

SourceOffSite

SourceOffSite

Abstract

SourceOffSite™ is a remote access product for users of Microsoft Visual SourceSafe™. SourceOffSite makes it easy to use Visual SourceSafe over the Internet. With SourceOffSite, most Visual SourceSafe operations can be performed from any remote location using standard TCP/IP access. For the most up-to-date information concerning SourceOffSite, please visit our online forum [<http://support.sourcegear.com/>].

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Chapter 1. Overview

1. General Product Description

SourceOffSite consists of a Server and a Client. They can communicate over any standard TCP/IP connection, including a PPP connection over a modem, an ISDN line, or an Ethernet connection on the same LAN as the Server. SourceOffSite does not require Windows Remote Access Service (RAS).

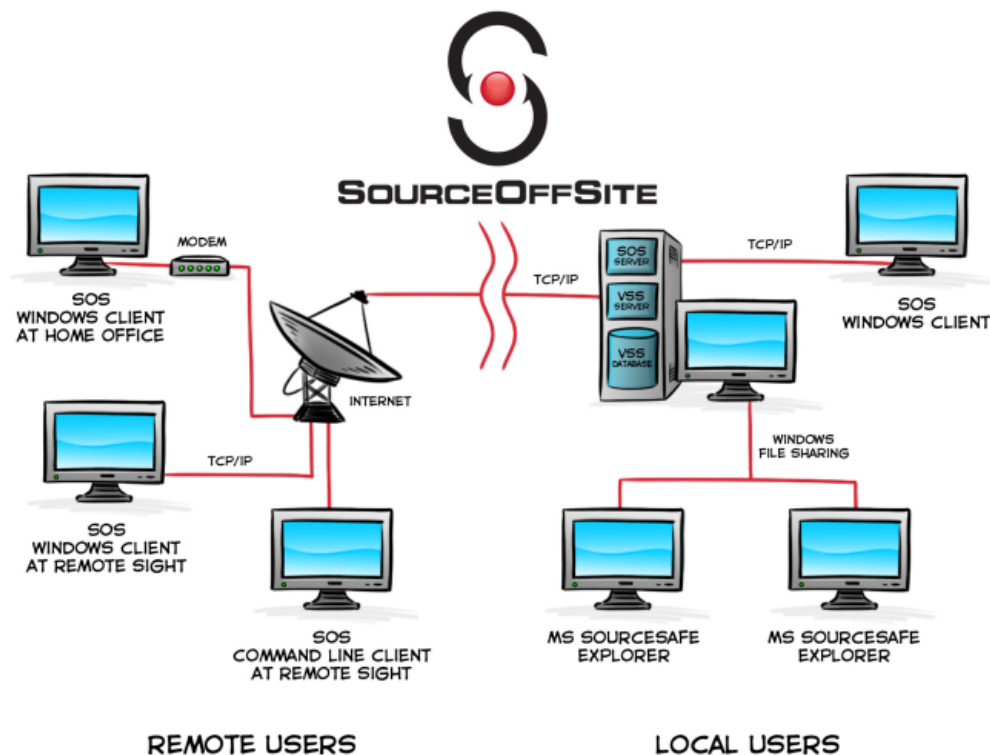
SourceOffSite is designed with a client-server architecture to facilitate remote version control. It is up to 12 times faster [<http://www.sourcegear.com/sos/test1.html>] than Visual SourceSafe over RAS.

Server

The Server is installed on the machine with access to the file system on which the Visual SourceSafe database resides. Once installed there, the Server provides access to Visual SourceSafe operations to Clients that connect using any standard TCP/IP connection.

The Server requires .NET 3.5, and can therefore be installed on systems running Windows ServerTM 2003, Windows ServerTM 2008, Windows XP, Windows Vista, or Windows 7. It runs in the background with no user interface of any kind. Configuration of the Server is accomplished through the Server Manager utility.

The SourceOffSite Server does not necessarily need to be installed on the machine where the VSS database resides. It can be installed on a different machine from the one hosting the VSS database, as long as they are both on the same LAN. However, the SourceOffSite Server does use the Visual SourceSafe Automation component (APIs). Thus, the Visual SourceSafe Client component must be installed on the server machine hosting the SourceOffSite Server. Installing the Visual SourceSafe Client also installs the Visual SourceSafe APIs.



Client

The SourceOffSite Client is a Microsoft 2007 Office Fluent UI designed application that provides all major Visual SourceSafe Explorer functionality. Visual SourceSafe users should find the SourceOffSite Client to be familiar and easy to use. Users can perform almost all Visual SourceSafe operations in a similar fashion. These operations include:

Create Project

Add Files

Delete Files or Projects

Get Latest Version

Check Out

Check In

Undo Check Out

Share

Branch

View

Edit

Merge

Show Differences

Show Properties

Show History

Status Search

Cloak

Web deploy

Label Version

Pin Files

Rename

Move

Set Working Folder

Refresh File List

Refresh Project Tree

Cancel Operation.

The SourceOffSite Client can connect to any SourceOffSite Server by simply specifying the location of that server (a host name or IP address, and a port number). SourceOffSite Clients are available for Windows XP/2003/Vista/2008/7 platforms. Linux and Solaris users may still use SourceOffSite 4.2 to connect to SourceOffSite 5.0 servers.

2. Cryptography

SourceOffSite supports data encryption to protect passwords and data files from being compromised as they are transferred across the Internet. SourceOffSite uses the Blowfish encryption algorithm as a symmetric block cipher.

SourceOffSite 5.0 contains 128-bit cryptography and has been approved for limited export by the US Commerce Department in accordance with the Export Administration Act.

Export to following countries is prohibited by United States law: Cuba, Iran, North Korea, Sudan, and Syria.

SourceOffSite is also available with no cryptography for users located within a restricted country.

The SourceOffSite Server manages encryption by referencing a key file containing all user keys. User keys are configured within the Server Manager. Once configured, the user key file should be securely transmitted to the client. Once the key file is on the client machine, launch SourceOffSite and select the Import Encryption Key [54] button from the Tools Panel of the Ribbon. Open the key file via the browse dialog.

3. Demo Version

A fully functional demo [<http://www.sourcegear.com/sos/downloads.asp>] of SourceOffSite can be downloaded from our web site. The demo allows 10 users to use SourceOffSite for 30 days. The trial period commences when the SourceOffSite Server is installed.

Once the demo nears expiration, it can be configured for permanent use by replacing the demo serial number with a permanent one.

Chapter 2. Client

The SourceOffSite Client software can be installed on any machine the user would like to access the Visual SourceSafe database.

The Client software is available for Windows XP/2003/Vista/2008/7. Linux and Solaris (SPARC) client software is also available for Solaris (x86) platform via the SourceOffSite 4.2 release.

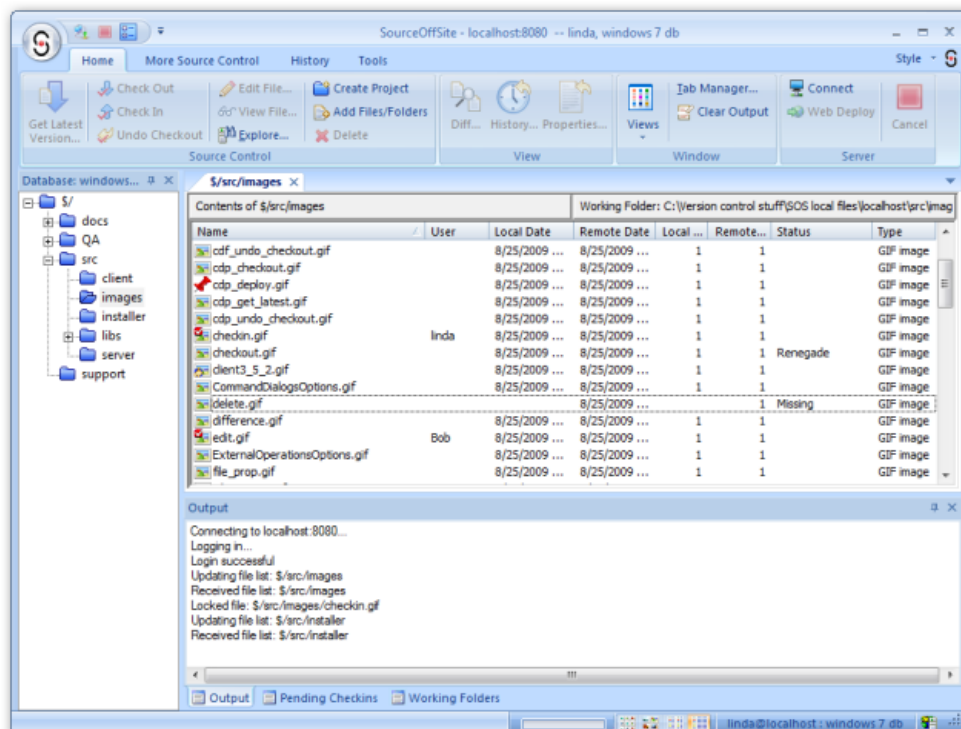
Please note: The SourceOffSite GUI interface of the Unix Client is that of SourceOffSite 4.2. UNIX users should see the help files of this previous version for a more accurate description of features.

The first time the SourceOffSite Client is run, it will retrieve a complete copy of the hierarchy of the Visual SourceSafe database. This process may take a few minutes over a slow connection. Thereafter, the hierarchy of the database is cached locally and can be updated as needed when projects change.

1. Client Window

The SourceOffSite client window provides the same functionality as Visual SourceSafe Explorer, and is presented using the Microsoft 2007 Office Fluent User Interface. The tabbed ribbon across the top (Tool Ribbon) provides access to the various program operations, all of which are organized into groups of similar function. The pane on the left side (Project List) includes a tree view of the Visual SourceSafe database. The pane on the right (File List) is a listing of the files in the currently selected project. The lower pane (Status Window) is a tabbed window offering the choice between a listing of recently performed operations, working folder settings, or check out list.

The Project list, File list, and tabbed output pane can all be undocked or repositioned. Click and drag any title bar of any pane to readjust its docked status or position.



1.1. The Project List

The Project List displays as a hierarchical tree on the left side of the Client window. The top of the tree is called the root project and is displayed as \$/.

The project tree is created when the SourceOffSite client first connects to the server. Any changes to the project tree by other users will not be noticed until a Refresh Project Tree operation is performed.

SourceOffSite Client users must have a minimum of read permission to this root project in order for SourceOffSite to retrieve the project tree. These permissions are set in the Visual SourceSafe Admin tool.







1.2. The File List

The File List on the right side of the Client window may contain as many as eight columns.

1. File – The name of the file. A visual cue is also provided to show the check out and share status of the file.
2. User – The name of the user who currently has the file locked.
3. Local Date – The date of the local (Client) copy of the file.
4. Remote Date – The date of the latest revision of the remote (Server) copy of the file in the Visual SourceSafe database.
5. Local Version – The version of the local (Client) copy of the file. This is often referred to as the baseline.
6. Remote Version – The latest version number of the remote (Server) copy of the file in the Visual SourceSafe database.
7. Status – The status of the local copy of the file relative to the copy in the Visual SourceSafe database.
8. Type – The type of file is listed based on file extension.

The File List view allows the list to be sorted by any column by clicking on the column heading. Some file operations may be performed by selecting the file and right-clicking on it. The column may be reverse-sorted by clicking twice on the column heading.

Icons next to the file name indicate the type of file. The following icon overlays also give a visual indication of whether the file is checked out or shared. These include:

1.  File is checked out.
2.  File is checked out by multiple users.
3.  File is shared.
4.  File is both shared and checked out.
5.  File is both shared and checked out by multiple users.
6.  File is pinned.

SourceOffSite 5.0 now also shows subprojects within the file list view. Note that operations performed when such a subproject is selected work on that selected subproject, not the parent project that is currently selected in the project list.


1.3. File Status

The Status column indicates the nature of the local (Client) copy of the file with respect to the remote (Server) copy. It can have the following possible values:

1. **Missing** – There is no local copy of the file. A file is determined to be Missing when the file is in the Visual SourceSafe database but not in the specified working directory on the Client machine.
2. **Old** – The remote version of the file is newer than the local copy. A file is determined to be Old by comparing the version number of the file on the Client to the version number of the corresponding file in the Visual SourceSafe database. If the version number of the file on the Client is less than the version number of the file in the Visual SourceSafe database, the Status column displays the value of Old.
3. **Edited** – The local copy has been edited and is checked out. A file is determined to be Edited by comparing file modification times. When a Save command is executed on a local file, its modification time is updated to the current time. SourceOffSite recognizes that the time has changed so it checks whether the file is checked out by you. If the file is modified and checked out by you, then the Status column displays the value of Edited. The Local Date column will show the recent modification time until the file is checked in. After check in, the local time may be the modification time or check in time depending on the settings of your SourceOffSite local file options.
4. **Renegade** – The local copy has been edited but it is not checked out by you. A file is determined to be Renegade by comparing file modification times. When a Save command is executed on a local file, its modification time is updated to the current time. SourceOffSite recognizes that the time has changed so it checks whether the file is checked out by you. If the file is modified and not checked out by you, then the Status column displays the value of Renegade. The Local Date column is also updated with the recent modification time.
5. **Unknown** – The local copy exists but it has never been retrieved using SourceOffSite. A file is determined to be Unknown when SourceOffSite cannot determine which revision of the file is present locally. Files that exist locally because they were downloaded using Visual SourceSafe Explorer will display an Unknown status. Use the Checksums [37] option or the Show Differences operation to see if the local and remote copies are identical. If the local file is not the most recent revision, use the Get Latest Version operation to retrieve the file from the database. Thereafter, the Status column will display more useful information.
6. **More Recent** – The local copy is a later version than the copy in the database. When the version number of a local file is greater than the latest version of the file in the Visual SourceSafe database, the Status column displays a value of More Recent. This could happen if a file is rolled back or pinned to a previous version in the database.
7. **Needs Merge** – The remote version of the file is newer than the local copy, and the local copy has been edited. Needs Merge is a combination of Old (there is a newer version of the file on the server) and either Edited (the file has been checked out and modified) or Renegade (the file has been modified locally but not checked out).
8. **(empty)** – If the status column is blank, then the local copy and the remote copy are identical. The local and remote copies of a file are determined to be the same by version number only. If the files share the same version number, then the Status column will display (empty). Once the file is modified in any way, the Status column will display one of the above values.

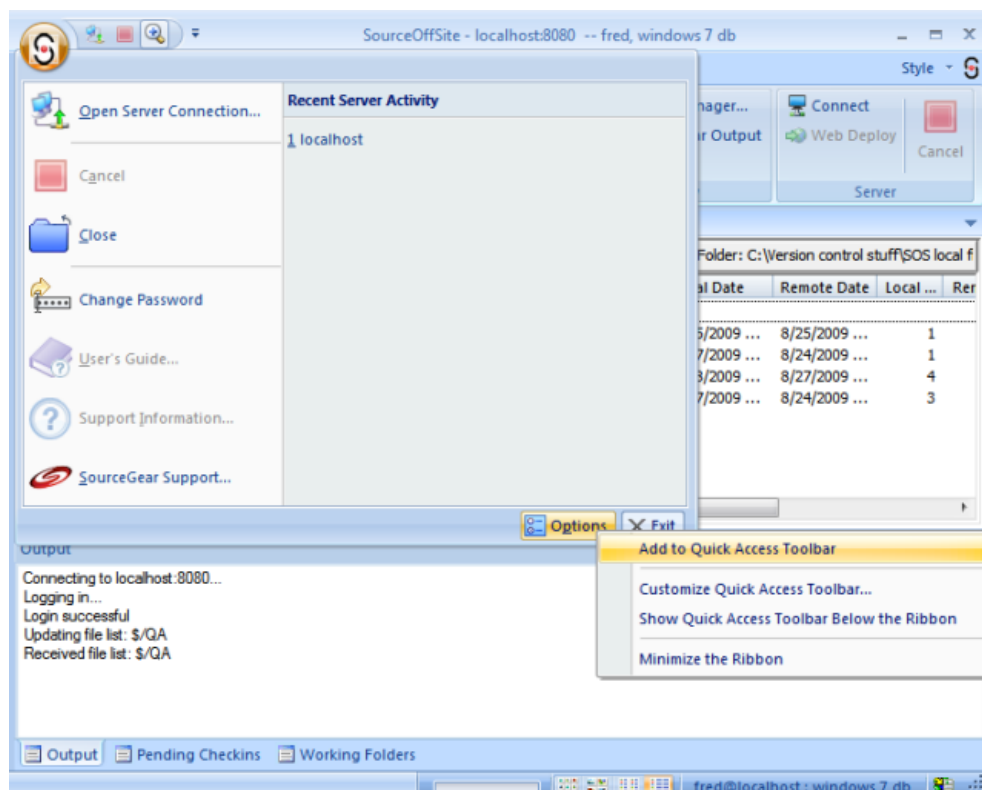
1.4. The Status Window


The Status Window is located in the lower portion of the Client window. The status window contains three dockable tabs that provide additional information.

1. Output - The results of recently performed file operations are dynamically logged to this tab. Every operation that is performed in the SourceOffSite Client during a session is documented in the Output tab. It shows all operations that are being performed, such as files that are downloaded or file lists that have been refreshed. Additionally, the output pane will show a variety of warning messages. The number of lines to display in the Output tab is configurable from the View pane of the Options dialog. The default is 300 lines. To clear the Output tab, select Clear Output  from the tools tab of the ribbon.
2. Pending Checkins – The pending checkins tab provides a hierarchal view of the tree showing files checked out from the local computer. It can be refreshed to show all files checked out by the currently logged-in user. A space for comments is also available from this tab as well as the option to check in, thus allowing multiple files from different projects to be committed simultaneously.
3. Working Folders – The working folders tab shows all working folder associations. From this tab, you can right click an item to edit or delete that particular working folder association.

1.5. Quick Access Toolbar

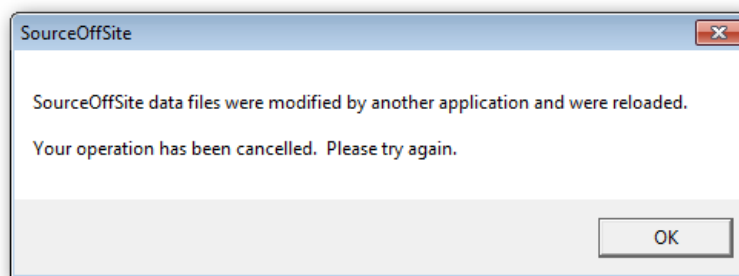
SourceOffSite 5.0 utilizes the new Microsoft Office 2007 Fluent UI. One aspect of this new user interface allows for SourceOffSite commands to be easily added to the quick access toolbar. The quick access toolbar is the strip that runs across the top of the application, and by default contains two commands, Open Connection and Cancel operation. These commands can be removed, and other more frequently used commands can be added. For example, if you wish to place the Options dialog as a quick access toolbar item, click the SourceOffSite icon in the upper left corner to view the application Menu. Near the lower right corner of the application menu, you will see the options icon. Right-click the icon, and select “Add to Quick Access Toolbar.”



You can do likewise with any other SourceOffSite function by right-clicking the appropriate icon in the ribbon. Additionally, you can click the  icon in the Quick access toolbar itself, and choose “More commands.”

1.6. Running Simultaneous Clients

SourceGear does not recommend running two SourceOffSite clients of the same version simultaneously connecting to the same SourceOffSite server. SourceOffSite stores information about the VSS database structure as well as file status information in local cache files. If two applications are each attempting to update the same cache, one client instance can become out of date relative to the other. Though not recommended, SourceOffSite does allow running two simultaneous clients. If changes have occurred in one instance of SourceOffSite and further operations are performed in another SourceOffSite application, the following dialog will be displayed.



This dialog indicates that second instance of the application has reloaded the relevant portion of the cache files, and is now ready to accept further operations.

Note that you may run both SourceOffSite 4.2 and SourceOffSite 5.0 simultaneously with no such issues, as each uses a separate cache file. In such a case, each version of SourceOffSite will have separate working folders and file statuses, so it is strongly recommended this be done only when working with non-overlapping sections of source code.

