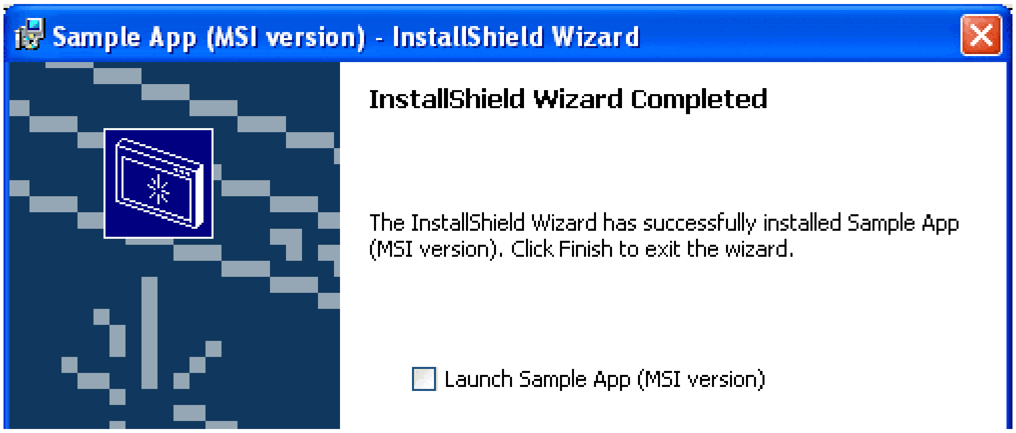
Launching Your Application after Installation

Robert Dickau
Senior Technical Content Manager
Flexera Software

A common requirement for an installation is to launch the installed application when the installation is completed, usually based on the user's check box selection on a completion dialog box similar to the following.



Sample App (MSI version) - InstallShield Wizard

InstallShield Wizard Completed

The InstallShield Wizard has successfully installed Sample App (MSI version). Click Finish to exit the wizard.

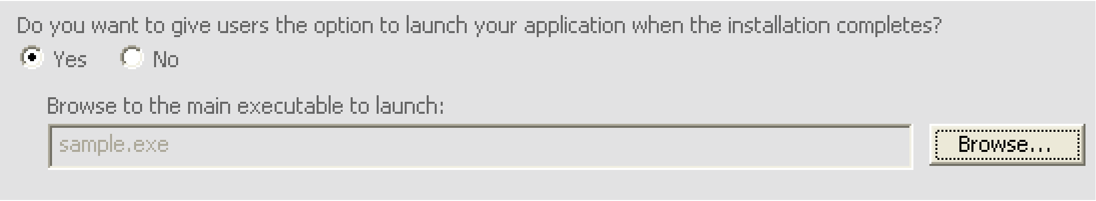
□ Launch Sample App (MSI version)

The following sections describe how to launch your application after installation for Basic MSI and InstallScript project types.

Windows Installer Projects

With a Windows Installer project, the basic idea is to call a launch-an-EXE custom action with a control event on the Finish button of the SetupCompleteSuccess dialog box.

With a Basic MSI project, you can enable such a check box and action in the **Installation Interview** page of the Project Assistant. You begin by selecting **Yes** for the question **Do you want to give users the option to launch your application when the installation completes?** Next, you browse for the executable you want to launch. In the Project Assistant, the executable must already be in the project; for this example, a file called sample.exe has been added to a component with destination INSTALLDIR.



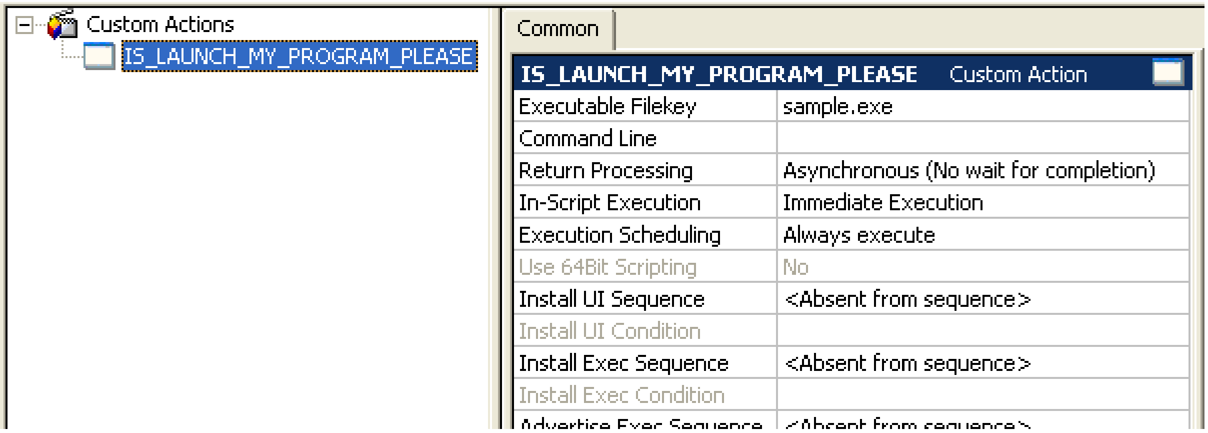
Do you want to give users the option to launch your application when the installation completes?

