



# Visual Studio Project Cleaner

by

Software Verify Limited

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# Visual Studio Project Cleaner

A companion tool for Visual Studio

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*by Software Verify Limited*

*Welcome to the Visual Studio Project Cleaner software tool. Visual Studio Project Cleaner allows you to automatically cleanup temporary and workspace files associated with Visual Studio 6 (and later versions).*

*We have noticed that sometimes Visual Studio 6 will crash for no reason at all. We have found that cleaning up the temporary and workspace files using this tool prevents these crashes from occurring.*

*Although we developed this tool many years ago for use with Visual Studio 6, many of the same files types are in use with more modern versions of Visual Studio. As such this tool still has utility if you are using modern versions of Visual Studio.*

# Visual Studio Project Cleaner Help

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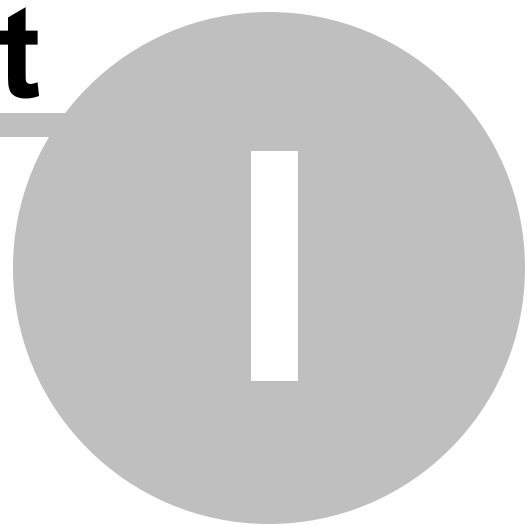
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**Part**



# 1 How to get Visual Studio Project Cleaner

Visual Studio Project Cleaner is free for commercial use. Visual Studio Project Cleaner can be downloaded for Software Verify's website at <https://www.softwareverify.com/product/visual-studio-project-cleaner/>.

This help manual is available in Compiled HTML Help (Windows Help files), PDF, and online.

|              |   |
|--------------|---|
| Windows Help | <a href="https://www.softwareverify.com/documentation/chm/visualStudioProjectCleaner.chm">https://www.softwareverify.com/documentation/chm/visualStudioProjectCleaner.chm</a>                 |
| PDF          | <a href="https://www.softwareverify.com/documentation/pdfs/visualStudioProjectCleaner.pdf">https://www.softwareverify.com/documentation/pdfs/visualStudioProjectCleaner.pdf</a>               |
| Online       | <a href="https://www.softwareverify.com/documentation/html/visualStudioProjectCleaner/index.html">https://www.softwareverify.com/documentation/html/visualStudioProjectCleaner/index.html</a> |

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You are free to use the software at your own risk.

You are not allowed to distribute the software in any form, or to sell the software, or to host the software on a website.

## Contact

Contact Software Verify at:

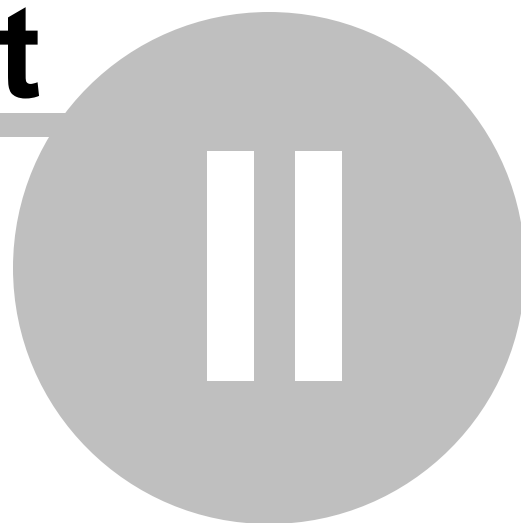
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|         |   |
|---------|---|
| sales   | <a href="mailto:sales@softwareverify.com">sales@softwareverify.com</a>              |
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| web     | <a href="https://www.softwareverify.com">https://www.softwareverify.com</a>         |
| blog    | <a href="https://blog.softwareverify.com">https://blog.softwareverify.com</a>       |
| library | <a href="https://library.softwareverify.com">https://library.softwareverify.com</a> |
| twitter | <a href="https://twitter.com/softwareverify">https://twitter.com/softwareverify</a> |

Visit our blog to read our articles on debugging techniques and tools.  
Follow us on twitter to keep track of the latest software tools and updates.

# Part

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## 2 What does Visual Studio Project Cleaner do?

Visual Studio Project Cleaner deletes all temporary and workspace files associated with Visual Studio.

### File Corruption and Instability

In some cases if these temporary and workspace files get corrupted it is possible for Visual Studio to become unstable and crash. This is particularly noticeable with Visual Studio 6.

Deleting these files causes Visual Studio to rebuild them the next time it needs them.

Our experience is that crashes caused by corrupt data are fixed if you run Visual Studio Project Cleaner to delete the temporary files.

### Use at your own risk

Visual Studio Project Cleaner destroys temporary files and workspace files. There are no backups made of the files that are destroyed.

