

Creating a Windows Installer (MSI) Version of the Dragon NaturallySpeaking Installation Version 7

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For More Information:

For general information about MSI, see the Microsoft web site:

http://msdn.microsoft.com/library/default.asp?url=/library/en-us/msi/setup/overview_of_windows_installer.asp

For information about the MSI command line switches, see the Microsoft web site:

http://msdn.microsoft.com/library/default.asp?url=/library/en-us/msi/setup/command_line_options.asp

Introduction:

Using the InstallShield tool "Admin Studio", you can convert a non-MSI installation of Dragon NaturallySpeaking® to an MSI installation that can be installed onto any computer using the Windows installer service (versions 1.2 or 2.0). For your convenience, ScanSoft includes an already built MSI file on the CD that can be installed directly or modified through Admin Studio. To execute the MSI file included with Dragon NaturallySpeaking, type the following command from the NaturallySpeaking Program directory:

```
msiexec /a natspeak.msi
```

If you want to create your own MSI file, use the instructions in this document. The basic procedure is to perform a full installation of Dragon NaturallySpeaking on a "clean system" using the Admin Studio repackager and legacy conversion tool to monitor the process and to generate a project that you can modify using InstallShield Developer.

The MSI file that ScanSoft provides is supported on the Windows 2000 Advanced Server, with System Management Server (SMS) and Active Directory Services (ADS)

From the Windows 2000 Advanced Server, you can install Dragon NaturallySpeaking on the following clients:

- Windows 2000: SP2 and SP3
- Windows XP Professional: SP1

If you are planning to install Dragon NaturallySpeaking in a Windows NT environment, you must follow the instructions in this document to create the MSI installer executable.

Requirements/Tools Needed:

1. An "empty" system -- representative of a clean machine of an end user. This machine must be on the network with a drive mapped to the shared directory of a second machine that contains Admin Studio.

2. A second machine containing an installation of InstallShield Admin Studio, version 3.5, in a directory that is shared across the network with the first machine.
3. A copy of the Dragon NaturallySpeaking Professional, version 7 installation disk.

In general, only the operating system and any universally installed applications should be on the user's machine prior to installing Dragon NaturallySpeaking. You need at least 1 GB of free space on both the user's machine and the machine that contains Admin Studio.

Procedure to Create the Initial InstallShield Visual Studio Project:

Follow the Admin Studio procedure to create a legacy installation (.INC) file and then convert that file into a Windows Installer (.MSI) project. See your Admin Studio documentation (or the Admin Studio Evaluator's Guide) for instructions on how to do this.

During the repackaging process (isrepackager.exe) you must enter some information specific to the Dragon NaturallySpeaking installation and conversion.

1. In the "Method Selection" pane, select the "Installation Monitoring" option.
2. In the Product Information pane, enter the following information in the designated fields:
 - a. Setup: The full path to the Dragon NaturallySpeaking setup.exe file you are installing.
 - b. Product Name: Dragon NaturallySpeaking
 - c. Version: 7.0
 - d. Product URL: <http://www.scansoft.com/naturallyspeaking>
 - e. Support URL: <http://support.scansoft.com>
 - f. Company Name: ScanSoft, Inc.
3. In the "Select a Configuration" pane, select "Use Settings from a Custom File," and enter the full path to the supplied configuration file (configuremsi.ini) that accompanies this document.

