The ConflictManager Process

ConflictManager provides an efficient way to detect and resolve potential conflicts before you deploy applications across your organization's workstations. Before you begin to use ConflictManager, however, you must set up your work environment by connecting to a database, defining conflict settings. If you are using the Enterprise Edition, you might also want to customize conflict resolution rules. Once you have set up ConflictManager, you can import applications into the database, detect conflicts between applications, resolve conflicts, export the changed applications, and test the modified installations.

Before You Start to Use ConflictManager

Before you can start resolving application conflicts, you must set up your ConflictManager work environment. This consists of connecting to or creating a database, defining conflict settings, and defining resolution rules.

 Connect to or create a database. The ConflictManager installation process sets your default ConflictManager database. If you choose to use an Access database for ConflictManager, it is created automatically in the Wise Package Studio share point directory during installation. If you want to use an MSDE or SQL Server database instead, you must create the database and register it as a data source either before or after installing ConflictManager.

When you first start ConflictManager, it opens your default database. If you want to use a database other than the default, or if you did not connect to a database during installation, you must create a database, register it as a data source, and then open it in ConflictManager. See Opening a ConflictManager Database on page 47 and Creating a New ConflictManager Database on page 48.

- **Define conflict settings.** Conflict settings determine the type of conflicts that are detected and the items, such as files and registry keys, that are excluded from the conflict detection. Excluding files and registry keys helps eliminate conflicts that don't have a negative impact on any installation. You define ConflictManager settings in the Conflict Settings dialog box, which you access by selecting Conflict Settings from the Setup menu. For more information, see Defining Conflict Settings on page 56.
- Define conflict resolution rules. Conflict resolution rules let you
 resolve conflicts automatically, which saves time, reduces errors, and
 provides consistency in conflict resolution. ConflictManager contains four
 predefined rule sets you can use.

If you have the Enterprise Edition, you can modify the existing rule sets or create your own to meet your needs. Rule sets are stored with the database, therefore, if you use multiple ConflictManager databases, you must define rule sets separately in each one. To define resolution rules, select Conflict Resolution Rules from the Setup menu. See Using Conflict Resolution Rules on page 64.

Process for Resolving Conflicts

Rather than depending on the trial and error method of finding conflicts that is, by installing an application and waiting for it to crash—you can approach the problem systematically with ConflictManager. You first obtain a Windows Installer or WiseScript installation file for each application you want to check for conflicts. If you want to check an application that is not in either of those formats, use Wise Package Studio to repackage it. Then import each application into a ConflictManager database, where you use ConflictManager to compare applications and find potential conflicts.

Typically, you follow the general process listed below to use ConflictManager. In some cases you might not follow all these steps, and often you might not follow them in order. If you are using ConflictManager for the first time, however, the steps below help familiarize you with different parts of the process.

Step 1: Define Applications

Before using ConflictManager to find conflicts, you need definitions of all the application installations that you need to compare. Each application must be in WiseScript (.WSE) format or Windows Installer (.WSI or .MSI) format. You can obtain application installations in different ways.

- If you're a software developer or your company uses in-house custom applications, you can build your installation in a Wise authoring tool such as Windows Installer Editor.
- Use an existing third-party Windows Installer or WiseScript installation.
- Use SetupCapture, ApplicationWatch, or other Wise Package Studio tools to repackage a third-party installation into WiseScript or Windows Installer format. See the *Wise Package Studio Reference Manual* for more information on the Package Studio tools.
- Use the predefined applications that are shipped with ConflictManager's sample database.

Step 2: Prepare Installations for Import into ConflictManager

Whether you built an installation in a Wise product or used Wise Package Studio to convert a third-party installer into WiseScript or Windows Installer format, you need to import the installation into ConflictManager. You can prepare installations for import into ConflictManager in the following ways:

- **Distribute to the ConflictManager share point.** You can use the Distribution Wizard to distribute an application installation to the ConflictManager share point directory. This is the recommended way to distribute applications that you plan to import into ConflictManager.
- **Distribute the installation to any network or local drive.** Use the Distribution Wizard to distribute the installation and its associated files to any network or local directory.
- Save the installation to any network or local drive. If you are not using ConflictManager in a multi-user environment, simply save the installation on your computer.

Note:

In order to export an application after resolving its conflicts, you must have access to the original installation and its associated files.