● Yes ○ No

Browse to the main executable to launch:

sample.exe

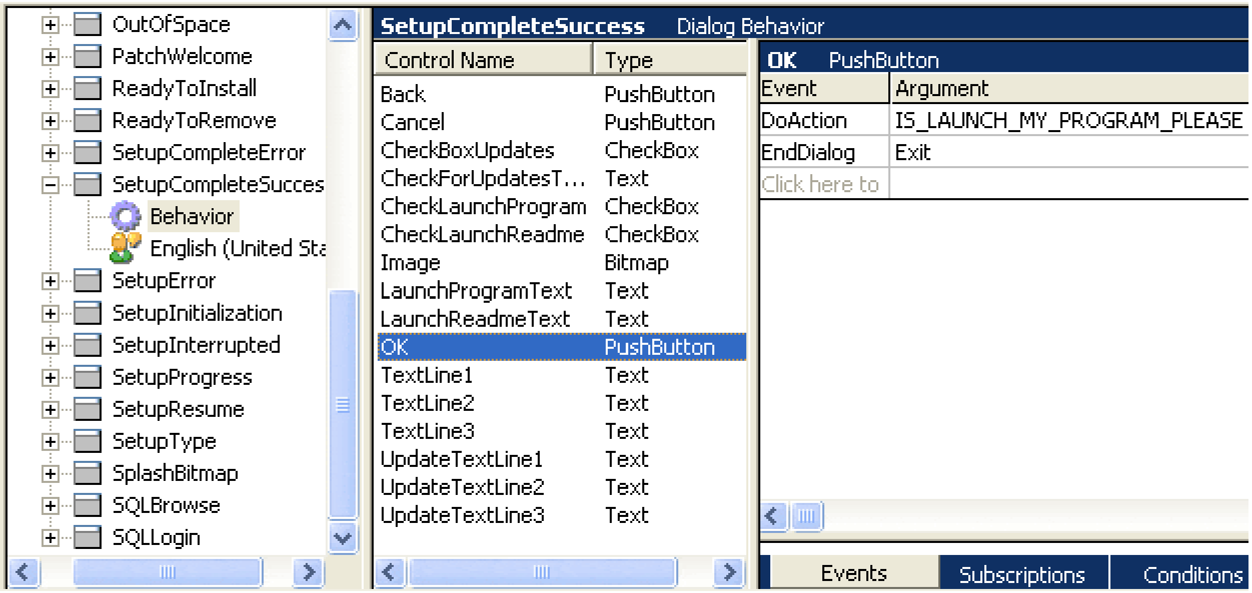
When you select Yes and browse for your executable, InstallShield adds an immediate-mode launch-an-EXE custom action called IS_LAUNCH_MY_PROGRAM_PLEASE to your project.



IS_LAUNCH_MY_PROGRAM_PLEASE Custom Action

Executable Filekey	sample.exe
Command Line	
Return Processing	Asynchronous (No wait for completion)
In-Script Execution	Immediate Execution
Execution Scheduling	Always execute
Use 64Bit Scripting	No
Install UI Sequence	<Absent from sequence>
Install UI Condition	
Install Exec Sequence	<Absent from sequence>
Install Exec Condition	
Advertise Exec Sequence	<Absent from sequence>

The action does not appear in the sequences, hence the Install UI Sequence, Install Exec Sequence, and related settings are undefined in the Custom Actions view. Instead, the action is launched by a DoAction control event attached to the Finish button (internally called the OK button) on the SetupCompleteSuccess dialog box. You can view the properties of the control event in the Dialogs view, under the Behavior node for SetupCompleteSuccess.