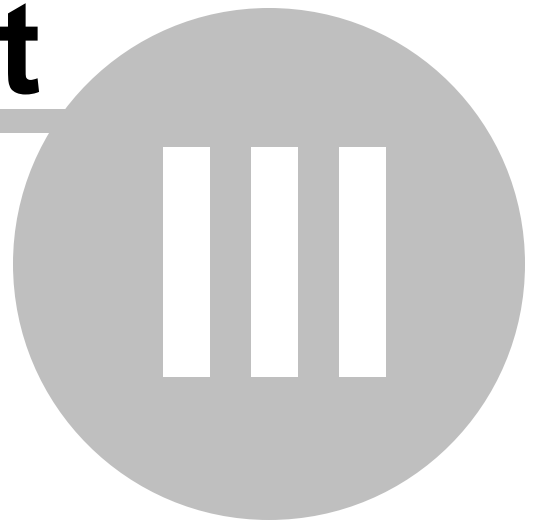
#### **Use this software tool at your own risk.**

We have never had any problems in the 9 years since we wrote this tool, but that does not guarantee this tool is bug free or that correct usage of this tool will not result in an important file you rely upon being deleted.

Always backup your data before using this tool, or ensure that it is in your version control system.

# Part

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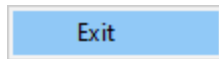


## 3 The menu

Enter topic text here.

### 3.1 File

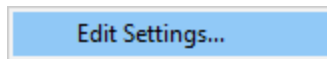
The File menu controls the closing of the software.



**File** menu → **Exit** → closes Visual Studio Project Cleaner.

### 3.2 Settings

The Settings menu controls the editing of the settings.

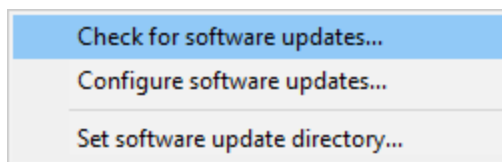


**Settings** menu → **Edit Settings...** → displays the settings dialog.

### 3.3 Software Updates


The Software Updates menu controls how often software updates are downloaded.

If you've been notified of a new software release to Visual Studio Project Fixer or just want to see if there's a new version, this feature makes it easy to update.

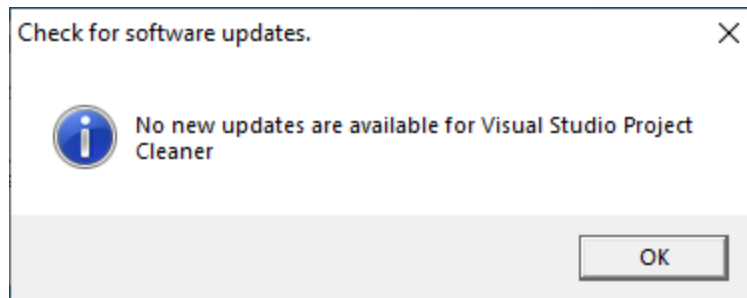


 **Software Updates** menu → **Check for software updates** → checks for updates and shows the software update dialog if any exist

An internet connection is needed to be able to make contact with our servers.

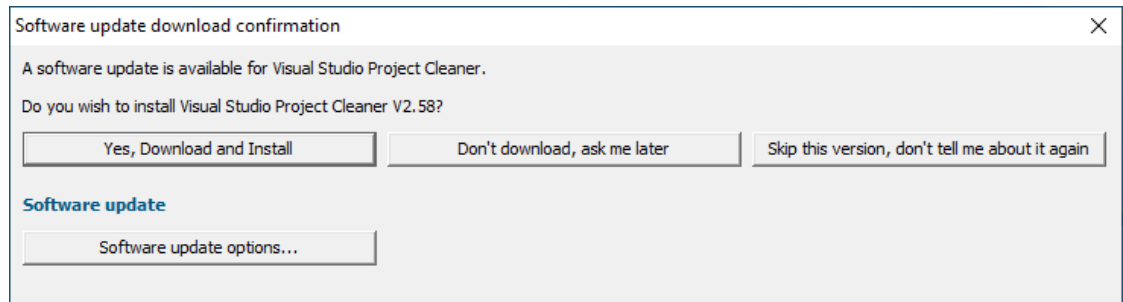
 Before updating the software, close the help manual, and end any active session by closing target programs.

If no updates are available, you'll just see this message:

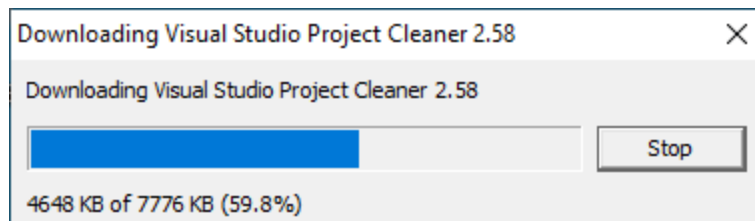


## Software Update dialog

If a software update is available for Visual Studio Project Fixer you'll see the software update dialog.



- **Download and install** ➡ downloads the update, showing progress



Once the update has downloaded, Visual Studio Project Fixer will close, run the installer, and restart.

