



DECtalk[®] Software

Installation Guide 4.6.3

DECtalk[®] Software Installation Guide

December 2004

This guide describes how to install DECTalk[®] Software.

Revision / Update Information:

This document supersedes the DECTalk Software Installation Guide, Version 4.6.

Operating System:

Microsoft Windows 95/98/ME/NT/2000/XP
Microsoft Windows CE/Pocket PC
Red Hat Linux Version 5.0 or higher
MacOS X or higher
Sparc Solaris 8 or higher

Software Version:

DECTalk Software Version 4.6.3

December 2004

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Preface

Purpose and Audience

This guide describes how to install DECtalk® Software Development Kits (SDKs) for:

- Windows 95, 98, ME, NT, 2000, and XP
- Windows CE and Pocket PC
- Linux

The instructions documented in this guide do not cover basic user information for the operating system. Only information specific to installing DECtalk Software is included.

Structure

The guide is organized as follows:

Chapter 1 Installing DECtalk Software for Windows 95/98/ME/NT/2000

Chapter 2 Installing DECtalk Software for Windows CE

Chapter 3 Installing DECtalk Software for Linux

Online Help

On Windows host systems, DECtalk Software online help is a component of Windows Help. The DECtalk Windows Help is part of the application and is easily accessed from any of the DECtalk applets or from the Help icon in the DECtalk program group. You can find specific information in Help by using keyword searches and the index. Windows Help has a powerful cross-referencing facility that allows you to access many related topics in the same session. See “Displaying Documentation” on page 41 for Windows 95/98/ME/NT/2000/XP and “Displaying Documentation” on page 62 Windows CE for instructions.

On Linux and Tru64 UNIX systems, DECtalk Software online help is provided as HTML Help and reference (man) pages. You access online help using a browser application for the HTML Help or the UNIX man command for the reference pages. See “Displaying Documentation” on page 71 for Linux for instructions.

The DECtalk Software online help includes guide and reference information about the following DECtalk features:

- DECtalk Software applets
Select DECtalk Software and then the DECtalk Applet Master Index.
- DECtalk Software API functions
Select the Programmer’s Guide and then the Introduction to the DECtalk Software API.
Select the Reference Guide and then DECtalk Software API Functions.
- DECtalk Software in-line commands
Select the Reference Guide and then one of the following:
DECtalk Software In-Line Commands.
Using In-Line Commands.

FAQs: Frequently Asked Questions about DECtalk Software

Q: What is DECtalk Software?

A: DECtalk Software is software that converts ASCII text into speech without the use of special or proprietary hardware.

Q: What hardware does it support? Does it work or require a DECtalk hardware device?

A: Although DECtalk Software does not need any specialized hardware (specialized hardware is defined as boards and devices released over the years with other DECtalk products) for the text-to-speech conversion process, you must have a sound card installed or built into your computer.

Q: Who is DECtalk Software for?

A: DECtalk Software is for users and developers. For users, there are the Dtsample (Windows only) and Speak graphical applets, the Say command-line applet, and the User Dictionary Build Tool. These provide a runtime environment in which users can speak text files directly using DECtalk applications or, in the Windows 95/98/ME/NT/2000 environment, through other applications using a Text-to-Speech server. For developers, DECtalk additionally provides an API and sample source code that can be used to incorporate text-to-speech synthesis into Windows, Linux, or Tru64 UNIX applications.

Q: How long does it take DECtalk Software to start speaking?

A: DECtalk Software is optimized for quick startup. However, speaking start time is hardware (processor type) and software (operating system) dependent.

Q: Can DECtalk Software be used in a telephony environment.

A: Yes, DECtalk Software supports 8-bit mu-law synthesis and a multi-instance environment with the proper licenses.

Q: Can I create my own DECtalk voice?

A: Yes! In addition to the nine predefined voices, you can create a customized voice of your own. See Chapter 5 in the DECtalk Software Reference Guide.

Q: What is the difference between the DECtalk Software Development Kit (SDK) and other DECtalk products?

A: The DECtalk family of products is listed in the following table.

| Product | Target Operating System | Provides: |
|----------------------------------|----------------------------|--|
| DECtalk Software Development Kit | Windows95/98/ME/NT/2000/XP | API, in-line commands, OLE, SAPI, TTS server, dictionary facilities, sample programs, sample source code |
| | Windows CE | API, in-line commands, OLE, dictionary facilities, sample programs, sample source code |
| | Linux | API, in-line commands, dictionary facilities, sample programs, sample source code |

| | | |
|-----------------------|--------------|--|
| | Tru64 UNIX | API, sample source code |
| DECTalk Software UNIX | Tru64 UNIX | In-line commands, dictionary facilities, sample programs |
| DECTalk PC2 | DOS, Windows | Hardware-assisted synthesis |
| DECTalk Express | Custom | Box with a serial interface and speaker |

Conventions

The following conventions are used in this guide:

| Convention | Meaning |
|-------------------|---|
| enter | Enter means type the required information and press the Enter key. |
| mouse | Mouse refers to any pointing device, such as a mouse, a puck, or a stylus. |
| MB1 | MB1 indicates the left mouse button. |
| click | Click means to press and release MB1. |
| Double click | Double click means to press and release MB1 twice in rapid succession without moving the mouse. |
| drag | The phrase drag means to press and hold MB1, move the mouse, and then release MB1 when the pointer is in the desired position. |
| Ctrl/ x | Press the Ctrl key while you press another key. |
| Menu > Command | The right arrow key indicates an abbreviated instruction for choosing a command from a menu. For example, File > Exit means pull down the File menu, move the pointer to the Exit command, and release MB1. |
| Courier type | Courier type indicates text that is typed or displayed on the screen. This is most often used for program code examples. |
| User Input | Boldface type in interactive examples indicates information you enter from the keyboard. For example: A:> SETUP |
| XX YY and XXn YYn | In DECTalk Software in-line command syntax, XX and YY indicate options and parameters. When more than one choice of options or parameters is allowed, the symbol XXn or YYn with n replaced by a numeral indicates each option or parameter in the symbolic representations, such as [:phoneme XX1 XX2 YY]. |

NOTE: Note that the number of characters in the symbolic representation does NOT represent the number of characters allowed in the actual option or parameter name.

DD and DDn In DECtalk Software in-line command syntax, DD indicates a decimal (base 10) value. When more than one decimal values are allowed, the symbol DDn with n replaced by a numeral represents each allowed value, such as [:volume XX DD1 DD2].

NOTE: Note that the number of characters in the symbolic representation does NOT represent the number of characters allowed in the actual decimal value.

Conventions used in API functions

Italics Italic text emphasizes important information.

Unless you are otherwise instructed, press **Enter** after typing responses to command prompts.

Windows 9x/
ME/NT/2000/XP

This chapter provides information you need to install the DECtalk Software Development Kit (SDK) for Windows 95/98/ME/NT/2000 on a host computer system.

- Specific topics include:
- Preparing for installation
- Installing DECtalk Software
- Installing SAPI Version 5 support (optional)
- Modifying, repairing, or removing the current installation
- Displaying documentation
- Solving installation problems

The DECtalk Software documentation is provided in PDF and other formats on the distribution CD-ROM. After a successful installation, DECtalk Software online help is accessible in the form of Windows Help. For more information, see “Displaying Documentation” on page 41.

Preparing for Installation

DECtalk Software is installed from the installation media shipped with the product. The installation should take you no longer than five minutes to complete. You can launch the InstallShield Wizard for DECtalk Software automatically, by inserting the installation CD-ROM, or manually, by using Windows Explorer or the Windows Run or Command Prompt facilities.

Before installing DECtalk Software:

- Make sure that all prerequisite hardware and software components are installed on your system.
- If another version of DECtalk Software is already installed, close any running DECtalk applications and uninstall the existing DECtalk Software.

During DECtalk Software installation, the InstallShield Wizard will display a License Agreement window, which explains the terms of the DECtalk Software license agreement, and a Readme window, which provides the latest information about the DECtalk Software product. Please read the complete contents of both windows carefully and make sure that you understand them before you continue.

Hardware Requirements

DECtalk Software for Windows requires an Intel-based Windows host system with adequate disk space for installation and a standard audio sound card.

DECtalk Software performance is dependent on your system having enough computational power to perform all the computations involved in text-to-speech conversion. See the release notes for a list of the latest supported systems.

NOTE: DECtalk Software performance can be affected in a heavily loaded multi-tasking environment where DECtalk Software could become starved for computational power and will not speak continuously. There might be pauses in output for any application running on such a system.

Audio Output Device

Your system must be configured with an audio device and appropriate driver that support 8-bit or 16-bit data format at an 11.025 kHz sample rate. You can install DECtalk Software without an audio device present and capture .wav audio files; however, an audio device must be present to actually have DECtalk Software speak text.

Required Disk Space and Software

DECtalk Software for Windows requires:

- A minimum of 31 MB of disk space for a Full Installation; however, if you specify a Custom Installation to the InstallShield Wizard, you can monitor the disk space required and make adjustments (see “Selecting Components for a Custom Installation” on page 20)

- An additional 1.8 MB of disk space if you install the optional DECtalk SAPI Version 5 SDK for Windows 98, ME, NT or 2000
- Windows 95, Windows 98, Windows ME, Windows NT, Windows 2000, or Windows XP running on the host system

Installing DECtalk Software

You can start the DECtalk Software installation automatically, by inserting the installation CD-ROM, or manually, from the Windows Explorer or from the Windows Run or Command Prompt dialog boxes. Starting the installation activates the InstallShield Wizard for DECtalk Software, which will guide you through the necessary steps and decisions.

If a previous version of DECtalk Software exists on your system, the new installation overwrites it.

NOTE: Before installing a new version of DECtalk Software, close any running DECtalk applications and uninstall any existing DECtalk Software.

This Software Development Kit (SDK) is provided on a single CD-ROM that lets you install any or all of the supported languages, including United States English, United Kingdom English, Castilian Spanish, Latin American Spanish, German, and French.

Starting the Installation

To start the DECtalk Software installation, insert the installation CD-ROM and wait for the InstallShield Wizard for DECtalk Software to appear.

If the InstallShield Wizard does not appear automatically, run the program `setup.exe` from the top level of the installation CD-ROM. You can do this in one of the following ways:

- In the Windows Explorer, select the appropriate drive and click program `setup.exe`.

- In the Windows Run or Command Prompt dialog box, run `setup.exe` with a command such as:

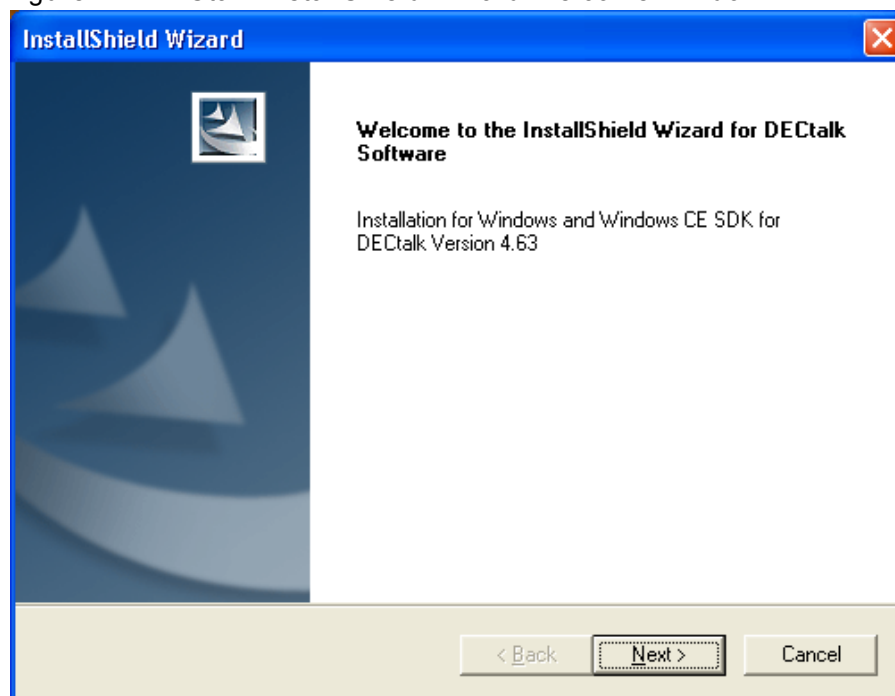
```
f:\setup.exe
```

where `f` is replaced by the correct letter for your CD-ROM drive.

When activated, the InstallShield Wizard for DECtalk Software displays the DECtalk InstallShield Wizard Welcome window, shown in Figure 1-1.

To proceed with the DECtalk Software installation, click the **Next** button.

Figure 1-1 DECtalk InstallShield Wizard Welcome Window



Selecting Which Kit to Install

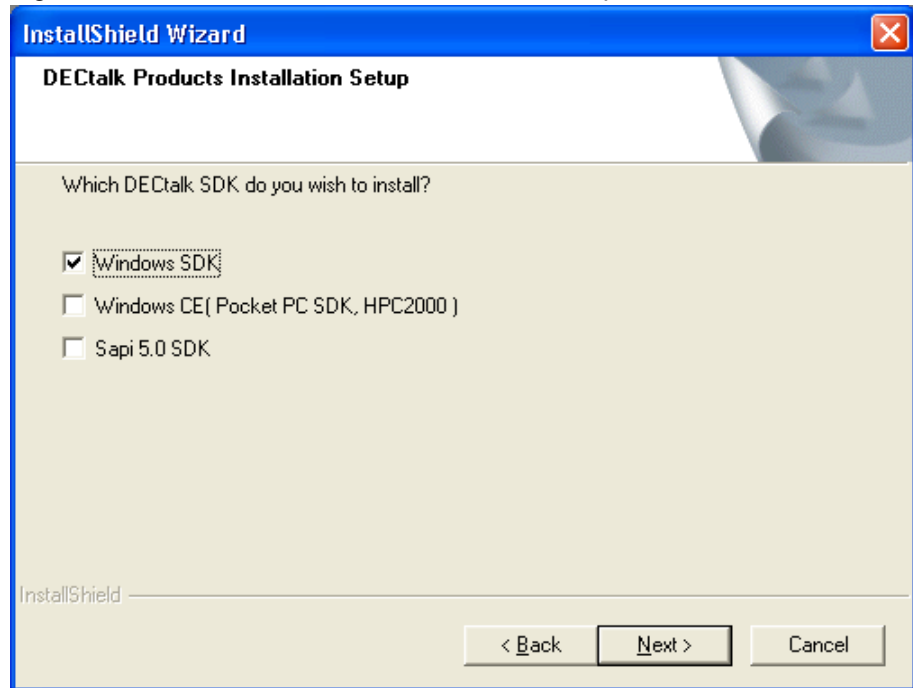
Next, the InstallShield Wizard displays the DECtalk Products Installation Setup window, shown in Figure 1-2.