2. Command Line Client

In addition to the primary GUI Client for SourceOffSite, we also provide a Command Line Client more suitable for use in automated scripts. The Command Line Client can be downloaded separately from SourceGear. Those customers who are using version 4.2 for the SourceOffSite command client should continue to use that version until a newer version becomes available. Any SourceOffSite 4.2 client, including the command line client, can connect to a SourceOffSite 5 server.

The Command Line Client supports a subset of operations that are available in the SourceOffSite GUI Client including:

1. Get Latest Version
2. Show File History
3. Add Files and Projects
4. Delete Files and Projects
5. Rename Files and Projects
6. Check In and Check Out Files and Projects

- 7. Undo Check Out
- 8. Branch Files and Projects
- 9. Share Files and Projects
- 10. Label Version
- 11. 128-bit Encryption
- 12. Compression

3. IDE Client

In addition to the GUI Client and the Command Line Client for SourceOffSite, we provide an integrated client that is suitable for use in development environments such as Visual Studio and Visual Studio .NET. Installation instructions for the IDE Client can be found in the IDE Integration [53] section of the installation page.

The IDE Client is supported in the following environments: Visual Studio® 2008, Visual Studio® 2005, Visual Studio .NET 2003, Visual Studio .NET 2002, Visual C++ 6.0, and VB 6.0.

Chapter 3. Operations

1. Basic Operations

1.1. Create Project



All operations performed in SourceOffSite are performed from within a project. All projects created within SourceOffSite are subprojects of a higher level project. The highest level project is the root project (\$/). Creating projects in SourceOffSite is similar to creating projects in Visual SourceSafe.

To create a new project in SourceOffSite, first highlight the folder where the new project belongs. Then, choose Create Project from the Source Control group of the Home tab or the right-click menu.

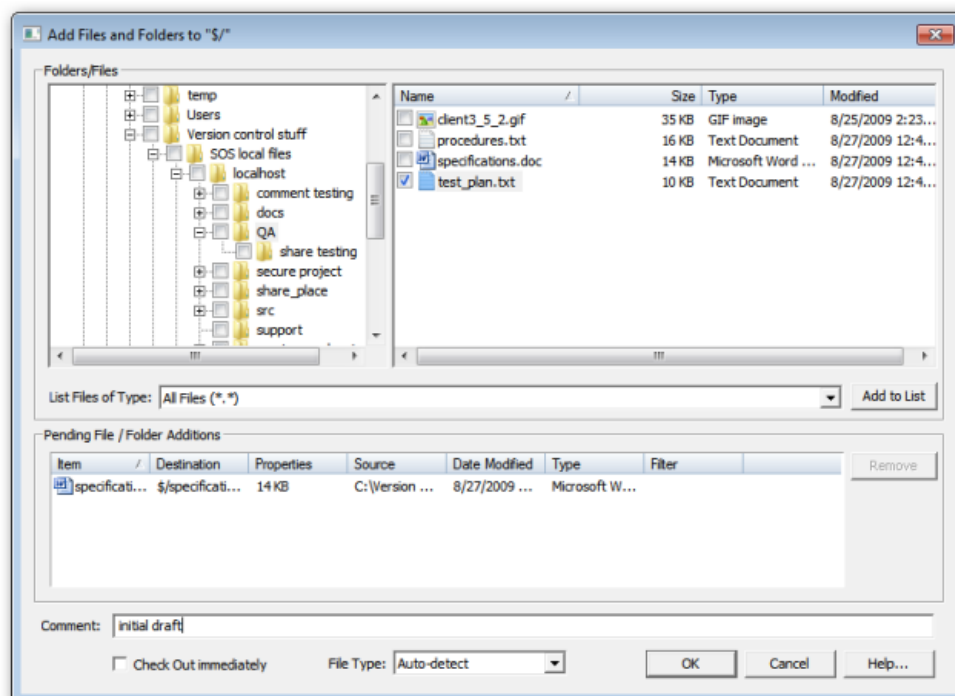
Enter the name of the project and add any comments in the Create Project dialog box and then click OK.

1.2. Add Files



Files may be added to any existing project. Files may be added one at a time, several at a time or recursively from the project level.

To add files to a project in SourceOffSite, first highlight the project in the Project List where you want the new files to reside. Then, click Add from either the Source Control group of the Home tab or the right-click menu. The Add Files dialog box will be displayed. If a project is selected from within the file list view, SourceOffSite will add the files and folders into that project, not the project selected in the project list pane.



Adding Individual Files

One or more files or folders can be added from within the Add Files dialog box.

To add files, open the folder where the files are located from the Folders list and highlight the check box located adjacent to the desired files.

To filter files based on a particular file type, first set up the filter in the File Types tab of the Options dialog by selecting the filter from the List of file types. Only the files of the selected file type will appear in the Files field.

Enter any desired comments in the space provided at the bottom of the dialog, or select check out immediate if you wish the file to be both added and be checked out to you. Any comments added in the Add Files dialog box will be globally applied to all of the files being added at that time. The file type may also manually be selected. This can later be changed from the Properties [22] dialog if necessary.

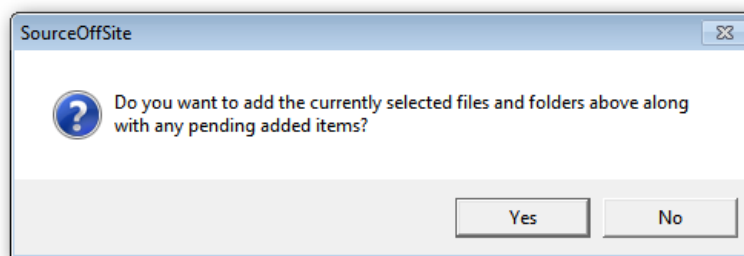
Adding All Files and Subprojects in a Folder

To add all files in a folder, select a folder from within the Folders list and select the check box next to every file listed. To add an entire folder, including all files and subfolders, select the check box adjacent to the folder. All subfolders will automatically be checked as well. If you wish to only add one folder without adding any of its subfolders, click the folder name, then expand the folder, and deselect all subfolders.

As with individual files, enter any desired comments in the space provided at the bottom of the dialog, or select check out immediate if you wish the file to be both added and be checked out to you. The file type may also manually be selected. This can later be changed from the Properties [22] dialog if necessary.


Pending List

When you select a file or folder to be added, you may also choose “Add to List” to keep a visible record of the files to be added. If you select additional files to add via the file and folder checkboxes, and press OK, the following dialog is presented.



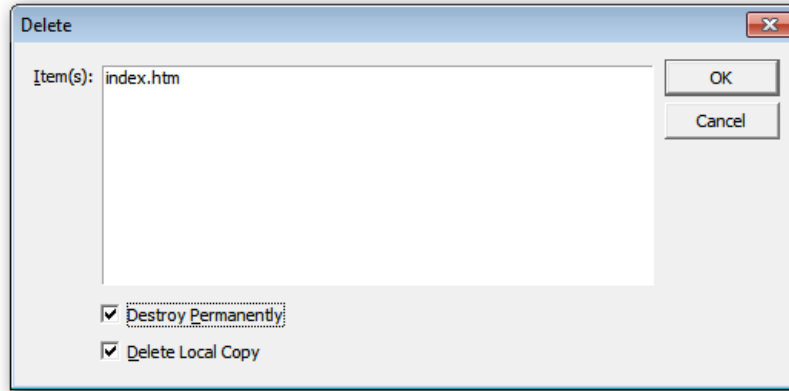
Choose Yes to add selected files and folders items as well as those listed in the pending list. Choose No to return to the Add files and folders dialog box to continue to select or remove files and folders to be added.

1.3. Delete Files or Projects

 There are two levels of deletion in SourceOffSite: Delete and Destroy. If a file is shared across two projects, the Delete and Destroy Permanently commands will only remove the file from within the currently selected project.

The Delete command is recoverable as the files will still exist within Visual SourceSafe, but destroy permanently is irreversible.

To delete files or projects in SourceOffSite, select the files or projects from the Project List or File List to be removed. Then, choose Delete from the Source Control group of the Home tab or the right-click menu, and selecting delete. In the dialog present, press OK to delete the listed files.



When the Destroy Permanently option is selected from the Delete dialog, the files are unrecoverable. When this option is selected, clicking OK will remove and delete files from the file list and the Visual SourceSafe database. This will free up disk space on the machine where the VSS database resides.

Choosing the Delete Local Copy option will also delete your local copy of the file. If you choose to delete a folder, and select the Delete Local Copy Option, the folder will only be deleted if all files within it are being deleted as well. Otherwise, all files being deleted will be removed, but any other remaining files and the folder containing them will be left intact.

1.4. Get Latest Version



The Get Latest Version operation retrieves the latest version of files. By default, files are retrieved in read-only mode. A global option may be set in the Files pane of the Options dialog enabling the latest version of files to be retrieved in read-write mode. Files retrieved during the Get Latest Version operation are copied locally into the current working folder.

Get Latest Version of Files

To get the latest version of a file, select the file(s) to be retrieved from the File List. Then, choose Get Latest Version from either the Source Control group of the Home tab or the right-click menu. The Get Latest Version operation will copy the files into the current working folder.

One uncommon scenario can occur if version 1 of a file is destroyed and then replaced with a new file with the same name. Since SourceOffSite uses version numbers to determine whether to download a file, the new file would not be retrieved when a Get Latest Version operation is performed. A 'Force file transfer' option has now been added to the file-level Get Latest Version Command dialog. Enabling this option will force the client to retrieve the file, even when the file version numbers are identical..

Get Latest Version of Projects

The Get Latest Version operation may also be performed at the project level. This enables all the files in a selected project to be retrieved.

To get the latest version of all files in a project, highlight the project in the Project List. Then, click Get Latest Version or choose Get Latest Version from either the Source Control group of the Home tab or the right-click menu.

A Get Latest Version dialog box will be presented with the option to perform the operation recursively. If the Recursive check box is selected, then all files in all subfolders will be retrieved during the Get operation. This can be a time consuming operation depending on the number of files and subprojects in the selected project. You can disable this dialog from the Command Dialogs pane of the Options dialog.

A lengthy recursive operation may be stopped by using the Cancel Operation command.

Choosing how to handle locally modified files during Get Latest Version is discussed in the Modified Local Files section.

1.5. Check Out



The Check Out command enables users to edit specific files locally. This command locks files or projects within the database. Once files are checked out, the user who has the files locked is displayed in the User column of the File List.

Files retrieved during the Check Out operation are copied locally into the current working folder. A global option may be set to Never Replace Local Copy During Check Out from the Files pane of the Options dialog.

Check Out Individual Files

To perform a Check Out on one or more files, highlight the files in the File List. Then, select Check out from the Source Control group of the Home tab or the right-click menu.

Check Out All Files in a Project

To perform a Check Out on all files in a project, highlight the project. Then, select Check Out from the Source Control group of the Home tab or the right-click menu.

A Check Out dialog box will be displayed containing different Check Out options which include Recursive and Don't Get Local Copy. This dialog can be disabled from the Command Dialogs pane of the Options dialog. If the Recursive option is selected, all of the files in subprojects will also be checked out.

Files retrieved during the Check Out operation are copied locally into the current working directory unless the Don't Get Local File option is selected. For instructions on how to choose appropriate actions with respect to files that are modified locally, see the Modified Local Files section.

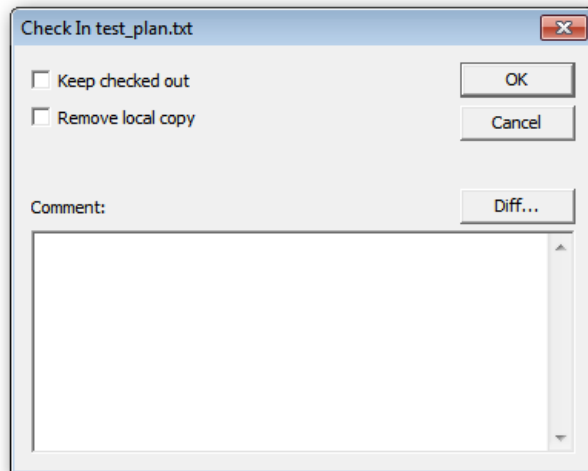
Multiple Check Out

SourceOffSite supports multiple user file check out if it has been enabled for the Visual SourceSafe database. For more information on Multiple Users, please see Check In with Multiple Check Outs.

1.6. Check In



After a file is checked out and edited, the modifications can be added to the database by performing a Check In operation.



Check In Files or Folders

To check in one or more files, first highlight the edited files from the File List. Then, select Check In from the Source Control group of the Home tab or the right-click menu.

Select Keep checked out if you would like to check in the current version of the file, yet leave it checked out locally for more editing. Additionally, select Remove local copy to delete the local version after the file has been committed to the VSS database. For folder check ins, a recursive option is available as well to check in all files in the currently selected folder as well as all subfolders.

Check In comments may be added in the Comment field of the Check In dialog. Any comments added at this time will be globally applied to all files being checked in.

Check In with Multiple Check Outs

Here is a complete description of what SourceOffSite does in a Multiple Check Out situation:

1. If the checked out file gets into a Needs Merge state, and the user resolves the merge on the client-side before attempting the Check In, the file will get checked into VSS and become the latest version.
2. If the merge is not resolved on the client-side, upon Check In, the SourceOffSite Server will attempt to do an automatic merge.
3. If there are no conflicting changes, then the Check In operation proceeds with no user intervention. The local version is replaced with the merged version from the Visual SourceSafe database.
4. If there are conflicting changes, the SourceOffSite Server will notify the Client of conflicts and the user will have to manually merge the changes using their configured merge utility.
5. After manually resolving the conflicts, the user can then resubmit the file for check in.

WARNING: Even if the conflicts are not resolved, the next Check In operation performed on the file will overwrite the latest version in the VSS database.

1.7. Undo Check Out



After a file or project is checked out, it is possible to Undo Check Out. This operation is convenient if the files are not edited or if the user decides not to check in an edited file or project.

Undo Check Out of Individual Files

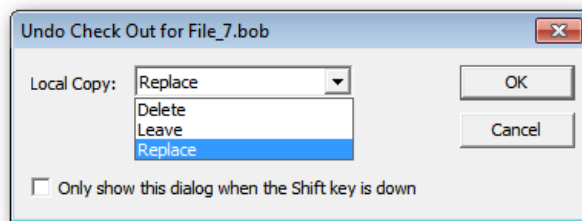
To undo a Check Out, select the file(s) that are checked out. Then, select Undo Check Out from either the Source control group of the Home tab or the right-click menu. The VSS copies of the file(s) will revert to the state before the Check Out operation was performed.

Undo Check Out of All Files in a Project

To undo the Check Out of all of the files in a project, select the project. Then, select the Undo Check Out command from either the Source Control group of the Home tab or the right-click menu.

The Recursive option may be selected on the Undo Check Out dialog box. If Recursive is selected, all of VSS copies of the files in the subprojects will revert to the state before the Check Out operation was performed. Click OK to undo the check out. This dialog box can be disabled from the Command Dialogs pane of the Options dialog.

Local copies



When performing an undo check out, there are three options for how to handle the local copies of the file(s).

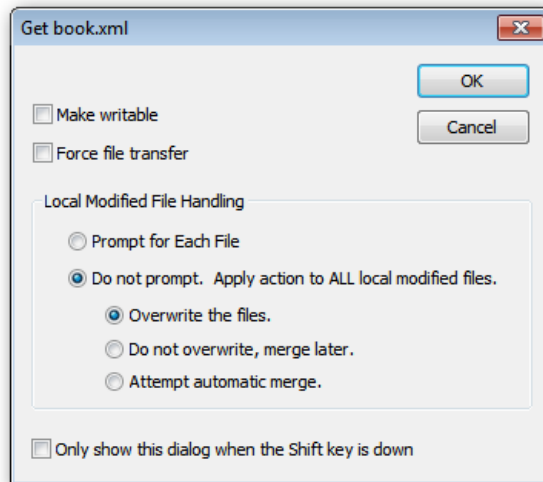
1. Delete will remove the file(s) from the local computer
2. Leave will not alter the local copy in any way. Modification done during check out will remain locally. This will cause the file to be of status "renegade," allowing local work to continue without yet checking in any changes.
3. Replace will cause the local copy to be overwritten with the latest version of the file from the VSS database.

Note that when Replace is chosen, the Modified Files dialog will be presented should any local files need to be changed.

1.8. Modified Local Files

When a Get Latest, Check out, or Undo Check Out operation is performed, there may be times when it is necessary to choose how to handle local files that have been modified. For example, if there are multiple "renegade" files, you may wish to overwrite them all with the latest copy from the tree, you may wish to check them out without making any local changes, or you may wish to choose separately for each file.

When retrieving the latest version of a file that already exists on the client machine and may be modified, SourceOffSite offers a number of choices regarding how to deal with potential conflicts.

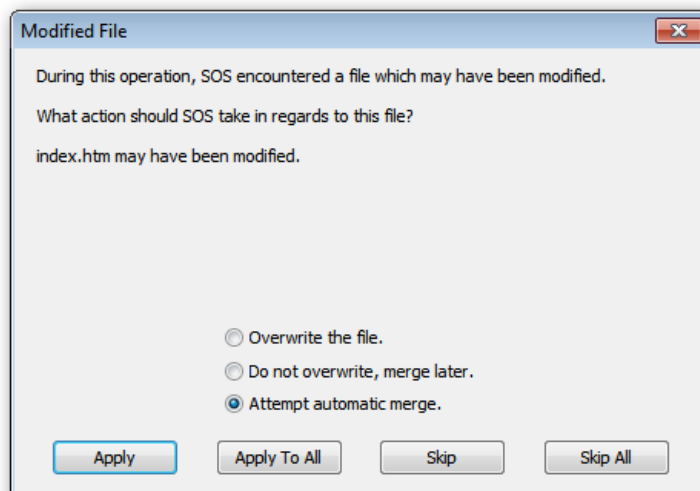


SourceOffSite can either prompt for each file it encounters when a potential merge conflict exists, or it can overwrite, merge later, or attempt an automatic merge for every file in the current operation.

1. Overwrite the local file with the version on the server (and lose all local changes)
2. Do not overwrite, merge later leaves the local file alone (not retrieving the latest version from the server)
3. Attempt an automatic merge using SourceOffSite's ability to do a three-way file merge

This dialog is seeded based on the options that are configured in the File pane of the Options dialog. Please note that if "Always Skip files that are checked out and modified" is selected, files that are checked out with a status of "edited" cannot be overwritten. The option to skip modified checked out files takes precedence in all cases. If you want to overwrite a file of status "edited", first disable the checkbox in the files pane of the Options dialog.

If you choose to prompt for each file, SourceOffSite will present a second dialog to give you the choice of how to handle each file it encounters that requires a decision. Note that in some cases when command dialogs are disabled, this modified file dialog may be the first one presented.



1. Apply will take the course of action selected, and prompt again when the next modified file is encountered.

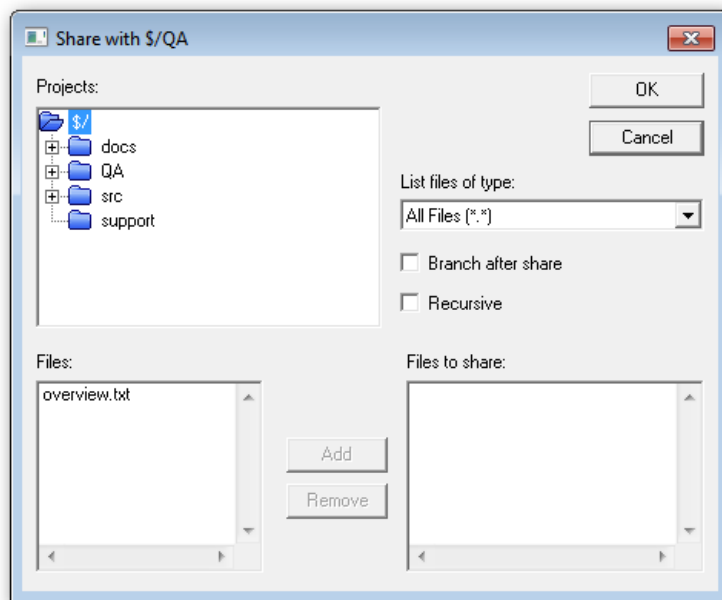
2. Apply To All will take the course of action selected, and perform that operation on any remaining files encountered that have been modified locally.
3. Skip will not perform any operation on the file in question, but will prompt again when the next locally modified file is encountered.
4. Skip All will end any further attempts to reconcile local changes. The operation will continue on for unmodified files, but not be executed for any locally modified files.