You can stop the download at any time, if necessary.

- **Don't download...** ➡ Doesn't download, but you'll be prompted for it again next time you start Visual Studio Project Fixer
- **Skip this version...** ➡ Doesn't download the update and doesn't bother you again until there's an even newer update
- **Software update options...** ➡ edit the software update schedule

## Problems downloading or installing?

If for whatever reason, automatic download and installation fails to complete:

- Download the latest installer manually from the software verify website.

Make some checks for possible scenarios where files may be locked by Visual Studio Project Fixer as follows:

- Ensure Visual Studio Project Fixer and its help manual is also closed
- Ensure any error dialogs from the previous installation are closed

You should now be ready to run the new version.

## Software update schedule

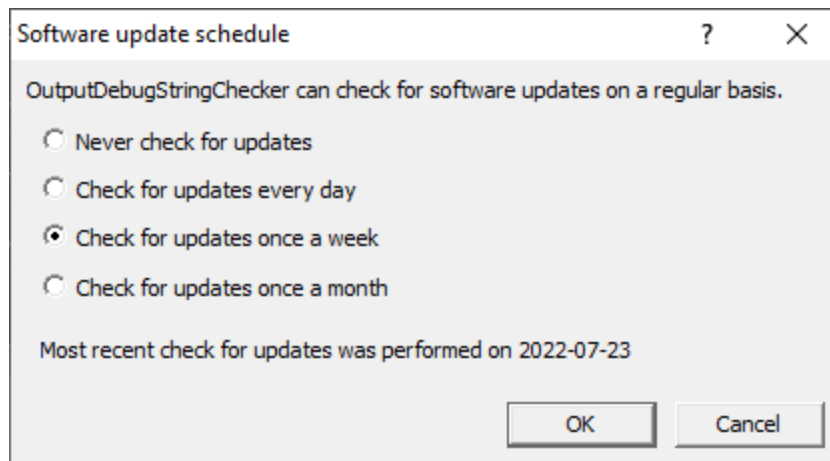
Visual Studio Project Fixer can automatically check to see if a new version of Visual Studio Project Fixer is available for downloading.

 **Software Updates** menu  **Configure software updates**  shows the software update schedule dialog

The update options are:

- never check for updates
- check daily (the default)
- check weekly
- check monthly

The most recent check for updates is shown at the bottom.



## Software update directory

It's important to be able to specify where software updates are downloaded to because of potential security risks that may arise from allowing the `TMP` directory to be executable. For example, to

counteract security threats it's possible that account ownership permissions or antivirus software blocks program execution directly from the `TMP` directory.

The `TMP` directory is the default location but if for whatever reason you're not comfortable with that, you can specify your preferred download directory. This allows you to set permissions for `TMP` to deny execute privileges if you wish.


 **Software Updates** menu  **Set software update directory**  shows the Software update download directory dialog




An invalid directory will show the path in red and will not be accepted until a valid folder is entered.

Example reasons for invalid directories include:

- the directory doesn't exist
- the directory doesn't have write privilege (update can't be downloaded)
- the directory doesn't have execute privilege (downloaded update can't be run)

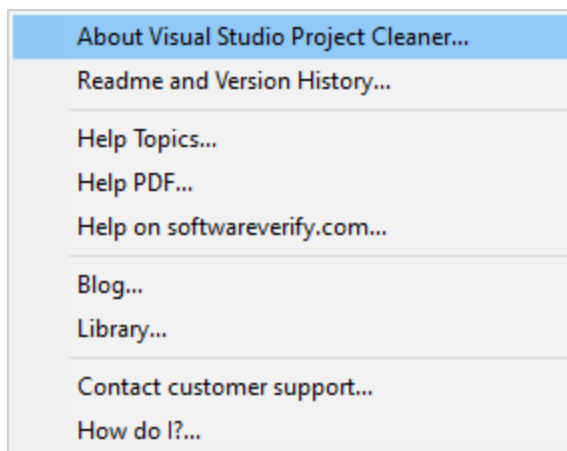
 When modifying the download directory, you should ensure the directory will continue to be valid. Updates may no longer occur if the download location is later invalidated.

- **Reset**  reverts the download location to the user's `TMP` directory

The default location is `c:\users\[username]\AppData\Local\Temp`

## 3.4 Help

The Help menu controls displaying this help document and displaying information about Visual Studio Project Fixer.



