This will make it more likely that you can make changes and check the results without restarting Windows. Windows cannot modify files that are in use.

- It is usually easier to read text in the **Notes** column of the Check Application Configuration and Check Recent Changes sections by clicking on the scroll bar slider and dragging it to view the text than it is to click outside the slider to scroll the text.

- You can double-click on most items in the Check Application Configuration and Check Recent Changes sections to see the **Details** dialog box.

- The Check Application Configuration section automatically sorts any problems it finds to the top of the list. If you want to view the items in alphabetical order instead, click the top of the **File** or **Name** column. Click again to go back to the original order. Note that the order will not change unless problems were found.

- The Check Recent Changes section automatically sorts any problems it finds to the end of the list. If you want to view the items in alphabetical order instead, click the top of the **Name** column. If you want to view the items by the times they were changed, click the top of the **Notes** column. Click again to go back to the original order.

- You can prevent the **Welcome to Tech Support Assistant** dialog box from displaying by removing the check mark at the bottom. You can get it to return by pressing the shift key while Tech Support Assistant is loading.

Problem Icons

Tech Support Assistant uses the following problem icons to indicate the severity if the problems it finds.

❌
Serious problem found

❌
Serious problem found - should be fixed when you restart Windows

❌
Problem found

❌
Problem found - should be fixed when you restart Windows

⚠️
Serious warning found

⚠️
Serious warning found - should be fixed when you restart Windows

⚠️
Warning found

⚠️
Warning found - should be fixed when you restart Windows

If Tech Support Assistant finds problems, it displays them according to the above order to emphasize the most significant problems.   The different icon meanings are as follows:

- The difference between a problem and a warning is that problems are assigned to required files and warnings are assigned to files that are not required.   For example, the application help file is usually not considered to be required since it is unlikely to cause the application to not behave properly.   If the application help file is missing or has the wrong size or date, this would be considered a warning.

- The difference between a serious problem or warning and a regular problem or warning is based on how significant the detected problem is.   For example, a file with a bad version is considered to have a serious problem, but a file with a wrong size or date or a file that is installed in an unexpected folder is not considered serious.

- The icons turn blue when you fix a problem that requires restarting Windows in order to take effect.   If you fix a problem that doesn't require restarting Windows the icon is removed, but if restarting Windows is required the icon is not removed since the problem is still there.   Since the icon color changes, you can readily distinguish the problems you have fixed from the problems you haven't.

Remember that the above rankings are based on general rules in order to emphasize the most significant problems.   You should generally look at the problems according to their ranking, but just because a problem   was assigned a lower ranking doesn't mean it isn't the cause of the problem.   For example, the CTL3DV2.DLL will not work at all unless it is installed in the System folder.

Describe The Problem

This section will ask you a series of questions to help determine the type of problem you are having.   The answers you give will determine what steps Tech Support Assistant will take to track down the problem. Most questions will have 'yes', 'no', and 'don't know' answers.   Select 'don't know' if you are not sure of the answer.   All responses you give are saved, so you don't need to do this section unless your answers are different from last time for this application.

This section may ask the following questions.

- Does restarting Windows change the behavior of the application?
- Is the problem consistent and repeatable?
- Is this the only application that is misbehaving?
- Does the application load successfully?
- Did the application work correctly in the past and just recently start having problems?
- Does the problem involve using QuickTime?
- What are the symptoms of the problem?

Does restarting Windows change the behavior of the application?

One of the first things to try when you are having a problem is to restart Windows. This is a good idea because it is possible that another application corrupted the Windows environment. If so, you may be looking for the problem in the wrong place. If you haven't restarted Windows recently, you should restart Windows now and try again before starting any other applications.

Is the problem consistent and repeatable?

One of the most important steps in tracking down a problem is to create a small set of steps that reproduces the problem in a consistent and repeatable manner.   If you haven't already, you should try to reproduce the problem now.   First try to see if it is repeatable, then try it a few times to see if it is consistent.   If the problem is not consistent, try to figure out why.   What is different when it works from when it doesn't?