1.9. Share




SourceOffSite enables the current version of a file or a complete project to be shared with another project in the same way as Visual SourceSafe.

To share a single or multiple files in SourceOffSite, select the project into which the file(s) will be shared. Then choose Share Into from either the Advanced Source Control group of the More Source Control tab or the right-click menu. A Share With dialog box will be presented. Either double-click on the file from the File list or select the desired file and click Add. The files to be shared will appear in the Files to Share list in the pane to the lower right.



Enable Recursive to share all subfolders. Enable Branch After Share to create shared copies which immediately will have their shares broken. Click OK when finished.

The  symbol next to a file in the File List indicates that a file is shared. In order to increase performance, share icons can be disabled in SourceOffSite via Tools > Options > View > Display share icon for shared files.

1.10. Branch



A shared file may be branched in SourceOffSite. After a shared file is branched, the share link is broken and the changes made to that file are not reflected in other projects.

To branch a single or multiple shared files, select the file(s) from the File List. Then choose the Branch command from either the Advanced Source Control group of the Home tab or the right-click menu. Add any comments to the Branch Comment dialog box and then click OK.

1.11. View



SourceOffSite allows a user to view the latest version of a file without checking out or replacing the local copy of the file. To view a file, select a file from the File List. Then select View File from either the Source Control group of the Home tab or the right-click menu.

The file editor in both Windows and Unix Clients may be configured in the Default External Programs pane of the Option dialog. In Windows, Notepad is the default. If this box is left blank, SourceOffSite will open files with their associated Windows application.

Binary files are not readable in Notepad. There is no default viewing application configured in Unix operating systems. Choose a viewing and editing application that will open the files most common to the database.

1.12. Edit



A file may be checked out and edited in a single operation using the Edit command. To Edit a file, select a file from the File List. Then, choose Edit File from either the Source Control group of the Home tab or the right click menu. Files locked by other users may not be edited unless multiple check out is enabled in the Visual SourceSafe database. The Edit command will check out the file, if needed, and then open the file in an editor application.

The file editor in both Windows and Unix Clients may be configured in Default External Programs pane of the Option dialog. In Windows, Notepad is the default. If this box is left blank, SourceOffSite will open the files with their associated Windows application.

Binary files are not readable in Notepad and should not edited in Notepad. There is no default editing application configured in Unix operating systems. Choose a viewing and editing application that will open the files most common to the database.

1.13. Show Differences



The Show Differences operation in SourceOffSite can be performed at the file or project level. SourceOffSite ships with DiffMerge, a tool that allows you to compare or merge files and compare folders. For more information about the many features of DiffMerge, see the DiffMerge manual by selecting help from within the DiffMerge tool. Alternatively, SourceOffSite can be configured with any diff utility that generates a list of differences between the local and remote copies of a file or of two specific revisions of the same file. A project diff utility other than DiffMerge may also be configured for viewing the differences between the local and remote project structure. SourceOffSite ships preconfigured to use DiffMerge, but the diff utilities may be reconfigured in the External Programs tab of the Options dialog.

File Level Differences

To see the differences between the local copy of a file and the latest version of the file in the Visual SourceSafe database, select the specific file in the File List. Then, choose the Diff command from either the View group of the Home tab or the right-click menu.

To see the differences between the local copy of a file and any historical version of the file, select the file from the File List. Then choose the Show History command from the View group of the Home tab or the right-click menu. From within the History dialog box, select the historical version of the file and then click Diff.

To see the differences of two historical versions of a file from the History dialog, select two versions of the file and click Diff.

Project Level Differences

To see the differences between the project structure that exists locally and the project structure that exists in the Visual SourceSafe database, select a project from the Project List. Then, select the Diff command from the View group of the Home tab or the right-click menu.

The Recursive option may be selected in the Project Diff dialog box. If the Recursive option is selected, the differences between the subprojects can also be viewed. Click OK to view the project differences.

1.14. Merge



When an auto merge fails, or when the user prefers to do a manual merge, the user can perform a visual merge of the file using the new SourceGear DiffMerge application or another diff/merge application configured by the user in the Options dialog.

Show Merge

Show Merge allows the user to do a 3-way merge of the file using the configured DiffMerge utility. Changes can be saved to the copy of the file in the working folder.

Resolve Status

Resolve Status allows the user to specify when the merge has been completed and all server modifications have been merged into the local file. When selected, Resolve Merge Status will change the file's status from Needs Merge to either Edited or Renegade.

1.15. Working Folder Settings

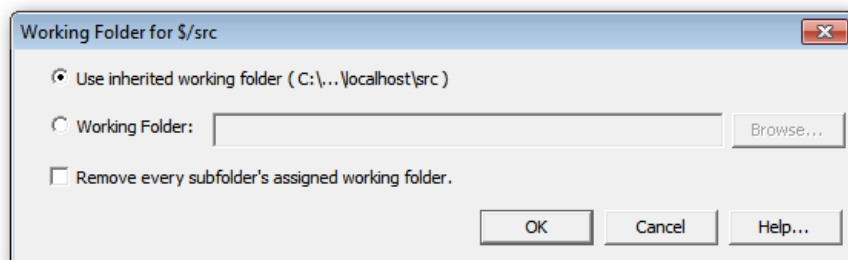


SourceOffSite uses working folders in the same way as Visual SourceSafe. The Working Folder Settings command communicates to SourceOffSite where local copies of the files in that project are located, as well as where they should be placed when retrieved from the database.

A working folder can be set at any level of the project tree hierarchy, including the root of the tree. Working folders are automatically inherited from parents in the tree. Subprojects may be individually configured to have a different working folder than the parent project.

Just like Visual SourceSafe, if a working folder is not set for a given project or any of its tree ancestors, then SourceOffSite will be unable to determine where the local files of this project are stored. In this case, SourceOffSite will be unable to accurately show the status of files in the File List view.

To set a working folder in SourceOffSite, first highlight the project for which the folder will be set. Choose the Working Folder Settings command from either the Project group of the Home tab or the right-click menu.



Select a folder from the Folders list in the Working Folder dialog box by clicking “Working Folder,” and then selecting browse. If the desired working folder does not yet exist locally, enter a folder name in the space provided and it will be created automatically.

If a working folder is not set for a child project, the child project will automatically inherit the working folder setting from its parent project. If a Working folder is set for a child project, click "Remove every subfolder's assigned working folder" in order to cause the subfolder to inheriting its working folder from the parent. Otherwise, leave the box unchecked to permit any child project's working folders to remain as they are currently set.

Unset Working Folder

A user may wish to unset a working folder if the folder is not part of the parent project's hierarchy. To unset a working folder, first highlight the project for which the folder will be unset. Choose the Working Folder Settings command from either the Project group of the Home tab or the right-click menu. Clear the path in the Name field of the Set Working Folder dialog box and press OK. This project will now inherit a working folder from the parent project if available. Alternatively, working folders can be unset from the working folder tab of the lower pane. Click on the working folder tab of the lower pane, select the working folder to be removed, right click, and choose delete.

Files of status unknown

If the working folder is set to a local folder which already contains files retrieved from VSS or some other means, the files will have a status of unknown. This occurs because SourceOffSite tracks which versions of files it has downloaded, but since the local files haven't been downloaded by SourceOffSite, it cannot know if they match those in the VSS database. Clearing unknown status can occur in one of two ways. Perform a Get Latest Version on all files is the most straightforward approach. For large directory structures, choose “Use Checksums to Determine Unknown File Status” from the Files pane of the Options dialog. SourceOffSite will then do a checksum comparison of each file to determine if the local copy matches that in the VSS database.

1.16. Refresh File List



The File List in the SourceOffSite Client displays a listing of the current state of the Visual SourceSafe database as communicated by the Server. It is possible that this list may become outdated as changes happen in the database. It may be necessary to refresh this view to ensure that information displayed is up to date. The Refresh File List command will refresh the view of the files list in the current directory.

The SourceOffSite Client communicates with the Server for file list information on two occasions:

1. When an automatic refresh [35] operation occurs (optional).
2. The first time a project folder is selected during a session.

Any subsequent time that directory is clicked in that session, the file list information will be taken from a cached file on the client machine located in the users %appdata% directory.

After the SourceOffSite Client is exited and restarted, a new session begins and the process of communicating with the SourceOffSite Server for the file list of each newly clicked directory begins again.

To refresh the file list on an open project, choose the Refresh File List command from the Project group from the More Source Control tab.

It is possible to configure SourceOffSite to perform a Refresh File List automatically through the View pane of the Options dialog. This capability is similar to Visual SourceSafe. However, because SourceOffSite is sometimes used over slow connections, the default setting for the automatic refresh feature is OFF.

Please note: The Refresh File List command is not recursive.

1.17. Refresh Project Tree



The project tree view in the SourceOffSite Client displays a listing of the state of the Visual SourceSafe database as communicated by the SourceOffSite Server. However, this view may become outdated as changes are made to the database. It will be necessary to manually refresh the project tree view to ensure that the displayed information is up-to-date.

The Refresh Project Tree operation retrieves the most recent folder hierarchy from the Server and updates the tree view accordingly. This operation must be manually performed in SourceOffSite when projects have been added or deleted in the Visual SourceSafe database. The Refresh Project Tree command refreshes the project hierarchy for the currently selected folder and all its descendants.

To refresh the view of the project tree, highlight the desired project. Then, select the Refresh Project Tree command from either the Project group of the More Source Control tab or the right-click menu

The tree must be refreshed a level above the level of the added or deleted projects. Clicking on the Refresh Project Tree button while a parent project is highlighted will synchronize the subprojects in the SourceOffSite Client with the Visual SourceSafe database.

If this command is performed from the root folder, it may be a slow operation as it requires the server to traverse the entire Visual SourceSafe database.

Please note: The Refresh Project Tree command is not executed on application startup. Any changes to the VSS database will require a Refresh Project Tree command to be performed from within SourceOffSite.

1.18. Cancel Operation



The Cancel Operation command allows the user to stop a lengthy procedure. Any time the stop button is enabled, the Stop command may be used.

To stop an operation, choose the Cancel Operation command from the Server group on any tab of the ribbon. The Stop command does not undo any part of the procedure that was performed before the Stop command was issued.

When a Cancel command is performed, the client disconnects from the server and then automatically reconnects. This starts a new session. However, this is the only time the File List is not automatically refreshed when a new session begins.

2. Version Tracking

2.1. Show Properties

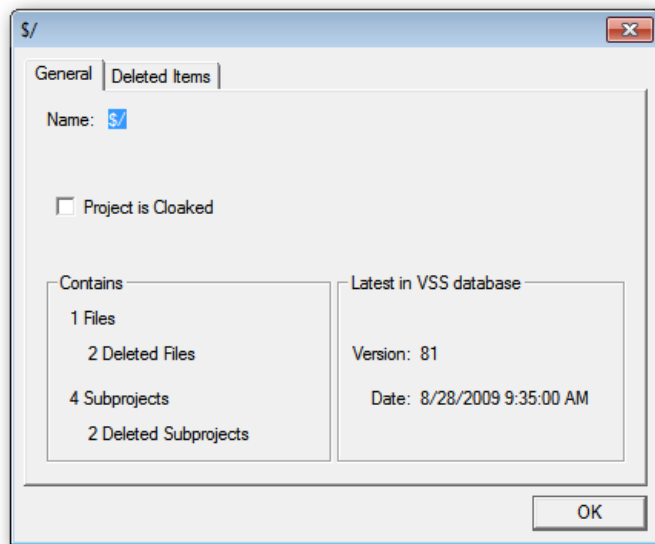
Please note: The Show Properties Command is available only in the Windows Client.

Project Properties



File or project properties may be viewed by using the Show Properties command. To see the properties of a project, select the project in the Project List. Select Properties from either the View group of the Home tab or the right-click menu. A Project Properties dialog with two tabs will be presented. These tabs include: General and Deleted Items.

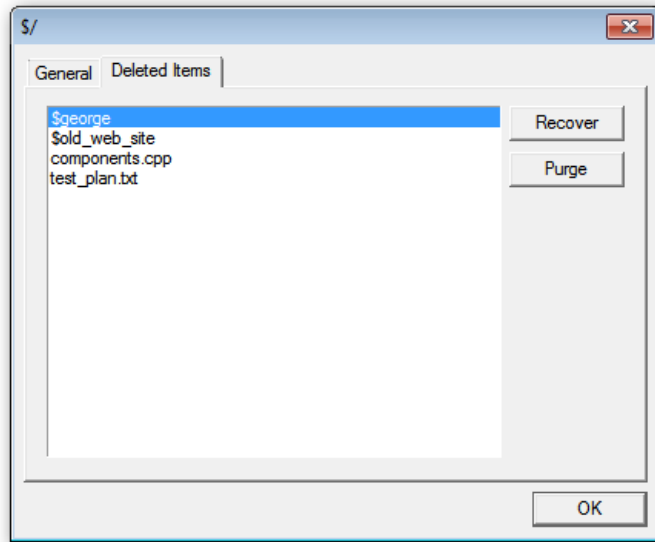
Viewing General Project Properties



The General tab displays the project name, the cloak status of the project, the number of files and subprojects in the project, the number of deleted files and subprojects (if any), and the version number and date of that version. Projects can be Cloaked and Uncloaked from this dialog by checking or unchecking the “Project is Cloaked” checkbox.

Viewing Deleted Items

To see a list of files and subprojects which have been deleted (but not destroyed) from the current project, click the Deleted Items tab. Items listed whose name begin with a \$ are projects, which may contain other subprojects. Items without a \$ are individual files. You can select items in the list and perform the following operations:



Recover: If you click the Recover button, the selected files will no longer be deleted, but will be restored to the project. Performing a recover will not cause items to be downloaded locally, so recovered files may have either a missing or unknown file status.

Purge: If you press the Purge button, the selected files or subprojects will be permanently destroyed from the VSS database and will no longer appear in the deleted items list. **WARNING:** files that are purged can not be recovered from VSS.

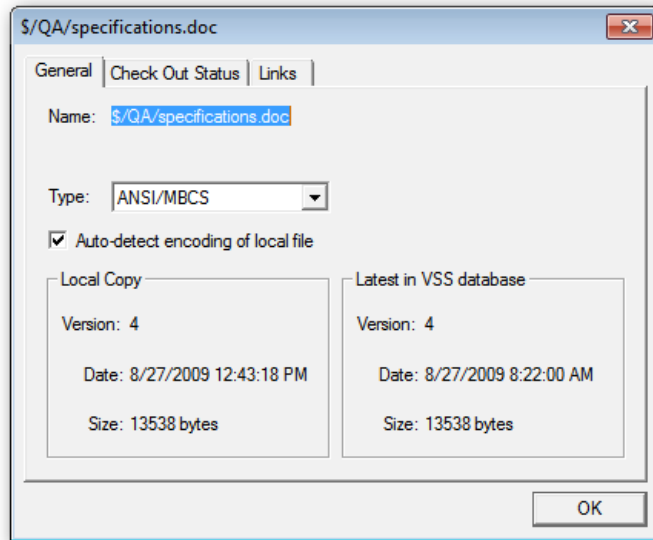
File Properties



The properties of a file may be viewed by using the Show Properties command.

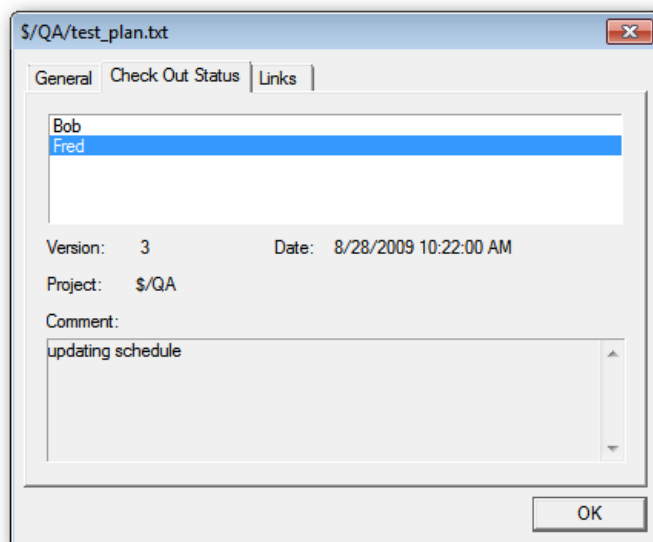
To see the properties of a file, select the file in the File List. Select the Properties command from either the View group of the Home tab or by right-click menu. A File Properties dialog with three tabs will be presented. These tabs include: General, Check Out Status and Links.

Viewing General File Properties



General tab displays the project name and filename, file type, size, the version number, date and size of the file stored on the SourceOffSite Client working directory. It also correspondingly displays the latest version number, version date, and size of the file in the Visual SourceSafe database.

Viewing File Check Out Status



The File Check Out Status tab shows whether or not the file is checked out and shows the user(s) who checked out the file. If more than one user has the file checked out, click on a particular username to see details of that check out. The details show the version number, the date of the check out, the name of the project to which the file is checked out and the check out comment.

Viewing File Links

The File Links tab shows the locations where the file is shared.



2.2. Show History

File History



To see the revision history of a file, select the file in the File List. Then select History from the View group of the Home tab on the ribbon or, right-click menu. The file's history will be displayed in a new tabbed window in the main display. All revisions to the file that were checked in to the database will be displayed with a version number.



All labels applied to the file will be displayed with a  label symbol in the History dialog. Any pin applied to a file version will be displayed with a  pin symbol.

You can move back and forth from the file list view to the history view by clicking on the tabs at the top of the main viewing area.

Additional Operations Supported through File History Dialog

Tabbed History windows support additional operations including Get, Show Differences, Pin [27], Unpin, Details, and Save to Disk. To retrieve the historical version of any file, select the version of the file and then click the Get button in the Source Control group of the History tab, or right-click the file. This will copy the selected version to the currently configured Working Folder. To show the differences between any two historical versions, select two versions and then click the Diff button in the View group of the History tab. This will launch the diff utility configured in the External Programs tab of the Options dialog. Select Pin or Unpin to change the pin status of a file version.

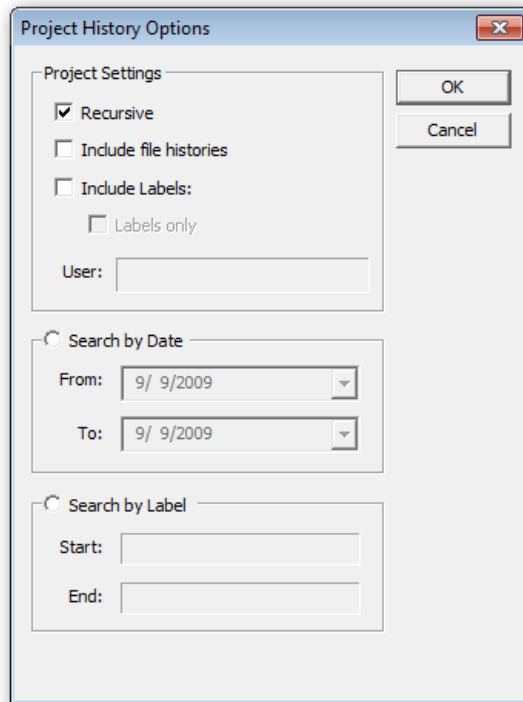
It is possible to see more information about any historical file version by highlighting the version of the file and then clicking the Details button in the View tab of the History window. The Details dialog will display any action performed on the file and any Label or Check In Comment applied to the file.

It is also possible to save the results of the history tab window by choosing Save to Disk from the View group of the History tab.

Project History



To see the revision history of a project, select the project in the Project List. Choose the History command from either the view group of the home tab or the right-click menu. A Project History dialog containing various options for displaying the history will be presented.