For more information about the Distribution Wizard, see the topic titled *Distribution Wizard* in the Wise Package Studio Help.

Step 3: Import Application Installations into ConflictManager

After you prepare installations for import, use ConflictManager to import them into the ConflictManager database. You can import application installations in the following ways:

- **Import from the ConflictManager share point.** If you or a coworker used the Distribution Wizard to distribute installations to the ConflictManager share point, import them into ConflictManager by selecting Import from Share Point from the Application menu. If you have the Enterprise Edition, you can use the Auto Import Service to import applications automatically. See Importing From the ConflictManager Share Point on page 73.
- **Import from any network or local drive.** If you or a coworker used the Distribution Wizard to distribute an installation to a network drive, or if an installation was saved to a local drive, import the installation

into ConflictManager by selecting Import from the Application menu. See Importing From a Network or Local Drive on page 78.

• **Distribute directly to the ConflictManager database.** The Distribution Wizard can distribute an application installation directly to the ConflictManager database. When you use this distribution method, the application automatically appears in the database the next time you open the database in ConflictManager.



Distributing directly to the ConflictManager database does not copy any files, so you cannot recompile the application after resolving its conflicts. Use this method only when you plan to use ConflictManager as a reporting tool.

Step 4: Detect Conflicts

After importing all the application installations that you need into ConflictManager, you can find conflicts by selecting Detect from the Conflicts menu. You choose one or more applications for which to find conflicts, which populates the database with conflict information for those applications you chose. ConflictManager identifies conflicts in files, registry, Autoexec.bat, Config.sys, ODBC, NT services, devices, .INI files, shortcuts, and path additions.

To actually see the conflicts, you use the Retrieve button in the left pane of the Conflict List. You can only retrieve conflicts for one application at a time. You can use the Reports menu to display and print conflict information in varying formats.

See Detecting Conflicts on page 84 and Reviewing Conflicts on page 86 for more information.

Step 5: Resolve Conflicts

The process of resolving a conflict involves looking at each file that has a conflict and choosing which version should be installed on the destination computer. You can also choose to change the location of conflicting files so that each application can use its respective version of the file. To resolve file conflicts for a particular application, select either Resolve or Resolve with Rules from the Conflicts menu. The Resolve command runs the Resolve wizard, which lets you review and resolve file conflicts individually. The Resolve with Rules command uses conflict resolution rules to resolve conflicts automatically. See Resolving Conflicts on page 91 for more information.

Step 6: Save Resolved Application Installations

The final step in the ConflictManager process is to save the changes you made to the installation back to the original WiseScript (.WSE) or Windows Installer file (.WSI), which you then recompile. You can also export to the original .MSI, which you do not need to recompile. This produces an installation that does not conflict with other applications on your company's computers. ConflictManager provides two ways to save installation changes:

- **Export.** Writes an application's database information to an installation file. After you export an installation you must compile it in either the Windows Installer Editor or WiseScript Editor.
- **Export and Recompile.** Exports all applications whose conflicts have been resolved. An option lets you recompile the applications automatically after exporting.

See Exporting Applications After Resolving Conflicts on page 100 for more information.

Step 7: Testing Your Repackaged Installation

After you save and recompile a resolved installation, you should install it on a clean machine and test it to make sure it works. If it does not work, return to ConflictManager and redo the conflict resolution, either individually with the Resolve wizard or automatically with rules.

Note:

It is important to test your application on a clean machine. A machine that is not clean might contain newer versions of some of the files you resolved. Because these newer files are not overwritten during the installation, you do not get a true representation of your resolved installation.

- To redo the conflict resolutions with the Resolve wizard, select Resolve from the Conflicts menu. In the wizard, select one or more files, then use the Revert button to undo your previous conflict resolutions for those files. Then try other ways to resolve the conflicts. Use this method when you want to revert changes for just one or a few files.
- To redo the conflict resolutions automatically with rules, select Resolve with Rules from the Conflicts menu and select a different rule set. This reverts all the previous conflict resolutions for that application and then resolves them using the different rule set.
- To revert all previous resolutions without applying a new rule set, select Resolve with Rules from the Conflicts menu and select the **Restore** original conflicts rule set. This reverts all previous conflict resolutions

but does not resolve the conflicts. Later, you can resolve conflicts with a different rule set or with the Resolve wizard.

After you redo the conflict resolutions, repeat the steps to save, export, and compile the application. Then install it on a clean machine and test it again.