**Help menu** ➞ **About Visual Studio Project Cleaner...** ➞ displays information about Visual Studio Project Cleaner.

**Help menu** ➞ **Readme and Version History...** ➞ displays the readme and version history.

**Help menu** ➞ **Help Topics...** ➞ displays this help file.

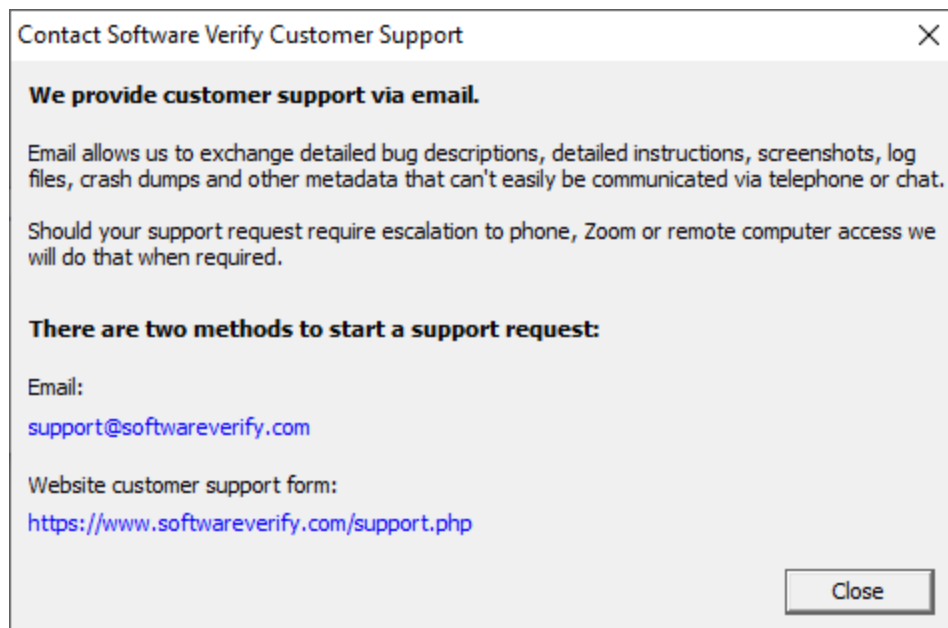
**Help menu** ➞ **Help PDF...** ➞ displays this help file in PDF format.

**Help menu** ➞ **Help on softwareverify.com...** ➞ display the Software Verify documentation web page where you can view online documentation or download compiled HTML Help and PDF help documents.

**Help menu** ➞ **Blog...** ➞ display the Software Verify blog.

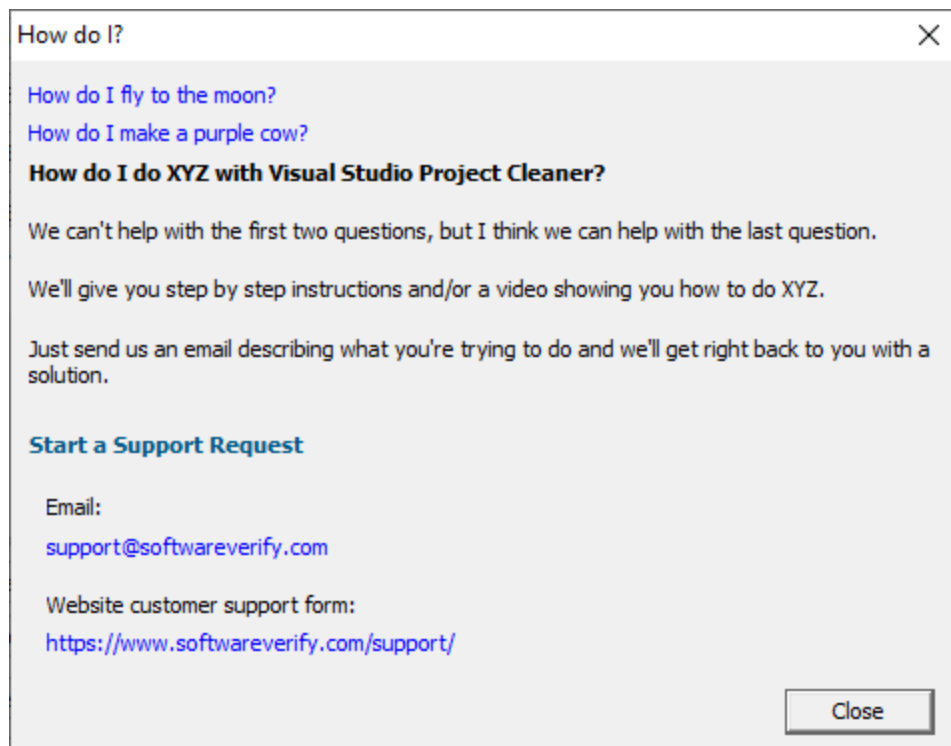
**Help menu** ➞ **Library...** ➞ display the Software Verify library - our best blog articles grouped by related topics.

**Help menu** ➞ **Contact customer support...** ➞ displays the options for contacting customer support.



Click a link to contact customer support.