Options in the project settings will be applied to any search criteria. The bottom two panels of the dialog allow history to be searched between two dates, or between two labels

If the Recursive option is selected, then the entire history for all of the project's subprojects will also be displayed. If "Include file histories" is selected, all file history operations will be included as well as project history events. "Include labels" will also show label activity for the project. If "Labels only" is chosen, all other history information is not displayed, but only label events are shown in the history window. Note that if both "Include file histories" and "labels only" are selected, both project labels and file labels will be displayed.

The user may also specify a beginning date for the history in the From text box and an ending date in the To text box of the Project History dialog. A beginning date can be specified with no ending date, showing all changes from the beginning date until the current time.

The user may also specify a set of labels to determine the boundaries of the search. A beginning label can be specified with no ending label, showing all changes from the label until the current time. Label search is case insensitive. Unlike VSS, you do not need to insert the letter L before the label search string.

Customize the Project History dialog and then click the OK button. The project's history will be displayed in a tabbed History window.

2.3. Pin Files



Files can be pinned in SourceOffSite just as in Visual SourceSafe. A file that has been pinned is denoted with a pin symbol. When you pin a file, you are locking in a particular version of the file. In other words, no changes can be made to a file as long as it is pinned. Thus, when a Get Latest operation is performed on a pinned file, the pinned version is the version that will be retrieved, even if there is a more recent version.

Pinning a File

To pin a file at its current version, select Pin from either the Source Control group of the history tab or the right-click menu. To pin an older version of a file, you must look at the revision history of a file. First, select the file in the File List. Then, click History command from either the View group of the Home tab or the right-click menu. Select the version you want to pin from the History list and click Pin from the Source Control group of the History tab. You have now locked this particular version of the file. A pin symbol will be displayed to the left of that file version in the History list as well as to the left of that file in the File List, indicating the pinned status of the file.

Please note: While you are presented with the option to Edit a pinned file, just as in Visual SourceSafe, you cannot perform this function. An "Operation Failed" error message will appear in the SourceOffSite Status Window.

Unpinning a File

When you pin a file, you typically are not planning to change the file, so that a particular version of the file becomes the version that is part of your project. No changes can be made to that file until it is unpinned.

To unpin a file, select the file in the File List. Choose Unpin from the Source Control group of the History tab. Alternatively, choose History from either the View group of the Home tab or the right-click menu. Select the pinned version from the History list and click Unpin. You have now unlocked this particular version of the file. The pin symbol will be removed from that file version in the History list and from the left of that file in the File List.

Please note: If you have turned off "Show status of pinned files" in the View pane of the Options dialog, SourceOffSite does not retrieve information about pin status of a file from the server. Therefore, to unpin a file, you must first enable "Show status of pinned files", then Refresh File List for the project in question before

2.4. Label Version



Projects and files can be identified with labels. These are usually more descriptive than version numbers and can be affixed at the project or file level. Labels are a convenient way to document a specific point in development time. Labels applied to files can be viewed by clicking the Details button while viewing a History listing.

Labeling Projects

To label a project, highlight the project in the Project List. Select Label from either the Advanced Source Control group of the More Source Control tab or the right-click menu. From within the Label dialog, enter a label name and any comments. The label will be applied to all files within the project and any subproject files.

Labeling Files

Labeling one or more files is similar to labeling projects. The label created is only applied to the files selected in the File List. However, to retrieve a file via a file label, you must be viewing the file history rather than the project history. Individual file labels cannot be retrieved from the project history tabbed window.

Get by Label

SourceOffSite allows files in a project to be retrieved based on a label. To get a project from a label, highlight the project in the Project List, and then select history from either the View group of the Home

tab or the right-click menu. A Project History listing will be displayed as a separate tabbed window. Various options are available while one of the versions or labels is selected from this window.

The user may also specify a beginning date for the history in the From text box and an ending date in the To text box of the Project History dialog. Customize the history and then click the OK button. The project's history will be displayed in a newly created tabbed window. To get all of the project's files from a label, highlight a label in the History listing and then select the Get button. This will copy all of the files associated with the label from that level down to the current working directory.

When you perform a Get by Label, you may notice that you are getting more files than you expected. This is because special care is taken to get each file appropriately, whether its project exists or not. Unfortunately, the Visual SourceSafe automation layer, which SourceOffSite utilizes, applies labels across the board to files, even when they have already been deleted. This means that a Get by Label will retrieve deleted files and projects, some of which may have actually been deleted before the label in question was applied. The Visual SourceSafe Automation layer does not provide a reasonable method of determining which happened first, the file deletion or the application of the label. To avoid unwanted files and projects from being retrieved by SourceOffSite when performing a Get by Label operation, purge (destroy) the deleted files using Visual SourceSafe. If you wish to keep a copy of the files, they can be archived.

2.5. Details



When viewing a tabbed window that contains a history listing, you may wish to more closely investigate a particular version and its comments. To do so, click Details on the View group of the History tab. A dialog will be presented allowing more room to view label names, action performed, and comments for that file version or label.

2.6. Save to Disk



SourceOffSite also allows the contents of tabbed windows that contain version information to be saved to disk. To do so, when viewing history information, select Save To Disk from the View group of the History tab. The listing can be saved as comma separated text, HTML, or tab separated text.

2.7. Refresh



SourceOffSite does not dynamically update tabbed windows that display history version information. To view any updates to history information, select Refresh from the View group of the History tab. The history query will be resubmitted to the SourceOffSite server so that any changes in the VSS database will be seen. The Refresh command for tabbed windows displaying file and folder versions is analogous to what the Refresh File List command is for file lists.

3. Additional Features

3.1. Rename



SourceOffSite allows the names of files and projects to be changed without affecting the history of the file. To rename a file or project, select the name to be edited. Then, choose Rename from either the

Advanced Source Control Group of the More Source Control tab or the right-click menu. Type the new name of the file or project in the New Name field of the Rename dialog and then press OK.

If a file exists locally, it will not be renamed in the Working Directory. Perform the Get Latest Version operation to retrieve a new copy of the file with the new name.

If a shared file is renamed, the name of the file will be changed in all of the projects that share it. Rename will not affect any files that have been branched.

3.2. Move



Both files and projects can be moved to a new location in the database. To move a file or multiple files to another location, highlight a single file in the file list or hold down the control key and select multiple files. Then, click move in the Advanced Source Control group of the More Source Control tab of the ribbon. You will be presented with a dialog that allows you to browse to the project in the database into which the files are to be moved. Select that project and press OK. To move a project, highlight the project name in either the project tree view or file list view. Click the move icon on the Advanced Source Control group of the More Source Control tab of the ribbon or the right-click menu, choose the project to move into, and press OK.


If a file or project exists locally, it will not be moved in the Working Directory. Perform the Get Latest Version operation to retrieve a new copy of the file or project with the new name.

3.3. Cloak Project



A project may be cloaked in SourceOffSite. Cloaked projects will be skipped in recursive operations. For example, commands such as Get Latest Version, Check Out, Check In, Undo Check Out and Show Differences will not affect a cloaked project.

To cloak a project, select the project from the Project List and then choose the Cloak Project command from the Project View of the More Source Control tab.


1. Windows users – The file symbol in the Project List will change to light gray,  indicating that the project has been cloaked.
2. Unix users – The text color that indicates a cloaked project can be configured in the Projects tab of the Unix Client options.

To uncloak a project, select the cloaked project and then choose Uncloak Project from the Project group of the More Source Control tab of the ribbon.

3.4. Web Deploy




The Web Deploy command will copy files or projects to a web server. To enable this functionality, the web projects and the path to the web server must be entered in the Web Projects tab of the SourceOffSite Server Manager utility. Once the project or projects have been entered, a visual cue will be provided to show which projects are deployable. This visual cue will not appear if a Refresh File Tree operation is performed, but will instead appear the first time the project is visited.

1. Windows users - The  symbol next to the project name in the Project List indicates a web project.
2. Unix users - The text color that indicates a web project can be configured in the Projects tab of the Unix Client options.

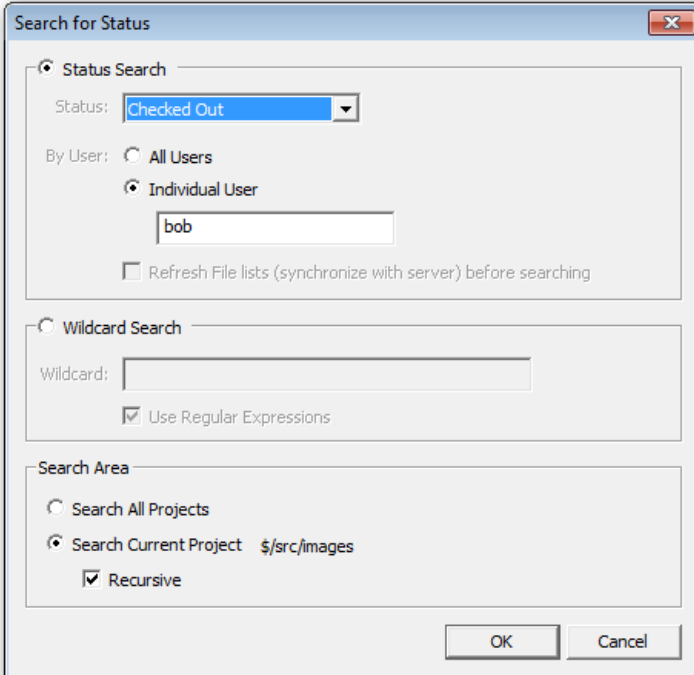
To deploy a project to a web server, select the web project and then choose the Web Deploy command from the Tools menu. This operation is recursive for the project and all subprojects. To deploy a file or multiple files to a web server, highlight a single file in the file list or hold down the Control key and select multiple files, then choose the Web Deploy command from the Tools menu. Users must have destroy rights to a project in VSS in order to web deploy that project.

In order to deploy files to a Linux machine, you need to be able to see the Linux machine when browsing through Network Neighborhood from the SourceOffSite Server. However, to do this, you need to be running SAMBA.

3.5. Search

 SourceOffSite allows a user to search for files of a given file status type, such as Checked Out or Needs Merged, or for files whose names match a given pattern. To perform a Search, choose the Search button from the SourceOffSite Tools/Options group of the Tools tab of the ribbon.

Status search



Search for Status

☒ **Status Search**

Status: Checked Out

By User: ☐ All Users ☒ Individual User

☐ Refresh File lists (synchronize with server) before searching

☐ **Wildcard Search**

Wildcard:

☒ Use Regular Expressions

Search Area

☐ Search All Projects ☒ Search Current Project \$/src/images

☒ Recursive

OK Cancel

The search dialog allows searching by either status or by wildcard. If the status search radio button is selected, the status dropdown allows for searches of files that are checked out, or files that have a given status. Check out status searches are performed by the SourceOffSite Server and can be done for all users at once, or for a selected user. Searches for all other status types are done on the Client using the file list information for each folder cached by the Client. To ensure that all file lists are up to date before

starting your search, enable the option “Refresh file lists before searching.” This is a server intensive operation, and could take some time for large recursive folders. If you are sure your file lists are already up to date, then you can leave this option unchecked which will result in a much faster search.

Wildcard Search

Wildcard searches scan the database for files returning a list of the filename matching the entered search pattern. Patterns can be entered by using wildcards or by using regular expressions. For example, using wildcards, you could search for *.cpp to return all files with an extension of cpp. Wildcard search are case insensitive.

If your search criteria are more complex, you can use the regular expression pattern matcher, often referred to as “regexp.” Full documentation of regexp is beyond the scope of this manual, but some brief examples of regular expressions follow:

1. q Finds filenames containing the letter “q”.
2. .q Finds filenames containing the letter “q”, if not the first letter.
3. [ae]q Finds filenames containing the letter “q”, preceded by either an “a” or “e”.
4. q[^\u] Finds filenames containing the letter “q” followed by any character other than “u”.
5. q\$ Finds filenames ending in “q”.
6. q\. Finds filenames containing the string “q.”

Regular expression searches are case sensitive.

Search Area

All searches can be conducted on the current project, the current project and all subprojects, or all projects by selecting the appropriate options in the lower portion of the dialog. Configure the search criteria as desired and then press OK. The results are placed in another tab in the main SourceOffSite window. Various operations can be performed from the Search Results tab including: View, Get Latest Version, Check Out, Check In, Undo Check Out, Show Differences, Show History, and Show Merge.

3.6. Change Password



SourceOffSite allows you to change your Visual SourceSafe password through the SourceOffSite/Tools Options group of the Tools tab of the ribbon. The Change Password command presents a dialog box which asks for Current Password, New Password and Confirm Password. Since SourceOffSite provides remote access to the VSS database, it is recommended users create a strong password. A Visual SourceSafe password can consist of any combination of 1 to 15 valid characters, which are displayed as asterisks in the dialog boxes. Also, Visual SourceSafe passwords are not case-sensitive.

Please note: Since VSS installs with a blank password for the “admin” user, make sure a strong password is set for the admin user in the VSS Administrator application on the SourceOffSite server machine to prevent unauthorized access to the VSS database.

3.7. Explore



Choose Explore to open the directory that corresponds to the working folder for any project. SourceOffSite will launch a copy of Windows Explorer such that it will immediately jump to the

working folder location on the local drive. This can be convenient if you wish to manually inspect or edit files in the working folder without going through a SourceOffSite source code control operations.

Explore is available via the right-click menu, or from the Source Control group of the Home tab on the ribbon.

3.8. Shortcut Keys

Besides selecting menu items or right-clicking a file or project, SourceOffSite allows you to use the keyboard for a variety of operations.


Please note: These keyboard shortcuts are only available in the Windows client. The Linux and Solaris clients do not contain keyboard shortcuts.

Connect to Server	CTRL + C
Add Files	CTRL + I
Check Out	CTRL + K
Check In	CTRL + U
Connect to Server	CTRL + O
Delete	DEL
Get Latest Version	CTRL + G
Refresh File List	F5
Refresh Project Tree	CTRL + F5
Rename	F2
Search	CTRL + S
Set Working Folder	CTRL + D
Show History	CTRL + H
Show Differences	CTRL + F

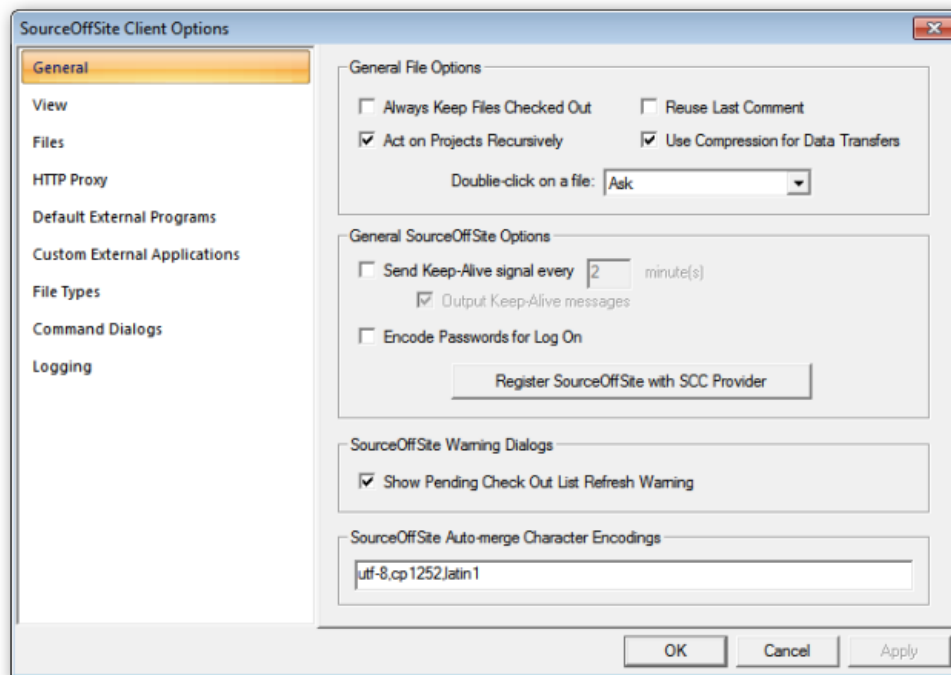
4. Customizing

SourceOffSite can be customized to suit each individual user's needs. These customizable features can be found in the SourceOffSite Options. To access the SourceOffSite options, click on the program



icon in the upper left of the ribbon to show the application menu. Near the lower right, click on Options.  Options .

4.1. General Options



Always keep files checked out

When a file is checked in, it can no longer be edited. Thus, selecting the Always Keep Files Checked Out option enables files to be kept in a checked out state upon Check In, so that they may still be modified after the Check In.

Act on projects recursively

This option enables SourceOffSite to always act recursively by default on all projects and subprojects during operations that support recursion. Since performing recursive operations can sometimes be a lengthy process, the default setting for this option is OFF. All command dialogs with a recursive option will derive their initial setting from this option.

ReUse Last Comment

When a file is checked in from SourceOffSite, the check in command dialog can be enabled. One of the items in this dialog allows a comment to be added describing the check in. If Reuse Last Comment is enabled, the comment field will automatically be seeded with the most recent comment made while checking in from that SourceOffSite client session.

Use compression for Data Transfers

SourceOffSite supports file compression to speed the transfer of files. Using conventional zlib routines, files are compressed before being transmitted and uncompressed when received. File compression is an optional feature. Because it speeds the transfer of files, the default setting for the file compression feature is ON.

Double-click on a file

A file in the File List can be either viewed or edited by double-clicking on it. The Double-click on a File option may be set to Ask, View or Edit. If Ask is selected, a dialog is displayed offering the choice to Edit or View the file when the file is double-clicked. If either View or Edit is selected, the file will automatically be opened in that mode when double-clicked.

Send Keep Alive Signal

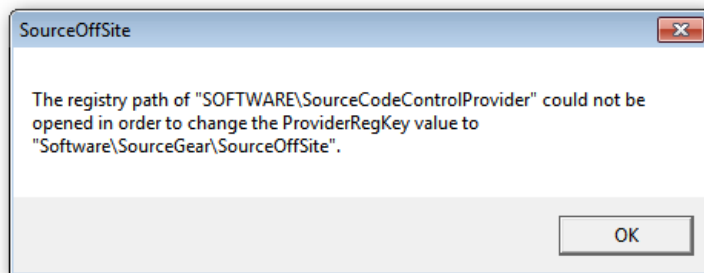
If a firewall exists between the SourceOffSite Client and Server and the firewall is configured to close connections that are idle after a certain period of time, it may be necessary to set the Send Keep-Alive Signal option. This will keep the connection through the firewall open by sending a signal at intervals specified by the user.

When the keep alive signal is sent, you can choose to be provided notification. SourceOffSite will write a line in the output window if Output Keep Alive Messages is checked.

Register SourceOffSite with SCC Provider

SourceOffSite provides a way for you to switch between Source Code Control providers when using IDE integration. By selecting this button, SourceOffSite updates your system registry to allow SourceOffSite 5 to be listed as one of the possible choices for Source Code Control Integration. Previous versions of Visual Studio would pull the SCC provider directly from a specific registry key, while new versions set additional registry keys allowing you to choose from a dropdown list within Visual Studio options dialog. Note that switching the default Source Code Control provider from within any development environment will still require specific projects to be unbound and rebound to the new SCC provider.

Selecting the button sets the registry to allow SourceOffSite to be one of the Source Code Control choices. On some operating systems, selecting this option may give the following dialog.



Setting the registry requires elevated rights for users of Windows Vista or Windows 7, and therefore SourceOffSite will present a warning dialog if not being run in Administrator mode. Close SourceOffSite and launch it again by right-clicking the application icon and selecting “Run as administrator.”

Encode Passwords for Log on

When using the secure port, SourceOffSite encrypts the entire session, including Log On credentials.

However, those users who are running on the unsecure port can still choose to avoid having their passwords sent in clear text by choosing “Encode Passwords for Log On.” While this option does not provide strong cryptographic obfuscation of passwords, it does allow for some measure of security for those users running on unsecure ports. For the most secure connection, including the client-server handshake, SourceGear recommends running the SourceOffSite server on the secure port.