Select **Windows SDK** to install the DECtalk Software Development Kit (SDK) for Windows 95, 98, ME, NT, 2000, or XP.

You can additionally select **Sapi 5.0 SDK**, **Windows CE** and **Pocket PC SDK**, or both. For details about those installation procedures, see “Installing SAPI Version 5 Support (Optional)” on page 29 and the chapter “Windows CE” on page 43.

To proceed with the DECtalk Software installation, click the Next button.

Figure 1-2 DECtalk Products Installation Setup Window



Reading the License Agreement

Next, the InstallShield Wizard displays a License Agreement window, which explains the terms of the DECtalk Software license agreement. Please read the license agreement carefully and completely.

The License Agreement window asks if you accept all the terms of the license agreement. To install DECtalk Software, you must understand and choose to accept the license agreement terms. To accept the license agreement, click the **Yes** button.

If you do not accept the license agreement, click **No**, which will terminate the installation.

Reading the Release Notes

Next, the InstallShield Wizard displays a Readme window, containing release notes that detail the latest information about the DECtalk Software product. Please read the release notes carefully and completely.

To proceed with the DECtalk Software installation, click the **Next** button.

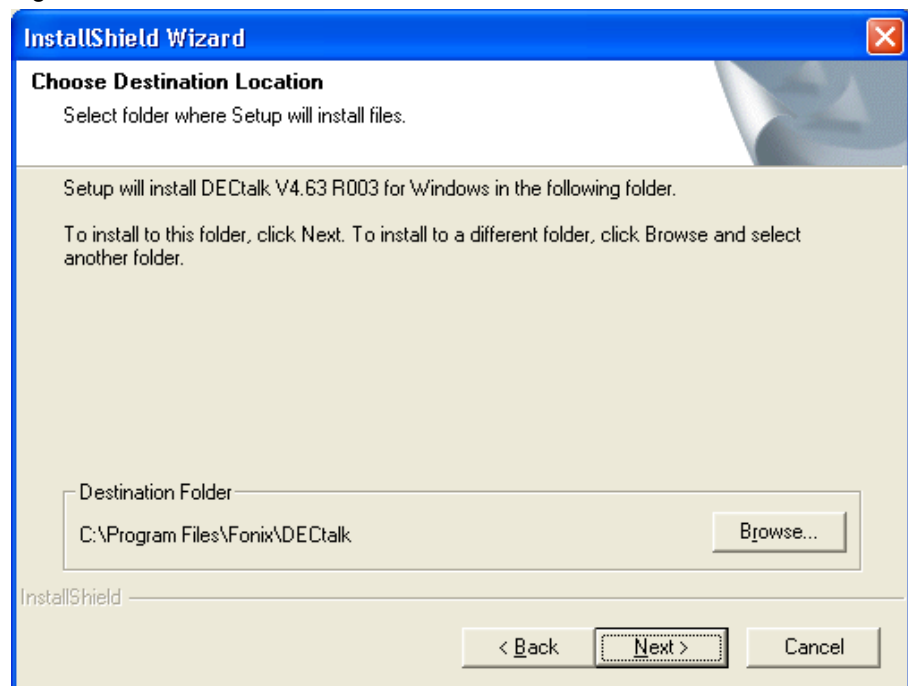
Choosing the Installation Destination Directory

Next, the InstallShield Wizard displays the DECtalk Choose Destination Location window, shown in Figure 1-3.

Select the directory to which you want to install DECtalk Software. You can accept the default installation directory, `C:\Program Files\DECtalk`, or click the **Browse** button and select another folder.

To proceed with the DECtalk Software installation, click the **Next** button.

Figure 1-3 DECtalk Choose Destination Location Window

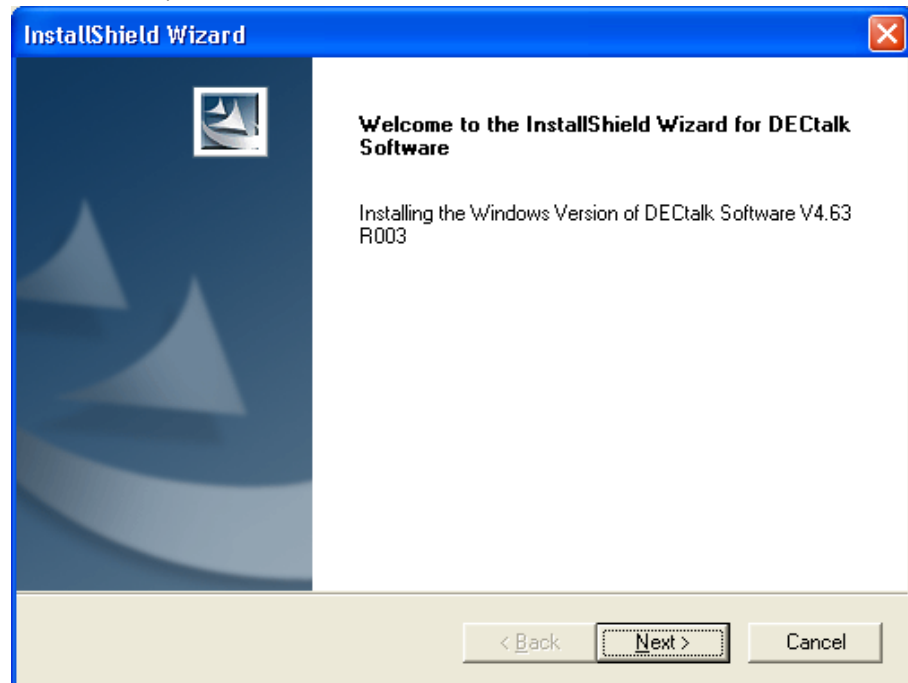


Starting the DECtalk Software for Windows Installation

If you selected to install **Windows SDK**, the InstallShield Wizard displays a welcome window to indicate that Windows SDK installation has begun, as shown in Figure 1-4.

To proceed with the DECtalk Software for Windows installation, click the **Next** button.

Figure 1-4 DECtalk InstallShield Wizard Welcome Window (95/98/ME/NT/2000/XP)



Entering Customer Information

Next, the InstallShield Wizard displays a Customer Information window. You can fill in the User Name and Company Name fields as appropriate

To proceed with the DECtalk Software for Windows installation, click the **Next** button.

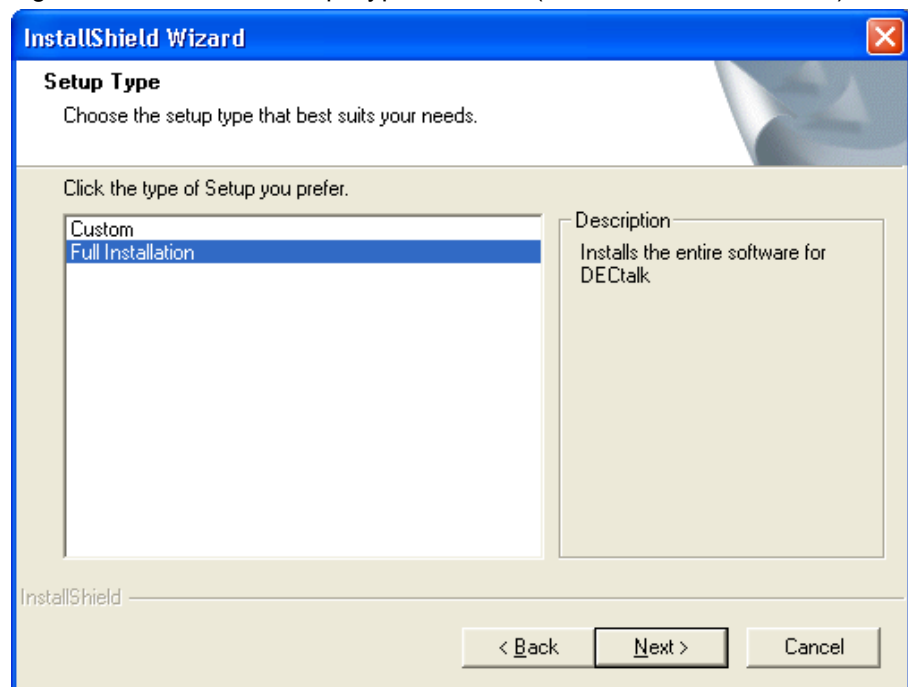
Selecting a Full or Custom Installation

Next, the InstallShield Wizard displays the DECtalk Setup Type window, shown in Figure 1-5.

Select either a **Full Installation**, the default, which will install all languages, all sample programs, help files, and documentation; or a **Custom** installation that allows you to include some components and exclude others.

To proceed with the DECtalk Software for Windows installation, click the **Next** button.

Figure 1-5 DECtalk Setup Type Window (95/98/ME/NT/2000/XP)



Selecting Components for a Custom Installation

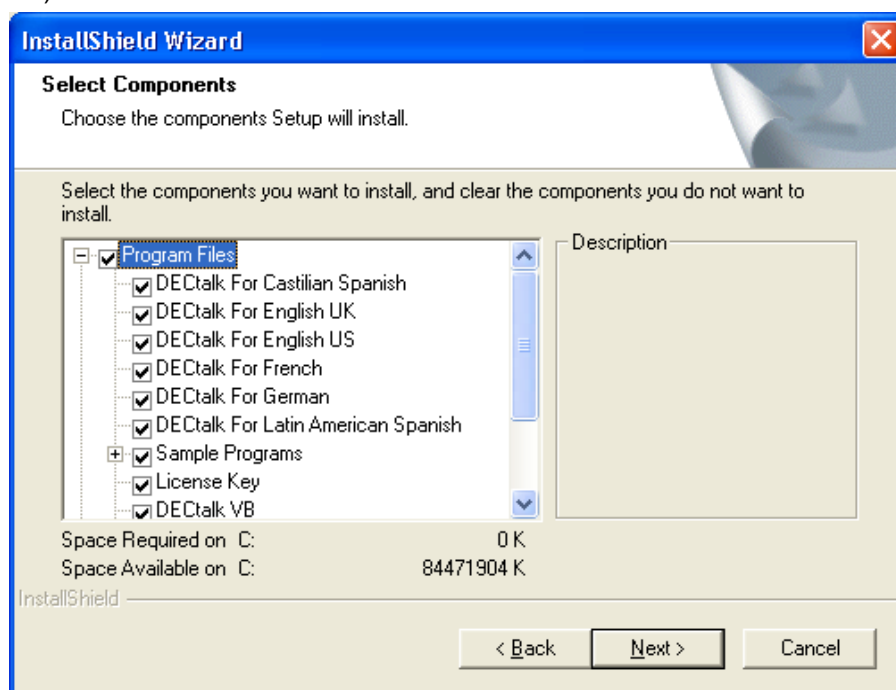
If you selected a **Custom** installation, the InstallShield Wizard displays the DECtalk Select Components window, shown in Figure 1-6.

By checking and unchecking boxes, select the DECtalk Software components to be included or excluded from your installation. As you include or exclude components in the window, the Space Required field is updated to reflect the memory requirements for your selected components.

The **License Key** box shown in Figure 1-6 pertains to the `licenin3` program, which you run immediately after the installation to increment the DECtalk license/key count from 1 to 4. If you would like to be able to run `licenin3` from your installation directory rather than from the installation CD-ROM, the **License Key** box must be selected.

When you are ready to proceed with the DECtalk Software installation, click the **Next** button.

Figure 1-6 DECtalk Select Components Window (95/98/ME/NT/2000/XP)



Naming the Program Folder

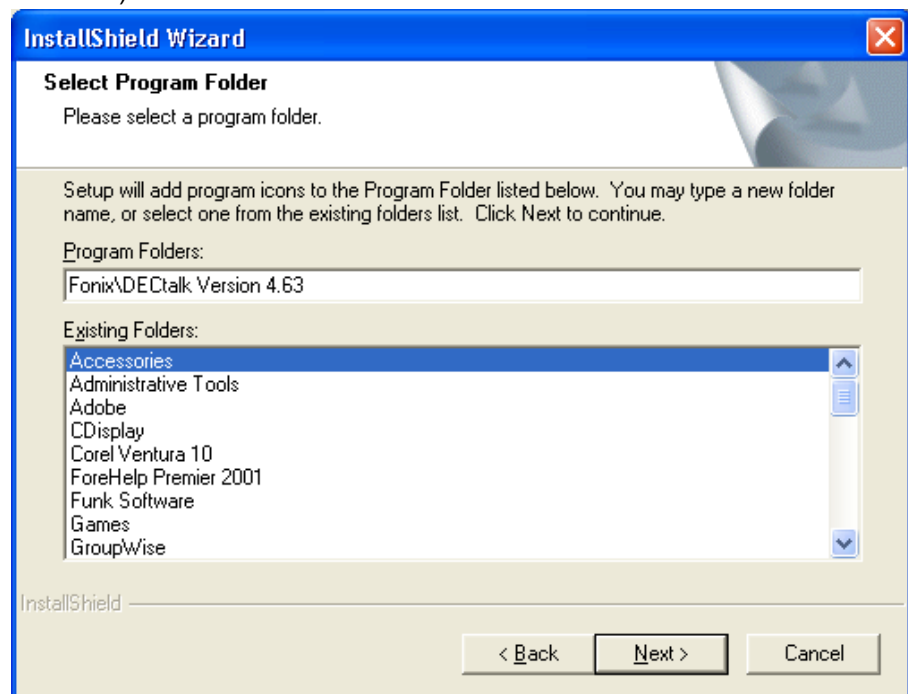
Next, the InstallShield Wizard displays the DECtalk Select Program Folder window, shown in Figure 1-7.

Select a Program Folder name to be included in the Windows Start menu Programs folder. You then will be able to access DECtalk components from the Start menu by clicking on the specified Program Folder name.

For example, if you accept the default name, DECtalk Version 4.62, you will be able to access a DECtalk component such as online help by navigating as follows: Start > Programs > DECtalk Version 4.62 > DECtalk Help.

To proceed with the DECtalk Software for Windows installation, click the **Next** button.