SetupCompleteSuccess Dialog Behavior

Control Name	Type
Back	PushButton
Cancel	PushButton
CheckBoxUpdates	CheckBox
CheckForUpdatesT...	Text
CheckLaunchProgram	CheckBox
CheckLaunchReadme	CheckBox
Image	Bitmap
LaunchProgramText	Text
LaunchReadmeText	Text
OK	PushButton
TextLine1	Text
TextLine2	Text
TextLine3	Text
UpdateTextLine1	Text
UpdateTextLine2	Text
UpdateTextLine3	Text

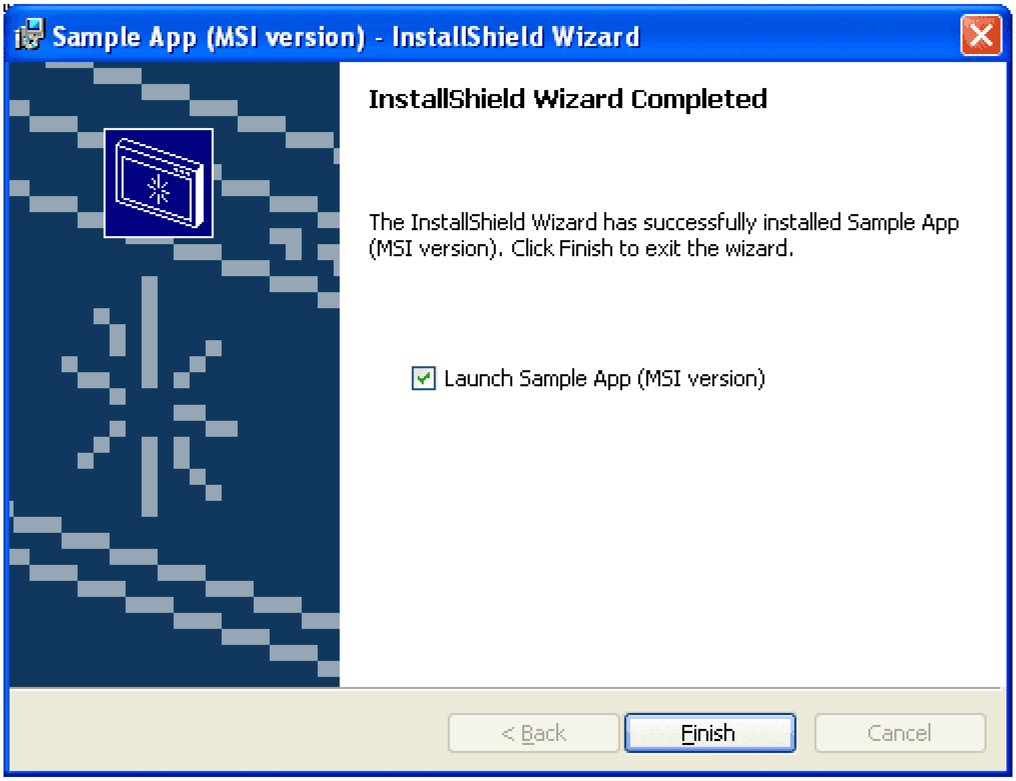
OK PushButton

Event	Argument
DoAction	IS_LAUNCH_MY_PROGRAM_PLEASE
EndDialog	Exit
Click here to	

The DoAction control event has the condition LAUNCHPROGRAM attached to it, where LAUNCHPROGRAM is the property associated with the CheckLaunchProgram check box control on SetupCompleteSuccess. If the user selects the check box at run time, LAUNCHPROGRAM will be set, and the custom action to launch your executable will run. If the user does not select the check box, the condition will fail and the executable will not be launched.

TIP: By default, the LAUNCHPROGRAM property has no value, and so the check box appears deselected by default at run time. To specify that the check box should be initially selected, you can add LAUNCHPROGRAM to the Property Manager view with value 1.

After selecting to add the check box, and then rebuilding and running the installation, the SetupCompleteSuccess dialog box appears as follows.



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☑ Launch Sample App (MSI version)

(If you look at the SetupCompleteSuccess dialog box in the Dialog Editor, you will notice that the option to launch the application is supported by two controls, the check box control called CheckLaunchProgram and the text control called LaunchProgramText. The reason for having two controls is that check box controls do not support the Transparent attribute, and therefore the text of the check box control would appear with a gray background over the white dialog box background bitmap. Text controls do support the Transparent attribute, and therefore the option is represented by a check box with no text, and a text control.)

The check box control and text control that enable the user to choose whether to launch the application have the following compound control condition:

SHOWLAUNCHPROGRAM="-1" And PROGRAMFILETOLAUNCHATEND<>"" And NOT Installed And NOT ISENABLEDWUSFINISHDIALOG

This condition ensures—among other things—that the check box appears only for a first-time installation (**Not Installed**), and not for a maintenance operation or uninstallation. A possible refinement is to offer to launch the application only if the feature containing the application was selected, by adding a condition similar to **&ProgramFeatureName=3**.