**Help menu** ➞ **How do I?...** ➞ displays the options for asking us how to do a particular task.





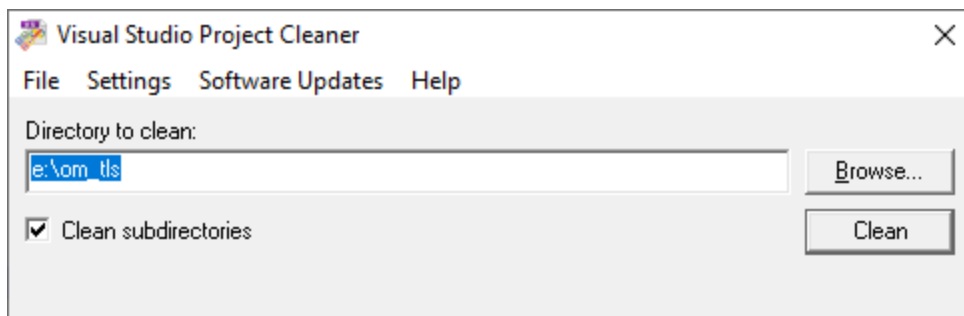
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**IV**

## 4 The graphical user interface

Visual Studio Project Cleaner provides a graphical user interface to allow you to select the file types you wish to clean and to monitor the progress of the cleaning operation.

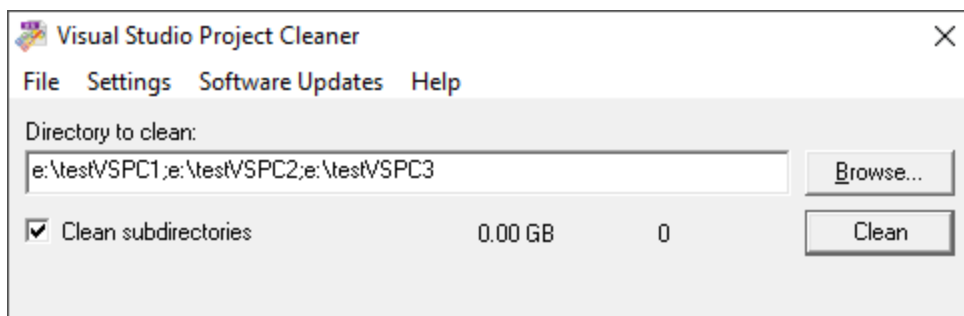


### Directory

Type the name of the directory to clean or use the **Browse...** button to select the directory using the Microsoft directory browser.

### Multiple directories

You can specify multiple directories by typing the directory paths directly into the directory field, separating each path with a semi colon.



### Clean subdirectories

If you wish to clean all subdirectories of the specified directory, select this check box.

If you don't wish to clean all subdirectories of the specified directory, clear this check box.

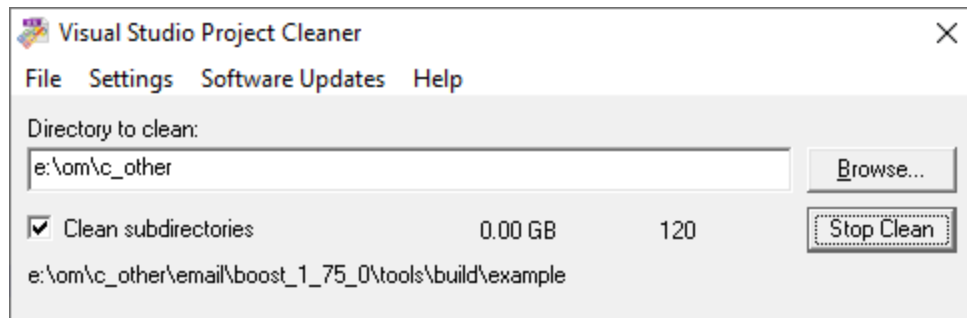
### Clean

When you are confident that you have selected the correct file types to clean in the specified directory click the **Clean** button.

The file cleaning process will commence. All files that match the selected file types will be deleted.

Progress will be shown on the display - the current filename or directory is displayed, with a count of the number of files deleted.

You can stop the cleaning process at any time by clicking the **Stop Clean** button.



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**V**

## 5 Settings

The settings dialog allows you to edit the types of file that will be cleaned by Visual Studio Project Cleaner.



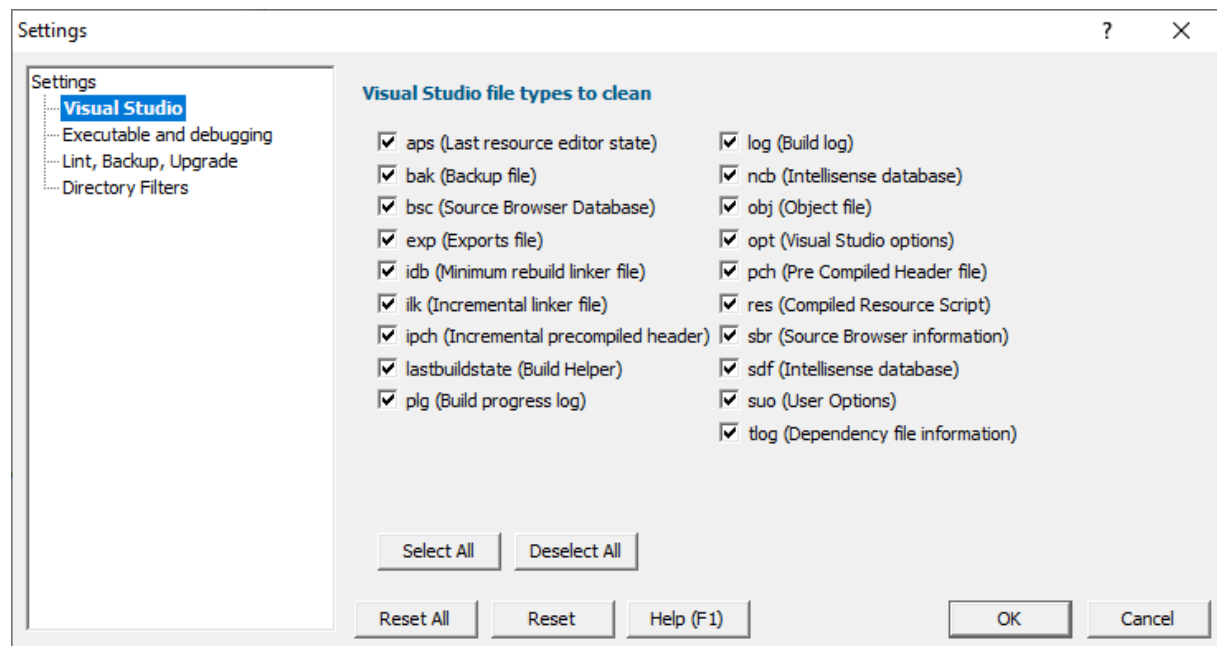
The types of file have been put in related groups: Visual Studio, Linker and Lint, Backup, Upgrade.