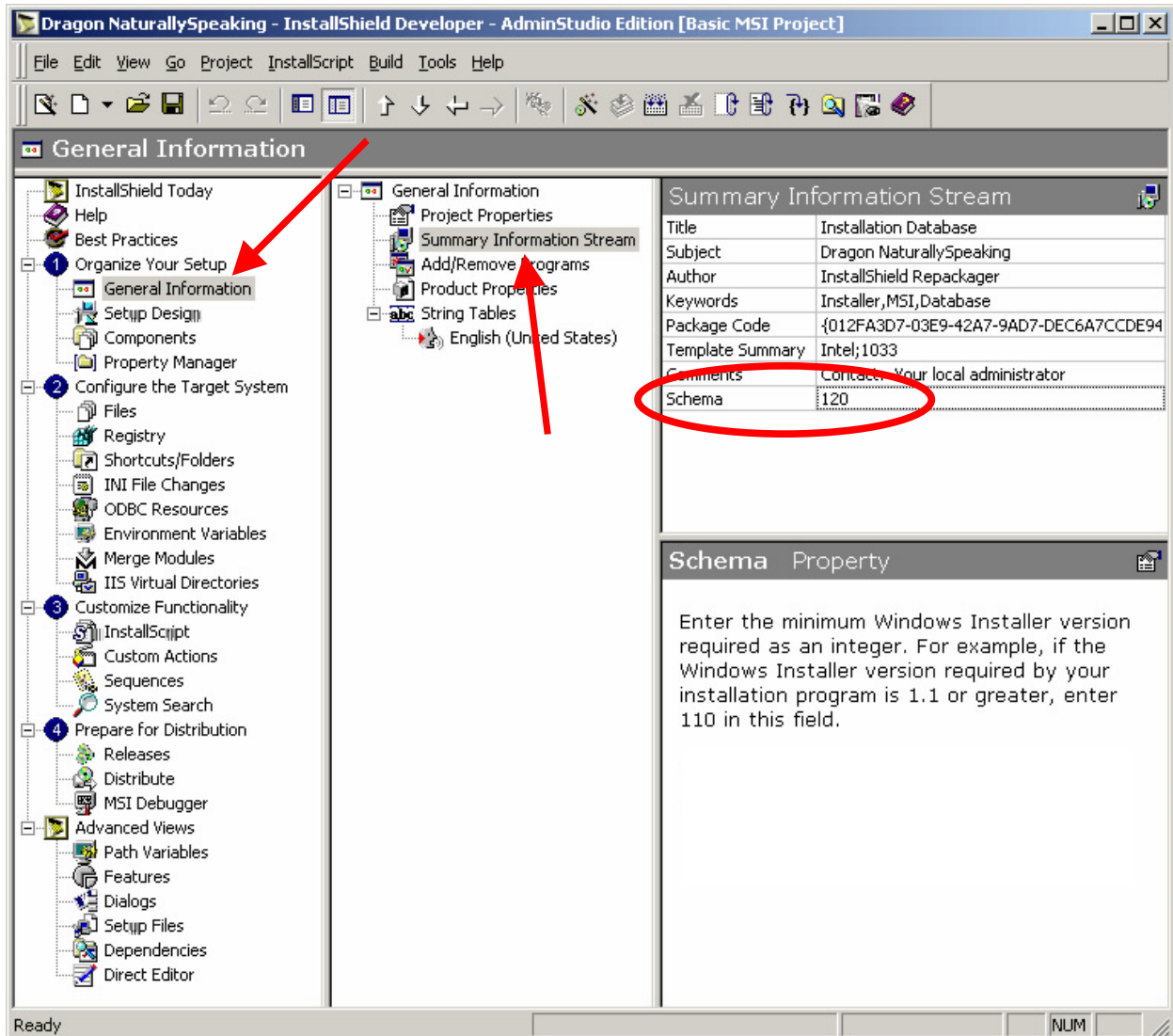
When you install (and monitor) Dragon NaturallySpeaking on the clean system, you should confirm that ALL supported languages and dialects are installed. Usually this happens by default. If there are any missing languages or dialects, try reinstalling the program.

Once you complete the repackaging process, you must run InstallShield's "Legacy Converter" process (legacyconverter.exe). Use the default settings. The project information screen should contain the information already entered during the repackaging process. Deselect the "Build an MSI package after creating the setup project" box in the Conversion Options frame to prevent the MSI package from building twice.