Figure 1-7 DECtalk Select Program Folder Window (95/98/ME/NT/2000/XP)



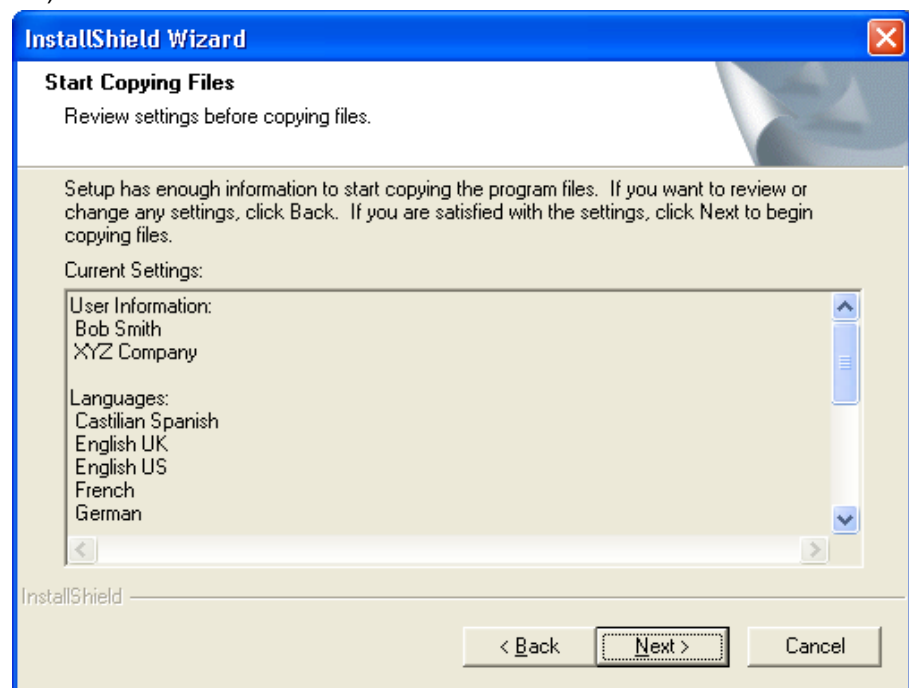
Starting the File Transfers

Next, the InstallShield Wizard displays the DECtalk Start Copying Files window, shown in Figure 1-8. This provides you a final opportunity to change any installation settings or halt the installation before any files are actually copied to your system.

To proceed with the DECtalk Software for Windows installation, click the **Next** button. To change installation settings, click the **Back** button. To halt the installation, click the **Cancel** button.

If you click **Next**, the InstallShield Wizard immediately performs the requested installation, while displaying a Setup Status window. This window is continually updated to display the current transfer in progress and the approximate percentage of the overall installation that has been completed.

Figure 1-8 DECtalk Start Copying Files Window (95/98/ME/NT/2000/XP)



Selecting the Default Language

If you selected more than one language for your DECtalk Software installation, the InstallShield Wizard displays the DECtalk Setup for Default Language window, shown in Figure 1-9.

Select a default language among the languages listed for your installation.

To proceed with the DECtalk Software for Windows installation, click the **Next** button.

You can modify the default language selection after installation by reinvoking the Installation Wizard, as described in *Modifying the Current Installation*.

Figure 1-9 DECtalk Setup for Default Language Window (95/98/ME/NT/2000/XP)



Completing the Installation

When the file transfers and (if applicable) the default language setup are complete, the InstallShield Wizard:

- Displays the DECtalk InstallShield Wizard Complete window, shown in Figure 1-10.
Click **Finish** to exit the InstallShield Wizard.
- Launches the speak program with readme.txt as input.

NOTE: When the installation is complete, run the program `licenin3.exe`, which increments the DECtalk license/key count from 1 to 4. If you included License Key in your installation, `licenin3` is installed in your selected installation directory (for example, `C:\Program Files\DECtalk`). Otherwise, it can be run from the license subdirectory of your installation CD-ROM. The `licenin3` program increments the license/key count without displaying any messages.

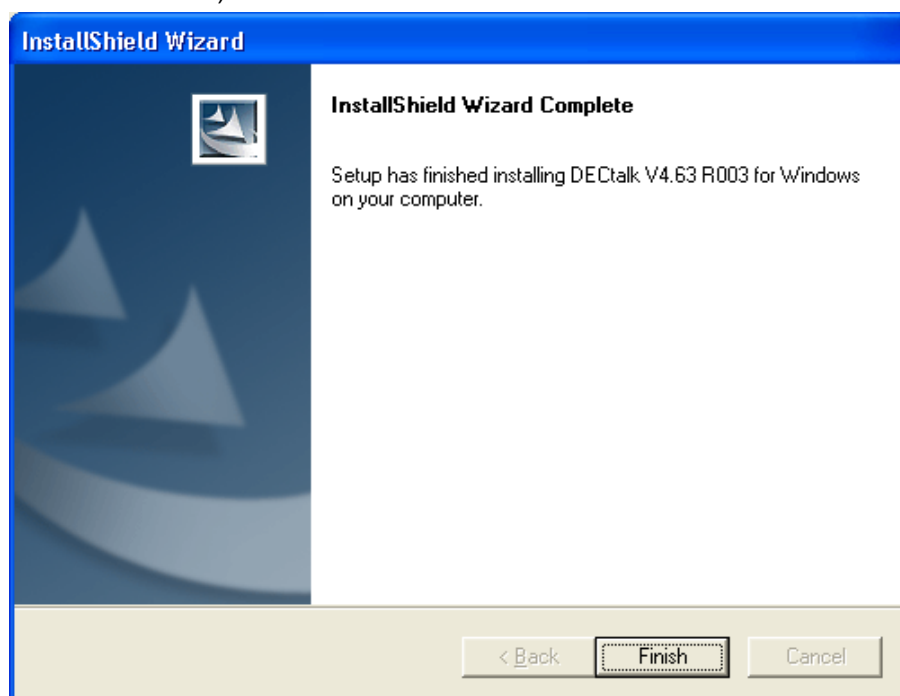
After the installation is complete:

- For a listing of files contained in the source media, refer to file appendix1.txt.

NOTE: All appendix and other readme text files can be accessed either from the Programs menu (for example, Start > Programs > DECtalk V4.62 > Appendix1) or at the top level of the installation Destination Directory (for example, c:\Program Files\DECtalk\appendix1.txt).

- For development hints, refer to file appendix2.txt.
- For a list of Microsoft Speech API functions supported by DECtalk Software, refer to file appendix3.txt.
- For additional information, consult the DECtalk Software documentation. See “Displaying Documentation” on page 41, which describes the various forms and locations in which documentation is provided.

Figure 1-10 DECtalk InstallShield Wizard Complete Window (95/98/ME/NT/2000/XP)

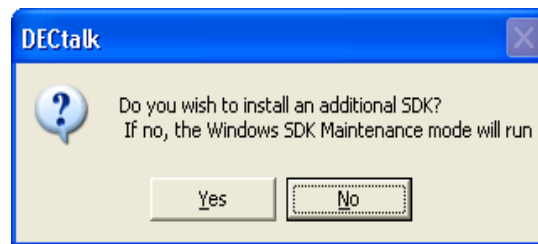


Modifying, Repairing, or Removing a DECtalk Windows SDK Installation

To modify, repair, or remove an existing DECtalk Windows SDK installation, you can:

- Launch the Windows control panel **Add/Remove Programs** and select **DECtalk V4.6.2 for Windows**
- Run the program setup.exe from the top level of your installation CDROM exactly as you did for the original installation

Either method reactivates the InstallShield Wizard for DECtalk Software. If you previously installed one or more DECtalk V4.62 SDKs, the following box is displayed:



Select **No** to proceed with modification, repair, or removal of a Windows SDK installation.

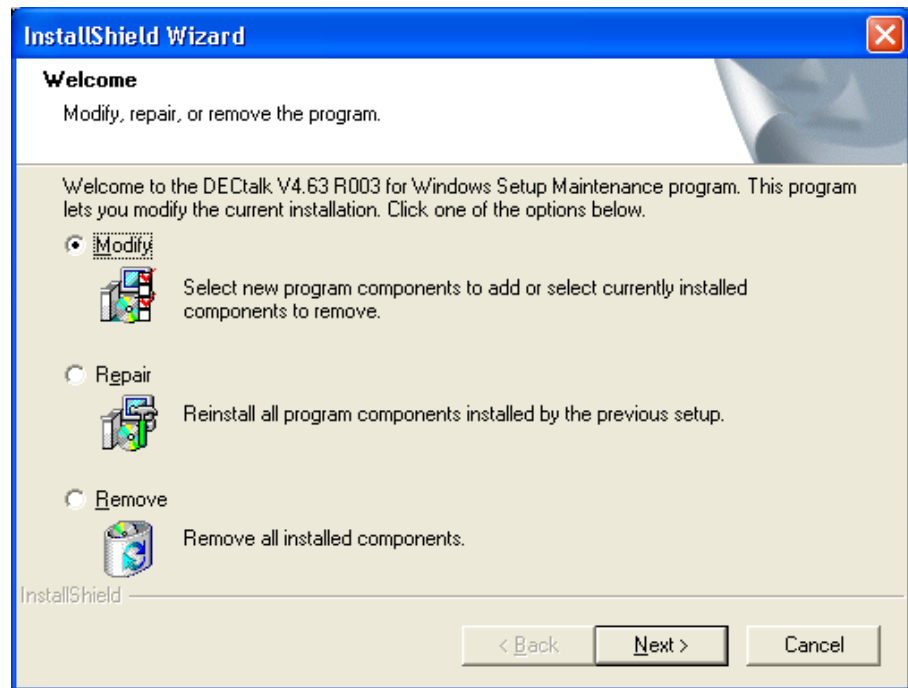
Next, the InstallShield Wizard displays the DECtalk Setup Maintenance window, displayed in Figure 1-11.

Select the action you want to perform:

- **Modify** the current installation, adding or removing components or resetting the default language
- **Repair** the current installation by exactly repeating the original installation
- **Remove** the current installation from the system

To proceed with the action you selected, click the **Next** button.

Figure 1-11 DECtalk Setup Maintenance Welcome Window (95/98/ME/NT/2000/XP)



Modifying the Current Installation

If you specified that you wanted to **Modify** the current DECtalk Windows SDK installation, the InstallShield Wizard returns you to the point in the installation procedure where you can customize the installation components and settings. See “Selecting Components for a Custom Installation” on page 20.

Select your modifications and, when you are ready to proceed with modifying your DECtalk SDK installation, click the **Next** button.

Repairing the Current Installation

If you specified that you wanted to **Repair** the current DECtalk Windows SDK installation, the InstallShield Wizard repeats the previously configured installation, while displaying a Setup Status window.

This window is continually updated to display the current transfer in progress and the approximate percentage of the overall installation that has been completed.

Removing the Current Installation

If you specified that you wanted to **Remove** the current DECtalk Windows SDK installation, the InstallShield Wizard displays a dialog box that asks you to confirm that want to completely remove the application and all of its components from the system.

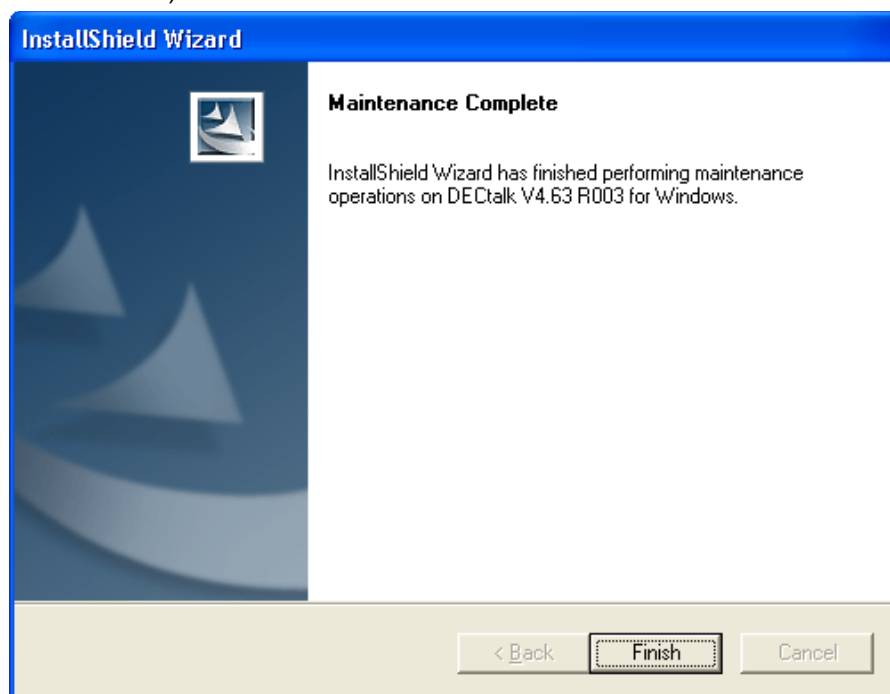
Select **OK** to completely deinstall the selected DECtalk SDK from your system. Select **Cancel** to exit the removal procedure.

Completing the Installation Maintenance

When the DECtalk Windows SDK installation modification you requested is complete, the InstallShield Wizard displays a Completion window, shown in Figure 1-12.

Click **Finish** to exit the InstallShield Wizard.

Figure 1-12 DECtalk Setup Maintenance Complete Window (95/98/ME/NT/2000)



Installing SAPI Version 5 Support (Optional)

DECtalk Software supports Version 5 of the Microsoft Speech API (SAPI) on Windows 98, Windows ME, Windows NT, and Windows 2000 platforms. For a list of supported functions, see the Supported SAPI Version 5 Features table in the Reference Guide manual and online help.

If you have installed the current version of DECtalk Software on a Windows 98, ME, NT, or 2000 system, you optionally can add SAPI Version 5 support to your DECtalk installation.

NOTE: In order to program SAPI Version 5 functions in your Windows speech applications, you must have Microsoft's system development kit (SDK) for SAPI Version 5, available from Microsoft. See the Microsoft web site for more information.

You can install SAPI Version 5 support by initiating a normal DECtalk

Software installation from your installation CD-ROM and selecting to install the SAPI Version 5 SDK.

Starting the Installation

To start a DECtalk Software installation, insert the installation CD-ROM and wait for the InstallShield Wizard for DECtalk Software to appear.

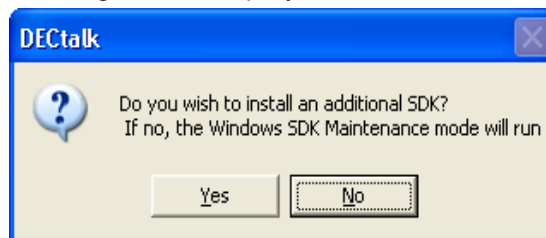
If the InstallShield Wizard does not appear automatically, run the program `setup.exe` from the top level of the installation CD-ROM. You can do this in one of the following ways:

- In the Windows Explorer, select the appropriate drive and click program `setup.exe`.
- In the Windows Run or Command Prompt dialog box, run `setup.exe` with a command such as:

```
f:\setup.exe
```

where `f` is replaced by the correct letter for your CD-ROM drive.

