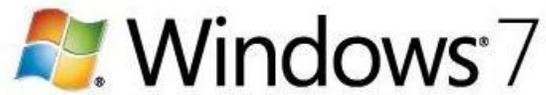# Accessibility in Windows 7

Windows 7

Use Accessibility Tools

Windows 7 introduces significant improvements to the Microsoft accessibility tools Magnifier, On-Screen Keyboard, and Narrator.

View Online Video Demos

- Magnifier
- On-Screen Keyboard

In this section learn how to:

Make items on the screen appear bigger (Magnifier)

Magnifier enlarges different parts of the screen. This is especially useful for viewing objects that are difficult to see, but also for seeing the whole screen more easily.

There are three modes:

- *Full-screen mode.* In full-screen mode, your entire screen is magnified. You can then have Magnifier follow the mouse pointer.
- *Lens mode.* In lens mode, the area around the mouse pointer is magnified. When you move the mouse pointer, the area of the screen that's magnified moves along with it.
- *Docked mode.* In docked mode, only a portion of the screen is magnified, leaving the rest of your desktop in a normal state. You can then control which area of the screen is magnified.

Figure 1: Image of Magnifier magnifying a portion of the screen

Note

Full-screen mode and lens mode are only available as part of the Aero experience. If your computer doesn't support Aero, or if you're using a theme other than an Aero theme, Magnifier will only work in docked mode.

1. Open Magnifier by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **Magnifier**.
2. On the **Views** menu, click the mode that you want to use.
3. Move the pointer to the part of the screen that you want to magnify.

Notes

- To exit Magnifier, press the Windows logo key +Esc.

When you're using full-screen mode, you can quickly preview your entire desktop by clicking the **Views** menu, and then clicking **Preview full screen**.

For a list of keyboard shortcuts that you can use with Magnifier, see Keyboard shortcuts.

Magnifier topics in this section:

- To choose where Magnifier focuses
- To change the zoom level
- To set the zoom increment
- To set the lens size
- To turn on color inversion
- To display the Magnifier toolbar

To choose where Magnifier focuses

1. Open Magnifier by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **Magnifier**.
2. Click the **Options** button, and then select the option that you want:

Option	Description
Follow the mouse pointer	Displays the area around the mouse pointer in the Magnifier window. When you select this option, you can choose to have the Magnifier window move when the mouse pointer approaches or when the mouse pointer hits the edge of the Magnifier window.
Follow the keyboard focus	Displays the area around the pointer when you press the Tab or arrow keys.
Have Magnifier follow the text insertion point	Displays the area around the text that you're typing.

To change the zoom level

1. Open Magnifier by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **Magnifier**.
2. Do one of the following:

To	Do this
Zoom in	Click **Zoom in** or press the Windows logo key +Plus sign
Zoom out	Click **Zoom out** or press the Windows logo key +Minus sign

To set the zoom increment

The zoom increment determines how quickly Magnifier zooms in and out.

1. Open Magnifier by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **Magnifier**.
2. Click the **Options** button, and then move the slider to adjust the zoom increment. Moving the slider to the left causes Magnifier to zoom slower, with smaller changes between zoom levels. Moving the slider to the right causes Magnifier to zoom faster, with larger changes between zoom levels.

To set the lens size

When you're using lens mode, you can adjust the size of the Magnifier lens.

1. Open Magnifier by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **Magnifier**.
2. Click the **Options** button, and then, under **Magnifier Lens Size**, move the sliders to adjust the size of the Magnifier lens. The lens size changes right away. Adjust the level until it's right for you.

Notes

- You must be using lens mode for the lens size options to appear.
- You can quickly change the lens size by pressing Ctrl+Alt+R, and then moving the pointer up and down to change the height, and left and right to change the width.

To turn on color inversion

Turning on color inversion increases the contrast between items on your screen, which can help make your screen easier to see.