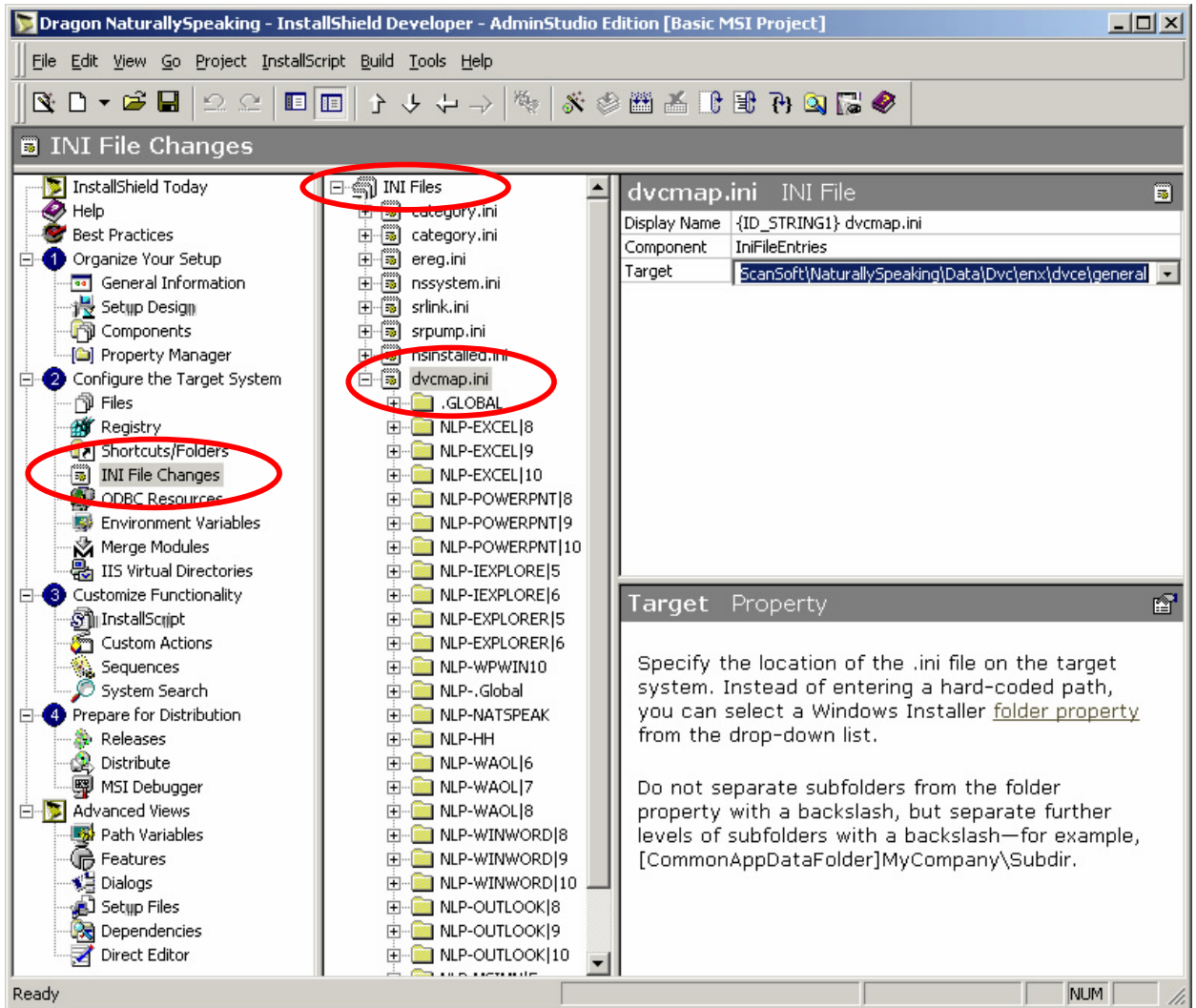
Necessary Modifications to the Project:

After the Legacy Conversion step, open the .MSI file in InstallShield Developer, make any desired changes within the Developer environment, and rebuild the .MSI file to produce a working Windows Installer service version 1.2 or 2.0 of Dragon NaturallySpeaking. These changes include the following, along with any other modifications that are relevant to your environment:

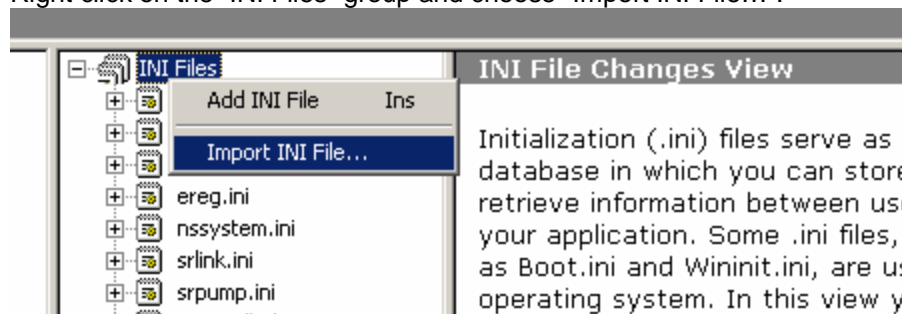
1. To enable use of version 1.2 of the Windows Installer service (instead of requiring version 2.0).
 - a. In the “Organize Your Setup/General Information” view, select “Summary Information Stream” and then the “Schema” property.
 - b. Change the value of the “Schema” property to match the minimum version of the Windows Installer that you expect your systems to use. Changing the value from “200” to “120” allows version 1.2 of the Windows Installer Service to install your built .MSI file.