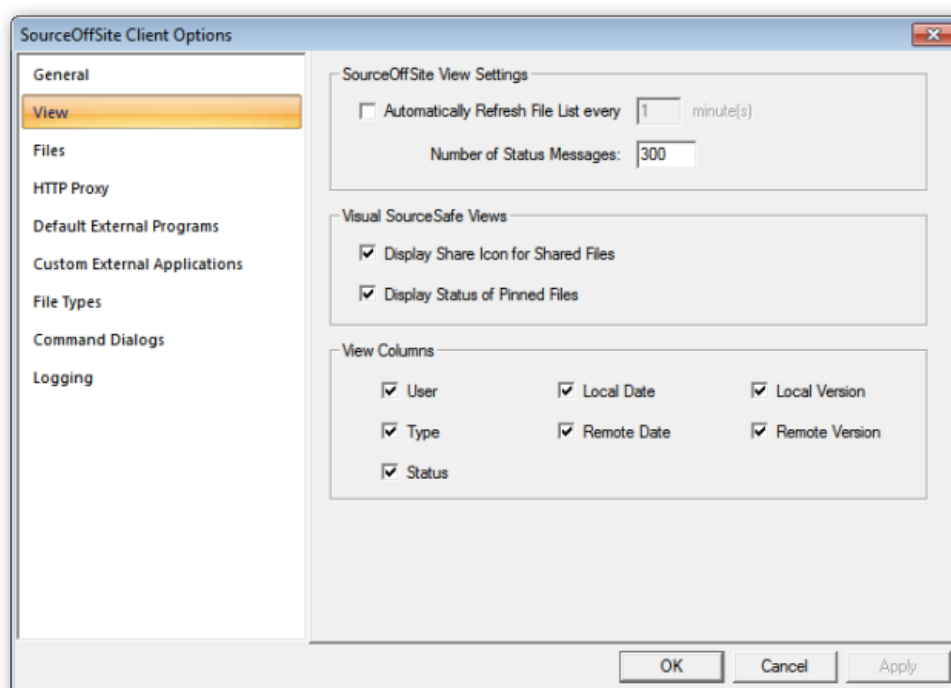
Show Pending Check Out List Refresh Warning

In the Pending Checkins tab of the lower window, SourceOffSite contains a “Refresh Pending” option that updates the check out list by querying the VSS database. If this option is checked, a Refresh Pending command will present a warning dialog before performing what could be a lengthy scan. If this option is unchecked, no dialog is presented and the scan to update the check out list occurs immediately.

SourceOffSite Auto-merge Character Encodings

SourceOffSite 5.0 now allows users more control in setting precedence for handling different character encodings. This tab contains a comma delimited list of character encodings to try when merging files without a byte-order mark. While most users will not want to alter these settings, those users who frequently work with foreign character sets may wish to change this setting to correspond to the character encodings being used.

4.2. View Options



Automatically refresh file list

This capability is similar to Visual SourceSafe. However, as SourceOffSite is more commonly used over slow connections using PPP and a modem, the default setting for the automatic refresh feature is OFF.


Number of Status Messages

Every operation that is performed in the SourceOffSite Client during a session is documented in the Status Window. The number of lines to display in the Status Window is configurable. The default is set to 500 lines.

Display Status of Pinned Files

By default, Display Status of Pinned Files is enabled. File retrieval speeds are increased by disabling this feature. In this case, pinned files will not display the pin symbol.

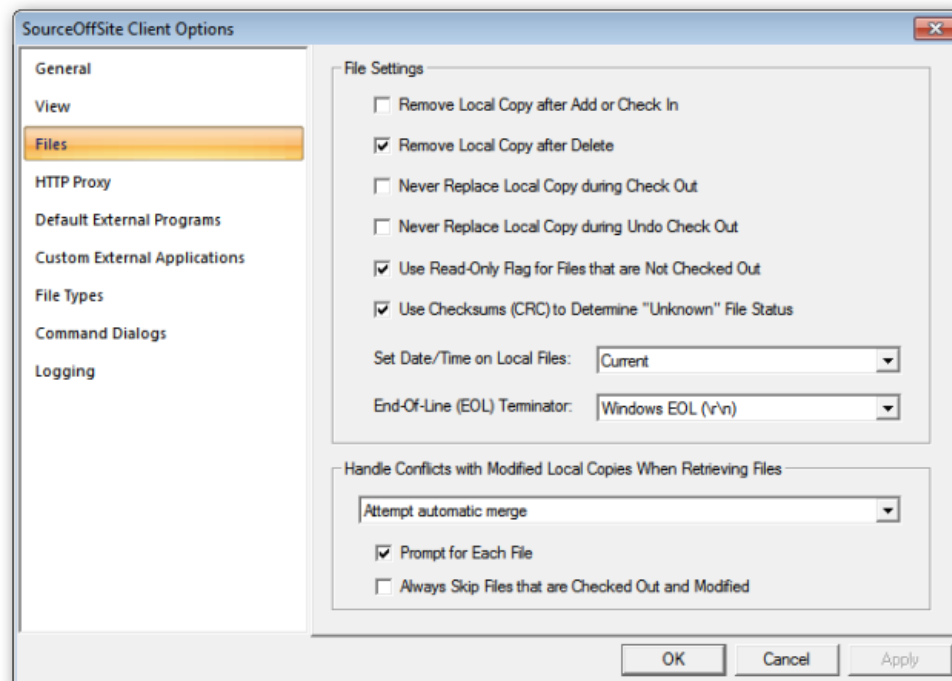
Display Share Icon for Shared File

When the Display Share Icon for Shared Files option is enabled, SourceOffSite will display the  symbol next to the files in the File List that are shared. By default, this option is ON. However, file retrieval speeds are increased if this feature is disabled.

View Columns

Users can select which columns they want to appear in the File List window. Disabling the Remote Date column will result in a performance increase when retrieving file lists.

4.3. File Options



Remove local copy after Check In

If this option is enabled, any file that is checked in will be automatically deleted from the local working directory after the operation has been performed. Enabling this option sets this as a default for all Check In operations.

Remove local copy after Delete

When files are deleted through SourceOffSite, the local files can also be deleted. Enable this option to have SourceOffSite delete local copies of files when any Delete command is chosen. Leave this option disabled if you would prefer local copies remain.

Never replace local copy during Check Out

During a Check Out operation, by default SourceOffSite will replace the local copy of the file. However, some users work on files locally before the files are checked out and may not want the local copy replaced by the file in the Visual SourceSafe database. Enabling this option will set the default to never replace the local copy of files during Check Out operations.

Never replace local copy during Undo Check Out

During an Undo Check Out operation, SourceOffSite defaults to replacing the local copy of the file. However, if it is not desired to revert back to the copy of the file in the Visual SourceSafe database, this option may be enabled. It sets the default to never replace the local copy of files during Undo Check Out operations. This setting can be overridden for individual files in the Modified Local Files dialog.

Use read-only flag for files that are not checked out

By default, any files transferred to a working folder when the files are not checked out will be set to read-only. The read-only flag is set for files transferred during operations such as Get Latest Version, Add Files, Check In, or Undo Check Out.

If this option is disabled, files transferred to a working folder will be set to read-write.

Use checksums to determine file status

By default, the Show Differences operation must be manually performed to see if the local and remote copies of files with an Unknown status are identical. When the Use Checksums to Determine File Status option is enabled, SourceOffSite will use checksums to determine if a local file of unknown status is the same as the file in the Visual SourceSafe database. This option can be particularly useful when configuring SourceOffSite working folders to a directory structure that is already in existence. In such a case, since SourceOffSite did not download the files, it cannot be certain whether the local and remote copies match unless this option is selected.

Set date/time on local files

The Local Date in the File List can be set to display files by either the Current time, Check In time or Modification time. The Current time sets the Local Date of the file to the current date and time when the SourceOffSite Client gets a file. This is the default setting. The Check In time sets the Local Date of the file to the date and time the file was last checked in to the database. The Modification time sets the Local Date of the file to the date and time the file was last saved.

When the time option is set to Modification time, the first time files are downloaded from the database, they will be given a timestamp corresponding to their modification time as determined by Visual Source Safe. This time is the same as the last time the file was saved in the VSS database.

Please note: The Set date/time on local files option is available only in the Windows Client.

End-of-line terminator

The end-of-line terminator for files may be specified using this option. The options for the end-of-line terminator are as follows:

1. Windows EOL (\r\n)
2. Unix EOL (\n)
3. Mac (\r)

By default, the End-of-Line Terminator option will be set to correspond with the operating system being used.

The End-of-Line Terminator option can be changed if the operating system where the working folders reside differs from the operating system being used by the SourceOffSite Client.

Handle conflicts with modified local copies when retrieving files

This is a global option to apply to all Get Latest Version operations. There are three choices:

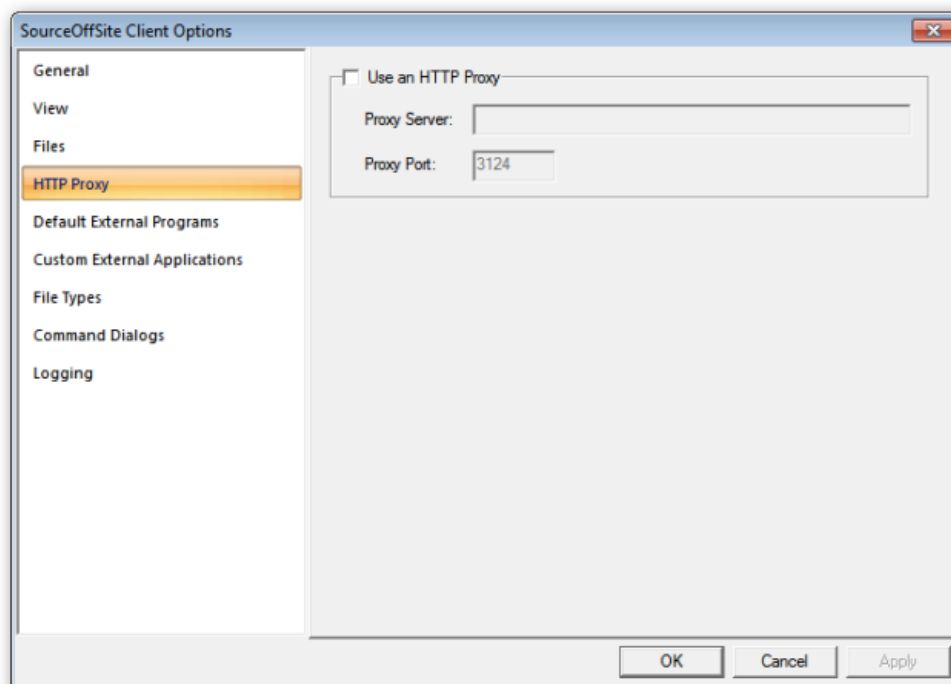
1. Overwrite (lose all the local changes)
2. Attempt automatic merge
3. Do not overwrite / Merge later

The value set here will preset the Modified Files Dialog.

Prompt for each file

If this option is enabled, the user is presented with a choice for each modified file that is encountered during the Get Latest Version, Check Out, and Undo Check Out operations. The dialog box gives the user the same choices to either overwrite, attempt an automatic merge, or merge later.

4.4. HTTP Proxy



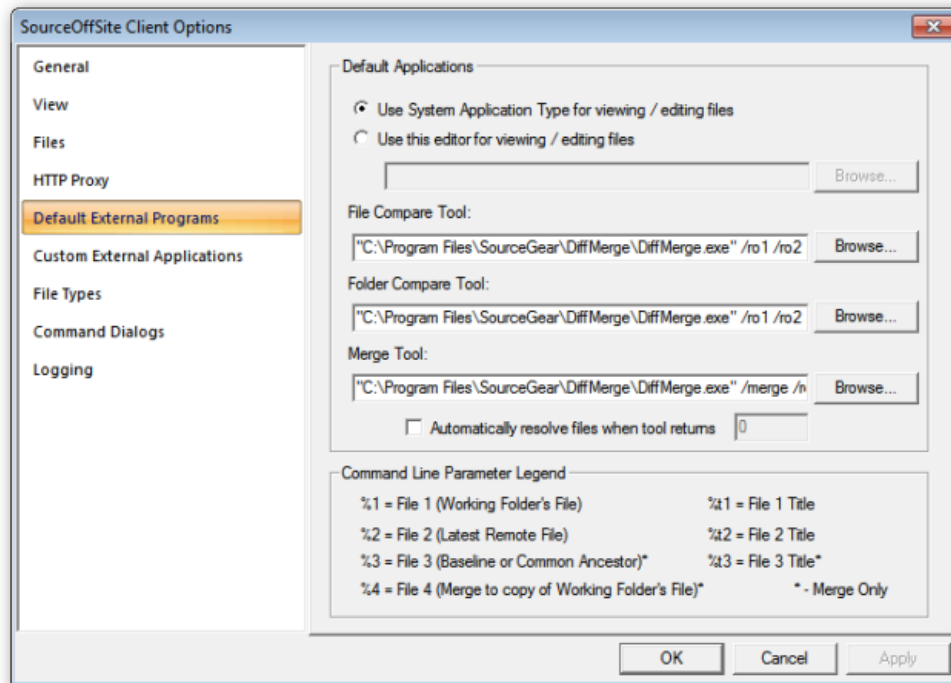
Use an HTTP Proxy

This option enables SourceOffSite Clients to work through a client-side proxy server.

Please note: SourceOffSite will only work with proxy servers that enable CONNECTS.

To configure SourceOffSite to connect through a proxy server, check the Use an HTTP Proxy option. When this option is checked, the HTTP Proxy section will be enabled. Enter the IP address of the proxy server in the Proxy Server text box and enter the proxy port in the Proxy Port text box, then press OK.

4.5. External Programs



Use System application tool for viewing / editing files

When enabled, this option calls the viewer or editor that the operating system associates with that file type. For individual cases where you may wish to do otherwise, exceptions to this rule can be entered in the Custom Applications dialog, or on a case by case basis from within the View/Edit command dialog.

Use this editor for viewing / editing files

SourceOffSite can be configured with the viewing/editing application of the user's choice. The View and Edit commands will automatically open files using the utility configured here. If this box is left blank, SourceOffSite will open files with their associated Windows application.

There is no default viewing application configured in Unix operating systems. Choose a viewing and editing application that will open the files most common to the database.

Unix users - The application for viewing and editing files should be configured using the following format:

```
<program name> "%s"
```

File Compare Tool

The application configured in this dialog will be used any time a "Show Differences" is selected. By default, SourceOffSite ships with DiffMerge, a tool that can diff both files and folders, as well as do three way merges.

Unix users - The application for comparing files should be configured using the following format:

```
<program name> "%s" "%s"
```

Application for comparing directories

SourceOffSite can be configured with a project diff utility to allow users to view a list of differences in the local and remote project structure. The SourceGear Diff/Merge utility is configured by default.

Unix users - The application for comparing directories files should configured using the following format:

```
<program name> "%s" "%s"
```

Merge Tool

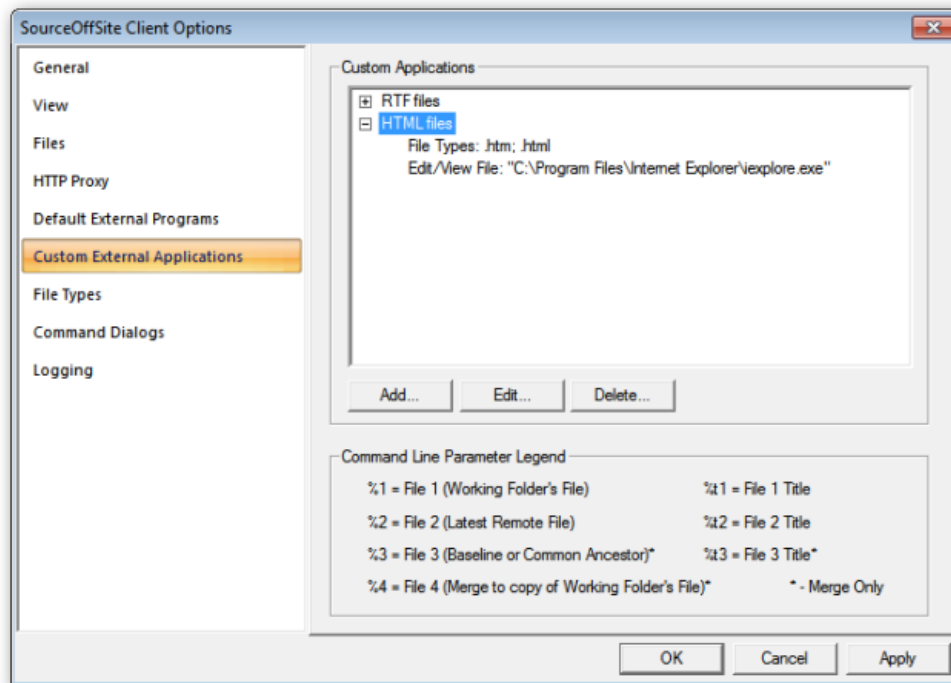
The merge utility configured will be used to perform visual merges on files with conflicting changes during Check In or when the user performs a Show Merge operation. The SourceGear Diff/Merge utility is configured by default.

SourceOffSite can be configured with a merge utility to allow users to manually merge conflicting changes to files of status Needs Merge. The SourceGear Diff/Merge utility is configured by default. An option is given for those users who wish to use a third party merge tool that uses a different return code for successful merges.

Unix users - The application for merging files should configured using the following format:

```
<program name> "%s" "%s"
```

4.6. Custom External Applications

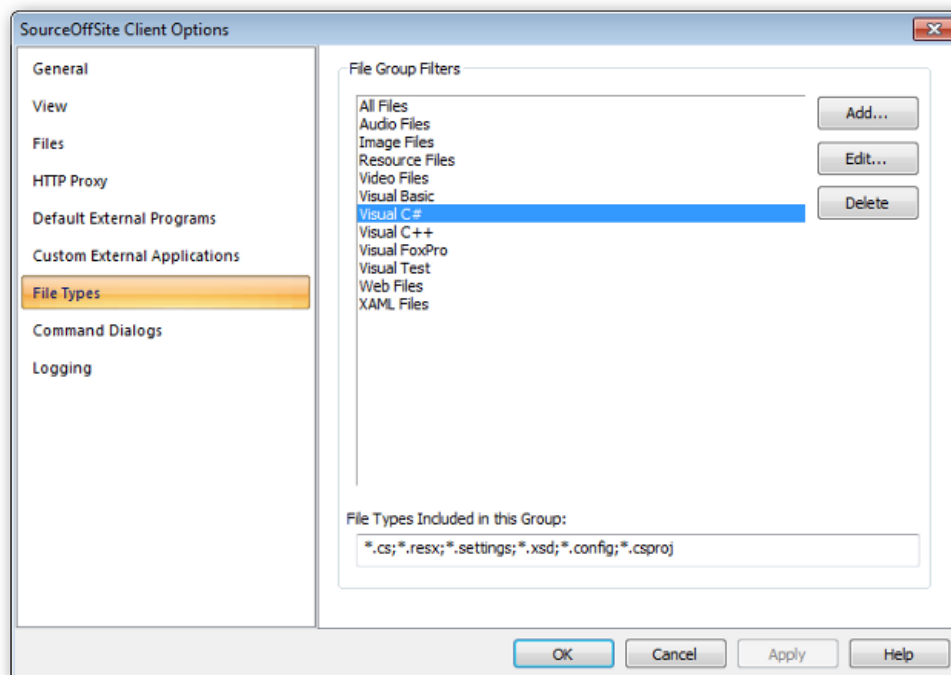


The customer External Applications dialog allows users to pick specific applications for viewing, diffing, and merging files based on file extension. For example, if you use a special tool for working with xml files, you can keep DiffMerge as your default diff tool, but configure the alternate diff tool for .xml files only. To do so, click add. Name the group, and choose a list of extensions that will cause the custom application to be used. Next, list the application file types by extension that will trigger use of the customer app. You can set this customer application for viewing and editing only, diffing only, merging only, or any combination of the three. Click OK when done.

To edit a custom application group after creation, click Edit.

To Delete a custom application group, click Delete.