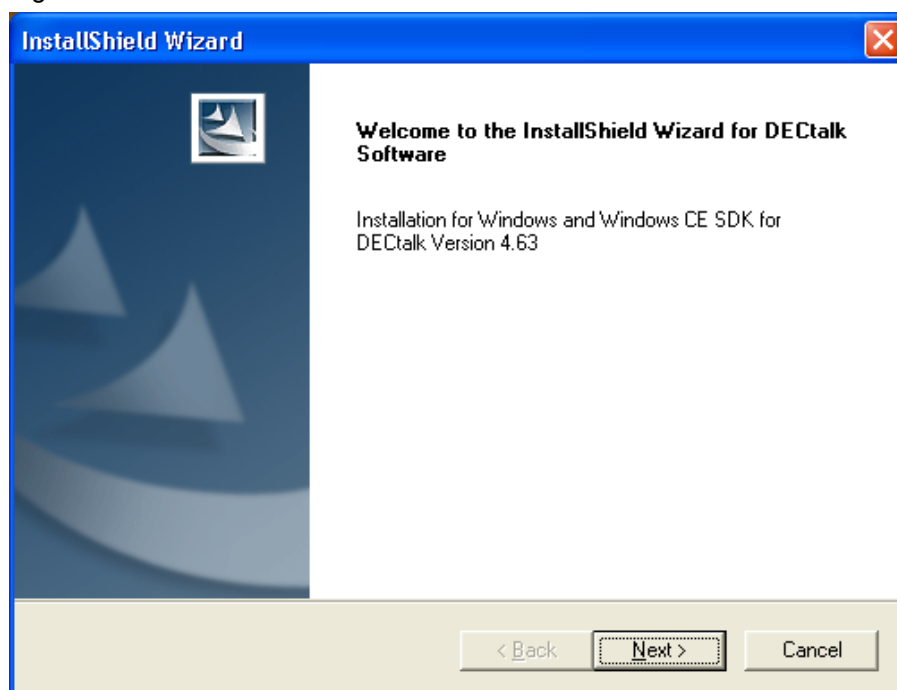
If you previously installed one or more DECtalk V4.62 SDKs, the following box is displayed:



To proceed with the DECtalk Software installation, click the **Yes** button.

If you have not yet run a DECtalk V4.62 installation, the InstallShield Wizard for DECtalk Software displays the DECtalk InstallShield Wizard Welcome window, shown in Figure 1-13. To proceed with the DECtalk Software installation, click the **Next** button.

Figure 1-13 DECTalk InstallShield Wizard Welcome Window



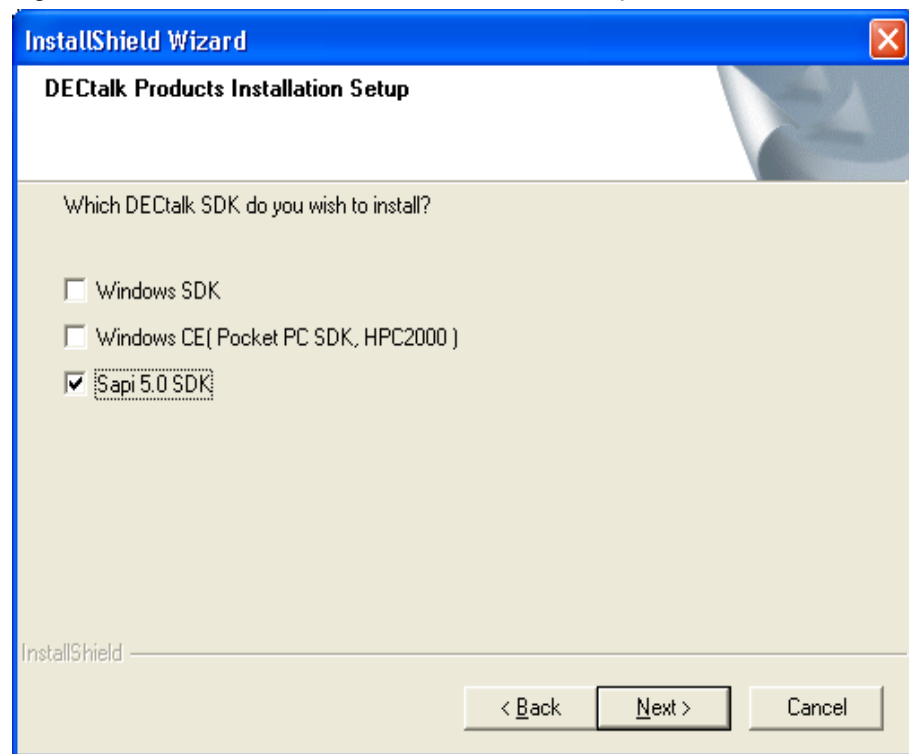
Selecting Which Kit to Install

Next, the InstallShield Wizard displays the DECTalk Products Installation Setup window, shown in Figure 1-14.

Select **Sapi 5.0 SDK** to install the SAPI Version 5 Software Development Kit (SDK) for Windows 98, ME, NT, 2000, or XP.

To proceed with the DECTalk Software installation, click the **Next** button.

Figure 1-14 DECtalk Products Installation Setup Window

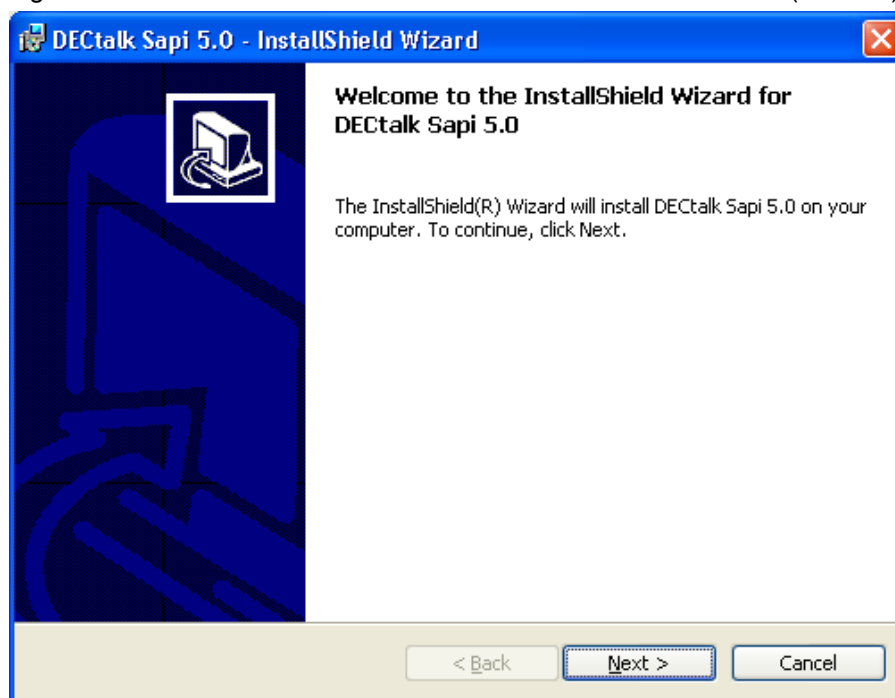


Starting the DECtalk SAPI Version 5 Installation

If you selected to install **Sapi 5.0 SDK**, the InstallShield Wizard displays a welcome window to indicate that DECtalk SAPI Version 5 SDK installation has begun, as shown in Figure 1-15.

To proceed with the DECtalk SAPI Version 5 installation, click the **Next** button.

Figure 1-15 DECTalk InstallShield Wizard Welcome Window (SAPI 5)



Reading the License Agreement

Next, the InstallShield Wizard displays a License Agreement window, which explains the terms of the DECTalk SAPI Version 5 license agreement. Please read the license agreement carefully and completely.

The License Agreement window allows you to accept or reject the terms of the license agreement. To install DECTalk SAPI Version 5 support, you must understand and choose to accept all the license agreement terms. To accept the license agreement, select **I accept the terms in the license agreement**. To proceed with the DECTalk SAPI Version 5 installation, click the **Next** button.

If you do not accept the license agreement, select **I do not accept the terms in the license agreement**, which will terminate the installation.

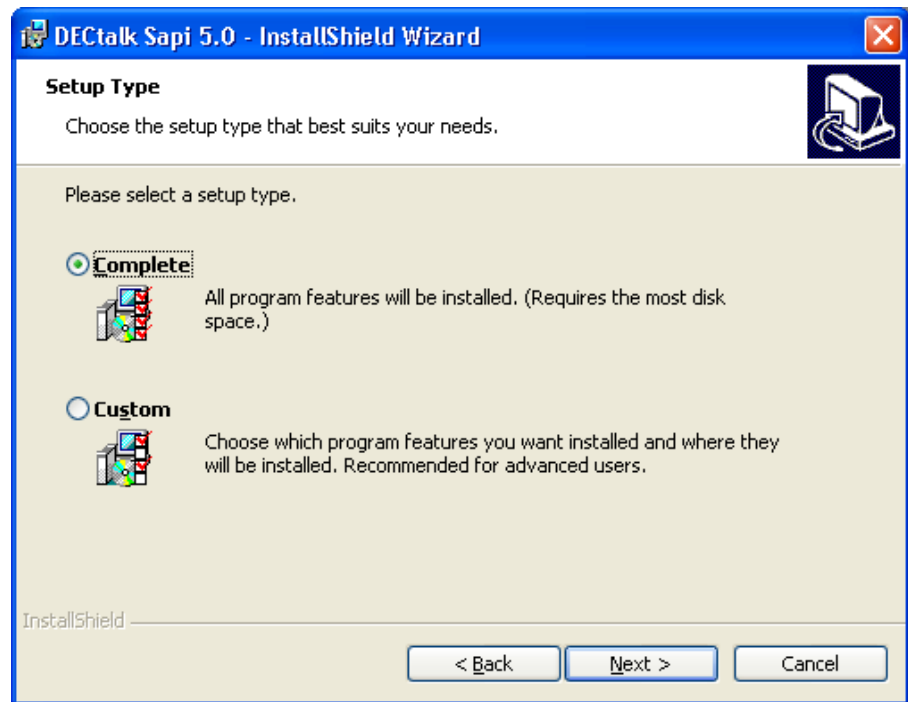
Selecting a Complete or Custom Installation

Next, the InstallShield Wizard displays the DECtalk Setup Type window, shown in Figure 1-18.

Select either a **Complete** installation, the default, which will install all program features to a Sapi5 folder in your existing DECtalk installation directory; or a **Custom** installation, which allows you to customize the location and other details of the installation.

To proceed with the DECtalk SAPI Version 5 installation, click the **Next** button.

Figure 1-16 DECtalk Setup Type Window (SAPI 5)



Customizing the Installation

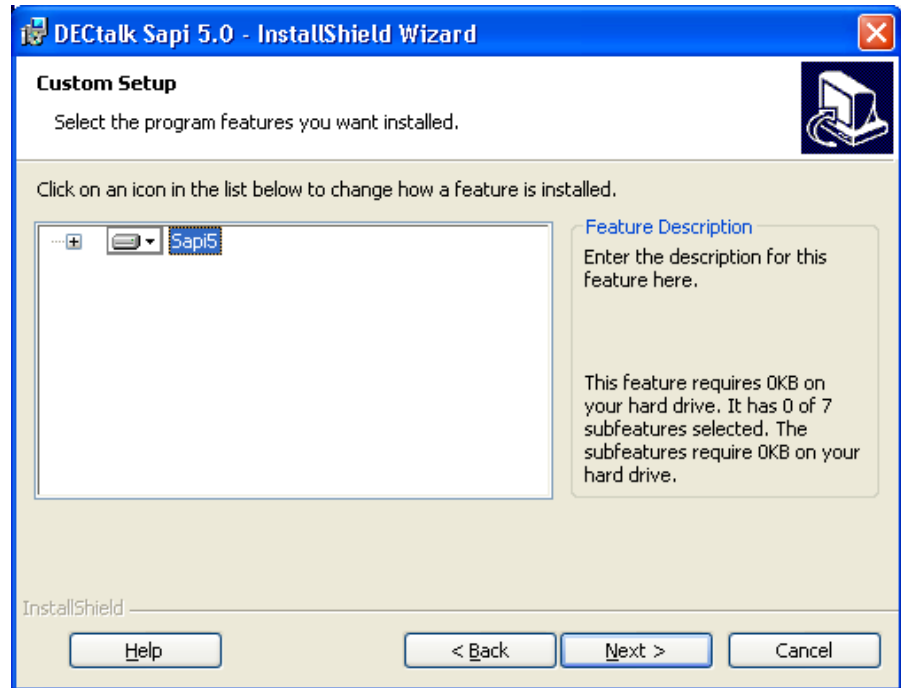
If you selected a **Custom** installation, the InstallShield Wizard displays the DECtalk Custom Setup window, shown in Figure 1-19.

By clicking on the **DECtalk for SAPI 5.0** icon in the feature list, you can alter the installation so that the SAPI Version 5 support will be installed only when required.

By clicking on the **Change** button, you can redirect the installation to a target directory other than a Sapi5 subdirectory of your existing DECTalk installation directory.

When you are ready to proceed with the DECTalk SAPI Version 5 installation, click the **Next** button.

Figure 1-17 DECTalk Custom Setup Window (SAPI 5)



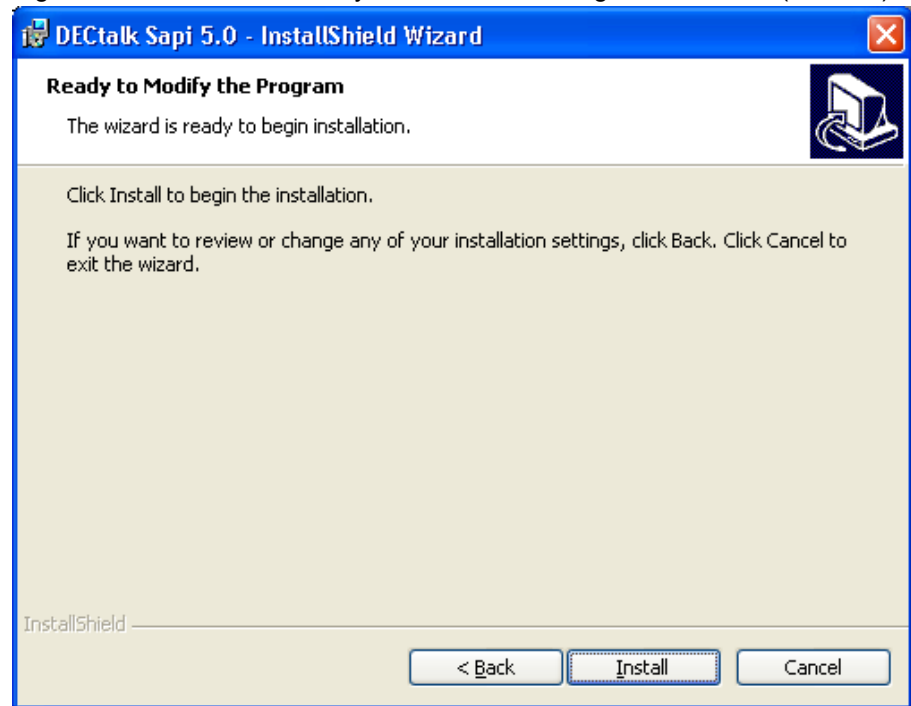
Starting the File Transfers

Next, the InstallShield Wizard displays the DECTalk Ready to Install the Program window, shown in Figure 1-18. This provides you a final opportunity to change any installation settings or halt the installation before any files are actually copied to your system.