1. Open Magnifier by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **Magnifier**.

2. Click the **Options** button, and then select the **Turn on color inversion** check box.

To display the Magnifier toolbar

1. Open Magnifier by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **Magnifier**.
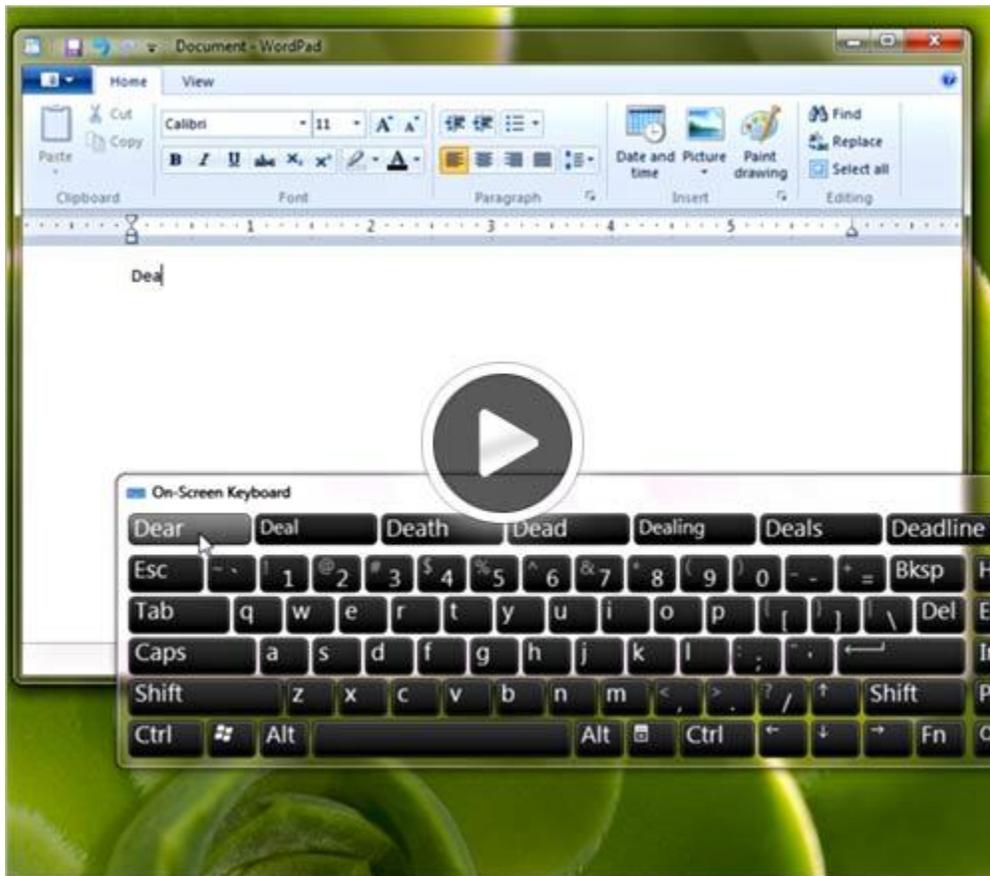2. Click the magnifying glass icon or click **Magnifier** on the taskbar.

Type without using the keyboard (On-Screen Keyboard)

Instead of relying on the physical keyboard to type and enter data, you can use On-Screen Keyboard. On-Screen Keyboard displays a visual keyboard with all the standard keys. You can select keys using the mouse or another pointing device, or you can use a single key or group of keys to cycle through the keys on the screen.

Figure 2: Image of On-Screen Keyboard on computer screen

On-Screen Topics in this section:

- To change how information is entered into On-Screen Keyboard
- To set On-Screen Keyboard to use audible clicks
- To use a numeric key pad in On-Screen Keyboard
- To enable text prediction in On-Screen Keyboard

To change how information is entered into On-Screen Keyboard

In On-Screen Keyboard:

1. Open On-Screen Keyboard by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **On-Screen Keyboard**.
2. Click **Options**, and then, under **To use the On-Screen Keyboard**, select the mode you want:

Typing mode	Description
Click on keys	In clicking mode, you click the on-screen keys to type text.
Hover over keys	In hovering mode, you use a mouse or joystick to point to a key for a predefined period of time, and the selected character is typed automatically.
Scan through keys	In scanning mode, On-Screen Keyboard continually scans the keyboard and highlights areas where you can type keyboard characters by pressing a keyboard shortcut, using a switch input device, or using a device that simulates a mouse click.

Notes

- If you're using either hovering mode or scanning mode and accidently minimize On-Screen Keyboard, you can restore it by pointing to it in the taskbar (for hovering mode) or by pressing the scan key (for scanning mode).
- If you're using a mouse click to select a key in the Scan through keys mode, the mouse pointer must be located over On-Screen Keyboard.
- The keyboard layout changes in On-Screen Keyboard depending on the language displayed in the active program.

To set On-Screen Keyboard to use audible clicks

You can have On-Screen Keyboard make an audible click when a key is pressed.

Open On-Screen Keyboard:

1. Open On-Screen Keyboard by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **On-Screen Keyboard**.
2. Click **Options**, select the **Use click sound** check box, and then click **OK**.

To use a numeric key pad in On-Screen Keyboard

You can use a numeric key pad to enter numbers with On-Screen Keyboard.