4.7. File Types Option



When adding or sharing files to a project, SourceOffSite allows files to be filtered by file groups. The File Groups list contains the names of file groups that may be used to filter files. The file types included in a selected file group are listed in the "File Types Included in This Group" field. SourceOffSite 5.0 will import file groups from SourceOffSite 4.2 settings if File Groups had been changed from the defaults. Otherwise, SourceOffSite 5.0 will create a new list of File Groups. The File Groups functions are:

Add File Group

To add a file group, press the Add button. Enter the name of the file group in the Add dialog then press OK. To add file extensions to the file group, select the name of the file group then enter the file extensions in the File Types Included in This Group text box. The file extensions should have the following format:

*.extension

Any number of file extensions may be entered for a given file group. The file extensions should be separated by a semicolon and are case-sensitive.

Edit File Group

To edit a file group, press the Edit Button. You can edit the name of the group as well as add, edit, or delete any of the file types listed.

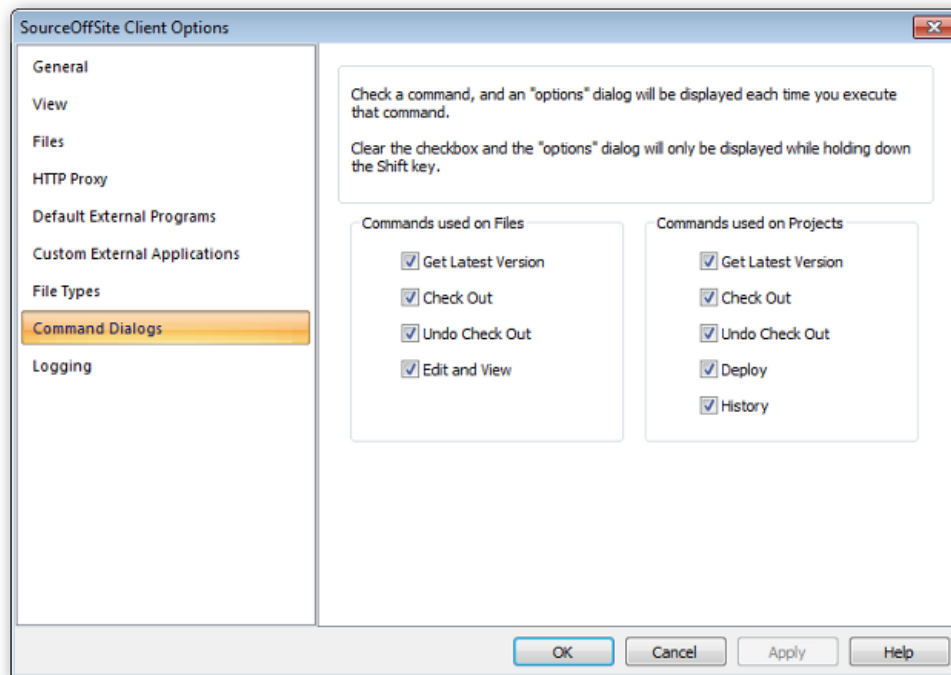
Delete File Group

To delete a file group, select an entry and then press the Delete button.

4.8. Command Dialogs

Just like Visual SourceSafe, SourceOffSite can be customized to specify which command dialog boxes are displayed when you perform certain SourceOffSite operations. For example, if you usually do not use the options provided in the Undo Check Out dialog box, you can disable the command dialog associated with that feature. Now when you perform Undo Check Out, the dialog box will not be shown.

The Command Dialogs tab can be found under Tools > Options.



Enabling or disabling any of the options under Command Dialogs does not change any of the default settings you configured in other SourceOffSite customizing options, mostly located in Files pane of the Options dialog.

Command Dialogs set up the display of intermediate dialog boxes, related to various SourceOffSite commands, where you are presented with additional options. In these dialog boxes, you may then select to change a previously set option for the upcoming operation only.

All Command Dialogs are enabled by default. Besides disabling the Command Dialogs in Tools > Options, the intermediate dialogs can also be turned off when they appear during an operation. Every intermediate dialog presents you with the choice to "Only Show this dialog when the Shift key is down." By checking this option, SourceOffSite will disable the comparable option in the main Command Dialogs tab.

Please note: You can override any setting you made in Command Dialogs by holding down the Shift key before performing any of the commands listed below. This will force a dialog box to appear, even if the corresponding option check box is not enabled in the Command Dialogs tab.

Command Dialogs for Files

SourceOffSite allows you to specify whether a dialog box appears in the following file commands:

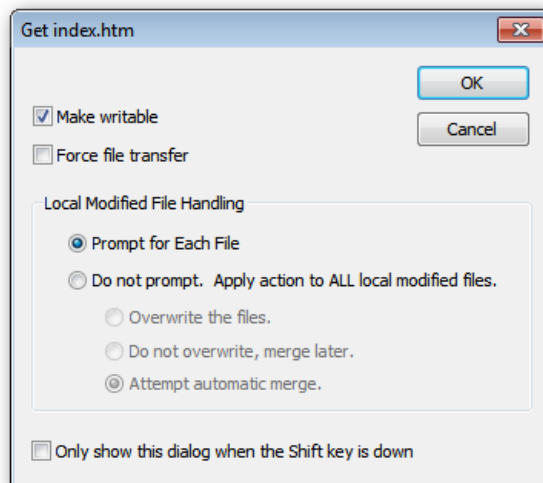
Get Latest Version

When the Get Latest Version command option for files is enabled, a dialog box will appear when you perform a Get Latest Version on a file. There are three options in this dialog: Make Writable, Force File Transfer, and local modified file handling.

If Version 1 of a file is destroyed and then replaced with a new file with the same name, the new file is not retrieved when a Get Latest Version operation is performed. Enabling Force file transfer will force the Client to retrieve the file.\

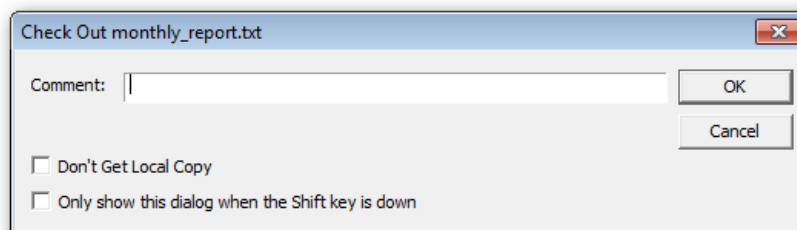
If there are multiple files that have been modified, choose to prompt for each file, or choose to globally overwrite, leave, or automerge for that operation.

The options in this dialog are preset based on how you have configured the options in the Files pane.



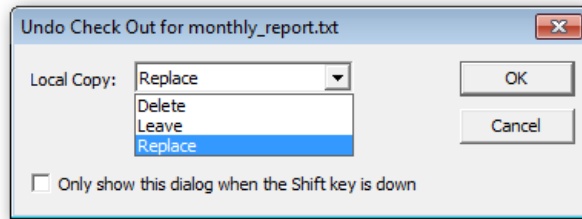
Check Out

When the Check Out command option for files is enabled, a dialog box will appear when you perform a Check Out on a file. Any comments entered in this dialog will be displayed at the time of check in, or if another views check out information in the Properties dialog before the check in occurs. Additionally, you can choose not to retrieve the copy of the file from the server by selecting “Don’t Get Local Copy”.



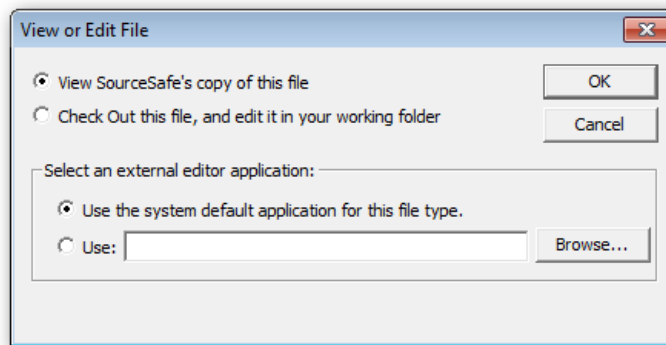
Undo Check Out

When the Undo Check Out command option for files is enabled, a dialog box will appear when you perform Undo Check Out on a file. There is one notable option in this dialog: Local Copy. Under the Local Copy menu, you can select to Delete, Leave or Replace the local copy of the file.



Edit and View

When the Edit and View command option for files is enabled, a dialog box will appear when you Edit or View a file. Both Edit and View File bring up the same dialog box. There are two notable options in this dialog: View Visual SourceSafe's Copy Of This File and Check Out This File And Edit In Your Working Folder. You can also select which editor to use for viewing or editing the file; the system default application for the type of file, or one that you configure.

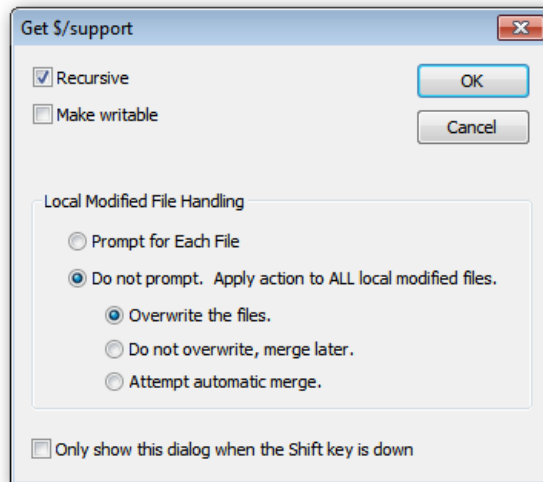


Command Dialogs for Projects

SourceOffSite allows you to specify whether a dialog box appears in the following project commands:

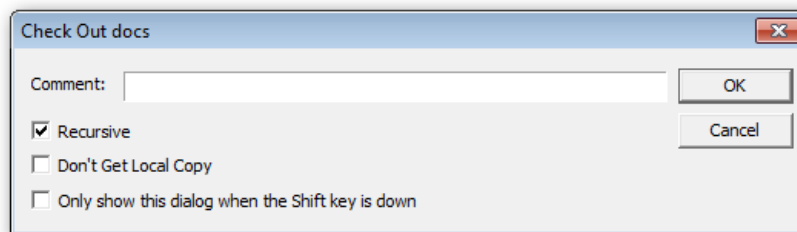
Get Latest

When the Get Latest Version command option for projects is enabled, a dialog box will appear when you perform a Get Latest Version on a project. There are three notable options in this dialog: Recursive, Make Writable, and local modified file handling. The options for handling conflicts with locally modified files are the same as in the Get dialog for multiple files.



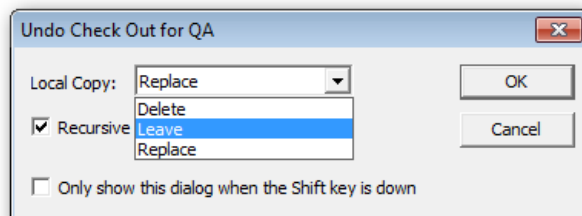
Check Out

When the Check Out command option for projects is enabled, a dialog box will appear when you perform a Check Out on a project. To check out all subfolders as well as the current folder, check the recursive box. Any comments entered in this dialog will be displayed at the time of check in, or if another user views check out information in the Properties dialog before the check in occurs. Additionally, you can choose not to retrieve the copy of the files from the server by selecting “Don’t Get Local Copy”.



Undo Check Out

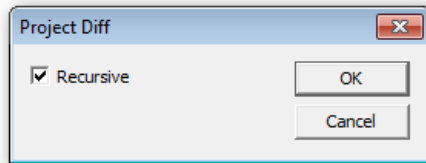
When the Undo Check Out command option for projects is enabled, a dialog box will appear when you perform Undo Check Out on a project. There are two notable command options in this dialog: Recursive and Local Copy. Under the Local Copy menu, you can select to Delete, Leave or Replace the local copy of the project.



Show Differences

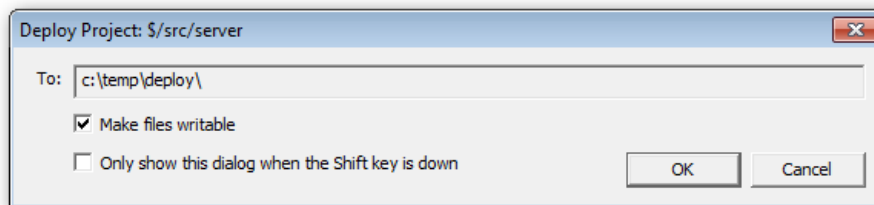
When performing differences on a project, only one option can be selected. Either you can show the differences for the project selected, or you can check the recursive box to show differences for the

selected project and all subprojects. Note that selecting recursive could result in a lengthy operation for large directories.



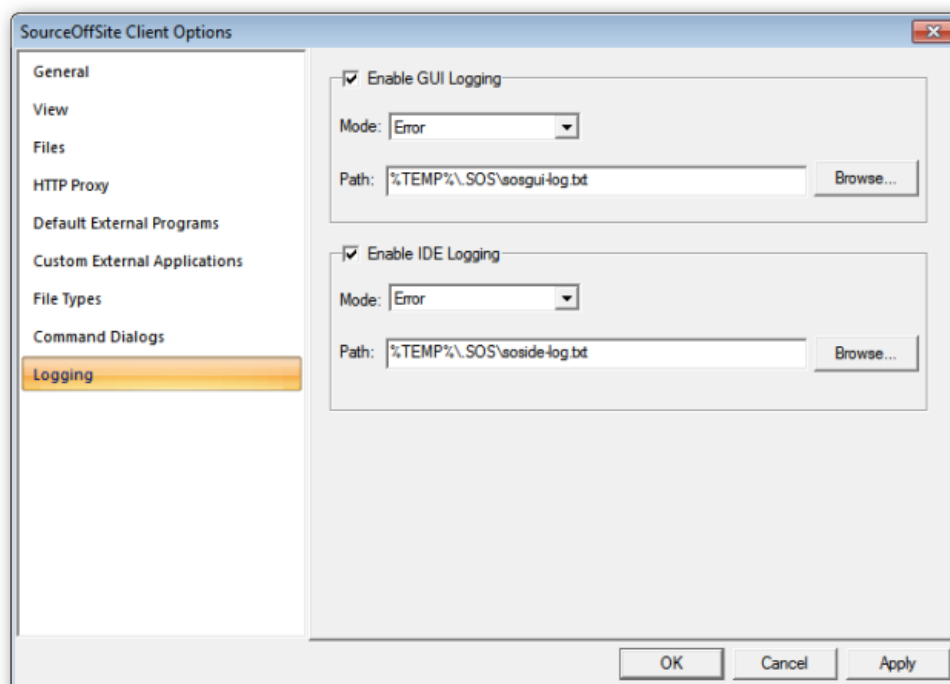
Deploy

When the Deploy command option for projects is enabled, a dialog box will appear when you select Web Deploy from the Tools menu. There is one notable option in this dialog: Make Files Writable.



In the To: box in this dialog, the deployment path is shown as configured in the Web Projects tab of the SourceOffSite Server Manager. Unlike Visual SourceSafe, SourceOffSite does not support web deploy with an ftp account. The Deploy Folder must be a folder on the same LAN as the SourceOffSite Server. We recommend specifying the Deploy Folder using a UNC pathname.

4.9. Logging



Enable GUI Logging

One of the new features of SourceOffSite 5.0 is client-side logging. By checking the box “enable GUI logging”, SourceOffSite will send information to a log file located in the path specified. The amount of information logged varies based on the setting of the Mode dropdown list. Error only logs the most substantial error conditions. Warning logs additional items of interest. Information logs still more activity. Verbose logs any and all SourceOffSite client activity. We recommend not set logging in Verbose mode unless you are working with SourceOffSite technical support to diagnose a specific issue, as log files will grow quite large in a short amount of time.

Enable IDE Logging

The SourceOffSite IDE client also can log information based on the settings in this dialog. Click enable IDE logging if you wish SourceOffSite to log activity will being the Source Code Control provider for an Integrated Development Environment. As with GUI logging, set the path to where the log file should be stored. The amount of information logged varies based on the setting of the Mode dropdown list. Error only logs the most substantial error conditions. Warning logs additional items of interest. Information logs still more activity. Verbose logs any and all SourceOffSite client activity. We recommend not set logging in Verbose mode unless you are working with SourceOffSite technical support to diagnose a specific issue, as log files will grow quite large in a short amount of time.

Chapter 4. Upgrade

1. Server Upgrade

Upgrading to SourceOffSite Server 5.0 from any SourceOffSite 4.0, 4.1, or 4.2 server 1 is as easy as running the SourceOffSite Server 5.0 installer and following the directions given by the installation wizard. Be sure to exit any instances of the Server running on your system before launching the installer.

Due to changes in the underlying technology of the product and installer, SourceOffSite 5.0 will not upgrade a previous installation. Also, SourceOffSite 5.0 serial numbers are not compatible with earlier versions of SourceOffSite. To use the SourceOffSite Server 5.0, you will need to upgrade your existing serial numbers.

In order to avoid losing information about server setup, SourceGear recommends installing SourceOffSite 5.0 before uninstalling SourceOffSite 4. In this way, information used by the server manager will not be deleted during the SourceOffSite 4.0 uninstall process. Once the SourceOffSite 5.0 Server Manager is correctly configured, then uninstall SourceOffSite 4.

If you wish to run SourceOffSite 4 and SourceOffSite 5 servers simultaneously, note that the new installation must be configured to run on a separate pair of ports to avoid conflict.

Note that while SourceOffSite 4.2 clients can communicate with SourceOffSite 5.0 servers, the reverse is not true. SourceOffSite 5.0 clients cannot communicate with SourceOffSite 4.2 servers. Therefore, it is necessary to upgrade the SourceOffSite server first in order to prevent any interruption for those users have not yet upgraded their client. Users running older clients can still connect to the upgraded SourceOffSite 5 server.

You can download the SourceOffSite Server from our product download page [<https://www.sourcegear.com/Sos/downloads.asp>].

2. Client Upgrade

Upgrading to SourceOffSite Client 5.0 from 4.0, 4.1 or 4.2 is as easy as running the SourceOffSite Client 5.0 installer and following the directions given by the installation wizard. Be sure to exit any instances of the Client running on your system before launching the installer.

The SourceOffSite Client 5.0 installation is not as a true upgrade of previous versions of SourceOffSite. You can manually uninstall previous versions of SourceOffSite prior to installing SourceOffSite Client 5.0, but you will want to retain all crypto keys found in your SourceOffSite Client installation directory. SourceOffSite 5.0 and SourceOffSite 4.2 can coexist in a side by side installation for those users who may need to access both new and older SourceOffSite servers.

SourceOffSite 5 has been enhanced to user a faster and more robust cache structure. For this reason, when installing SourceOffSite 5, all working folders will need to be reconfigured. Therefore, files will initially have a status of known. SourceGear recommends turning on "Use Checksums to Determine File Status", and performing a Get Latest Version of any relevant files in order to reset local version numbers.

Note that while SourceOffSite 4.2 clients can communicate with SourceOffSite 5.0 servers, the reverse is not true. SourceOffSite 5.0 clients cannot communicate with SourceOffSite 4.2 servers. Therefore, it is necessary to upgrade the SourceOffSite server first in order to prevent any interruption for those users have not yet upgraded their client.

You can download the SourceOffSite Client from our product download page [<https://www.sourcegear.com/Sos/downloads.asp>].

Chapter 5. Installation

SourceOffSite recommends the following minimum hardware and software configuration for the Server:

1. 1GHz 32-bit (x86 processor) or 1.4GHz 64-bit (x64 processor) 256 MB RAM
2. 256 MB of additional system memory.
3. up to 1 GB of available hard drive space may be required.
4. 800 x 600, 256 colors (Minimum); 1024 x 768 high color, 32-bit (Recommended).
5. Windows XP; Windows Server 2003; Windows Vista; Windows Server 2008; Windows 7.
6. .NET 3.5
7. Visual SourceSafe 6.0d (SSAPI version 6.0.9848)
8. Windows Installer 3.1.

SourceOffSite recommends the following minimum hardware configuration for the Windows Client:

1. 1GHz 32-bit (x86 processor) or 1.4GHz 64-bit (x64 processor)
2. 64 MB of system memory.
3. 32 MB HDD space.
4. Display: 800 x 600, 256 colors (Minimum); 1024 x 768 high color, 32-bit (Recommended)
5. Windows XP; Windows Server 2003; Windows Vista; Windows Server 2008; Windows 7.
6. Windows Installer 3.0.