To proceed with the DECTalk SAPI Version 5 installation, click the **Install** button. To change installation settings, click the **Back** button. To halt the installation, click the **Cancel** button.

If you click **Install**, the InstallShield Wizard immediately performs the requested installation, while displaying a Setup Status window. This window is continually updated to display the current transfer in progress and the approximate percentage of the overall installation that has been completed.

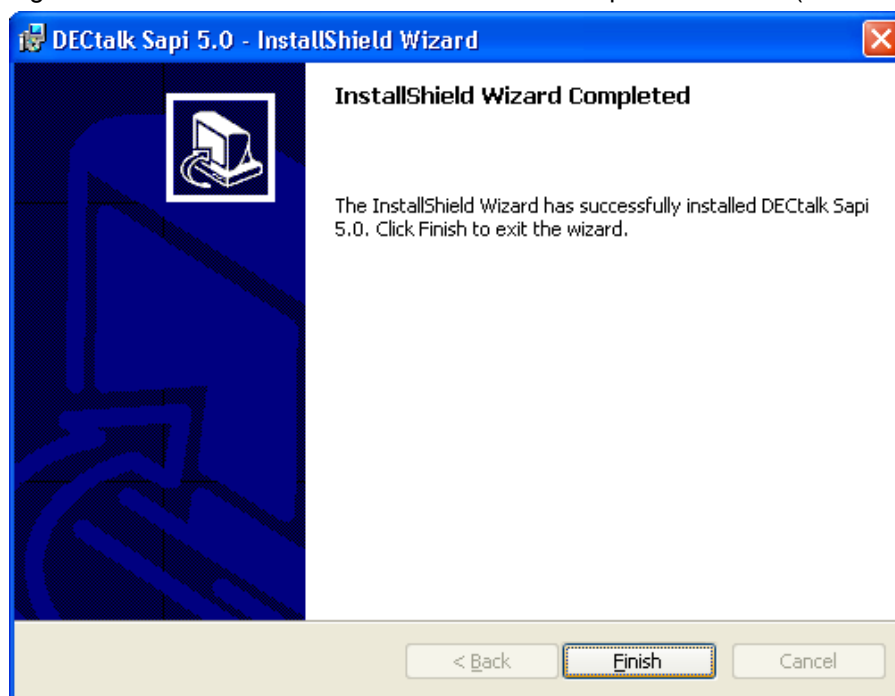
Figure 1-18 DECTalk Ready to Install the Program Window (SAPI 5)



Completing the Installation

When the SAPI Version 5 file transfers are complete, the InstallShield Wizard displays the DECTalk InstallShield Wizard Completed window, shown in Figure 1-19. Click **Finish** to exit the InstallShield Wizard.

Figure 1-19 DECTalk InstallShield Wizard Complete Window (SAPI 5)

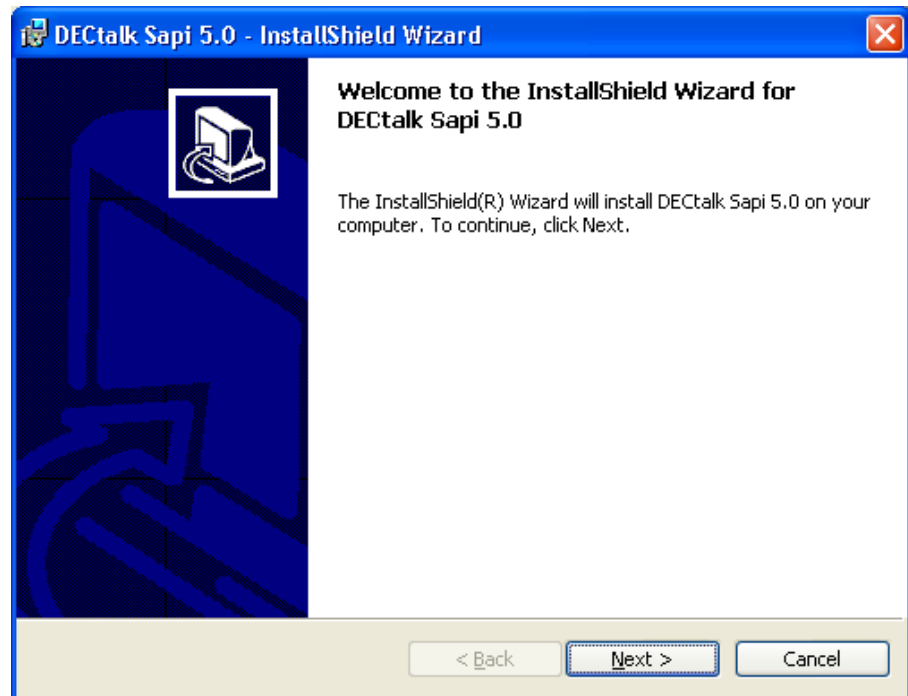


Modifying, Repairing, or Removing a DECTalk SAPI V5 SDK Installation

To modify, repair, or remove an existing DECTalk SAPI Version 5 SDK installation, you launch the Windows control panel **Add/Remove Programs** and select **DECTalk SAPI 5.0**. This reactivates the InstallShield Wizard, which displays a welcome window, shown in Figure 1-20.

To proceed with modifying, repairing, or removing your DECTalk SAPI Version 5 SDK installation, click the **Next** button.

Figure 1-20 DECTalk Program Maintenance Welcome Window (SAPI 5)



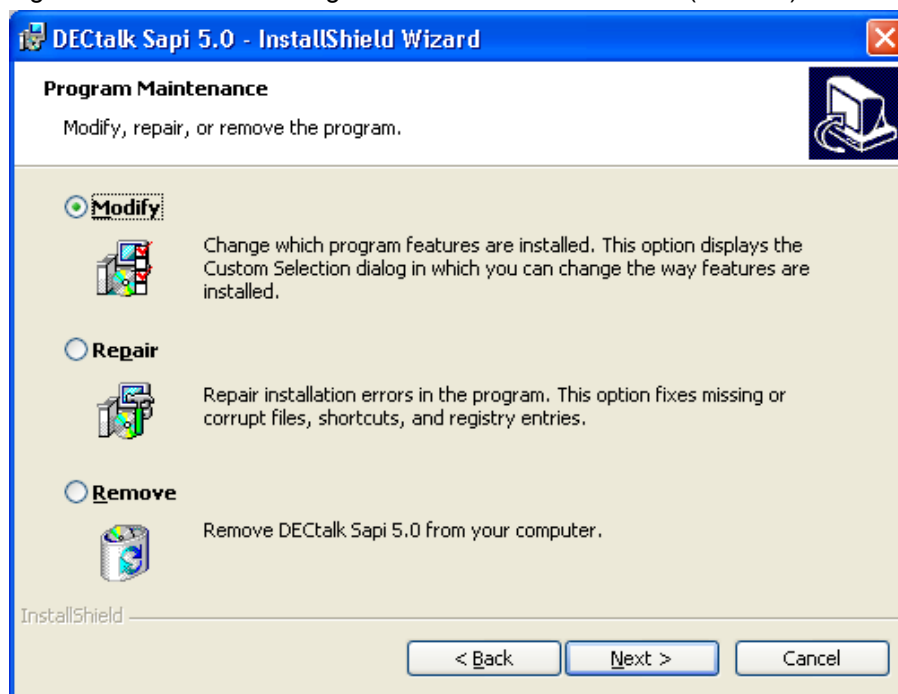
Next, the InstallShield Wizard displays the DECTalk Program Maintenance window, displayed in Figure 1-21.

Select the action you want to perform:

- Modify the current installation, changing the way features are installed
- Repair the current installation by exactly repeating the original installation
- Remove the current installation from the system

To proceed with the action you selected, click the Next button.

Figure 1-21 DECTalk Program Maintenance Window (SAPI 5)



Modifying the Current Installation

If you specified that you wanted to **Modify** the current DECTalk SAPI Version 5 SDK installation, the InstallShield Wizard returns you to the point in the installation procedure where you can customize the installation components and settings. See “Customizing the Installation” on page 34.

Select your modifications and, when you are ready to proceed with modifying your DECTalk SDK installation, click the **Next** button.

Repairing the Current Installation

If you specified that you wanted to **Repair** the current DECTalk SAPI Version 5 SDK installation, the InstallShield Wizard repeats the previously configured installation, while displaying a Setup Status window. This window is continually updated to display the current transfer in progress and the approximate percentage of the overall installation that has been completed.

Removing the Current Installation

If you specified that you wanted to **Remove** the current DECTalk SAPI Version 5 SDK installation, the InstallShield Wizard displays a dialog box that asks you to confirm that want to completely remove the application and all of its components from the system.

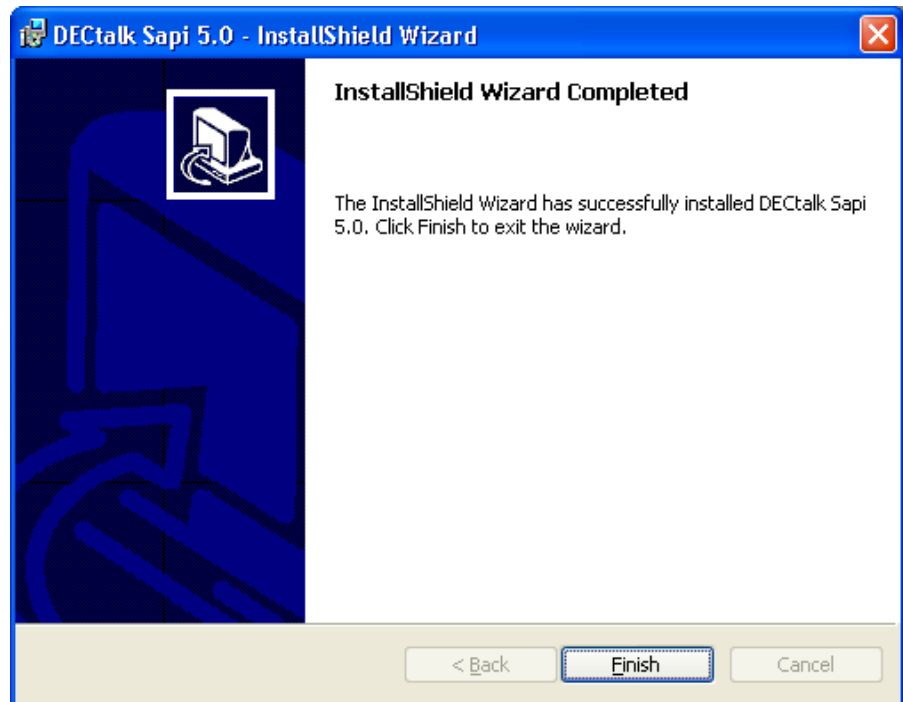
Select **Remove** to completely deinstall the DECTalk SAPI Version 5 SDK from your system. Select **Cancel** to exit the removal procedure.

Completing the Installation Maintenance

When the SDK installation modification you requested is complete, the InstallShield Wizard displays a Completion window, such as shown in Figure 1-22.

Click **Finish** to exit the InstallShield Wizard.

Figure 1-22 DECTalk Program Maintenance Complete Window (SAPI 5)



Displaying Documentation

The DECtalk Software documentation is provided in PDF and other formats on the distribution CD-ROM. You can display the PDF files on your workstation using Adobe Acrobat Reader.

After a successful installation, DECtalk Software online help is accessible in the form of Windows Help. DECtalk Software Windows Help is part of the application and is easily accessed from any of the applets or from the Help icon in the DECtalk program group.

You can find specific information in Help by using keyword searches and the index. Windows Help has a powerful cross-referencing facility that allows you to access many related topics in the same session.

The DECtalk Software Windows Help file includes guide and reference information about the following DECtalk features:

- DECtalk Software applets
Select DECtalk Software and then the DECtalk Applet Master Index.
- DECtalk Software API functions
Select the Programmer's Guide and then the Introduction to the DECtalk Software API.
Select the Reference Guide and then DECtalk Software API Functions.
- DECtalk Software in-line commands Select the Reference Guide and then one of the following:
DECtalk Software In-Line Commands.
Using In-Line Commands.

Solving Installation Problems

If errors occur during the installation procedure, DECtalk Software returns an error message. Installation errors usually occur if any of the following conditions exist:

- The operating system version is incorrect.

- The prerequisite software and hardware components or version is missing or incorrect.
- Insufficient disk space is available.
- System files and parameters are not updated to reflect exact file locations and directory naming conventions.

If you have problems while using DECtalk Software and you believe the error is

caused by the application, do one of the following:

- If you purchased DECtalk Software from an Authorized Distributor or Reseller, contact your Authorized Distributor or Reseller for support.
- If you purchased or licensed DECtalk Software directly from Fonix Corporation, contact Fonix's Technical Support, at (801) 55-FONIX.

For up-to-date information about support options, visit the Fonix web site at: <http://www.fonix.com>.

Windows CE

This chapter provides information you need to install the DECtalk Software Development Kit (SDK) for Windows CE on a Windows 95, 98, ME, NT, 2000, or XP host system running on an Intel processor.

The Windows 95/98/ME/NT/2000/XP host system must host a Personal Digital Assistant (PDA) with audio capability that is running Windows CE in one of the following configurations:

| Windows CE Version | Hardware Architecture |
|-----------------------|--|
| 2.11 for MS HPC Pro | MIPS SH3 SH4 StrongARM X86EM |
| 2.11 for Palm-Size PC | MIPS SH3 X86EM |
| 3.00 for Pocket PC | MIPS SH3 StrongARM X86EM ARM Xscale |

Specific topics in this chapter include:

- Preparing for installation
- Installing DECtalk Software
- Modifying, repairing, or removing the current installation
- Displaying documentation
- Solving installation problems

The DECtalk Software documentation is provided in PDF and other formats on the distribution CD-ROM. After a successful installation, DECtalk Software online help is accessible on the host system in the form of Windows Help. For more information, see “Displaying Documentation” on page 62.

NOTE: The following formats are not supported in any TextToSpeech...() function call because of a limitation in the Windows CE operating system:

WAVE_FORMAT_1M16
WAVE_FORMAT_08M08

The Windows CE SDK does not support Microsoft Speech API (SAPI).

Preparing for Installation

DECtalk Software is installed from the installation media shipped with the product. The installation should take you no longer than ten minutes to complete. You can launch the InstallShield Wizard for DECtalk Software automatically, by inserting the installation CD-ROM, or manually, by using Windows Explorer or the Windows Run or Command Prompt facilities on your host system.

Before installing DECtalk Software:

- Make sure that all prerequisite hardware and software components are installed on your system.
- If another version of DECtalk Software is already installed, close any running DECtalk applications and uninstall the existing DECtalk Software.