Is this the only application that is misbehaving?

Another important step in tracking down a problem is to determine if this application is the only application that is misbehaving.   If it appears to be, then this suggests an application problem.   If not, then this suggests a Windows problem.

Does the application load successfully?

Sometimes application simply will not load.   If this is the case, select Yes and Tech Support Assistant will try to load each application extension individually to try to isolate the problem.

Did the application work correctly in the past and just recently start having problems?

If the application worked correctly in the past and just recently started having problems, then this suggests that a recent change to your system configuration is the problem.   The Check Recent Changes section of Tech Support Assistant is designed to help track down just such problems.   If you answer Yes, be sure to run this section.

Does the problem involve using QuickTime?

If QuickTime is involved with the problem, select Yes and Tech Support Assistant will give you instructions on how to test QuickTime.

What are the symptoms of the problem?

Indicate if any of the listed general symptoms apply to the problem.   This information will be included in the report generated by Tech Support Assistant.

Check Application Configuration

This is the most important section of Tech Support Assistant and is the section where configuration problems are usually found.   This section will check your system to verify that it satisfies the minimum requirements, check the program files, components, and drivers for their versions, sizes, and dates, check for component loading problems by loading the components individually, and checks the relevant Registry and INI settings.

The best way to use this section is to first go through all the steps to see if any problems are found and try to understand what is wrong, if anything.   You should then go through all the steps again and fix the problems.   At the end of the section, you will be reminded to try the application again to see if the problem has been solved.

Any of the above checks may be skipped if not required by the application.   The component load check is not performed if you did not report loading problems in the first section.

This section may ask you to insert a CD-ROM.   Doing so will allow Tech Support Assistant to verify that your installed files have the correct sizes and dates.   If you do not need to check the file sizes and dates, select Cancel.

While you should be careful when making changes, note that you can undo most changes you make in this section in the Check Recent Changes section.

Minimum Requirements

This step compares your system configuration to the minimum system requirements.   This is the first step in checking the configuration because you obviously will not get good results if your system does not satisfy the minimum requirements.

Note that if you do not have enough memory available, Windows creates virtual memory from available hard disk space.   If your hard disk space is low, this may show up as a memory problem instead of a disk space problem.

You can quickly free some hard disk space by deleting unused temporary files and emptying the Recycle Bin.   If Tech Support Assistant finds more than 1 MB of temporary files, the **Fix** button will be enabled which will allow you to delete these files automatically.

{button ,JI(`',`Icons')} Icon Explanations

Program, DLL, Active X/OCX/VBX, and Driver Files

This step compares the file versions, locations, sizes, and dates to what is expected and reports any errors.   Any problems are indicated with a problem icon and the problem is explained in the **Notes** column.

Since most application extensions use version numbers, the version number is the most important piece of information used to check for problems.   In fact, if a file version number is found, Tech Support Assistant doesn't bother to check the file size or date because this information is relatively insignificant in comparison.   However, if a file does not have a version number, the size and date are the only way to determine if the file is correct.

You can view the **File Details** dialog box by clicking the **Details** button or double-clicking the file name. Note that any differences between the actual and expected values are highlighted in bold text.   The **File Details** dialog box is a convenient way to compare the actual file details to the expected values.

Most file problems are solved by replacing a bad version of a file with a good version.   Where do the good versions come from?   Tech Support Assistant first checks for the file on the source CD-ROM or floppy (you will be prompted to insert the disc if it is not found).   If not there, it checks for any backup versions that it may have made.   Lastly, it checks in the Windows sysbckup folder.

If you click the **Fix** button, a confirmation dialog box will appear to verify the change. Tech Support Assistant will save the old version of the file in case you change your mind.   If an acceptable replacement file is not found, Tech Support Assistant cannot fix the problem and you will have to obtain the file from another source.

While you should be careful when making changes, note that you can undo most changes you make in this section in the Check Recent Changes section.