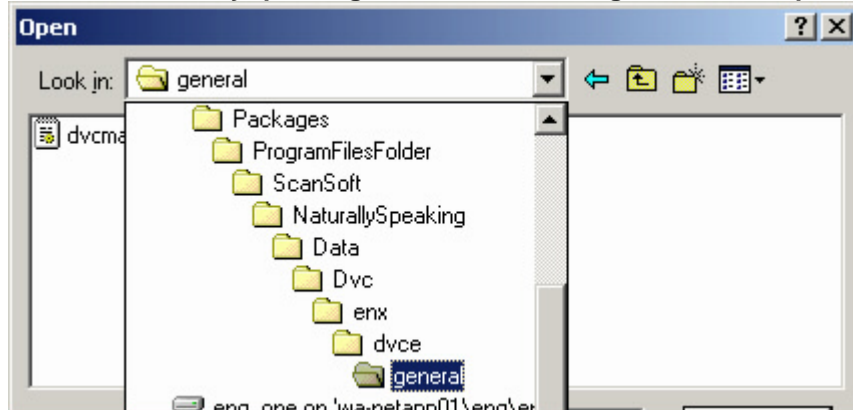
2. Remove the dvcmap.ini files and re-import them manually. The LegacyConverter process fails to process these files properly, which can cause a part of NaturallySpeaking to not work properly after installation. We must remove this .ini file and import it manually.



- a. From the “INI File Changes” Pane (the “INI Files”) view, select each of the two “dvcmap.ini” files and delete them (right-click, choose “Delete”).
- b. Right click on the “INI Files” group and choose “Import INI File...”.

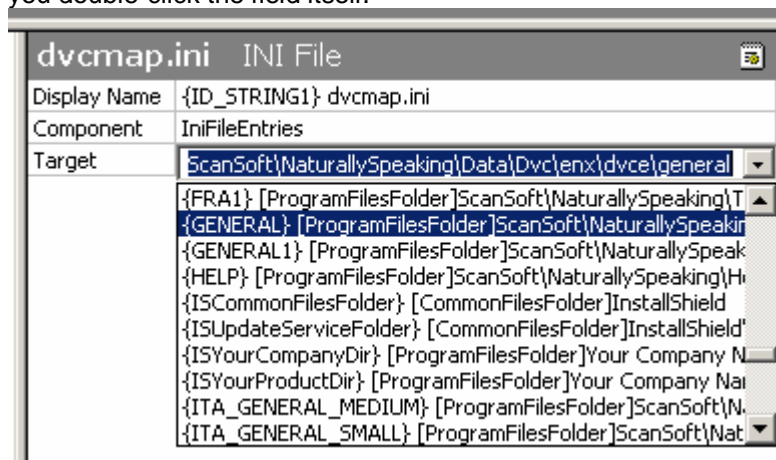


- c. Navigate down to the following file: **ProgramFilesFolder\ScanSoft\NaturallySpeaking\data\dvc\enx\dvce\general\dvcmap.ini**

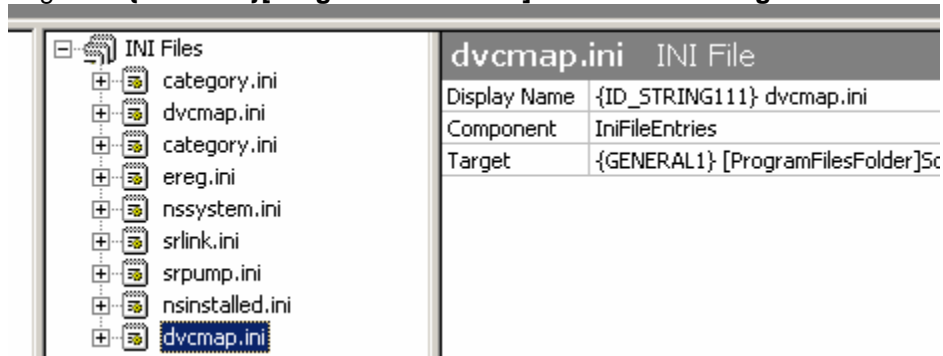


- d. Once you've imported the dvcmap.ini file, select it and change its properties.
- The Display Name should be "**dvcmap.ini**"
 - The Component should be "**IniFileEntries**"
 - The Target should be "**{General}[ProgramFilesFolder]Scansoft\...\dvce\general**"