During DECtalk Software installation, the InstallShield Wizard will display a License Agreement window, which explains the terms of the DECtalk Software license agreement, and a Readme window, which provides the latest information about the DECtalk Software product.

Please read the complete contents of both windows carefully and make sure that you understand them before you continue.

Hardware Requirements

DECtalk Software for Windows CE requires an Intel-based Windows host system with adequate disk space for installation.

DECtalk Software performance is dependent on your system having enough computational power to perform all the computations involved in text-to-speech conversion. See the release notes for a list of the latest supported systems.

NOTE: DECtalk Software performance can be affected in a heavily loaded multi-tasking environment where DECtalk Software could become starved for computational power and will not speak continuously. There might be pauses in output for any application running on such a system.

Audio Output Device

Your system must be configured with an audio device and appropriate driver that support 8-bit or 16-bit data format at an 11.025 kHz sample rate. You can install DECtalk Software without an audio device present and capture .wav audio files; however, an audio device must be present to actually have DECtalk Software speak text.

Required Disk Space and Software

DECTalk Software for Windows CE requires:

- Windows 95, 98, ME, NT, 2000, XP running on the Intel-based host system
- A minimum of 75 MB of disk space on the host for a Full Installation; however, if you specify a Custom Installation to the InstallShield Wizard, you can monitor the disk space required and make adjustments (see “Selecting Components for a Custom Installation” on page 54)
- Windows CE running on the PDA; consult the CE kit’s README.TXT file or the beginning of this chapter for supported CE/hardware combinations

Installing DECtalk Software

You can start the DECtalk Software installation automatically, by inserting the installation CD-ROM, or manually, from the Windows Explorer or from the Windows Run or Command Prompt dialog boxes on your host system. Starting the installation activates the InstallShield Wizard for DECtalk Software, which will guide you through the necessary steps and decisions.

If a previous version of DECtalk Software exists on your system, the new installation overwrites it.

NOTE: Before installing this version of DECtalk Software, close any running DECtalk applications and uninstall any existing DECtalk Software.

This Software Development Kit (SDK) is provided on a single CD-ROM that lets you install any or all of the supported languages, including United States English, United Kingdom English, Castilian Spanish, Latin American Spanish, German, and French.

Starting the Installation

To start the DECtalk Software installation, insert the installation CD-ROM and wait for the InstallShield Wizard for DECtalk Software to appear.

If the InstallShield Wizard does not appear automatically, run the program `setup.exe` from the top level of the installation CD-ROM. You can do this in one of the following ways:

- In the Windows Explorer, select the appropriate drive and click program `setup.exe`.
- In the Windows Run or Command Prompt dialog box, run `setup.exe` with a command such as:

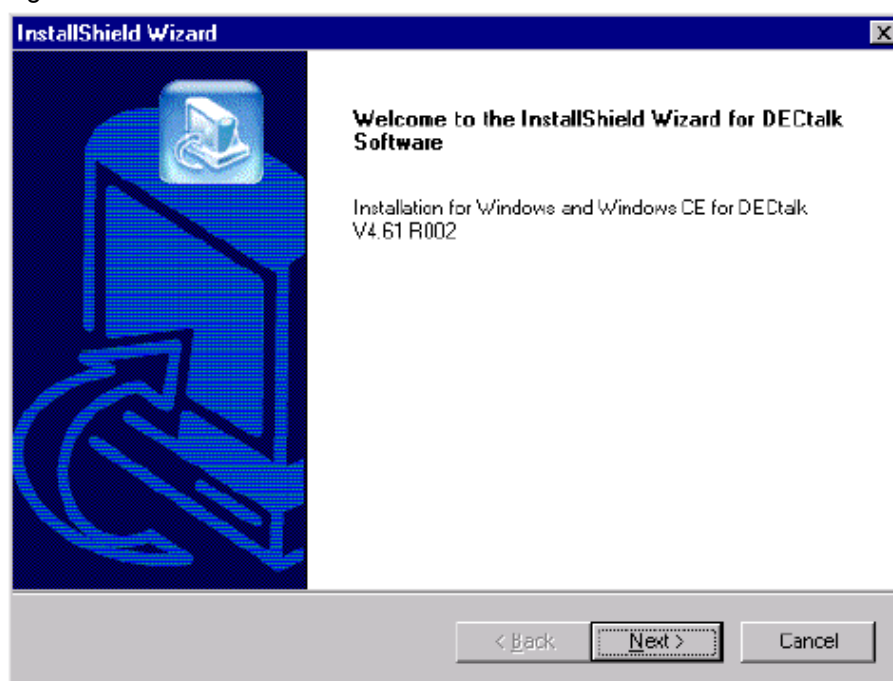
```
f:\setup.exe
```

where `f` is replaced by the correct letter for your CD-ROM drive.

When activated, the InstallShield Wizard for DECtalk Software displays the DECtalk InstallShield Wizard Welcome window, shown in Figure 2-1.

To proceed with the DECtalk Software installation, click the **Next** button.

Figure 2-1 DECTalk InstallShield Wizard Welcome Window



Selecting Which Kit to Install

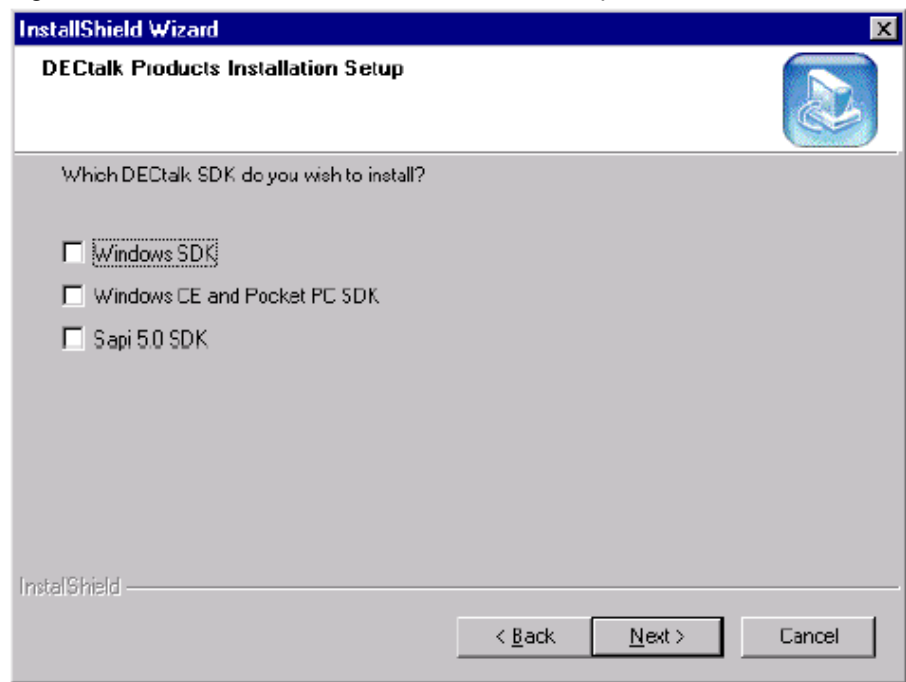
Next, the InstallShield Wizard displays the DECTalk Products Installation Setup window, shown in Figure 2-2.

Select **Windows CE and Pocket PC SDK** to install the DECTalk Software Development Kit (SDK) for Windows CE or Windows Pocket PC.

You can additionally select **Windows SDK**, **Sapi 5.0 SDK**, or both. For details about those installation procedures, see the chapter "Windows 9x/ME/NT/2000/XP" on page 11.

To proceed with the DECTalk Software installation, click the **Next** button

Figure 2-2 DECtalk Products Installation Setup Window.



Reading the License Agreement

Next, the InstallShield Wizard displays a License Agreement window, which explains the terms of the DECtalk Software license agreement. Please read the license agreement carefully and completely.

The License Agreement window asks if you accept all the terms of the license agreement. To install DECtalk Software, you must understand and choose to accept the license agreement terms. To accept the license agreement, click the **Yes** button.

If you do not accept the license agreement, click **No**, which will terminate the installation.

Reading the Release Notes

Next, the InstallShield Wizard displays a Readme window, containing release notes that detail the latest information about the DECTalk Software product. Please read the release notes carefully and completely.

To proceed with the DECTalk Software installation, click the **Next** button.

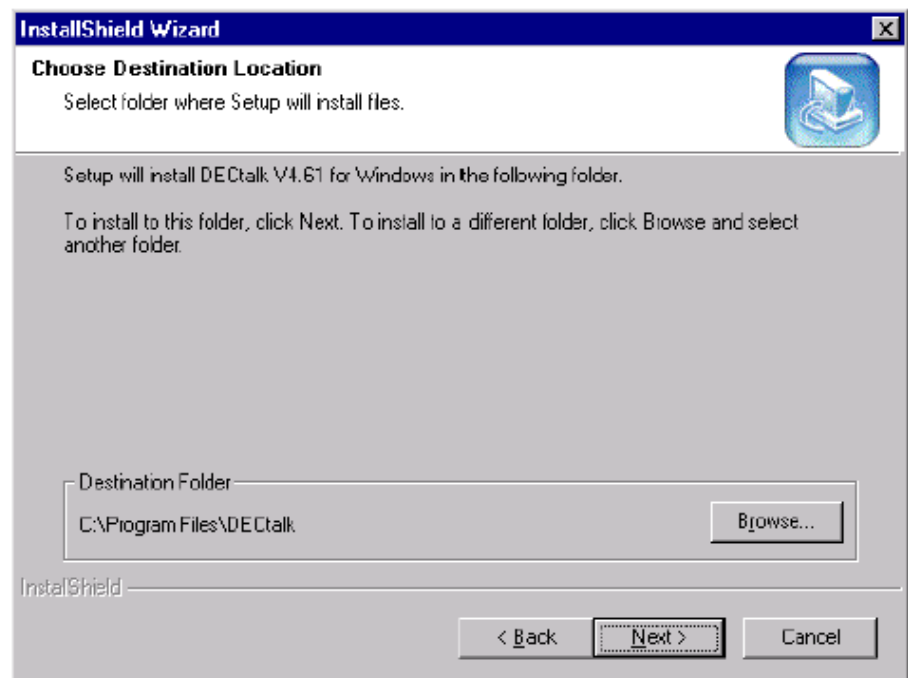
Choosing the Installation Destination Directory

Next, the InstallShield Wizard displays the DECTalk Choose Destination Location window, shown in Figure 2-3.

Select the directory to which you want to install DECTalk Software. You can accept the default installation directory, C:\Program Files\DECTalk, or click the **Browse** button and select another folder.

To proceed with the DECTalk Software installation, click the **Next** button.

Figure 2-3 DECTalk Choose Destination Location Window

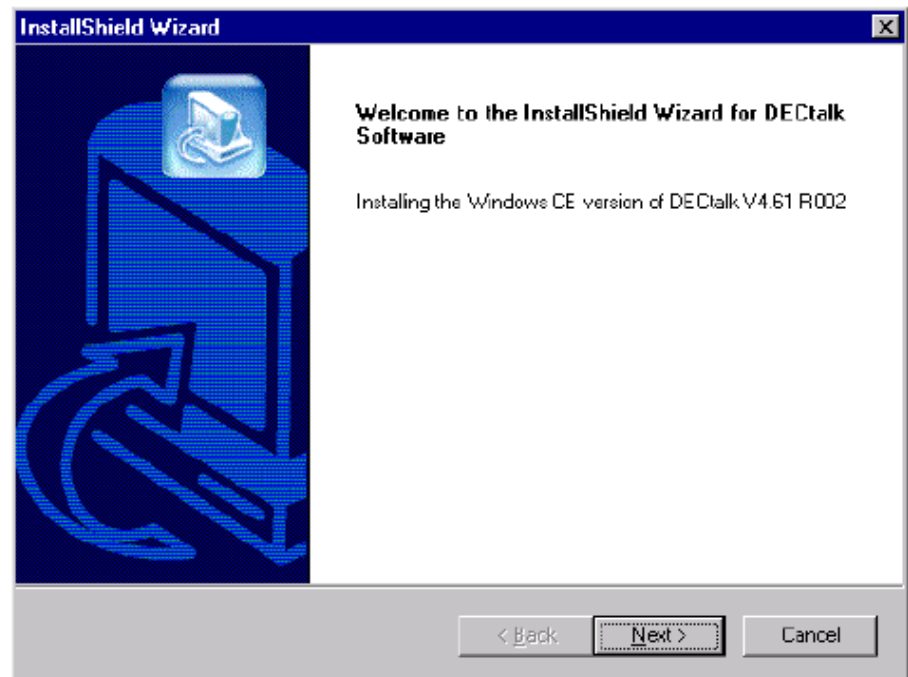


Starting the DECTalk Software for Windows CE Installation

If you selected to install **Windows CE and Pocket PC SDK** in the previous step, the InstallShield Wizard displays a welcome window to indicate that Windows CE and Pocket PC SDK installation has begun, as shown in Figure 2-4.

To proceed with the DECTalk Software for Windows CE installation, click the **Next** button.

Figure 2-4 DECTalk InstallShield Wizard Welcome Window (CE)



Entering Customer Information

Next, the InstallShield Wizard displays a Customer Information window. You can fill in the User Name and Company Name fields as appropriate

To proceed with the DECTalk Software installation, click the **Next** button.

Selecting Full, By-Platform, or Custom Installation

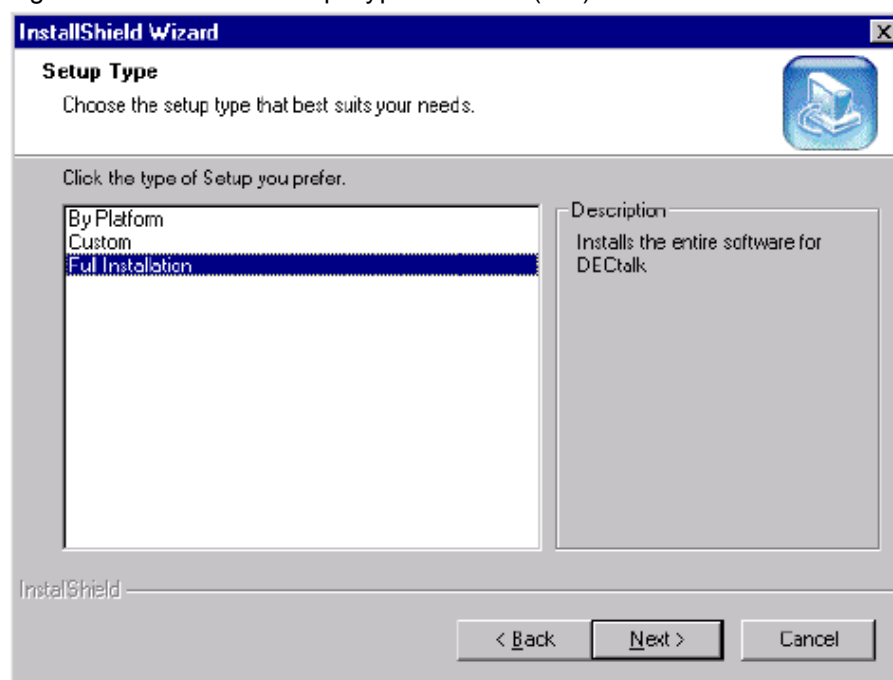
Next, the InstallShield Wizard displays the DECTalk Setup Type window, shown in Figure 2-5.