1. Open On-Screen Keyboard by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **On-Screen Keyboard**.
2. Click **Options**, select the **Turn on numeric key pad** check box, and then click **OK**.

To enable text prediction in On-Screen Keyboard

When text prediction is enabled, as you type, On-Screen Keyboard displays a list of words that you might be typing.

1. Open On-Screen Keyboard by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **On-Screen Keyboard**.
2. Click **Options**, select the **Use Text Prediction** check box, and then click **OK**.

If you don't want to automatically add a space after you insert a word using text prediction, clear the **Insert space after predicted words** check box, and then click **OK**.

Notes

- Text prediction is only available in English, French, Italian, German, and Spanish. To enable text prediction in a specific language, you must first install additional language files for that language. For more information, see Install or change a display language in Help.
- Text prediction isn't included in Windows 7 Home Basic.

Hear text read aloud with Narrator

Windows comes with a basic screen reader called Narrator, which reads text on the screen aloud and describes some events (such as an error message appearing) that happen while you're using the computer.

Narrator topics in this section:

- Narrator Keyboard Shortcuts
- Choose which text Narrator reads aloud
- Change the Narrator voice
- Start Narrator minimized
- Narrator doesn't read what I expect it to
- I can't hear any text read aloud by Narrator
    - To check for a sound card
    - To determine if the sound card is working
    - Text to speech frequently asked questions

Narrator is not available in all languages, so if the steps below don't work, Narrator is not available for your language.

1. Open Narrator by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **Narrator**.

Narrator Keyboard Shortcuts

Use the keyboard shortcuts in the following table to specify which text you want Narrator to read:

Use this keyboard shortcut	To do this
Ctrl+Shift+Enter	Get information about the current item
Ctrl+Shift+Spacebar	Read the entire selected window
Ctrl+Alt+Spacebar	Read the items that are selected in the current window
Insert+Ctrl+G	Read a description of the items that appear next to the currently selected element
Ctrl	Stop Narrator from reading text
Insert+Q	Move the cursor backward to the beginning of any preceding text that has different formatting. For example, the cursor moves from a bold word to the beginning of a non-bold word that precedes it.
Insert+W	Move the cursor to the beginning of any text that follows it that has different formatting. For example, the cursor moves from a bold word to the beginning of a non-bold

Use this keyboard shortcut	To do this
	word that follows it.
Insert+E	Move the cursor back to the beginning of any text that has the same formatting. For example, the cursor moves from the middle of a bold word to the beginning of that word.
Insert+R	Move the cursor to the end of any text that has the same formatting. For example, the cursor moves from the middle of a bold word to the end of that word.
Insert+F2	Select all of the text that has the same formatting as the character at the cursor
Insert+F3	Read the current character
Insert+F4	Read the current word
Insert+F5	Read the current line
Insert+F6	Read the current paragraph
Insert+F7	Read the current page
Insert+F8	Read the current document

Note

- The Insert key is used for Narrator commands, so when you press Insert while Narrator is running, you won't be able to insert characters. To use the Insert key to insert characters while Narrator is running, press Insert+I and then the characters you want to add.

Choose which text Narrator reads aloud

1. Open Narrator by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **Narrator**.
2. Under **Main Narrator Settings**, do one or more of the following:
   - To hear what you type, select the Echo User's Keystrokes check box.
   - To hear background events, such as notifications, select the Announce System Messages check box.
   - To hear an announcement when the screen scrolls, select the Announce Scroll Notifications check box.

Change the Narrator voice

1. Open Narrator by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **Narrator**.
2. Click **Voice Settings**, and then make any of the following adjustments:

- To select a different voice, click the voice you want to use in the **Select Voice** box.
- For a faster voice, select a number in the **Set Speed** list. The higher the number, the faster the voice.
- For a louder voice, select a number in the **Set Volume** list. The higher the number, the louder the voice.
- For a higher-pitched voice, select a number in the **Set Pitch** list. The higher the number, the higher the pitch. A higher-pitched voice can be easier for some people to hear.

Start Narrator minimized

1. Open Narrator by clicking the **Start** button, clicking **All Programs**, clicking **Accessories**, clicking **Ease of Access**, and then clicking **Narrator**.
2. Select the **Start Narrator Minimized** check box.

The next time you start Narrator, it will appear as an icon on the taskbar instead of being open on your screen.

To restore the Narrator dialog box to its full size, click **Narrator** in the taskbar.

Narrator doesn't read what I expect it to

This topic provides information about problems you might run into when using Narrator.