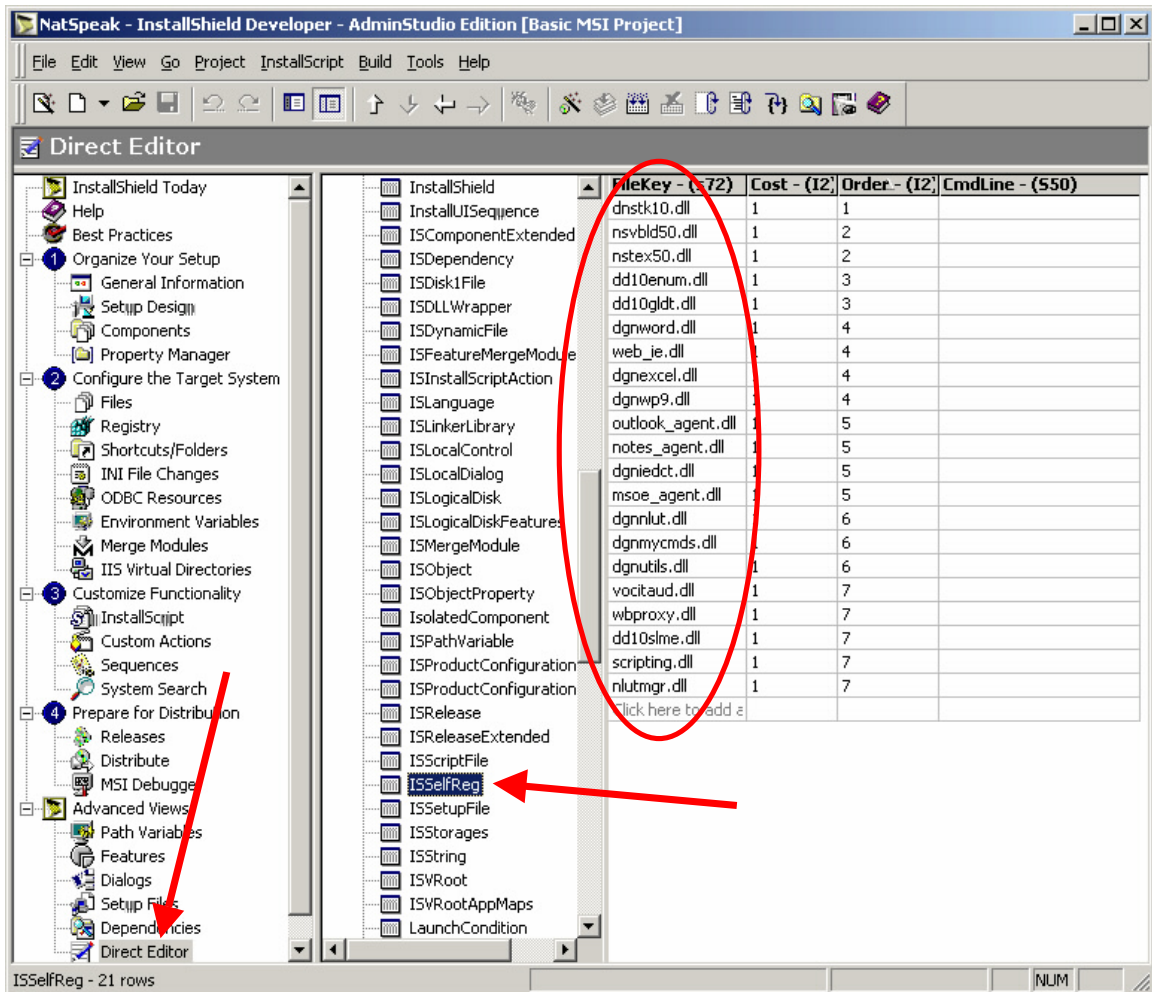
Both the Component and Target entries can be selected using the browse button or drop list at the right of the data entry field. The browse button or drop list button appears when you double-click the field itself.



- e. Repeat steps b through d, for the same file in the **dvcu\general** directory, and set that target to "**{General1}[ProgramFilesFolder]Scansoft\...\dvcu\general**"



3. Mark several .DLL files as “self-registering” so that support for Internet Explorer and certain versions of Word and WordPerfect will have full support. Since the order of .DLL registration is important, we will use the Direct Editor to do this.
 - a. From the “Advanced Views” view, find the “Direct Editor” pane and select the “ISSelfReg” table.