1. SourceOffSite Server

The SourceOffSite Server is written in C# and requires the Microsoft .Net Framework 3.5.

The SourceOffSite Server does not necessarily need to be installed on the machine where the Visual SourceSafe database resides. It can be installed on a different machine from the one hosting the VSS database, as long as they are both on the same LAN. However, the SourceOffSite Server does use the VSS Automation component (APIs), so the VSS Client component must be installed on the server machine hosting the SourceOffSite Server. Installing the VSS Client also installs the VSS APIs.

The SourceOffSite 5 server can run side by side with previous versions of SourceOffSite. Users who wish to uninstall SourceOffSite 4.2 should do so as a separate activity after installing SourceOffSite 5.0. It is recommended that you back the `soosvr.prp` file which contains configuration information unique to your server setup and the `soosvr.kys` file, which contains the list of encryption keys. The first time the Server Manager is run, it will ask you to transfer setup information from the SourceOffSite 4.2 installation.

Also, please note that while both SourceOffSite 4.2 and SourceOffSite 5.0 can run simultaneously, they cannot do so on the same ports. Therefore, if you choose to run both servers, each server will need to run on its own unique set of ports. Each server can use any port, as long as it does not conflict with any other application, including older versions of SourceOffSite.

1.1. Set Up Server Environment

Check firewall configuration

SourceOffSite operates using a TCP/IP-based networking protocol. This protocol can be operated on any port. The ports are configured in the General Settings tab of the Server Manager utility. If a firewall or proxy server is in place, the firewall or proxy server may need to be configured to allow connections on that port to pass.

Please note: Since SourceOffSite 5 installs to a different location than previous versions of SourceOffSite, you may need to adjust your firewall settings. The server installation will provide the option to allow an exception automatically. If you do not choose to do so, but want to reconfigure the firewall manually at a later time, add an exception by specifying the path to the executable from within the Windows Firewall section of the security control panel.

Check that Microsoft Visual SourceSafe is installed

The Server must be installed on a machine where Visual SourceSafe has already been installed. Installing the VSS Explorer Client from the CD will ensure that all of the VSS APIs are installed on the server machine. SourceOffSite requires the SourceSafe APIs to be version 6.0.9848 or higher. This version of the VSS APIs is installed with Microsoft VSS 6.0d.

Check that the Microsoft .Net Framework 3.5 is installed

The SourceOffSite Server is written in C# and requires the Microsoft .Net Framework 3.5. You can check to see if the Microsoft .Net Framework 3.5 is installed on your server machine by looking in the Microsoft.NET\Framework folder located in your Windows directory.

1.2. Install SourceOffSite Server

Run the setup program

SosServerProfessional.msi (with encryption)

SosServerStandard.msi (without encryption)

Follow the instructions given by the setup program.

Verify files are in selected folder

After the installation is completed, assuming that default installation location was accepted, the SourceOffSite Server should be found in C:\Program Files\SourceGear\SourceOffSite 5 Server or C:\Program Files(x86)\SourceGear\SourceOffSite 5 Server\ on 64-bit machines. The notable files installed in that folder are:

1. SosService.exe -- The actual Server executable that runs as a service
2. sossvr.prp -- The Server configuration file.
3. ServerMgr.exe -- The GUI tool for managing the server

1.3. Configure Server Manager

The Server Manager is a GUI tool for configuring the SourceOffSite server. A VSS database must be configured in the SourceOffSite Server Manager for SourceOffSite to work. Please refer to the Server

Manager section of this documentation for step-by-step instructions on configuring the following aspects of the Server:

1. System Info
2. General Settings
3. Serial Numbers
4. Databases
5. Users
6. User Keys
7. Web Projects
8. Excluded File Types

1.4. Start the SourceOffSite Server

The SourceOffSite Server runs as a service. The SourceOffSite Server Service will be listed in the Services Control Panel. Configure the SourceOffSite Server service as follows:

1. Windows XP, from Start Menu > Control Panel, select Administrative Tools, then Services. Right-click the SourceOffSite 5 Server and select Properties.
2. Windows Vista, from Start Menu -> Control Panel, select System and Maintenance. Then select Administrative Tools, and double click Services. Right-click the SourceOffSite Server and select Properties.
3. Windows 2003, from Start Menu > Control Panel, select Administrative Tools, then Services. Right-click the SourceOffSite 5 Server and select Properties.

We recommend configuring the following:

1. Set the Startup Type option. We suggest setting this to Automatic.
2. Set the Log On As option. This sets the user name under which the SourceOffSite Server service will execute. If the Visual SourceSafe database is located on a different drive or machine, we recommend changing the account of the SourceOffSite Server service to a Windows Domain account. Examine the Log On As option and make sure it is set to a valid network user name. For example: domainname\username. By default, the SourceOffSite Server service runs as the local system account which may not have access to the VSS installation on another machine or drive.

Please note: When the SourceOffSite Server service is run as a user and VSS is set to automatically log in users using their network names, users will be able to log in to the VSS database using that user's ID without entering a password. There are two ways to avoid this: (1) Run the SourceOffSite Server service as a user that does not have a corresponding Visual SourceSafe log in (2) Turn off the automatic log in option under the Visual SourceSafe Administrator options.

After the Server service is configured, start the service.

1.5. Configure Server Logging

The SourceOffSite server can log information about connections as well as operations performed. While many customers will choose the default settings for server logging, SourceOffSite does provide

a mechanism to change these settings. Details about the name of the log file, the level of logging, and whether or not to create a new log file upon starting the server are all stored in the `sooserver.exe.config` file, located in the installation directory.

The file name for the SourceOffSite server log is located in the line that reads `<param name="File" value="log.txt" />`. Changing this filename will cause the SourceOffSite server to log information to the name specified.

SourceOffSite can either continue to log to the same file, or can overwrite the log file with a fresh copy each time the SourceOffSite server service is started. By default, the log file will be appended to. If you wish to change this setting, find the line in the `sooservice.exe.config` file that reads `<param name="AppendToFile" value="true" />`, and change the value of "true" to "false."

Normally, SourceOffSite only logs errors to the log file in order to keep it from growing to an excessively large size. However, if you wish to glean more information about the server's operations to troubleshoot a specific problem, you can set the logging level to a much higher level of output. To change the logging level, find the line in the `sooserver.exe.config` file that reads `<priority value="ERROR" />`. You can change the value, in increasing order of verbosity, to INFO, WARN, or DEBUG. Please note that setting this value to DEBUG will provide an excessive amount of information for troubleshooting, but due to the size of the log file that would be created, it is not recommended to run indefinitely at this logging level.

2. SourceOffSite Windows Client

The following is a checklist for setting up the Client:

2.1. Set Up Client Environment

The SourceOffSite Client should be installed on machines from which Visual SourceSafe data will be accessed via the SourceOffSite Server. The Windows Client is supported on Windows XP/2003/Vista/2008/7 platforms. Installation instructions for the Unix Clients can be found in the SourceOffSite 4.2 help files.

2.2. Install SourceOffSite Client

The installation of the Client is straightforward. Simply run the installation executable. Please refer to the upgrade information if running the installation over a previous installation of SourceOffSite.

IDE Integration

IDE integration may be enabled during the Client installation process. To enable SourceOffSite integration into development environments, click the Yes button in response to the question:

"Would you like SourceOffSite to be your default Source Code Control provider?"

If you do not want SourceOffSite to be the default Source Code Control provider, click No.

The IDE Client is supported in the following environments: Visual C++ 6.0, Visual Basic 6.0, Visual Studio .Net 2002, Visual Studio .NET 2003, Visual Studio® 2005, Visual Studio® 2008, and Visual Studio® 2010.

SourceOffSite provides a way for you to toggle between Source Code Control providers when using IDE integration. This feature can be accessed from the General Pane of the Options dialog. By enabling or disabling this option, you can change your system registry to choose either SourceOffSite or

Visual SourceSafe as your SCC provider. While SourceGear recommends against changing back and forth between SourceOffSite and Visual SourceSafe on the same machine, this option is helpful for individuals who occasionally need to switch between SCC providers and are familiar with the ramifications.

2.3. Run the SourceOffSite Client

After the setup is complete, start the SourceOffSite Client by using the entry created under the Start menu.

When the SourceOffSite Client is run for the first time, a Connect to Server dialog will prompt for a server machine and the port number to connect. These values are specific to the Server installation. The server name should be either the host name or IP address of the machine hosting the SourceOffSite Server. The port number is the port on which the Server was configured to listen for Client messages.

Import encryption key



If the SourceOffSite Server has been configured to listen on a secure port, the SourceOffSite Client must be initialized with an encryption key to connect to the secure port. The encryption key is generated in the Users Keys section of the Server Manager. An import key file should be obtained for the SourceOffSite Server to which the SourceOffSite Client will be connecting.

To initialize the SourceOffSite Client with the encryption key, start the Client. In the SourceOffSite/Tools Options group of Tools tab of the ribbon, select the Import Encryption Key command and enter the location and name of the import key file. The file name will be <username>.iky. Connections can then be made on the secure port.

If the SourceOffSite Server has been configured to listen on an unsecure port, the SourceOffSite Client does not need an encryption key to access this port.

Please note: SourceOffSite 5 accepts encryption keys with fully qualified domain names. Some keys generated in SourceOffSite 4 may no longer work with SourceOffSite 5, because in previous version SourceOffSite truncated those keys with fully qualified domain names. If the key was created using an IP number, the same key will continue to work. However, if the key was originally created using a fully qualified domain name, or if the client connection is via a fully qualified domain name, a new key will need to be generated for use with SourceOffSite 5.0.

Retrieve project tree

The first time the SourceOffSite Client is run, the Client will retrieve a complete copy of the project tree of the Visual SourceSafe database. This does not mean that every file in the database will be retrieved. Only the project tree is retrieved. However, if the Visual SourceSafe database is very large, this can still be a time consuming operation. This will only happen the first time the Client is run. Thereafter, the hierarchy of the Visual SourceSafe database is cached locally on the SourceOffSite Client machine. Any changes to the VSS database that creates, moves, deletes or renames projects will not be shown until a Refresh Project Tree operation is performed.

3. Uninstall SourceOffSite

3.1. Server

Windows XP/Vista/2003

1. On Windows XP/2003, from Start Menu > Control Panel, select Administrative Tools, then Services. Then, stop and disable the SourceOffSite 5 Server service.

Windows Vista, from Start Menu -> Control Panel, select System and Maintenance. Then select Administrative Tools, and double click Services. Then, stop and disable the SourceOffSite 5 Server service.

2. Windows XP/2003, from Start Menu > Settings > Control Panel, select the Add/Remove Programs. Then, highlight and remove the SourceOffSite 5 Server entry.

Windows Vista, from Start Menu -> Programs and Features. Highlight SourceOffSite 5 Sever, right click and choose Uninstall.

3. Delete the remaining contents of the SourceOffSite 5 Server directory.

3.2. Client

Windows XP/Vista/2003

1. Windows XP/2003, from Start Menu > Settings > Control Panel, select the Add/Remove Programs. Then, highlight and remove the SourceOffSite 5 Client entry.

Windows Vista, from Start Menu -> Programs and Features. Highlight SourceOffSite 5 Client, right click and choose Uninstall.

2. From Start Menu select All Programs, select then remove the SourceOffSite 5 Client entry.

3. Delete the remaining contents of the SourceOffSite 5 Client directory.

Chapter 6. Server Manager

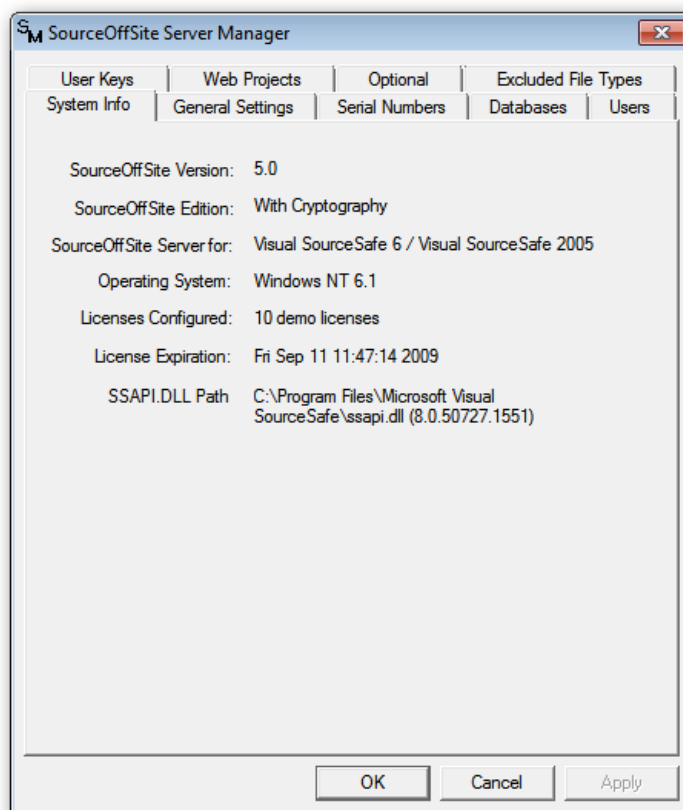
The SourceOffSite Server Manager is a Windows application for configuring the SourceOffSite Server. The Server Manager is included in the SourceOffSite Server installation and should be run before starting the Server for the first time. To start the Server Manager (ServerMgr.exe), launch it from the Windows Start Menu. On Windows Vista, the server manager must run with elevated rights, and will automatically request administrative privileges. The Server Manager has ten tabs to allow configuration of various aspects of the SourceOffSite Server. A description of each tab follows.

Changes are applied when the Server Manager is exited via the OK button or the APPLY button. Closing the Server Manager via the "x" button at the far right of the title bar will cancel any changes made.

Please note: The SourceOffSite Server must be restarted after making any configuration changes in the Server Manager. The SourceOffSite Server does not need to be restarted when using the Server Manager to create User Keys.

1. System Info

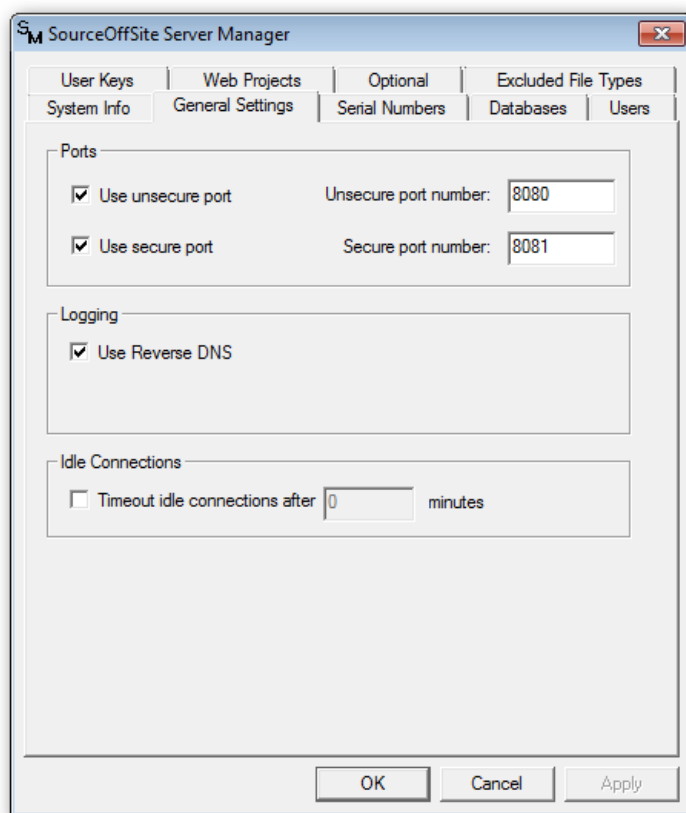
The System Info tab contains version, edition and license information about the SourceOffSite Server. It also contains general system information, including what version of the operating system and what version of the VSS automation layer are being used. There is no user input to this area.



2. General Settings

The General Settings tab contains three sections – Ports, Logging and Idle Connections.

Please note: If changes are made to the General Settings tab, the SourceOffSite Server must be restarted to register the changes.



Ports

The Ports area is used to configure the ports through which the SourceOffSite Server will communicate with the SourceOffSite Client. SourceOffSite operates using a TCP/IP-based networking protocol. This protocol can be operated on any port the user specifies. If a network firewall or proxy server is used, the firewall or proxy server may need to be configured to allow communication on the specified ports.

The SourceOffSite Server may be configured to listen on a secure and/or an unsecure port. The secure port listens for connections with encryption enabled; the unsecure port listens for connections in the clear.

For SourceOffSite with no cryptography, the Use Unsecure Port check box should be checked. SourceOffSite with no cryptography always ignores the secure port.

Logging

Server logging may be set to:

By default, SourceOffSite uses reverse DNS to identify names of client computers that are connecting to the SourceOffSite server. This option can be disabled to improve performance in environments where

reverse DNS lookup would slow program operation. For more options regarding logging options, see the Configure Sever Logging section in the Installation chapter.

Idle Connections

By default, the Idle Connections option is disabled.

Enable this option if the network connection between the SourceOffSite Server and Client times out on a regular basis. When this option is enabled, connections made by SourceOffSite Clients will be dropped after the configured amount of time.

3. Serial Numbers

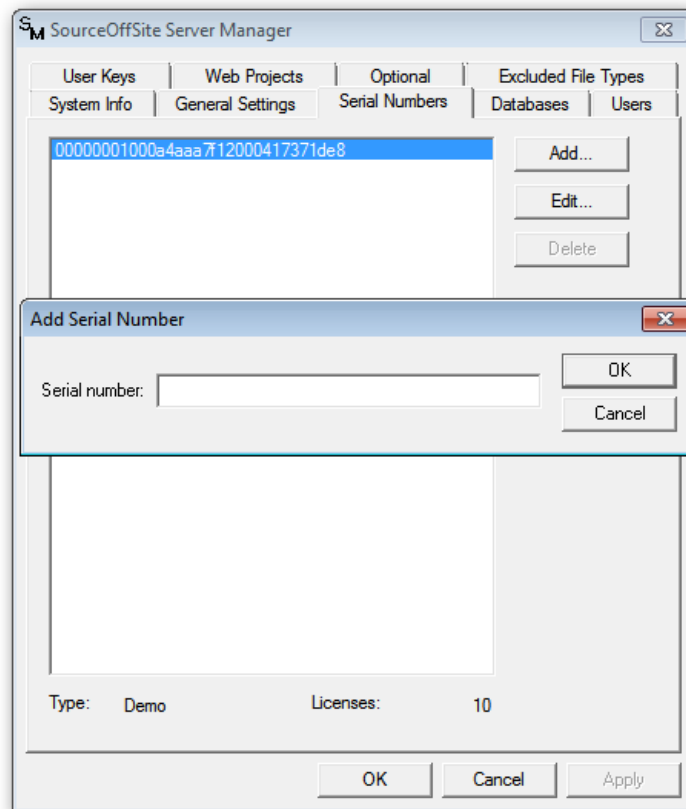
SourceOffSite licensing is configured exclusively on the server-side from the Serial Numbers tab of the Server Manager. When SourceOffSite is purchased, a serial number is issued. A serial number is exactly 32 characters long. Each serial number is encoded with a certain number of licenses and an expiration date. Permanent licenses do not expire.

All SourceOffSite serial numbers granted for versions prior to SourceOffSite 5.0 are not compatible with SourceOffSite 5.0. To upgrade serial numbers from previous versions of SourceOffSite to SourceOffSite 5.0, please visit our online store [<https://csp.sourcegear.com/login.aspx/>].

There is no need to configure a serial number for evaluation copies. The Server Manager will automatically generate a demo serial number. The evaluation copy of the Server will run for 30 days after installation. After the demo period expires, the demo serial number should be replaced by a permanent serial number.

To activate the SourceOffSite Server for long-term operation, the demo serial number must be replaced by one or more permanent serial numbers. Multiple serial numbers may be entered. After the serial numbers are configured and the Server is restarted, the Server will be enabled for the total number of licenses encoded in all the serial numbers.

Please note: Anytime a serial number is added, edited or deleted, the SourceOffSite Server must be restarted to register the change.