- ***Narrator doesn't read what I expect it to read.*** Narrator provides basic screen-reading capabilities that allow you to use Windows when you don't have a more full-featured screen reader. Narrator is not designed to read content in all programs. For more information about screen readers and other assistive technologies, go to the **Microsoft Accessibility website** www.microsoft.com/enable.

- ***Narrator doesn't read notifications or the contents of some folders.*** Narrator can't read notifications because notifications can't be selected. For the same reason, it can't read the contents of some folders.

- ***Narrator doesn't read some Help topics.*** Narrator can't read the text that appears below collapsed headings in Help topics. To read the text of Help topics with collapsed headings, tab to the **Show all** link at the top of the topic and press Enter to expand all the topics. Then press Ctrl+Shift+Spacebar to have Narrator read the window again.

Note

- Narrator is not available in all languages.

I can't hear any text read aloud with Narrator

Here are some things to try if you're having trouble hearing text read aloud by Narrator:

- Make sure that your speakers are connected properly. If you're not sure how to do this, check the information that came with your speakers.
- Make sure that the speaker volume is turned up sufficiently and your speakers aren't muted.
- Make sure that your sound card is properly installed and the drivers are updated.

To check for a sound card

1. Open Audio Devices and Sound Themes by clicking the **Start** button, clicking **Control Panel**, clicking **Hardware and Sound**, and then clicking **Sound**.
2. Your sound card is listed on the **Playback** tab.

   If you don't have a sound card installed, you'll have to get one for Narrator to work.

To determine if the sound card is working

1. Open **Device Manager** by clicking the **Start** button, clicking **Control Panel**, clicking **Systems and Maintenance**, and then clicking **Device Manager**.

   If you are prompted for an administrator password or confirmation, type the password or provide confirmation.

2. If the sound card has a yellow question mark next to it, the sound card might not be working. Try reinstalling the sound card driver. For more information, see <u>Update a driver for hardware that isn't working properly</u>, in Help.
3. If the sound card appears twice in the list, you might have a ghost device. If so, delete the entry with the question mark.

Narrator does not read some Help topics

Narrator cannot read the text that appears below collapsed headings in Help topics. To read the text of Help topics with collapsed headings, tab to the Show all link at the top of the topic and press ENTER to expand all the topics. Then press CTRL+SHIFT+SPACEBAR to have Narrator read the window again.

The INSERT key doesn't work as expected when Narrator is running

The INSERT key is used for Narrator commands, so when you press INSERT while Narrator is running, you won't be able to insert characters. To use the INSERT key to insert characters while Narrator is running, press INSERT+I and then the characters you want to add.

Text to speech: frequently asked questions

Here are some answers to common questions about text-to-speech programs.

Note that Narrator is not available in all languages.

Can on-screen text be read aloud to me?

Yes, Narrator and other programs read aloud text, buttons, menus, file names, and other items on the screen—even keystrokes. This can be helpful for people who don't see the screen or have difficulty seeing the screen.

Does Windows include a text-to-speech program?

Yes. It's called Narrator. It's adjustable in many ways and can make the computer easier to use. For more information, see Hear text read aloud with Narrator in Windows Help.

Can any computer read text aloud?

Nearly any computer can be set up to read text aloud. Make sure your computer has a functioning sound card, and that you meet the basic requirements. For more information, see Troubleshoot Narrator problems in Help.

Are there other text-to-speech programs?

Yes, there are several. For a list of text-to-speech programs, go to the **Microsoft Accessibility website** www.microsoft.com/enable.

Use Speech Recognition

You can use your voice to control your computer. You can say commands that the computer will respond to, and you can dictate text to the computer.

Before you get started using Windows Speech Recognition, you'll need to connect a microphone to your computer.

Figure 3: Image of Set up Speech Recognition dialog box

Once you've got the microphone set up, you can train your computer to better understand you by creating a voice profile that your computer uses to recognize your voice and spoken commands. For information about setting up your microphone, see Set up your microphone for Speech Recognition in Windows Help.

After you've got your microphone and voice profile set up, you can use Speech Recognition to do the following:

- **Control your computer.** Speech Recognition listens and responds to your spoken commands. You can use Speech Recognition to run programs and interact with Windows. For more information about the commands you can use with Speech Recognition, see Common commands in Speech Recognition in Windows Help.

- **Dictate and edit text.** You can use Speech Recognition to dictate words into word-processing programs or to fill out online forms in a web browser. You can also use

Speech Recognition to edit text on your computer. For more information about dictating text, see Dictate text using Speech Recognition in Windows Help.

Note Speech Recognition is available only in English, French, Spanish, German, Japanese, Simplified Chinese, and Traditional Chinese.