

SPEECH TO TEXT

Install speech recognition

If you recently purchased a new computer, the Microsoft speech recognition engine might have been installed by the computer manufacturer. No further installation is necessary. If you installed Microsoft Office XP, or if you purchased a new computer with it installed, the speech recognition engine is included, but might not be installed. Follow one of the instructions below to install it.

To determine if the speech recognition engine is installed

- Click **Start**, click **Control Panel**, click **Sounds, Speech, and Audio Devices**, and then click **Speech**.

If the **Speech Recognition** tab is available in Speech Properties, the speech recognition engine is installed. If it is not available, the engine is not installed.

To install speech recognition from Microsoft Word 2002

1. Open Microsoft Word.
2. On the **Tools** menu, click **Speech**.

Speech recognition is now available in all Office programs as well as other programs for which it is enabled, such as Microsoft Internet Explorer.

To install speech recognition using Add or Remove Programs

1. Open Add or Remove Programs in Control Panel.
 2. Click **Change or Remove Programs**, click **Microsoft Office XP**, and then click **Change**.
 3. Click **Add or Remove Features**, and then click **Next**.
 4. Under **Features to install**, double-click **Office Shared Features**.
 5. Double-click **Alternative User Input**, click **Speech**, click the down arrow, and then click **Run from My Computer**.
 6. Click **Update**.
- Speech recognition engines are language-specific. The first three Microsoft speech engines that are available are Simplified Chinese, U.S. English, and Japanese. Engines for other languages will become available.

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To add speech recognition

Speech recognition is normally added automatically as a text service when it is installed. *Use this procedure only if it you removed it as a text service and want to add it.*

1. Open Regional and Language Options in Control Panel.
 2. On the **Languages** tab, under **Text services and input languages**, click **Details**.
 3. Under **Installed services**, click **Add**.
 4. In the **Input language** list, click an input language.
 5. Select the **Speech** check box, and then click an option in the list.
- Speech recognition engines are language-specific. The first three Microsoft speech engines that are available are Simplified Chinese, U.S. English, and Japanese. Engines for other languages will become available.
 - To open Regional and Language Options, click **Start**, click **Control Panel**, click **Date, Time, Language, and Regional Options**, and then click **Regional and Language Options**.
 - Speech recognition requires computer memory and can affect your computer's performance, so you should remove it as a text service if you do not use it.
 - If speech recognition is not available, it may not be installed. For more information, click **Related Topics**.
 - For more detailed information about using speech recognition, click the **Help** button on the Language bar.
 - If a language does not appear in the **Input language** list, the fonts for that language might not be installed. For information about installing East Asian and complex script languages, click **Related Topics**.

To remove speech recognition

1. Open Regional and Language Options in Control Panel.
 2. On the **Languages** tab, under **Text services and input languages**, click **Details**.
 3. Under **Installed services**, click **Voice Recognition** under the language you are using, and then click **Remove**.
- To open Regional and Language Options, click **Start**, click **Control Panel**, click **Date, Time, Language, and Regional Options**, and then click **Regional and Language Options**.
 - Speech recognition requires computer memory and can affect your computer's performance, so you should remove it as a text service if you do not use it.
 - Removing speech recognition does not delete it from your computer, it only removes it as an available text service and prevents it from being loaded into memory. You can add it again at any time.
 - To remove the speech recognition engine from your hard disk, follow the instructions in the program with which it was installed, or use Add or Remove Programs in Control Panel.

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To set up a microphone

1. Locate the sound connections and connect the microphone jack to the computer. Most computers use an internal sound card and often the connections will be in the back of the system.
2. There will be a series of connections the same size and diameter as the microphone jack. One will be labeled as the microphone connection, either with a small icon that looks like a microphone or explicitly labeled as such.
3. Plug the microphone into that connection.

To test the connection:

1. Open **Speech** in Control Panel.
2. Select the **Speech Recognition** tab.
3. Speak directly into the microphone. The sound level should register in the Microphone Level indicator.

To determine the selected speech recognition engine

1. Open **Speech** in Control Panel.
 2. On the **Speech Recognition** tab, the name displayed in the Language drop-down list box is the active engine.
- The language supported by an engine may not be obvious by the engine's displayed name. Refer to the specific user's guide for detailed information about the engine. This includes not only the language supported, but also the lexicon purpose. The lexicon purpose indicates whether it is a general grammar or jargon specific to a profession such as legal or medical.
 - To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**, and then double-click the appropriate icon.

To train the speech recognition engine

1. Open **Speech** in Control Panel.
 2. On the **Speech Recognition** tab, select the speech recognition engine you want from the Language drop-down menu.
 3. Select the profile you want from the Recognition Profile group. Training is specific to an engine and profile so that training one engine/profile set has no effect on any other engine/profile set.
 4. Click **Train Profile**. The Voice Training Wizard will appear; follow the directions in the wizard. Not all engines support training. If your engine does not, **Train Profile** will be unavailable.
- To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**, and then double-click the appropriate icon.
 - It is recommended that you spend at least 15 minutes training the computer. The more training you do, the higher your recognition accuracy will be.