Select one of the following:

- **Full Installation**, the default, which will install all languages, all sample programs, help files, and documentation
- **By-Platform** installation, if you wish to exactly specify which platforms to include and exclude
- **Custom** installation, if you wish to exactly specify which components to include and exclude

To proceed with the DECTalk Software for Windows CE installation, click the Next button.

Figure 2-5 DECTalk Setup Type Window (CE)



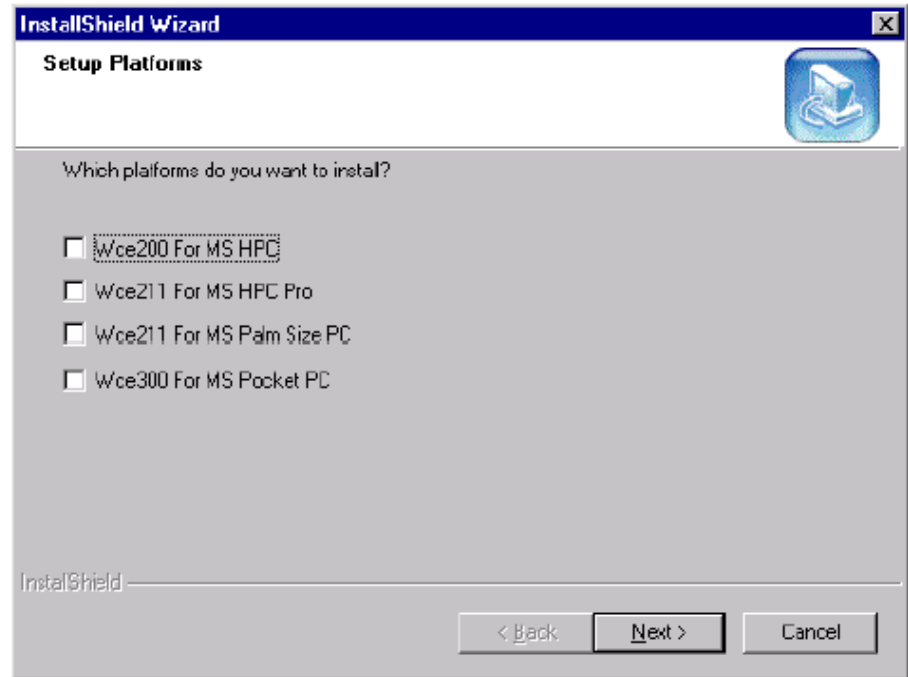
Selecting Platforms for By-Platform Installation

If you selected installation **By Platform**, the InstallShield Wizard displays the DECTalk Setup Platforms window, shown in Figure 2-6.

By checking and unchecking boxes, select the Windows CE version(s) for which to install DECtalk Software support. You can consult the CE kit's README file or the beginning of this chapter for a list of supported CE/hardware platform combinations.

When you are ready to proceed with the DECtalk Software for Windows CE installation, click the **Next** button.

Figure 2-6 DECtalk Setup Platforms Window (CE)



Selecting Components for a Custom Installation

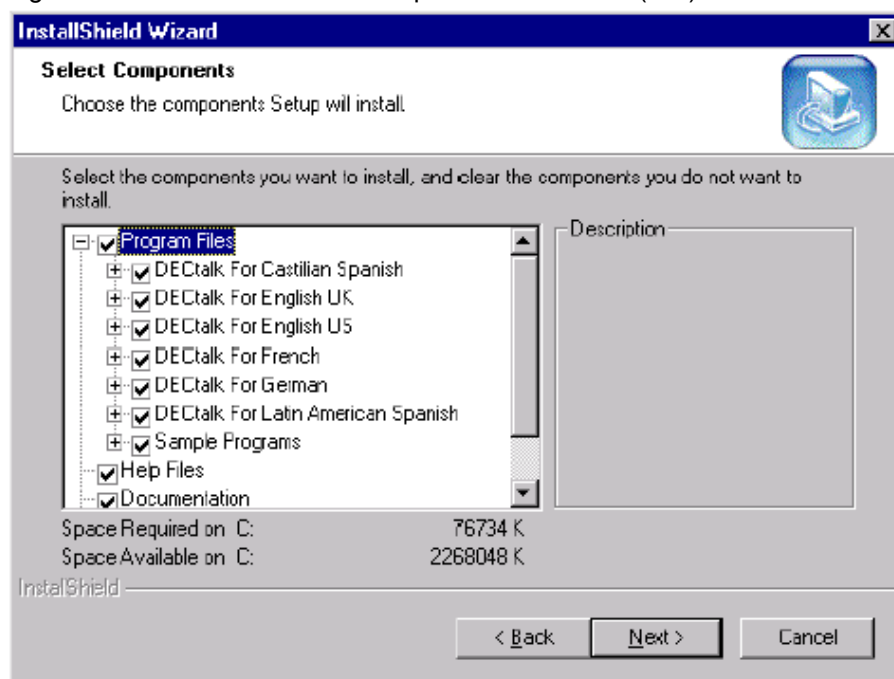
If you selected a **Custom** installation, the InstallShield Wizard displays the DECtalk Select Components window, shown in Figure 2-7.

By checking and unchecking boxes, select the DECtalk Software components to be included or excluded from your installation. As you include or exclude components in the window, the Space Required field is updated to reflect the memory requirements for your selected components.

The **License Key** box shown in Figure 2-7 pertains to the `licenin3` program, which you run immediately after the installation to increment the DECTalk license/key count from 1 to 4. If you would like to be able to run `licenin3` from your installation directory rather than from the installation CD-ROM, the **License Key** box must be selected.

When you are ready to proceed with the DECTalk Software for Windows CE installation, click the **Next** button.

Figure 2-7 DECTalk Select Components Window (CE)



Naming the Program Folder

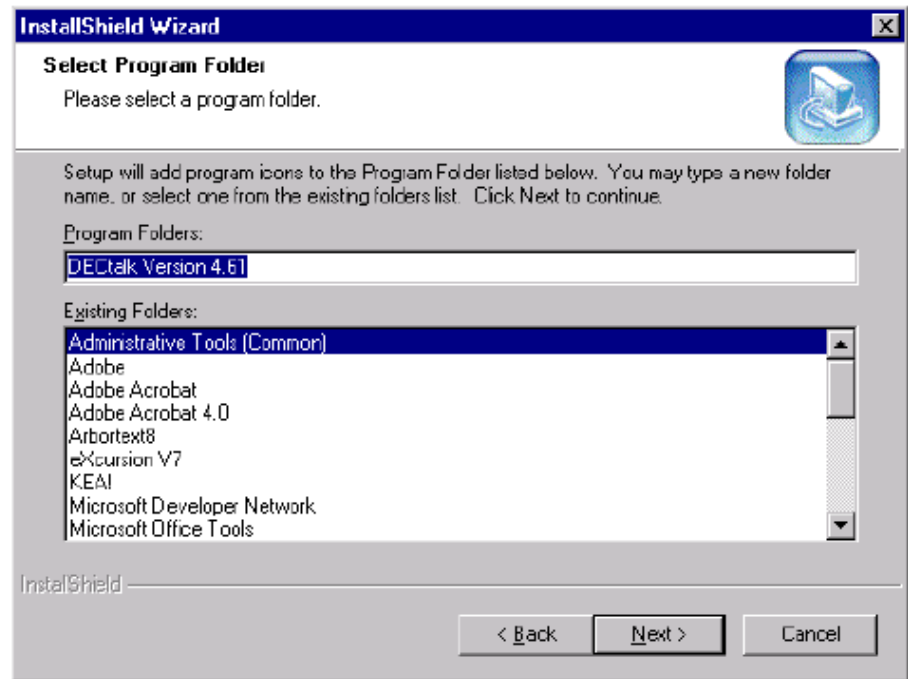
Next, the InstallShield Wizard displays the DECTalk Select Program Folder window, shown in Figure 2-8.

Select a Program Folder name to be included in the Windows Start menu Programs folder. You then will be able to access DECTalk components from the Start menu by clicking on the specified Program Folder name.

For example, if you accept the default name, DECtalk Version 4.62, you will be able to access a DECtalk component such as online help by navigating as follows: Start > Programs > DECtalk Version 4.62 > DECtalk Help.

To proceed with the DECtalk Software for Windows CE installation, click the **Next** button.

Figure 2-8 DECtalk Select Program Folder Window (CE)



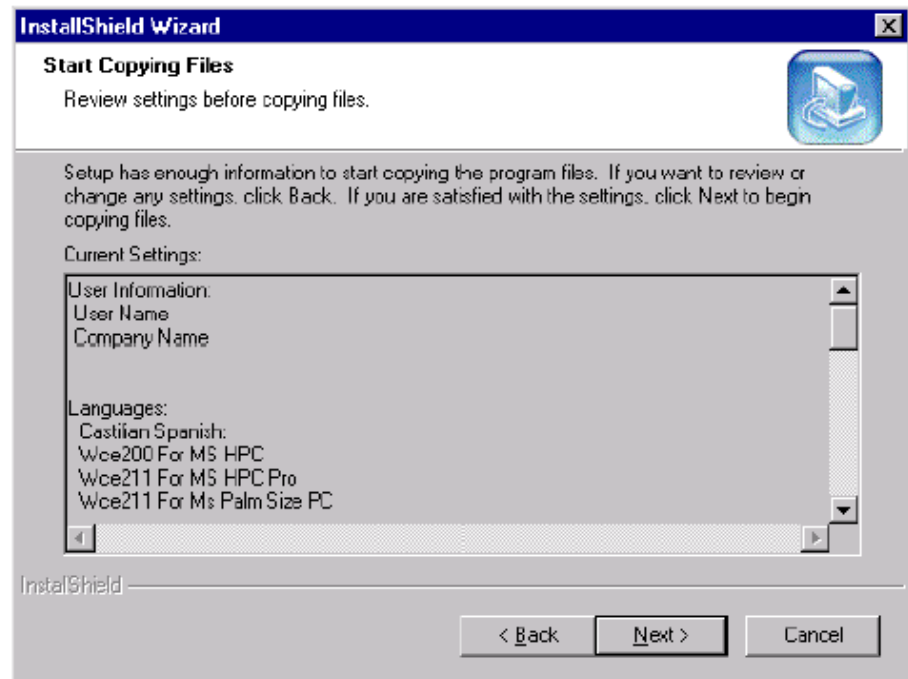
Starting the File Transfers

Next, the InstallShield Wizard displays the DECtalk Start Copying Files window, shown in Figure 2-9. This provides you a final opportunity to change any installation settings or halt the installation before any files are actually copied to your system.

To proceed with the DECtalk Software installation, click the **Next** button. To change installation settings, click the **Back** button. To halt the installation, click the **Cancel** button.

If you click **Next**, the InstallShield Wizard immediately performs the requested installation, while displaying a Setup Status window. This window is continually updated to display the current transfer in progress and the approximate percentage of the overall installation that has been completed.

Figure 2-9 DEctalk Start Copying Files Window (CE)



Completing the Installation

When the file transfers are complete, the InstallShield Wizard launches the User Dictionary Build Tool (`windic`) program, which you can use to create a loadable dictionary (`.dic`) file. For more information, you can access online help directly from `windic`.

NOTE: When the installation is complete, run the program `licenin3.exe`, which increments the DEctalk license/key count from 1 to 4. If you included License Key in your installation, `licenin3` is installed in your selected installation directory (for example, `C:\Program Files\DEctalk`). Otherwise, it can be run from the license subdirectory of your installation CD-ROM. The `licenin3` program increments the license/key count without displaying any messages.

After the installation is complete:

- For a listing of files contained in the source media, refer to file `appendix1.txt`.

NOTE: All appendix and other readme text files can be accessed either from the Programs menu (for example, Start > Programs > DECTalk V4.62 > Appendix1) or at the top level of the installation Destination Directory (for example, `c:\Program Files\DECTalk\appendix1.txt`).

- For development hints, refer to file `appendix2.txt`.
- For additional information, consult the DECTalk Software documentation. See “Displaying Documentation” on page 62, which describes the various forms and locations in which documentation is provided.

Configuring the Windows CE Target System

To configure DECTalk Software on the Windows CE target system:

- 1 Run Windows CE Agent to set up the Windows CE registry on the Windows CE target system.
- 2 Run Microsoft Active Sync to transfer files from the DECTalk installation directory on your Windows host to the Windows CE target system.
- 3 Copy the DLLs (`dectalk.dll`, `dtalk_xx.dll`) to the CE target's `\windows` directory.
- 4 Copy the dictionary files (`dtalk_xx.dic`) and the executable files (`*.exe`) to one of the following directories, according to the CE version and platform you are running:
 - For Windows CE 2.00 or 2.11 (MS HPC Pro), `\My Handheld PC`
 - For Windows CE 2.11 (palm size PC), `\My Palm Size PC`
 - For Windows 3.00 (pocket PC), `\My Device`
- 5 Install a license using the remote registry editor.
 - Install the key
 - `HKEY_LOCAL_MACHINE\SOFTWARE\DECTalk software\DECTalk\4.63\`
 - `"licenses"="tY20lc@0rlv1"`

Should the DECTalk Software for Windows CE configuration become unstable at a later point, you can repair the current installation as described in *Repairing the Current Installation* and then repeat the steps in this section.

