

ACCESSIBILITY FEATURES BUILT INTO MS WINDOWS

For many years, Windows has included facilities aimed at benefiting people who have various disabilities. In current versions of MS Windows, these facilities are quite powerful. Unfortunately, many people are not aware of their existence. This document lists tools provided and a brief explanation of each.

Ease of Access in Windows 10

How to find it

As is often the case with modern software, there are several ways of achieving the same thing. The following options apply to Windows 10 and there may be variations in other versions of Windows.

1. The fastest option, if you remember the shortcut, is to press Windows-u.
2. If the sometimes fickle Windows Search cooperates, press the Windows key and start writing ease of access. Then select Ease of Access from the list that appears.
3. A more formal method using the mouse is to:
 - a. Press the Windows key or click on the Windows icon on the left of the Taskbar with the mouse
 - b. Click the Settings icon
 - c. Click the Ease of Access icon
4. Or, using the keyboard:
 - a. Press the Windows key;
 - b. Press up arrow once to All Apps;
 - c. Press s followed by the Enter key;
 - d. Press down arrow until reaching Settings and press Enter;
 - e. Tab out of the edit field and press right arrow until reaching Ease of Access and press Enter.

Overview

Within Ease of Access, many options are available. They are divided into three main categories:

- Vision;
- Hearing; and
- Interaction.

Depending on individual needs, it may be helpful to use tools from more than one category

Vision group

There are six sections in this group.

Display

- Change the size of apps and text on the main display
- Change the size of apps and text on other displays
- Change the size and colour of the mouse pointer
- Make everything brighter automatically or use night life
- Show animations in Windows (check or uncheck)
- Show transparency in Windows (toggle on or off)
- Automatically hide scroll bars in Windows (toggle on or off)
- Show notifications (duration set to 5 seconds by default)
- Show Desktop background image (toggle on or off)
- Personalise your background and other colours

Cursor and pointer size

- Change cursor thickness
- Change cursor size and colour (regular, white, black or inverted)
- Show visual feedback around touch points when touching the screen (assumes a touch screen)
- Make visual feedback for touch points darker and larger (unchecked by default)

Magnifier

Commercial magnification software for Windows is available. It is arguably more powerful in terms of features than Magnifier. As shown below, however, Magnifier offers quite a lot of features and flexibility. To get to Magnifier settings quickly, press Windows-control-m.

- Turn on Magnifier (unchecked by default). It can be turned on from anywhere by pressing Windows-numpad plus (+) and turned off by pressing Windows-Escape.
- Make everything on my computer bigger
- Zoom out and zoom in buttons and set zoom increments
- Start Magnifier after sign in (unchecked by default)
- Start Magnifier before sign in for everyone (unchecked by default)
- Collapse Magnifier window to a floating transparent magnifying glass (unchecked by default)
- Smooth edges of images and text (checked by default)
- Invert colours (unchecked by default)
- Change Magnifier view between full screen, docked or lens (can use control-alt-m)
- Have Magnifier follow: mouse cursor (checked), keyboard focus (unchecked), text insertion point (unchecked), Narrator cursor (checked).

Colour filters

- Turn on colour filters (off by default)

- Allow the shortcut key, Windows-control-c, to toggle filter on or off (unchecked by default)

High contrast

- Turn on high contrast (off by default)

Narrator

Narrator is the screen reader built into Windows and is primarily for use by people who have little or no vision. However, its high-quality synthetic speech may be useful to people who have visual reading difficulties for any reason. It is not as powerful as the free NVDA screen reader or commercial products, but has evolved into a quite useful tool and is available on all Windows computers. Narrator settings can be reached by pressing Windows-control-n.

- Use Narrator (off by default)
- Allow the shortcut key, Windows-control-Enter, to start and stop Narrator (checked)
- Learn how to use Narrator
- Various other Narrator settings which are also available from within Narrator once launched

Hearing

Audio

- Change device volume (slider showing current setting)
- Change device or app volume
- Change other sound settings
- Turn on mono audio (off by default)
- Show visual alerts (options are no visual alerts, flash the title bar of the active window, flash the active window or flash the entire screen)

Closed captions

- Caption colour (nine options)
- Caption transparency (five options)
- Caption style (eight options)
- Caption size (five options)
- Caption effects (six options)
- Caption background colour (nine options)
- Caption background transparency (five options)
- Window colour (nine options)
- Window transparency (five options)
- There is a link to video playback settings

Interaction

Speech

- Get more information about Dictation ([link](#))
- Change how I talk to Cortana ([link](#))
- Get more information about Cortana
- Turn on speech recognition (off by default)

Some comments on dictation in Windows

Sadly, at the time of writing, Microsoft's speech recognition can give very poor results when used by someone with an Australian accent. Cortana seems to do somewhat better. There is a dictation feature in both Word and Outlook in Office 365, which does much better with Australian accents. It is necessary to be signed into your Microsoft account and to have an internet connection. Turn on Dictation from the Home tab of the Ribbon or, from the keyboard, press alt-h d d. Turn it off the same way. It will also turn off if nothing is spoken for several seconds.

Keyboard

- Use onscreen keyboard (off by default)

Sticky Keys

- Press one key at a time for shortcut keys (off by default). Instead of having to hold down keys such as shift, control, alt and Windows while pressing another key, the modifier key can be pressed and released before the second key is pressed.
- Allow the shortcut key (pressing either shift key five times) to start Sticky Keys (checked). Once Sticky Keys are turned on, press a modifier key once to affect the next key that is pressed (a high-pitched beep is heard). Press twice to lock the key. For example, press the shift key twice to write in all capitals. Pressing a third time unlocks the key and a lower tone is heard. It is possible to lock the control key by pressing twice and then use right or left arrow keys to move a word at a time. Lock both shift and control keys to select text. To turn off Sticky Keys, press – say – shift and control together.

Toggle keys

- Play a sound whenever you press Caps Lock, Num Lock or Scroll Lock (unchecked)
- Allow the shortcut key (hold down num lock for five seconds) to start Toggle Keys (unchecked)

Filter Keys

- Ignore brief or repeated key strokes and change repeat key rates (unchecked)
- Allow the shortcut key (hold down right shift key for eight seconds) to start Filter Keys (unchecked)

Keyboard (continued)

Change how keyboard shortcuts work

- Underline access keys when available (unchecked)

Make it easier to type

- Show a warning message when turning on Sticky Keys, Toggle Keys or Filter Keys from the keyboard (checked)
- Make a sound when turning Sticky Keys, Toggle Keys or Filter Keys on or off from the keyboard (checked)
- Change other typing options ([link](#)). Includes spell checking options and word prediction when using the onscreen keyboard.

Mouse

- Turn on Mouse Keys to use the numeric keypad to move the mouse pointer (off). Turn on by pressing left alt-shift-num lock.

Eye Control (beta)

- Get more information about Eye Control ([link](#)). Requires an eye tracking device to be connected to the computer.

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