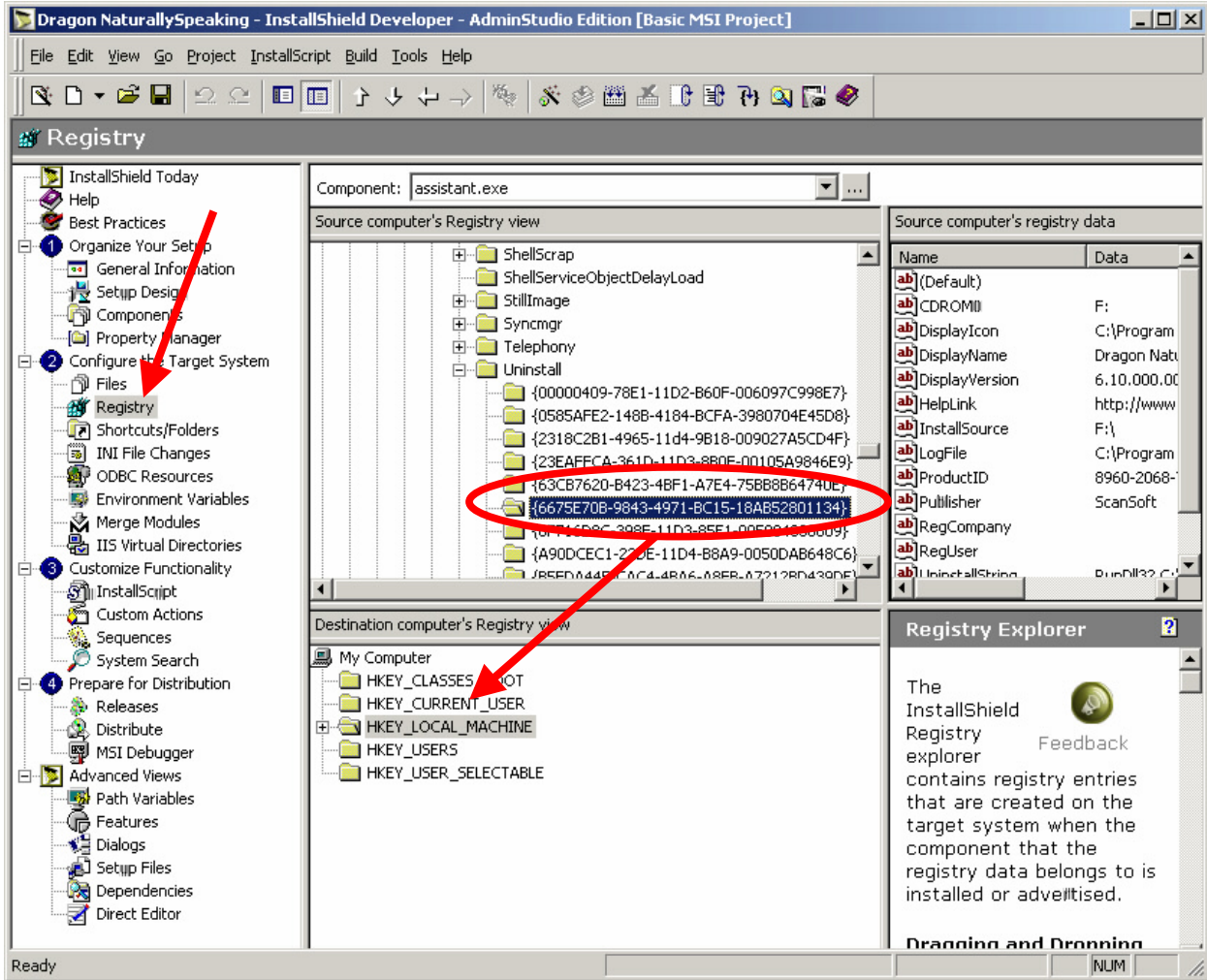


- b. You will need to add each of the following file names to the list, and specify the order. For each of the following files, you'll enter the name in the **FileKey** field, followed by a numeral 1 in the **Cost** field, and the registration priority number (specified in parentheses after the name) in the **Order** field.

dnstk10.dll (1)
 nsvbld50.dll (2)
 nstex50.dll (2)
 dd10enum.dll (3)
 dd10gldt.dll (3)
 dgnexcel.dll (4)
 dgnword.dll (4)
 dgnwp9.dll (4)
 web_ie.dll (4)
 dgniedct.dll (5)
 msoe_agent.dll (5)