**Reset All** - Resets **all** global settings, not just those on the current page.

**Reset** - Resets the settings on this page

### 5.1 Visual Studio

The settings dialog allows you to edit the types of file that will be cleaned by Visual Studio Project Cleaner.



### Visual Studio

Select the types of file you wish to clean.

The default selection is the complete set of file types for Visual Studio 6, plus the addition of .tlog files for more modern versions of Visual Studio.

These files are either temporary files that are not automatically cleaned or they are files that will be automatically regenerated by Visual Studio if they are deleted.

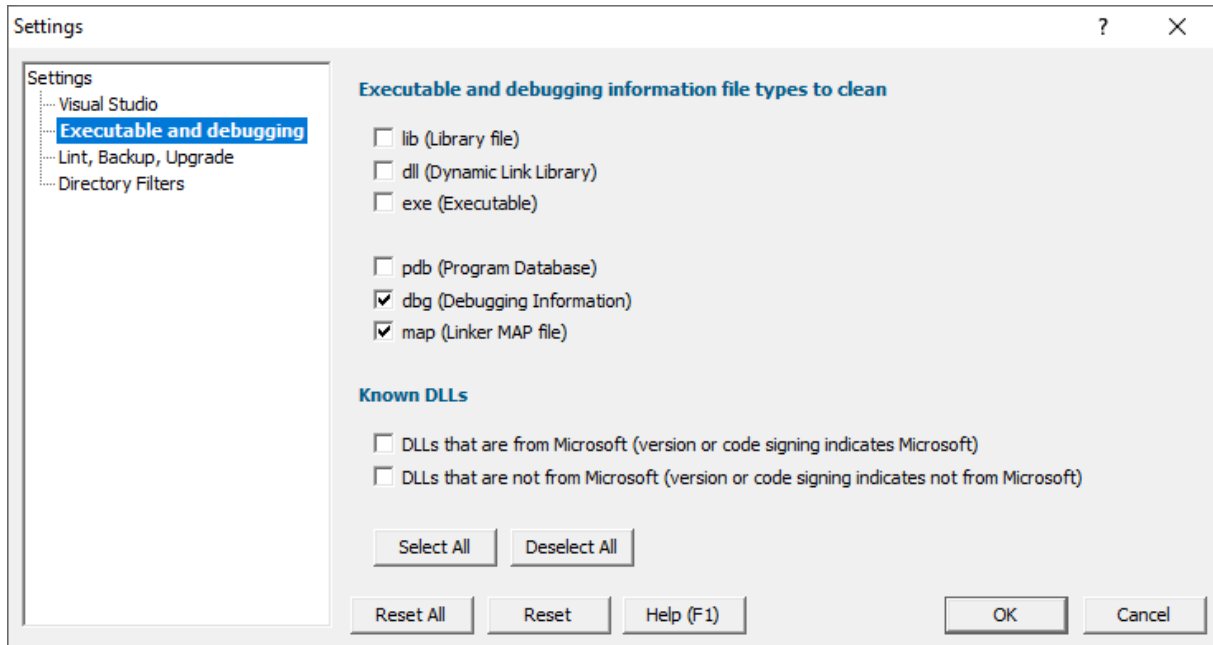
|                       |   |
|-----------------------|---|
| <b>aps</b>            | Last resource editor state                                  |
| <b>bak</b>            | Backup file   |
| <b>bsc</b>            | Source code browser database.                               |
| <b>exp</b>            | Exports file  |
| <b>idb</b>            | Incremental database file, used for minimum rebuild linking |
| <b>ilk</b>            | Incremental linker file                                     |
| <b>ipch</b>           | Incremental precompiled header                              |
| <b>lastbuildstate</b> | Build helper  |
| <b>plg</b>            | Build progress log  |
| <b>log</b>            | Build log   |
| <b>ncb</b>            | Intellisense database                                       |
| <b>obj</b>            | Object file produced by compiler                            |
| <b>opt</b>            | Visual Studio 6 options                                     |
| <b>pch</b>            | Precompiled header file                                     |
| <b>res</b>            | Compiled resource file                                      |
| <b>sbr</b>            | Source Browser Information                                  |
| <b>sdf</b>            | Intellisense Database                                       |
| <b>suo</b>            | User Options  |
| <b>tlog</b>           | File dependency information                                 |

