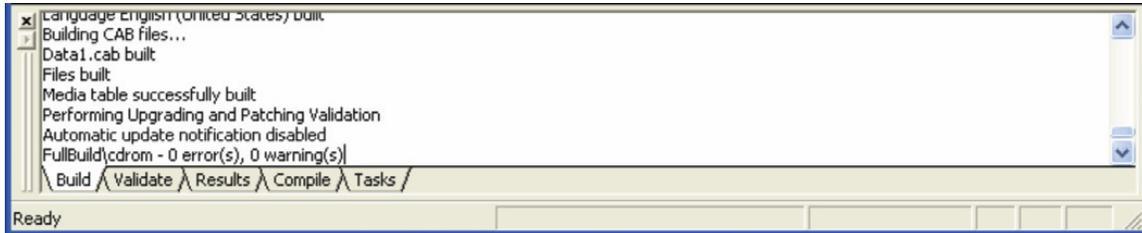


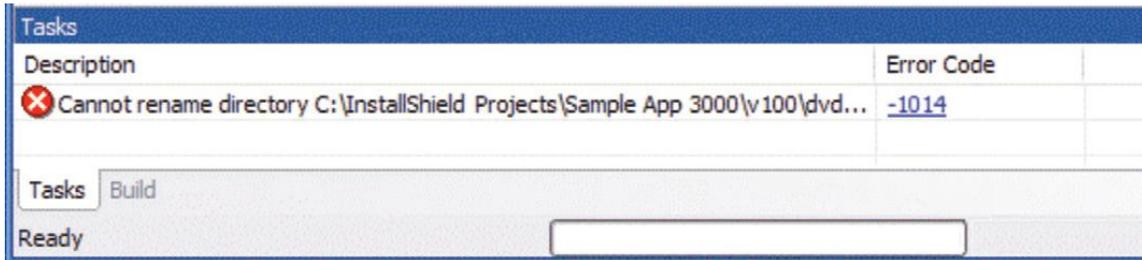
MSI Build Warnings and Errors

As InstallShield builds your project, status messages are displayed in the output window at the bottom of the development environment.



For a command-line build using IsCmdBld.exe, status messages are displayed at the command prompt.

If any errors or warnings occur, they are displayed in the Build tab of the output window, as well as in the Tasks tab. The Tasks tab contains links to the InstallShield Knowledge Base for the latest information about resolving these warnings. (This requires a live Internet connection.)



Addressing Build Errors and Warnings

Build errors and warnings typically refer to missing or unexpected source files or merge modules, but can refer to any condition that prevents a build from completing. For example, the build process reports error **-1014** ("Cannot rename directory...") if an installation inside the build folder is running, or if Windows Explorer or a command prompt is pointing to the build folder.

In addition, the InstallShield environment will prevent you from entering some project settings that would cause the package to fail at deployment time. For example, a project cannot use DATABASE or PATCH as an internal Directory-table identifier—the way INSTALLDIR or SystemFolder is a Directory identifier—as these are reserved identifiers used by Windows Installer. If you try to define a component destination folder with internal identifier DATABASE, the environment will rename the identifier to a valid value such as DATABASE_DIR1. (If, however, you use the Direct Editor to define a Directory called DATABASE or PATCH, the build process will report error **-6262**.)

TIP: When you manually search the InstallShield Knowledge Base for a particular build warning or error number, omit the minus sign in the search. For example, instead of searching for “-1014”, search for “1014”.

Errors Regarding Missing Source Files

If the build process cannot find a source file, because it has been renamed or deleted, the build process returns error **-6103** (“Could not find file file”) and **-1007** (“Cannot copy source file to target directory”).

Two features of InstallShield that can help you work with source files are path variables and dynamic file linking. Path variables are variables used by the InstallShield build process to represent the locations of source files on the development system. Whenever you add a file to a component, InstallShield by default creates a path variable or reuses an existing path variable to represent that file’s location. If you move the source file, instead of having to reestablish the file link, you can simply assign the path variable a new value in the Path Variables view of the InstallShield environment. (The InstallShield help library also describes registry-based and environment variable-based path variables, with which you can modify path variable values without having to modify the project file.)

In addition, if you have source directories that contain lists of files that are continually changing, you can use dynamic file linking. With dynamic linking, you specify a directory and optional file name masks for inclusion and exclusion. Each build process then copies all of the matching files in the dynamic link into the corresponding component.

An important consideration regarding file linking is that a dynamically linked file cannot be the key file of its component. However, a component can contain any combination of static and dynamic links, and therefore a solution is to set a statically linked file as the key file, additionally marking the key file as an exclusion to the dynamic link.

Moreover, when using dynamic file linking, it is important to specify a “previous package” in the build settings to ensure File, Component, and Media table keys are synchronized between builds. For more information, see the InstallShield help topic “Upgrade Considerations”.

Another error related to missing data on the build system is **-1024** (“File not found. Cannot stream the file into the Binary file.”), which occurs if a file used by a custom action or dialog box (such as a DLL or bitmap file) has been moved or deleted. Similarly, build error **-7017** occurs if your project includes merge modules or other redistributables that are not present on your build system. Other errors sometimes related to missing source files are **-6271** (“File file not found. An error occurred building the MsiFileHash table record...”) and **-1501** (“Could not compress file into file.cab”).

Design Issues and Build Warnings

In addition to issues related to source files, some build warnings address design issues in your project.

A deferred custom action must be placed between InstallInitialize and InstallFinalize in the Execute sequence of an installation. To help detect problems with improper placement of deferred actions, the build process generates warning **-6524** if it detects a deferred custom action outside the range of InstallInitialize and InstallFinalize.

TIP: By default, the build process will continue to completion even if any build errors occur. To cancel a build, you can click the Stop Build toolbar button, or press **Ctrl+Break**. To specify always to stop a build if an error occurs, you can pull down the Tools menu and select Options; in the General tab, select the check box labeled "Stop build process when first error is encountered".

If you use the command-line build tool IsCmdBld, the -x switch enables you to stop the build when the first error occurs, and the -w switch lets you specify that build warnings should be treated as errors.

Begin a Free Evaluation of InstallShield

You can download a free trial version of InstallShield from the Flexera Software Web site at:

www.flexerasoftware.com/installshield/eval

Want to learn more best practices for building quality installations? Join an InstallShield training class – visit www.flexerasoftware.com/training for available classes.

You can also get more tips on building MSI installations in our white papers area at

www.flexerasoftware.com/whitepapers