{button ,JI(`',`Icons')} Icon Explanations
{button ,JI(`',`Advice')} General Advice: Newer Files are Generally Better, but Not Always

INI and Registry File Settings

This step compares the INI or Registry settings to what is expected and reports any errors. Any problems are indicated with a problem icon and the problem is explained in the **Notes** column.

The **Name** column in the list shows only the setting name or key. The line below the list box shows the complete INI or Registry setting name.

You can view the **INI Details** or **Registry Details** dialog box by clicking the **Details** button or double-clicking the item name. Note that any differences between the actual and expected values are highlighted in bold text. Also, if there is a problem, the suggested action is given at the bottom of the dialog box. The **INI Details** or **Registry Details** dialog box is a convenient way to compare the actual data to the expected data.

If you click the **Fix** button, a confirmation dialog box will appear to verify the change. Note that the expected value is automatically inserted in the With: box, but you may replace the setting with any value you like. Obviously, you should not modify the value unless you know what you are doing.

INI files only accept text settings, but the Registry will accept text as well as hex and binary data. Hex data is in the format "0x00000000" where binary data is in the format "00 00…" , where each hex pair is one byte. Obviously, it is not really in binary format, but binary values can have any number of bytes where hex values are always 32 bit.

While you should be careful while making changes, note that you can undo most changes you make in this section in the Check Recent Changes section.

{button ,JI(`',`Icons')} <u>Icon Explanations</u>

Active X/OCX, OLE Server, and Type Library Registry Settings

This step compares the OLE Registry settings to what is expected and reports any errors. Any problems are indicated with a problem icon and the problem is explained in the **Notes** column.

You can view the **OLE Registry Details** dialog box by clicking the **Details** button or double-clicking the item name. Note that any differences between the actual and expected values are highlighted in bold text. Also, if there is a problem, the suggested action is given at the bottom of the dialog box. The **OLE Registry Details** dialog box is a convenient way to compare the actual data to the expected data.

Generally, there are only two ways of fixing OLE Registry problem. If the file locations don't agree, you can either move the files or change the Registry setting. Otherwise, you will have to fix the problem by reinstalling the items that have problems.

{button ,JI(`',`Icons')} <u>Icon Explanations</u>

Retry the Application Now

Since you have made changes to the application configuration that may have fixed the problem, you should run the application now to see if the problem has been fixed before continuing to the next step.

Check Recent Changes

This section is useful if the application worked correctly in the past and only recently started having problems.   This section is also useful if you want to undo any changes made in the Check Application Configuration section.

The best way to use this section is to first determine a date when you think the application was working correctly.   If you are not sure, select the earliest date.   If no relevant configuration changes have been made since that date, the list will be empty.   You should then examine all the changes and determine which ones you think may be responsible for the problem.   Click the **Revert** button to restore the previous configuration.   At the end of the section, you will be reminded to try the application again to see if the problem has been solved.

Note that this section is almost the exact opposite of the Check Application Configuration section.

{button ,JI(`',`RecentVsCheck')} <u>Comparing Check Application Configuration to Check Recent Changes</u>

Check Recent Changes

This step compares the current configuration to a previous configuration based on a date you specify. Unlike the Check Application Configuration section, the current configuration is assumed to be valid (otherwise you should have fixed it in the previous section), and previous configurations are possibly invalid.   Consequently, the icons are used to indicate if the previous configuration change would create an invalidate configuration.   Tech Support Assistant will not let you create a invalid configuration, so the **Revert** button is disabled for all items with a problem icon.

The best way to use this section is to first determine a date when you think the application was working correctly.   If you are not sure, select the earliest date.   If no relevant configuration changes have been made since that date, the list will be empty.   You should then examine all the changes and determine which ones you think may be responsible for the problem.   Click the **Revert** button to restore the previous configuration.

Previous configuration items are not displayed if they are the same as the current file or setting.   If you select a date that doesn't have any entries or has fewer entries than you expect, this is why.   These items are removed since changing them will not accomplish anything.