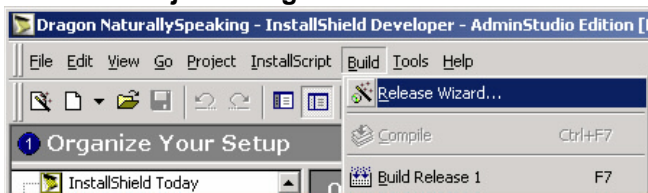
notes_agent.dll (5)
 outlook_agent.dll (5)
 dgnmycmds.dll (6)
 dgnnlut.dll (6)
 dgnutils.dll (6)
 dd10slme.dll (7)
 nlutmgr.dll (7)
 scripting.dll (7)
 voctaud.dll (7)
 wbproxy.dll (7)

4. (This step applies to Dragon NaturallySpeaking version 6 only): Add the original uninstallation key that was created during the clean installation. This step is not necessary for version 7 or later.
 - a. In the “Configure the Target System/Registry” view, go to the “Source computer’s registry view”, and open the following folder:
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall
 - b. Select the following folder:
{6675E70B-9843-4971-BC15-18AB52801134}
 - c. Drag that folder to the “Destination computer’s registry view” pane, and into the HKEY_LOCAL_MACHINE folder.



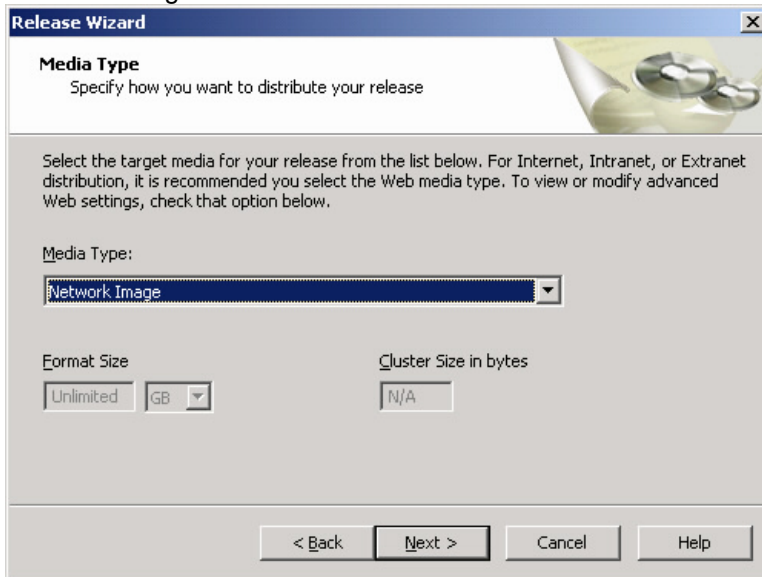
Once these changes are complete, you can start the .MSI file build process. If you have any additional changes to perform (for example, adding specific license agreement screens, or permitting user selection of installation location), make them before starting the Release Wizard, as the Release Wizard process may run for over an hour.

Build the Project Using the Release Wizard:

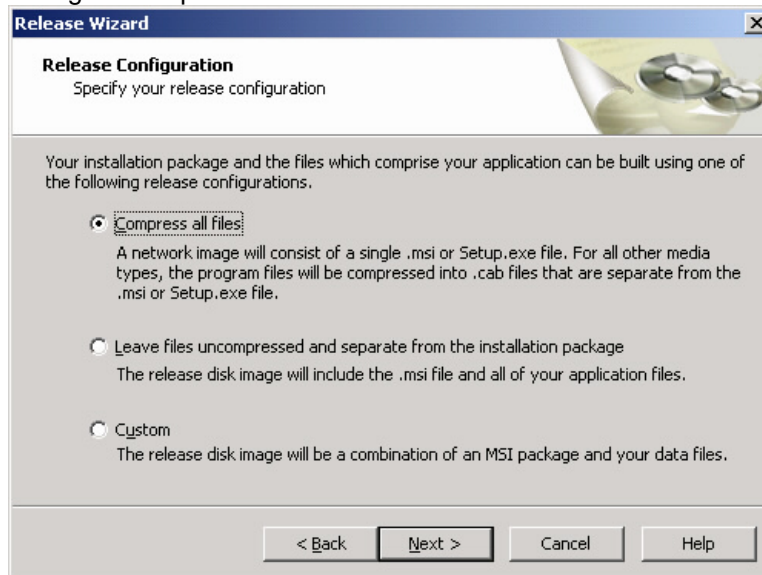


To create the Dragon NaturallySpeaking .MSI file, start the Release Wizard and create the Release template from within the InstallShield Developer environment in the following manner:

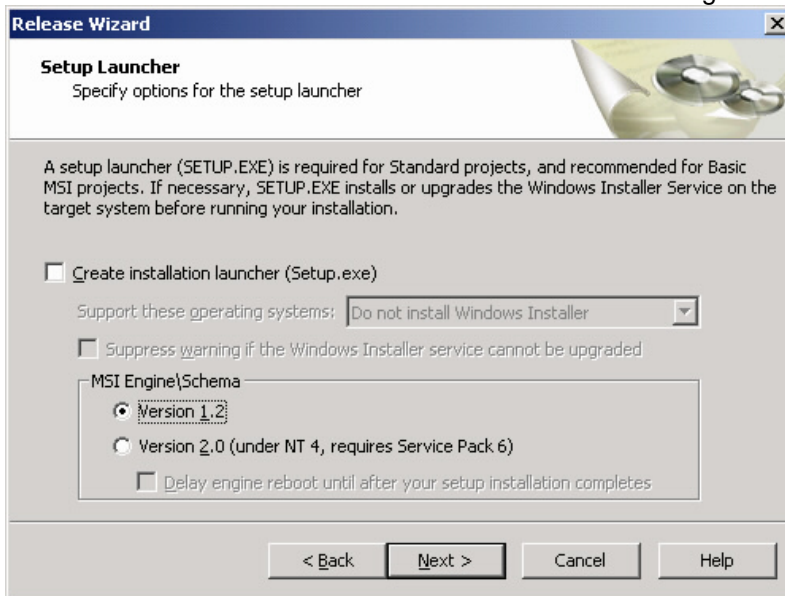
1. On the Build menu, click “Release Wizard,” and create a new product configuration and a new release name.
2. Accept the default filter settings and languages, and make sure the “Media Type” is set to “Network Image”.



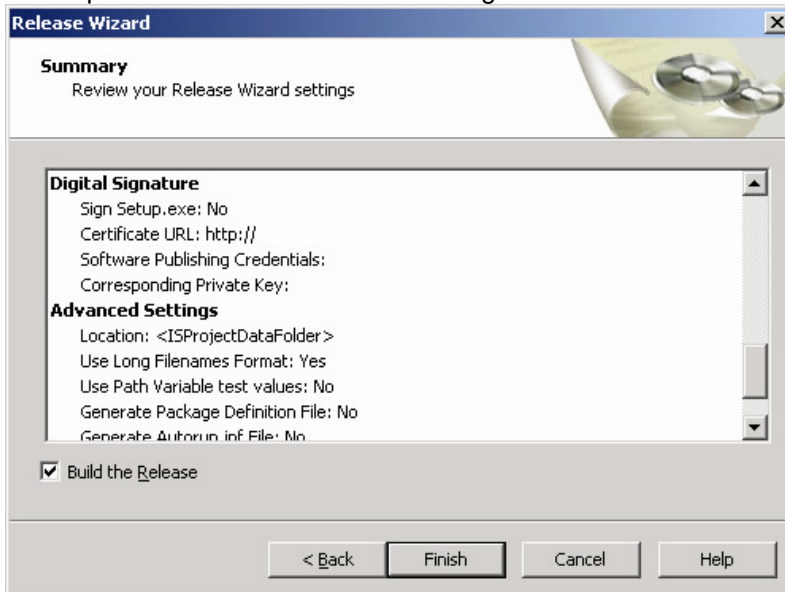
3. If you want a single file for distribution, choose “Compress All Files” on the “Release Configuration” pane.



- If your users' platform is Windows 2000 or Windows XP, then you do not need to install or upgrade the Windows Installer service on the target system. Deselect the "Create Installation Launcher" checkbox and select "Version 1.2" in the MSI Engine\Schema area.



- In the next panes, you can set a digital signature or any advanced settings. Unless you have specific needs to do so, accept the default entries in each of these panes, and set the location of the output .MSI file in the Release Settings Location field.



- Click Finish to build the release.

You should have a Windows Installer version of Dragon NaturallySpeaking ("Dragon NaturallySpeaking.msi") in the location you specified in the last pane of the Release Wizard. That file should work as any other Windows Installer file, and launching it will install Dragon NaturallySpeaking onto a user's system with a minimum of user interaction.

Installing Dragon NaturallySpeaking on the End User Machine:

When installing Dragon NaturallySpeaking on a Windows XP machine, you must first install the Windows Speech API. To do that, run spchapi.exe, which is located on the Dragon NaturallySpeaking installation disk for MSI.