**Reset All** - Resets **all** global settings, not just those on the current page.

**Reset** - Resets the settings on this page

## 5.2 Executable and debugging

The settings dialog allows you to edit the types of file that will be cleaned by Visual Studio Project Cleaner.



### Executable and debugging file types

- lib**      Library file
- dll**      Dynamic link libraries. Deselected by default.
- exe**      Executable programs. Deselected by default.
- pdb**      Program database - debugging information
- dbg**      Debugging information (an alternative form of PDB file)
- map**      MAP file produced by program linker

### Known DLLs

**DLLs that are from Microsoft**      Useful for cleaning up Microsoft DLLs you've temporarily deployed in your build environment.

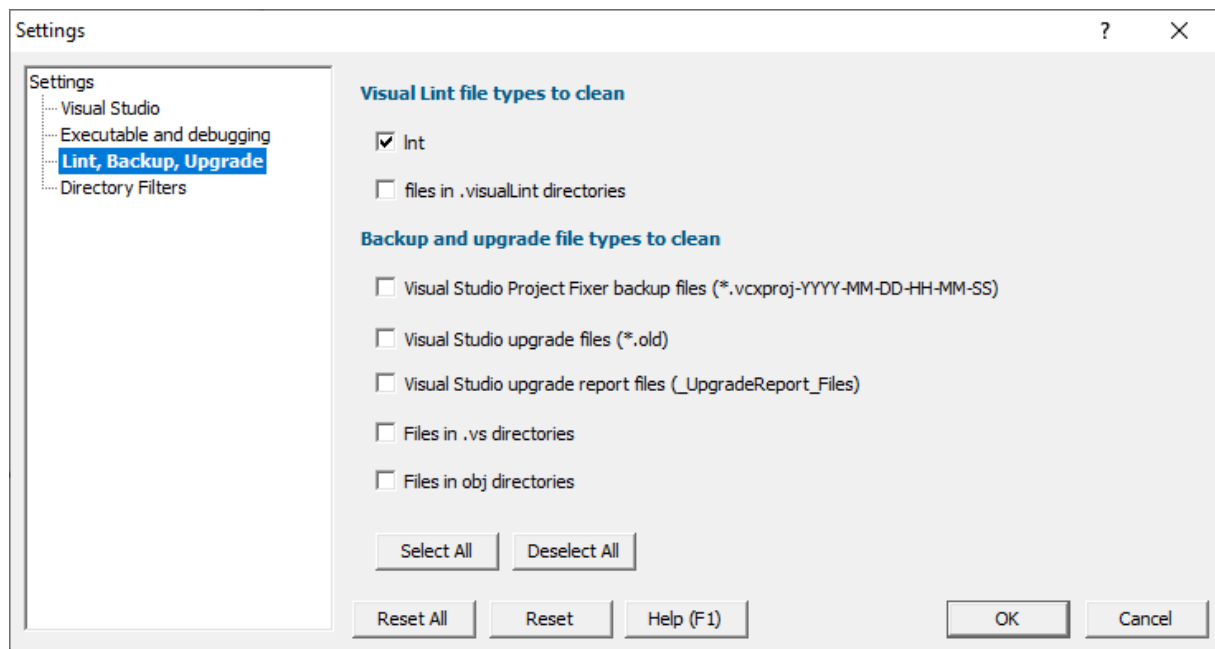
**DLLs that are not from Microsoft**      Useful for cleaning up your DLLs or 3rd-party you've temporarily deployed in your build environment.

**Reset All** - Resets **all** global settings, not just those on the current page.

**Reset** - Resets the settings on this page

## 5.3 Lint, Backup, Upgrade

The settings dialog allows you to edit the types of file that will be cleaned by Visual Studio Project Cleaner.