Clicking the **Show OK Only** button doesn't necessarily display the **Show All** items with the problem items removed.   If the first file or setting made on or after the selected date is not valid and **Show All** is selected, the invalid item will be shown with a note indicating why it is not acceptable.   If **Show OK Only** is selected and another file or setting after that date is valid, then **Show OK Only** will display that item.

Note that this section is almost the exact opposite of the Check Application Configuration section.

{button ,JI(`'`,`Icons')} Icon Explanations
{button ,JI(`'`,`RecentVsCheck')} Comparing Check Application Configuration to Check Recent Changes

Retry the Application Now

Since you have made changes to the application configuration that may have fixed the problem, you should run the application now to see if the problem has been fixed before continuing to the next step.

A Comparison of the Check Application Configuration and Check Recent Changes Sections

In many ways, the Check Recent Changes section is the opposite of the Check Application Configuration section.   Where the Check Application Configuration section tries to solve the problem by allowing you to make sure all your configuration components were current, the Check Recent Changes section tries to solve the problem by allowing you to revert to a previous configuration.   While this may replace newer components and settings with older components and settings, it will help you track down the problem if an early configuration was working properly.

Note that reverting to a previous file or setting may not actually fix the problem but may help narrow the problem down.   You may want to revert back to the newer file or setting if in fact the problem is not fixed.

In the Check Application Configuration section, all items that were not valid were marked with icons and your goal was to fix these items.   In the Check Recent Changes section, the icons refer not the current state (which is assumed to be valid), but to the previous state.   You can revert any item that does not have an icon from its current state to a previous state.   You cannot revert an item that has an icon because doing so would put that application in an invalid state.   The items with icons are listed for reference only.

When All Else Fails

This section is useful when you have no idea what else to do.   While these suggestions are useful and can help you fix or isolate the problem, it is usually more productive to try them only if the preceding sections didn't find the problem.

Check the Application's Read Me File

Review the application's Read Me to see if it has a solution to the problem.   Read Me files often contain useful information solving application problems.

Check for General Software Problems

This step suggests a few items to check for general software problems.

Check for General Hardware and Driver Problems

This step suggests a few items to check for general hardware and driver problems.

Try Restarting Windows in Safe Mode

For Windows 95 Only

This step suggests restarting Windows in Safe Mode, which is useful for isolating driver-related problems. If the application works correctly in Safe Mode, the problem is more likely a driver problem than an application problem.

How To Contact Technical Support

This section gives you information on how to contact technical support.   Press the **Finish** button to generate the Tech Support Assistant report.

How To Contact Technical Support

This section gives you an opportunity to describe yourself and the problem you are having.   It then provides information on how to contact technical support.   The information you provide will be included with the Tech Support Assistant report that will be generated when you are finished.   You can then e-mail or fax the report to technical support if requested.

User Information

Enter the requested information about yourself.   All items are optional, but the more information you provide, the easier technical support will be able to contact you.

Problem Information

Enter the problem ID (if given to you by technical support) and a description of the problem you are having.   Be sure to provide a complete problem description, including a description of what you are trying to do, exactly what the problem is (including the exact error message, if any), and instructions on how to reproduce it.   Also include any other information you think will be helpful.

How To Contact Technical Support

This step gives you information on how to contact technical support.   Press the **Finish** button to generate the Tech Support Assistant report.

Config.sys and Autoexec.bat Files

This dialog box presents the complete contents of the Config.sys and Autoexec.bat files.   Note that Windows 95 and Windows NT do not make much use of these files.   Things to look for are:

- Config.sys should have Files and Buffers settings of at least 40 each.
- Autoexec.bat contains a Path statement that determines where Windows looks for files.   If Windows is having trouble finding files, there may be missing information in the Path statement.

Note that any line beginning with "REM" or "rem" is ignored.

File Details

This dialog box presents the following information for the selected file:

- File name, type, and icon
- The actual file location, version, size, and date
- The expected file location, version, size, and date
- Version information (for executables)
- Dependent file information (for 32-bit executables)

Note that any differences between the actual and expected values are highlighted in bold text.