InstallScript Projects

For an InstallScript project, you add the option to launch the application by modifying the **OnFirstUIAfter** event handler. By default, the OnFirstUIAfter event handler contains an if statement that checks whether a reboot is necessary and whether you included Update

Service support, and displays the appropriate completion dialog box. The possible completion dialog boxes are SdFinishReboot, SdFinishUpdateEx, and SdFinish. In most cases, SdFinish is the dialog box you will want to modify.

In the default implementation of OnFirstUIAfter, the branch of the if statement that displays SdFinish appears simply as follows:

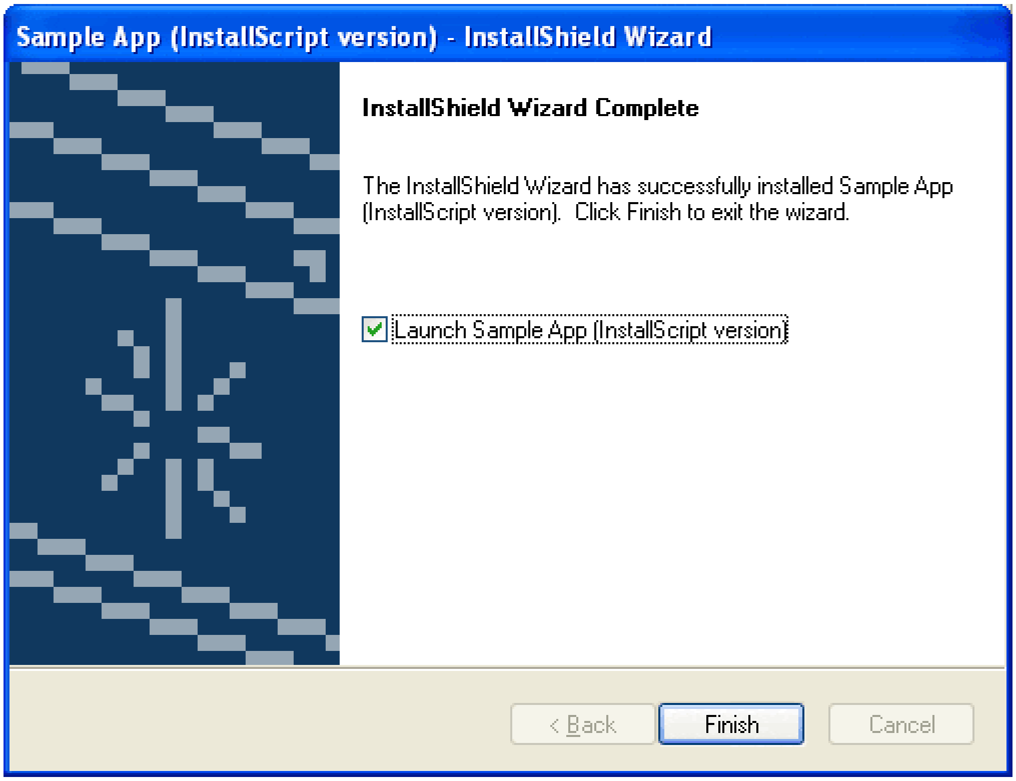
```
SdFinish(szTitle, szMsg1, szMsg2, szOpt1, szOpt2, bvOpt1, bvOpt2);
```

To enable the check box with appropriate text, and launch your application if the user selects the check box, you can modify the branch of the if statement to appear as follows:

```
bvOpt1 = TRUE; // enable check box
szOpt1 = "Launch %p"; // %p expands to product name
SdFinish(szTitle, szMsg1, szMsg2, szOpt1, szOpt2, bvOpt1, bvOpt2);
if (bvOpt1) then
   LaunchApp(TARGETDIR ^ "sample.exe", "");
endif;
```

(In practice, you should use a string-table entry instead of a hard-coded string for szOpt1, to ease localization of your installation project.)

At run time, the dialog box appears as follows.



Sample App (InstallScript version) - InstallShield Wizard

InstallShield Wizard Complete

The InstallShield Wizard has successfully installed Sample App (InstallScript version). Click Finish to exit the wizard.

☑ Launch Sample App (InstallScript version)

As with the Windows Installer project, an enhancement is to ensure the check box is displayed only when the feature containing the application is installed, using the FeatureIsItemSelected