Add Serial Numbers

To enter a serial number, press the Add button. Paste the serial number into the Serial Number field in the Add dialog and then press the OK button. If replacing an evaluation serial number with a permanent one, the Edit button should be used.

Edit Serial Numbers

To replace a demo or prior version serial number, select the serial number to be replaced and then press the Edit button. Paste the new serial number over the old serial number in the Serial Number field of the Edit Serial Number dialog and then press the OK button.

Delete Serial Numbers

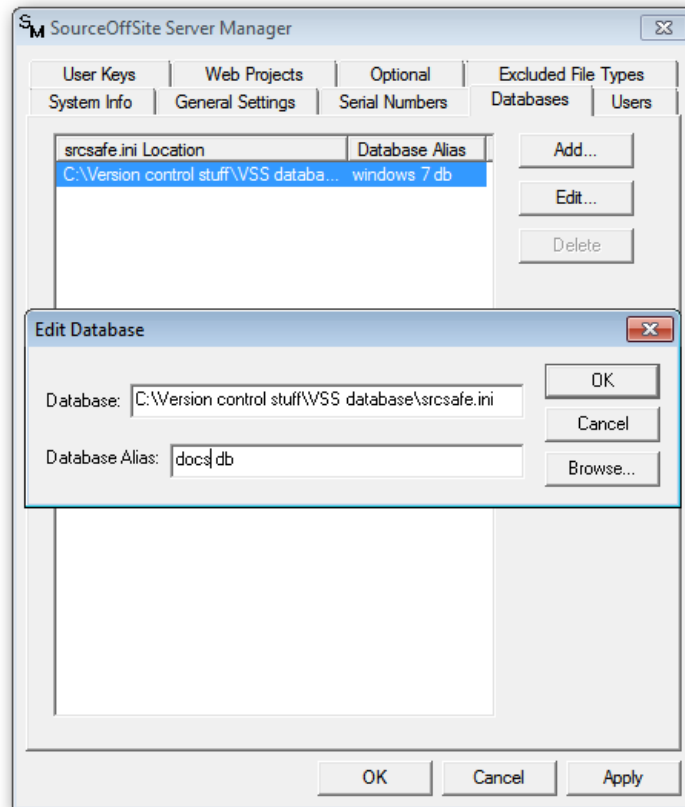
To delete an existing serial number, select the serial number and then press the Delete button.

4. Databases

Multiple databases can be served by a single SourceOffSite Server.

The Databases tab contains the names and aliases of the Visual SourceSafe databases served by SourceOffSite Server.

Please note: Anytime a database is added, edited or deleted, the SourceOffSite Server must be restarted to register the change.



Add Database

To add a database, press the Add button and then use the Browse button in the Add Database dialog to select the srcsafe.ini file corresponding to the Visual SourceSafe database. The file name should be the full path of the srcsafe.ini file corresponding to the chosen database. To hide the physical location of the database, a database alias may be created for each database. If a database alias is created, only the alias name will be visible to SourceOffSite Clients. Click the OK button in the Add Database dialog to save the database path and alias.

When specifying a database that is on a different drive or a different machine from the SourceOffSite Server, the path to the database should be formatted with a UNC pathname and the SourceOffSite Server service should be run as a domain account. To configure the database path using a UNC pathname, browse for the srcsafe.ini file through the Local Area Network as opposed to a mapped drive.

Edit Database

To edit a database path or alias, select the database and then press the Edit button. Make any changes to the database path or alias then press the OK button.

Delete Database

To cause SourceOffSite to no longer serve an existing database, select the database and then press the Delete button.

5. Users

The Users tab contains the Visual SourceSafe user names of the people who will have access the SourceOffSite Server. Configuring this section is entirely optional. If SourceOffSite licenses are

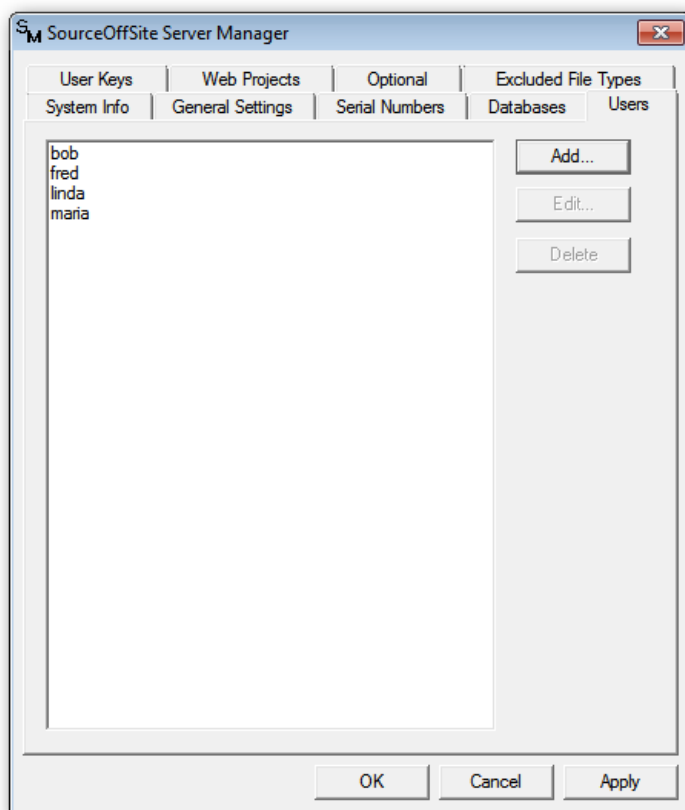
available, the first users to log in to the SourceOffSite Server will be automatically added to the Users tab and then tied to a license.

SourceOffSite is licensed on a per user basis (not on a concurrent user basis). Each user name listed in the Users tab will be locked to a SourceOffSite license. For example, if five licenses are configured, then five user names may be added to the Users tab. The user names may be added in one of two ways:

1. Five users may be specifically configured. This locks each license to a user. Only the five users configured will be able to log in.
2. The Users tab may be left blank and users may log in on a first-come, first-serve basis. The first five users who log in to SourceOffSite will be automatically added to the Users tab and a license will be locked to each of those users. After five users log in, no more licenses will be available, so no one else will be able to log in.

It is possible to limit access to fewer users than the number of licenses owned. This can be accomplished by adding "dummy" user names for the total number of licenses. These "dummy" user names may be replaced with legitimate user names as needed.

Please note: Anytime a user name is added, edited or deleted, the SourceOffSite Server must be restarted to register the change.



Add Users

To enter a user name, select the Add button. Type the Visual SourceSafe user name into the Visual SourceSafe User Name field in the Add User dialog and then press the OK button.

Edit Users

To replace an existing user name, select the user name and then press the Edit button. Edit the user name in Visual SourceSafe User Name field in the Edit User dialog and then press the OK button.

Delete Users

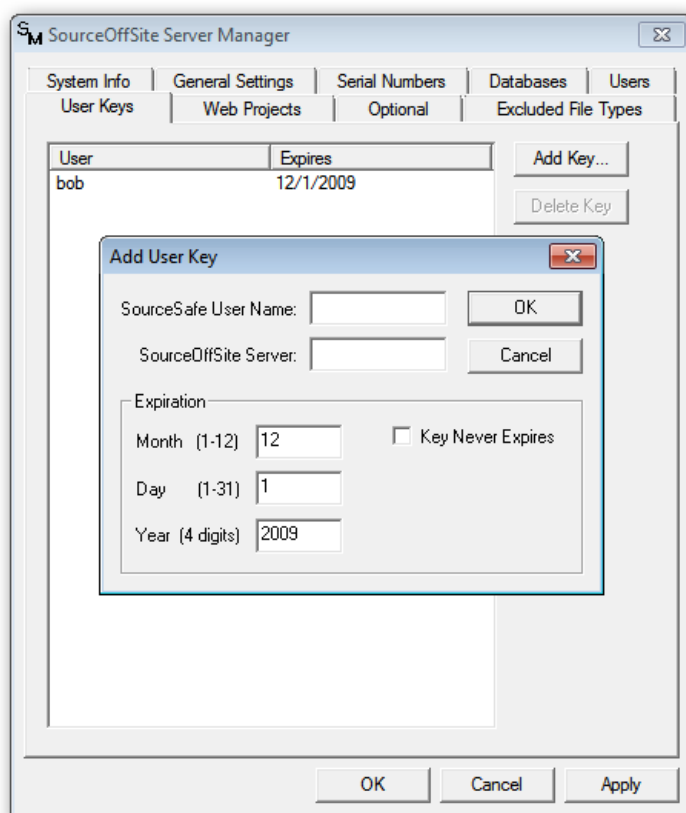
To delete an existing user name, select the user name and then press the Delete button.

6. User Keys

Each user must have a user key to access the secure port of the Server. The User Keys tab is used to generate those user keys and to maintain the Server Keys file (sossvr.kys). The Server Keys file contains all user keys authorized to access the Server. All new encryption keys generated are 128-bit keys.

User keys are not needed for SourceOffSite with no cryptography or for the unsecure port of SourceOffSite with cryptography.

Please note: Information entered in the User Keys tab is not tied to the contents of the Users tab.



Add Key

To create a key, click the Add Key button. In the Add User Key dialog, enter a Visual SourceSafe User Name and a SourceOffSite Server name. Please note that no verification is done on this user name when it is entered in the Server Manager. To log in successfully, the user name must be known to Visual SourceSafe.

The server name should be the DNS name or IP address of the machine on which the SourceOffSite Server will be running. Additionally, the server name entered here must correspond to the server name specified in the Client Connect dialog. Some examples of server names are:

bullwinkle bullwinkle.abc.com 236.162.15.22

By default, the user key will expire 90 days from the day that it is made. The expiration date may be changed in the Expiration section of the Add User Key dialog. If the Key Never Expires option is selected, the user key will never expire.

After a user key is created, an encryption key file entitled <username>.iky will be generated and placed in the Server directory. This key file should be delivered to the user in a secure fashion. The user must import [54] this key into the SourceOffSite Client in order to communicate with the SourceOffSite Server through the secure port.

All encryption keys are maintained locally on the Server in the Server Keys file. When a SourceOffSite Client tries to connect to the Server, it sends the encryption key to the Server. The Server verifies that the key matches the key stored in the Server Keys file.

Delete Key

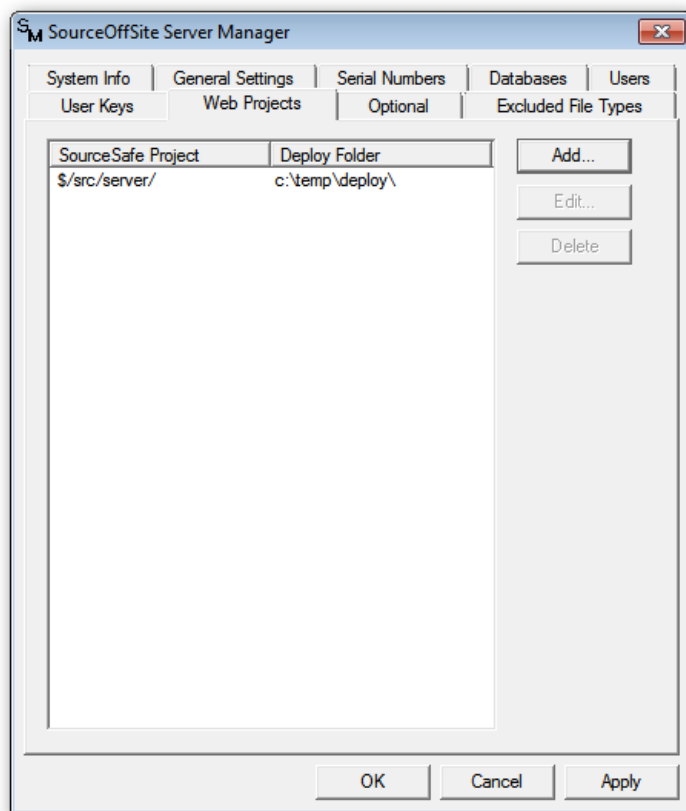
A user key may be removed by selecting the entry and pressing the Delete Key button. This removes the key from the Server Keys file.

7. Web Projects

The Web Projects tab contains the names of Visual SourceSafe projects that are designated as web projects. Only those projects configured as web projects in the Server Manager will be deployable by SourceOffSite Clients.

Web Projects set in SourceOffSite are not required to match those set in Visual SourceSafe. In other words, if a web project is set up in SourceOffSite, it does not necessarily need to be configured in Visual SourceSafe and vice versa. In such a case, if some developers are using SourceOffSite, while other are using Visual SourceSafe, one group of people would be able to utilize web deploy, while the other group would not.

Please note: Anytime a web project is added, edited or deleted, the SourceOffSite Server must be restarted to register the change.



Add Web Project

To specify a web project, click Add. Enter the name of the Visual SourceSafe Project and the Deploy Path in the appropriate boxes of the Add Web Project dialog. The Visual SourceSafe Project must be a current project in the Visual SourceSafe database. The path should begin with a “\$/” and give the full path to the project to be deployed, for example:

\$/WebProject

Unlike Visual SourceSafe, SourceOffSite does not support web deploy with an ftp account. The Deploy Folder must be a folder on the same LAN as the SourceOffSite Server. We recommend specifying the Deploy Folder using a UNC pathname. For example: \\machinename\sharename\deploy folder

When specifying a deploy folder that is located on a different drive or a different machine from the SourceOffSite Server, the SourceOffSite Server service must run as an NT domain account.

Edit Web Project

To Edit an existing web project, select an entry and then press the Edit button. Make any changes in the Edit dialog and then press OK.

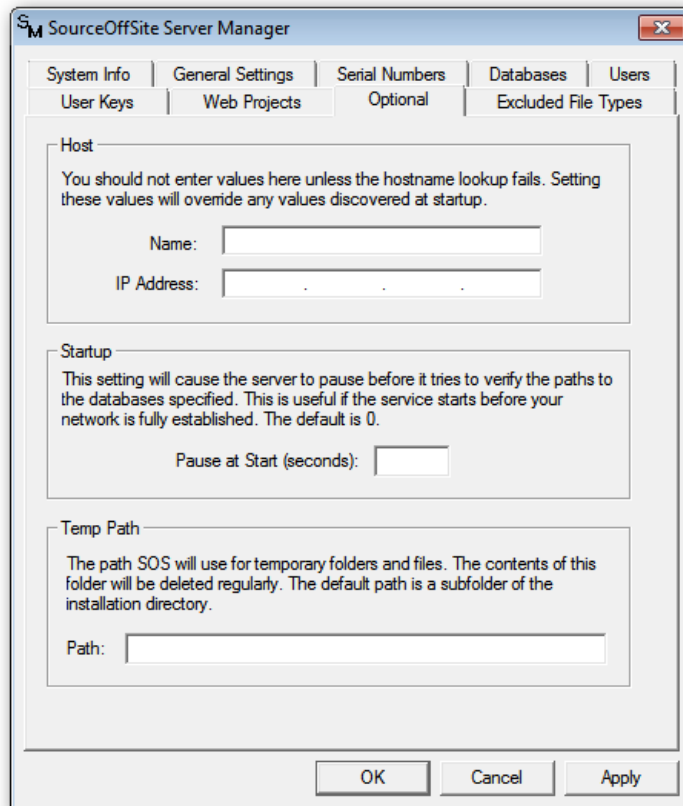
Delete Web Project

To remove the web project specification, select an entry and then press the Delete Button.

8. Optional

The Optional tab contains three options that many users may never need, but are included to alleviate problems that can occur in certain environments.

Please note: Anytime a file type is added, edited, or deleted, the SourceOffSite Server must be restarted to register the change.



Host

Allows you to specify the server name and IP address of the server machine when there are multiple network cards. In all other cases, the SourceOffSite Server will automatically bind itself to the network.

Startup

If your SourceOffSite Server service cannot start because the database path cannot be validated quickly enough during a system restart, you can cause the SourceOffSite Server to pause for a specified amount of time to correct the problem.

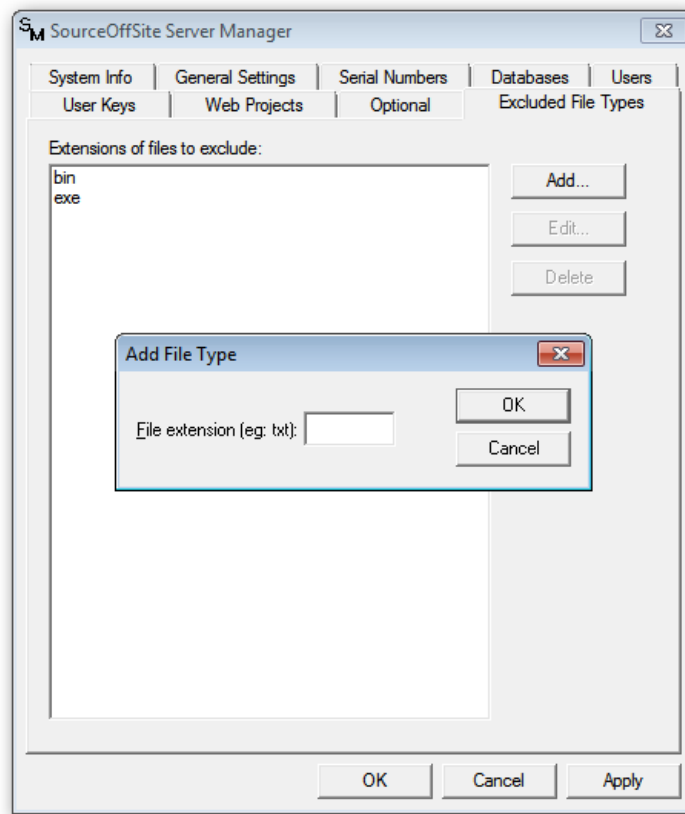
Temp Path

Allows you to specify the location on your disk where you want the SourceOffSite Server to write temporary files and folders. If you do not specify a location, the Server will use a subfolder of your installation directory by default.

9. Excluded File Types

The Excluded File Types tab contains a list of files types to be excluded from the Visual SourceSafe database. Files with the extensions listed here can not be added to projects in the Visual SourceSafe database using SourceOffSite.

Please note: Anytime a file type is added, edited, or deleted, the SourceOffSite Server must be restarted to register the change.



Add Excluded File Types

To add an excluded file type, click the Add button. Enter the file extension in the Add File Type dialog and then press the OK button.

Edit Excluded File Types

To Edit an existing excluded file extension, select an entry and then press the Edit button. Make any changes in the Edit File Type dialog and then press OK.

Delete Excluded File Types

To remove an excluded file extension, select the file extension and then press the Delete button.

Chapter 7. Troubleshooting

For the latest SourceOffSite troubleshooting information, see our online forum. [<http://support.sourcegear.com/>]

Chapter 8. License

SourceOffSite is licensed on a per user basis (not by concurrent users). If you have three people who use SourceOffSite, you need to purchase three licenses: one license for each of those three people. Each user may install the SourceOffSite Client on multiple machines as needed. The SourceOffSite Server will limit the number of users to the number of licenses purchased.

In order to activate SourceOffSite for operation, you must configure one or more serial numbers on the server-side. These serial numbers are used to tell the Server how many Client licenses you have purchased. For evaluation licenses, the serial number is dynamically generated.

Please see the SourceOffSite license agreement [<http://www.sourcegear.com/sos/licenseag.html>] for specific details.

Legal Notice

To use SourceOffSite, you must be a licensed user of Microsoft Visual SourceSafe™. Please refer to your Microsoft Visual SourceSafe™ license agreement for specific details. SourceOffSite facilitates access to a Visual SourceSafe database from a machine where Visual SourceSafe itself may not have been installed. However, it is important to remember that SourceOffSite is a technological substitute for Visual SourceSafe, but it is not a legal substitute. To access a Visual SourceSafe database, you must be a licensed user of Visual SourceSafe, regardless of the means you use to obtain that access.

This product includes cryptographic software. Blowfish was developed by Bruce Schneier of Counterpane Systems. The implementation of the algorithm used by SourceOffSite was written by Eric Young (eay@cryptsoft.com). Copyright (C) 1995-1997 Eric Young (eay@cryptsoft.com). All rights reserved.