

User Story: Investigate InstallShield
ID: 2110

Abstract

Research and present a document about different installer options available that address most of Colligo's problems with the current built-in Visual Studio 2010 Installer solution:

1. It's a big maintenance overhead – Every time they need to build an installation package it takes 1 of their developers a tremendous amount of time to create the installation packages.
 - a. They're looking for a solution where the creation of an installation package can be simplified a lot.
 - b. Colligo's willing to invest time towards the initial creation of an installation package as long as it makes all subsequent builds more seamless.
2. Colligo would like to have one installation package for both 32-bit and 64-bit applications.
3. Current solution doesn't provide functionality to add custom actions at certain points in the installer and they have to do this through unmanaged code. – They want to add custom actions through managed code at different steps of the installer.
4. Current solution is limited in terms of user experience. It will be nice to have the ability to customize the installer wizard to include flash and/or feature questions.
5. Given all the time invested in building Colligo's current solution, it will be nice to be able to port/convert it easily/automatically to the new installer format.

Introduction

Different installer options were considered. The full list is available at the end of this document. The criteria selected for the evaluation focused on:

- Complexity - How easy is it to configure the installer? How easy is it to customize the installer? Can we easily convert from Visual Studio solution?
- 64-bit & 32-bit package - Is it possible to package the files for a 64-bit installation together with the files for a 32-bit installation into one installer that will run only the appropriate version as per the target system?
- Prerequisites - Can we request certain conditions to be met prior to installation? Can we request certain products to be installed prior to installation?
- Custom actions - Can we request certain actions to be executed as part of the installation?
- Bootstrapping - Is any provision made for bootstrapping the installer?
 - Definition: During the installation of computer programs it is sometimes necessary to update the installer or package manager itself. The common pattern for this is to use a small executable bootstrapper file (e.g. setup.exe) which updates the installer and starts the real installation after the update. Sometimes the bootstrapper also installs other prerequisites for the software during the bootstrapping process.

Findings

The table below summarizes the findings about the top installer options. The license column indicates whether the installer software is proprietary. The version and version date columns indicate the activity associated with the software - it has been assumed that the higher the version and the more recent the

version date are, the better the chance that the installer is in an active and healthy state.

	License	Complexity	64-bit & 32-bit	Prerequisites	Custom actions	Bootstrapping	Version	Version Date
Windows Installer	Free							
Advanced Installer							8.6	19/10/2011
ActiSetup							4.5	2009
MSI Studio							4.2	
InstallWizzard								2010
InstallAware							2012	26/09/2011
InstallConstruct							8	11/04/2011
InstallShield							2012	23/08/2011
MS Visual Studio	Retired [1]						2010	12/04/2010
MSI Factor							2.1	26/07/2011
MSI Studio							5.03	21/10/2011
QSetup							10	27/11/2010
SharpSetup							1.6	18/09/2011
WiX								
Wise Installer	Retired [2]						8	07/11/2011
NSIS							2.46	06/12/2009
InnoSetup								
InstallBuilder 8							8	14/11/2011
InstallCreator								

Legend:

Commercial
Commercial / Free
Free
Retired
Hard
Easy
Not Supported
Information unavailable

[1] With the release of Visual Studio 2010 Microsoft announced that Visual Studio Installer will be retired in favor of InstallShield Limited Edition. The InstallShield Limited Edition 2010 offers comparable functionality to the Visual Studio Installer projects. In addition, you can build your deployment projects using Team Foundation Server and MSBuild. For more information, see <http://tinyurl.com/39pmc2o>

[2] <http://tinyurl.com/6pwlqf3>

Based on the established criteria, we recommend that any further investigation concentrates on

- InstallShield: <http://www.flexerasoftware.com/products/installshield/features.htm>
- Advanced Installer: <http://www.advancedinstaller.com/feats-list.html>
- MSI Setup: http://www.fastgrid.co.uk/feature_comparison.asp

InstallShield

1. Examples of how to convert an existing VisualStudio installer project to an InstallShield project:
 - a. <http://kb.flexerasoftware.com/doc/Helpnet/InstallShield2011/Convert-vdproj.htm>
 - b. <http://stackoverflow.com/questions/7842656/convert-a-vs-setup-project-custom-action-to-installshield-project-custom-action>

2. Great video showing the functionality of InstallShield in terms of interactive forms, 64&32-bit installer packages, verifying preconditions, installing prerequisites, using custom actions, creating a bootstrapper, and converting from the VS built-in installer for InstallShield.
 - a. <http://tinyurl.com/c7ne4bp>
3. Detect version of Office before installer continues
 - a. http://kb.flexerasoftware.com/selfservice/microsites/search.do?cmd=displayKC&docType=kc&externalId=Q103290&sliceId=1&docTypeID=DT_INFO_1_1&dialogID=119437183&stateId=0%200%20119435213
4. A walk-through for the free Limited Edition InstallShield that comes with Visual Studio 2010
 - a. <http://codesmartnothard.com/InstallShieldLimitedEditionForVisualStudio2010Walkthrough.aspx>
5. Provide more examples
 - a. <http://shieldmaster.wordpress.com/>
 - b. Evaluate Colligo's list of preconditions, prerequisites, and custom actions and confirm with product support that they are indeed supported. [Pending Colligo's input]

List of other Installer Options

The following installers have also been considered:

1. AKInstallerMSI
2. Advanced Installer
3. Dacris ActiSetup
4. Desktop Authority MSI Studio
5. DigitalWeb InstallWizard Professional
6. GkSetup
7. InnoSetup
8. InstEd
9. Install Creator
10. InstallAnywhere
11. InstallAware
12. InstallBuilder
13. InstallConstruct
14. InstallJammer
15. InstallSimple
16. Installer VISE
17. Instyler Setup
18. IsWiX
19. IzPack
20. izfree
21. MSI Factory
22. MSISudio
23. MakeMSI
24. Microsoft Visual Studio
25. Microsoft Windows Installer SDK

26. Nullsoft Scriptable Install System (NSIS)
27. Nvn Installer
28. QSetup PRO
29. Qwerty.Msi
30. SharpSetup
31. wItem Installer (formerly wItem Installer2Go)
32. War Setup
33. WiXAware
34. WiXEdit
35. Wise

References

<http://www.installsite.org/pages/en/msi/authoring.htm>
http://en.wikipedia.org/wiki/List_of_installation_software