### Visual Lint file types

**Int** Visual Lint files (\*.Int).

**Visual Lint .visualLint** directory. Files created by Visual Lint static analysis tool. These are stored in a

### Backup and Upgrade file types

**Visual Studio Project Fixer** Backup files created by Visual Studio Project Fixer.

**Visual Studio upgrade** Backup files created by upgrading a Visual Studio solution/project.



**Visual Studio upgrade report** Files created to report information about upgrading a Visual Studio solution/project.

**.vs** Files in .vs directories. Often found in .Net Core projects.

**obj** Files in obj directories. Often found in .Net Core projects.

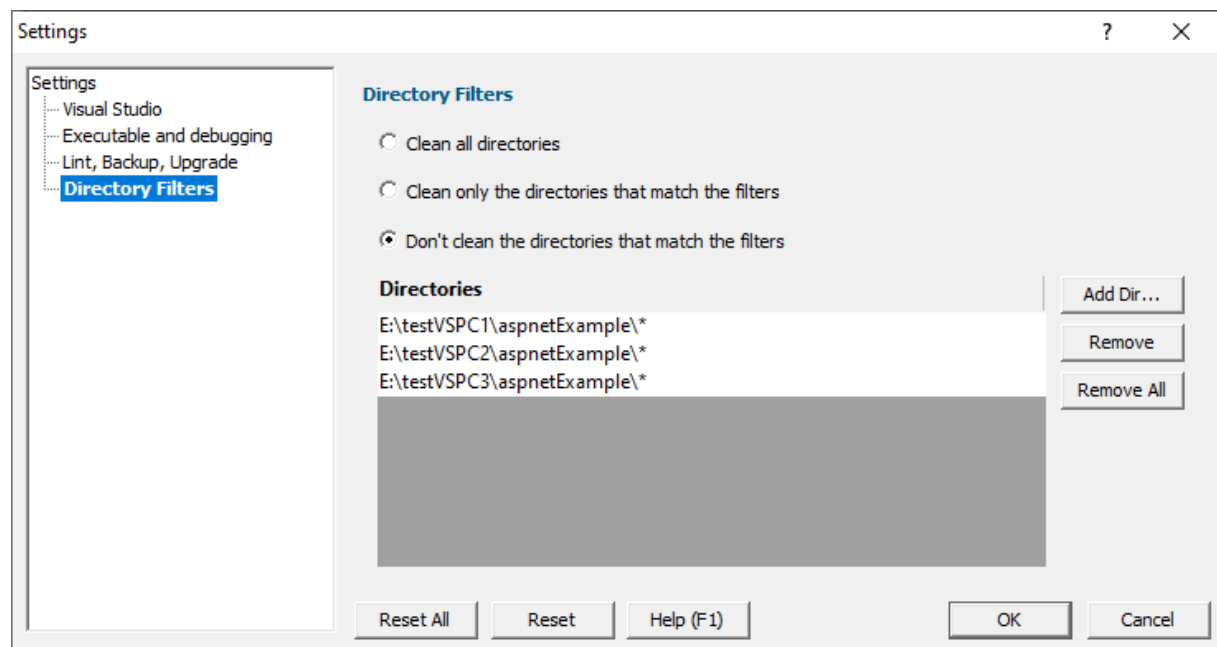
You can reset these settings, select all file types or deselect all file types using the button at the bottom of the dialog.

**Reset All** - Resets **all** global settings, not just those on the current page.

**Reset** - Resets the settings on this page

## 5.4 Directory Filters

The settings dialog allows you to edit the types of file that will be cleaned by Visual Studio Project Cleaner.



### Directory Filters

Directory filters are specified by specifying the directories to filter and choosing the filter action to apply.

### Directories

Directories are specified by adding directories to the list of directories, editing them if necessary, and by removing unwanted directories when required.

- **Add Dir...** ➡ choose a directory using the Microsoft directory browser
- **Remove** ➡ remove the selected directory from the list
- **Remove All** ➡ remove all directories from the list

An existing directory entry can be edited by double clicking it to start editing.

An existing directory entry can be removed by selecting it then pressing the delete key.

Filter directory specifications can include a \* wildcard (as many times as you need a wildcard). To add the wildcard you'll need to edit the entry by double clicking it.

## Filter Action

The filter action allows you to change filter behaviour without needing to edit the list of filter directories.

- **Clean all directories** ➡ clean all directories, ignore the filter directories
- **Clean only the directories that match the filters** ➡ clean directories that match the filter directories
- **Don't clean the directories that match the filters** ➡ clean directories that don't match the filter directories

**Reset All** - Resets **all** global settings, not just those on the current page.

**Reset** - Resets the settings on this page

**Part**

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**VI**

## 6 Command Line

The command line support in Visual Studio Project Cleaner is very simple.

### **/configure**

The **/configure** command has no arguments.

When this command is on the command line the Settings dialog is displayed allowing the clean settings to be configured, but not allowing a clean operation to be performed.

This option exists to allow Visual Studio Project Cleaner to be configured from within Visual Studio Project Builder.

### **/dir**

The **/dir** command takes one argument, a directory name.

```
/dir e:\build\product\release
```

The **/dir** command can be specified multiple times, allowing you to clean multiple directories from the command line.

```
/dir e:\build\product\release /dir e:\build\product\debug
```

This option exists to allow Visual Studio Project Cleaner to perform a clean from within Visual Studio Project Builder.

### **/loadSettings**

The **/loadSettings** command takes one argument, a settings file name.

```
/loadSettings e:\preBuildSettings.vspcs
```

### **/resetAll**

The **/resetAll** command has no arguments.

This option resets all settings back to the default settings.

## Example command line

```
visualStudioProjectCleaner.exe /loadSettings e:\preBuildSettings.vspcs /dir e:\build\product\re
```

The above command line will load settings from e:\preBuildSettings.vspcs, then clean the directory e:\build\product\release