Modifying, Repairing, or Removing the Current Installation

To modify, repair, or remove an existing DECTalk Software installation, you can:

- Launch the Windows control panel **Add/Remove Programs** and select a DECTalk installation
- Run the program setup.exe from the top level of your installation CDROM exactly as you did for the original installation

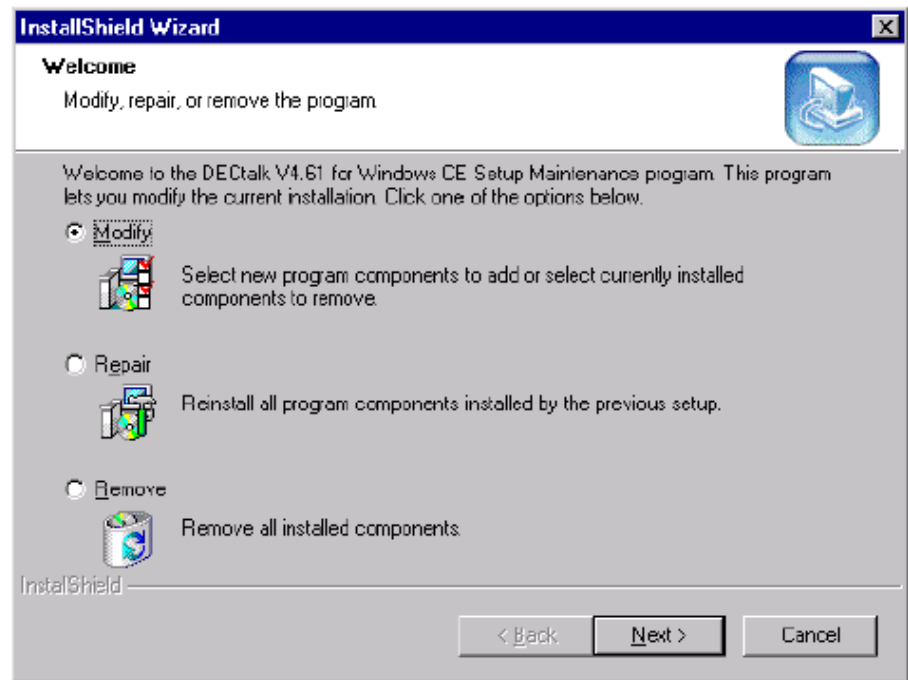
Either method reactivates the InstallShield Wizard for DECTalk Software. Subsequent InstallShield dialog leads you to the DECTalk Setup Maintenance Welcome window, shown in Figure 2-10.

Select the action you want to perform:

- **Modify** the current installation, adding or removing components
- **Repair** the current installation by exactly repeating the original installation
- **Remove** the current installation from the system

To proceed with the action you selected, click the **Next** button.

Figure 2-10 DECTalk Setup Maintenance Welcome Window (CE)



Modifying the Current Installation

If you specified that you wanted to **Modify** the current DECTalk SDK installation, the InstallShield Wizard displays the DECTalk Select Components window. This is the same window that is used to select DECTalk Software components in a fresh Custom installation, as shown in Figure 2-7 (see “Selecting Components for a Custom Installation” on page 54).

By checking and unchecking boxes, you select the DECTalk Software components to be included or excluded from your installation. As you include or exclude components in the window, the Space Required field is updated to reflect the memory requirements for your selected components.

When you are ready to proceed with modifying your DECTalk SDK installation, click the **Next** button.

Once the modifications complete, you should repeat the steps listed in Configuring the Windows CE Target System.

Repairing the Current Installation

If you specified that you wanted to **Repair** the current DECTalk SDK installation, the InstallShield Wizard immediately repeats the previously configured installation, while displaying a Setup Status window. This window is continually updated to display the current transfer in progress and the approximate percentage of the overall installation that has been completed.

Once the previously configured installation completes, you should repeat the steps listed in Configuring the Windows CE Target System.

Removing the Current Installation

If you specified that you wanted to **Remove** the current DECTalk SDK installation, the InstallShield Wizard displays a Confirm File Deletion dialog box that asks you to confirm that want to completely remove the application and all of its components from the system.

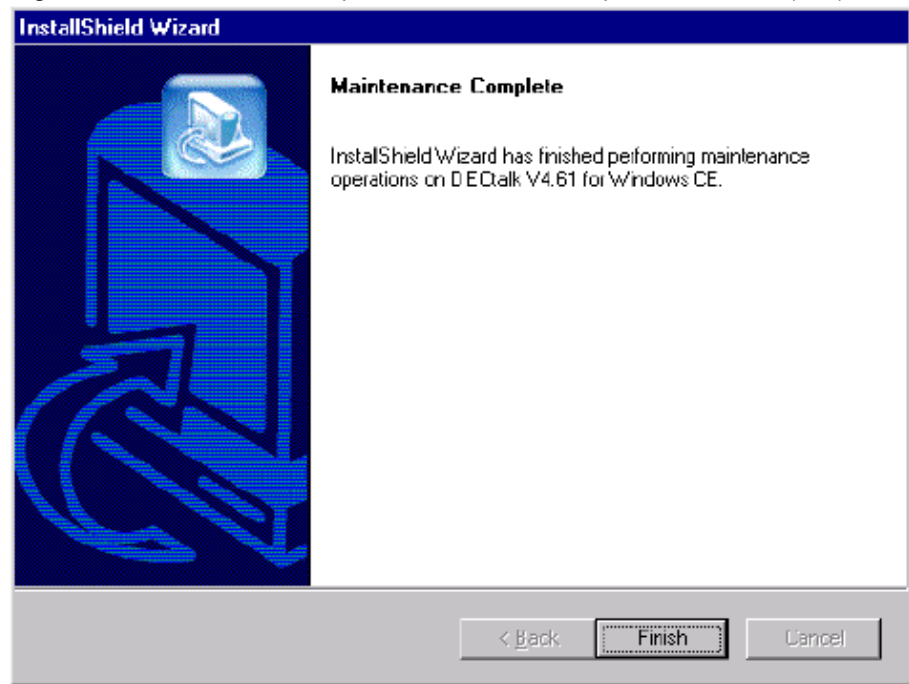
Select **OK** to completely deinstall DECTalk Software from your system. Select **Cancel** to exit the removal procedure.

Completing DECTalk Installation Maintenance

When the SDK installation modification you requested is complete, the InstallShield Wizard displays the DECTalk Setup Maintenance Complete window, shown in Figure 2-11.

Click **Finish** to exit the InstallShield Wizard.

Figure 2-11 DECTalk Setup Maintenance Complete Window (CE)



Displaying Documentation

The DECTalk Software documentation is provided in PDF and other formats on the distribution CD-ROM. You can display the PDF files on your workstation using Adobe Acrobat Reader.

After a successful installation, DECTalk Software online help is accessible on the host system in the form of Windows Help. DECTalk Software Windows Help is part of the application and is easily accessed from any of the applets or from the Help icon in the DECTalk program group.

You can find specific information in Help by using keyword searches and the index. Windows Help has a powerful cross-referencing facility that allows you to access many related topics in the same session.

The DECTalk Software Windows Help file includes guide and reference information about the following DECTalk features:

- DECtalk Software applets
Select DECtalk Software and then the DECtalk Applet Master Index.
- DECtalk Software API functions
Select the Programmer's Guide and then the Introduction to the DECtalk Software API.
Select the Reference Guide and then DECtalk Software API Functions.
- DECtalk Software in-line commands
Select the Reference Guide and then one of the following:
DECtalk Software In-Line Commands.
Using In-Line Commands.

Solving Installation Problems

If errors occur during the installation procedure, DECtalk Software returns an error message. Installation errors usually occur if any of the following conditions exist:

- The operating system version is incorrect.
- The prerequisite software and hardware components or version is missing or incorrect.
- Insufficient disk space is available.
- System files and parameters are not updated to reflect exact file locations and directory naming conventions.

If you have problems while using DECtalk Software and you believe the error is caused by the application, do one of the following:

- If you purchased DECtalk Software from an Authorized Distributor or Reseller, contact your Authorized Distributor or Reseller for support.
- If you purchased or licensed DECtalk Software directly from Fonix Corporation, contact Fonix's Technical Support, at (801) 55-FONIX.

For up-to-date information about support options, visit the Fonix web site at: <http://www.fonix.com>.

Linux & Unix

This chapter describes the tasks required to install the DECtalk Software Development Kit (SDK) for Linux on a Red Hat Linux host system running on an Intel or StrongARM processor. Topics include:

- Preparing for installation
- Installing DECtalk Software
- Displaying documentation
- Solving installation problems

The DECtalk Software documentation is provided in HTML format on the distribution CD-ROM. After a successful installation, DECtalk Software online help is accessible in the form of HTML Help and reference (man) pages. For more information, see “Displaying Documentation” on page 71.

Preparing for Installation

DECtalk Software is installed from the installation media shipped with the product. The installation should take you no longer than ten minutes to complete.

Before installing DECtalk Software:

- Make sure that all prerequisite hardware and software components are installed on your system.
- You should back up the disk or file system on which you will be installing DECtalk Software.

NOTE: You must have superuser privileges to install DECtalk Software.

Extract the Installation Materials

Before you can start the installation, you must select a processor architecture directory on the installation CD-ROM and extract the installation materials from a `.tar.gz` file. To extract the installation materials:

1 On the installation CD-ROM, go to the directory that corresponds to your Linux system's processor type:

- arm for StrongARM
- intel for Intel

2 For each processor type, two installation archives are provided:

- DECTalk_ n. nn_ xxxx.tar.gz (standard installation – recommended)
- DECTalk_ n. nn_ xxxx_debug.tar.gz (installation with debug symbols)

In the file names above, n.nn represents the DECTalk Software version (for example, 4.6.3) and xxxx represents a revision value (for example, R002).

Copy the .tar.gz file that represents the type of installation you want to perform to a working installation directory.

Typically you would select the standard installation. Installation with debug symbols normally is reserved for troubleshooting a systematic problem and is used to generate useful information for support personnel.

3 Extract the installation materials from the .tar.gz file. For example:

```
% tar zxvf DECTalk_4.6.3_R002.tar.gz
```

Release Notes

Before you install the DECTalk Software, you should read the release notes in the `readme.txt` file found in the working installation directory. These notes contain the latest information about the DECTalk Software product.

Hardware Requirements

Hardware requirements include a standard audio sound card and adequate disk space for installation.

DECtalk Software performance is dependent on your system having enough computational power to perform all the computations involved in text-to-speech conversion.

NOTE: DECTalk Software performance can be affected in a heavily loaded multi-tasking environment where DECTalk Software could become starved for computational power and will not speak continuously. There might be pauses in output for any application running on such a system.

Audio Output Device

Your system must be configured with an audio device and appropriate driver that support 8-bit or 16-bit data format at an 11.025 kHz sample rate. You can install DECTalk Software without an audio device present and capture .wav audio files; however, an audio device must be present to actually have DECTalk Software speak text.

Required Disk Space and Software

DECTalk Software for Linux requires:

- A minimum of 3 MB disk space for proper configuration and installation
- Red Hat Linux Version 5.0 or higher
- Kernel 2.0.34 or higher
- glibc v2.0 (libc6)
- GTK+ V1.2.7

Installing DECTalk Software

To install DECTalk Software for Linux:

- 1 Review DECTalk's list of target installation directories, `locations.sh`, and make any necessary modifications.
- 2 Run the DECTalk installation script, `install.sh`.

If a previous version of DECtalk Software exists on your system, the new installation overwrites it.

Reviewing the List of Target Installation Directories

Before starting the DECtalk Software for Linux installation, you should examine the list of target installation directories in the file `locations.sh`, found in the working installation directory.

If you would like DECtalk Software components installed to locations other than the defaults, modify the file to specify the path names you desire.

Normally, you will want to preserve the hierarchy of subdirectories that are defined relative to `$BASE_DIR` in `locations.sh`.

Running the Installation Script

To install, DECtalk Software for Linux, run the script `install.sh`, found in the working installation directory.

The installation script does the following:

- 1 Installs software libraries to the LIBS directory, as defined in `locations.sh`
- 2 Installs dictionary files to the DICTIONARIES directory, as defined in `locations.sh`
- 3 Installs bitmap files to the BITMAPS directory, as defined in `locations.sh`
- 4 Installs text sample programs to the TEXT_SAMPLE_PROGRAMS directory, as defined in `locations.sh`
- 5 Installs graphic sample programs to the GRAPHIC_SAMPLE_PROGRAMS directory, as defined in `locations.sh`
- 6 Installs HTML, documentation to html, subdirectory of the DOCUMENTATION directory, as defined in `locations.sh`
- 7 Installs reference pages to the MAN1 and MAN3 directories, as defined in `locations.sh`
- 8 Installs sample source files to the SAMPLE_SOURCE directory, as

defined in `locations.sh`

9 Creates the file `/etc/DECtalk.conf` and writes information to the file to record installation locations and licensing information

10 Invokes the `say` utility to speak the following:

"DECtalk Vn.nn has been successfully installed."

When the DECtalk Software for Linux installation is complete, the script displays the following message:

```
If DECtalk just spoke, DECtalk was sucessfully installed.  
If DECtalk did not speak, your sound device may not be  
functioning or your path may not include the directory  
that DECtalk was installed to.  
If you have installed rsynth, rsynth installs a say  
program of its own. That may be the program that just  
spoke.  
If the libs directory is not in your ld.4.6.2.conf file,  
DECtalk will not work. Add it and run ldconfig.
```

Displaying Documentation

The DECtalk Software documentation is provided in PDF, Postscript, and HTML file formats on the distribution CD-ROM. You can display the files on your workstation using Adobe Acrobat Reader, a Postscript reader, or a browser application.

After a successful installation, DECtalk Software online help is accessible in two forms:

- Reference (man) pages – Invoke reference page help for DECtalk utilities (such as **speak**) and API functions from the Linux command line with the **man** command. The reference pages are installed to the MAN1 and MAN3 directories, as defined in `locations.sh`.
- HTML Help – Start HTML Help by launching a web browser and loading the online help file `defaultdectalk.html`. The HTML Help files are installed to the `html` subdirectory of the DOCUMENTATION directory, as defined in `locations.sh`.

The DECtalk Software HTML Help files include guide and reference information about the following DECtalk features:

- DECtalk Software applets

Select DECtalk Software and then the DECtalk Applet Master Index.

- DECtalk Software API functions

Select the Programmer's Guide and then the Introduction to the DECtalk Software API.

Select the Reference Guide and then DECtalk Software API Functions.

- DECtalk Software in-line commands

Select the Reference Guide and then one of the following:

DECtalk Software In-Line Commands.

Using In-Line Commands.

Additionally, PDF and Postscript files of the DECtalk Software manuals can be found in the `pdf` and `ps` subdirectories of the `DOCUMENTATION` directory, as defined in `locations.sh`.

Solving Installation Problems

If errors occur during the installation procedure, DECtalk Software returns an error message. Installation errors usually occur if any of the following conditions exist:

- The operating system version is incorrect.
- The prerequisite software and hardware components or version is missing or incorrect.
- Insufficient disk space is available.
- System files and parameters are not updated to reflect exact file locations and directory naming conventions.

If you have problems while using DECtalk Software and you believe the error is caused by the application, do one of the following:

- If you purchased DECtalk Software from an Authorized Distributor or Reseller, contact your Authorized Distributor or Reseller for support.
- If DECtalk does not run, /usr/local/bin may not be in your path. Also /usr/local/lib may not be in /etc/ld.so.conf. You may also have to run ldconfig so DECtalk (Say in-line command) can find the shared libraries.
- If you purchased or licensed DECtalk Software directly from Fonix Corporation, contact Fonix's Technical Support, at (801) 55-FONIX.

For up-to-date information about support options, visit the Fonix web site at: <http://www.fonix.com>.

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