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To configure the microphone

Getting the best results from your microphone depends on a variety of factors including the distance from mouth to microphone and correct positioning of the microphone. Each manufacturer addresses specific requirements.

1. Open **Speech** in Control Panel.
2. On the **Speech Recognition** tab, click **Configure Microphone**; the Microphone Wizard appears. The features supported are dependent on the manufacturer of the engine. Follow the instructions in the wizard. **Configure Microphone** is available only if the current engine supports microphone training. To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**, and then double-click the appropriate icon.

To check the input sound levels

1. Open **Speech** in Control Panel.
 2. On the **Speech Recognition** tab, the Microphone box displays a linear register of the input sounds. If the microphone is accepting input, a bar is displayed indicating the sound level. Normal speech should register slightly less than halfway on the graph.
 3. If no sound registers, make sure the microphone is turned on; a few models have a mute switch. Also, double-check the connections to the computer. Some systems have several locations where a microphone can be plugged in.
- To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**, and then double-click the appropriate

To change the speech recognition volume

To adjust the volume input levels, follow the procedure below. However, not all devices support this option in the same way. Some devices will not support volume control and the **Volume** button will be unavailable. Other engines may use their own display. In those cases, follow the instructions presented on the screen or documented separately with the engine.

1. Open **Speech** in Control Panel.
 2. On the **Speech Recognition** tab, click **Audio Input**, and then click **Volume**.
 3. A volume control mixer will be displayed. Adjust the appropriate device to the required level.
- To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**, and then double-click the appropriate icon.

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To set or determine a profile

1. Open **Speech** in Control Panel.
 2. On the **Speech Recognition** tab, the Recognition Profiles list box displays the active profile.
 3. To select a different profile, click the one you want. Only one profile may be active at a time.
- To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**, and then double-click the appropriate

To add a profile

Profiles are specific to your voice and environment. The Profile Wizard will lead you through several steps to create a Recognition Profile. A new profile should be created if you move offices, the noise level changes on a permanent basis or additional people are often present. Recognition Profiles allow multiple users to share the same machine without interfering with each other's setups.

1. Open **Speech** in Control Panel.
2. On the **Speech Recognition** tab, click **New** in Recognition Profiles. The Profile Wizard will appear; follow the directions it presents. Profiles are specific to engines and not all engines support similar functions.

To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**,

To remove a profile

1. Open **Speech** in Control Panel.
 2. On the **Speech Recognition** tab, select the profile you want to delete from the Recognition Profiles list box. This highlights the profile and selects it; **Delete** becomes available.
 3. Click **Delete**.
 4. Verify the action with **Yes** or **No**.
 5. Click **OK** or **Apply** to remove, otherwise click **Cancel**.
- An engine must have at least one profile associated with it. The last existing profile may not be deleted.
 - To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**, and then double-click the appropriate icon.
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To change speech recognition options

These options control the methods the speech recognition engine uses to process voice inputs.

1. Open **Speech** in Control Panel.
2. On the **Speech Recognition** tab, click **Settings** in the Recognition Profiles area.
3. Select **Pronunciation Sensitivity**, **Accuracy vs. Recognition Response Time**, or **Background Adaptation**.

Pronunciation Sensitivity controls the level of confidence needed for the system to respond to your command. High sensitivity indicates that you want the system to reject any command you utter when it is not confident of what you said. This means the system will make fewer recognition errors, but it will also increase the frequency of rejecting what you said. As a result, you may need to enunciate more slowly and clearly. Low sensitivity indicates that you want the system to respond to your command when it has little confidence that it has correctly recognized what you said. This will result in the system making more mistakes in recognizing your commands, but it will very rarely reject your command. This setting affects only command and control applications.

Accuracy vs. Recognition Response Time controls the trade off between accuracy in recognizing speech and computer processing time needed to generate the recognized speech. Low/Fast indicates that the system will perform limited processing. This results in the recognized text appearing on the screen quickly, but with a low accuracy rate. High/Slow indicates that the system will perform a much larger amount of computation to obtain the best accuracy possible, but at the expense of producing the dictated text much more slowly. This setting affects both command and control applications and dictation applications.

Background Adaptation controls whether the system adapts to your voice and speaking manner. When this box is checked, the system will learn what your voice sounds like (in a particular environment). This information is stored in your profile and contributes to an improvement in recognition accuracy. It is highly recommended that you select this setting.

To accept a new option, click **Apply**. To ignore any changes made in the dialog box and retain the current options, click **Cancel**. **Restore Defaults** overrides all changes and sets the options to a default state.