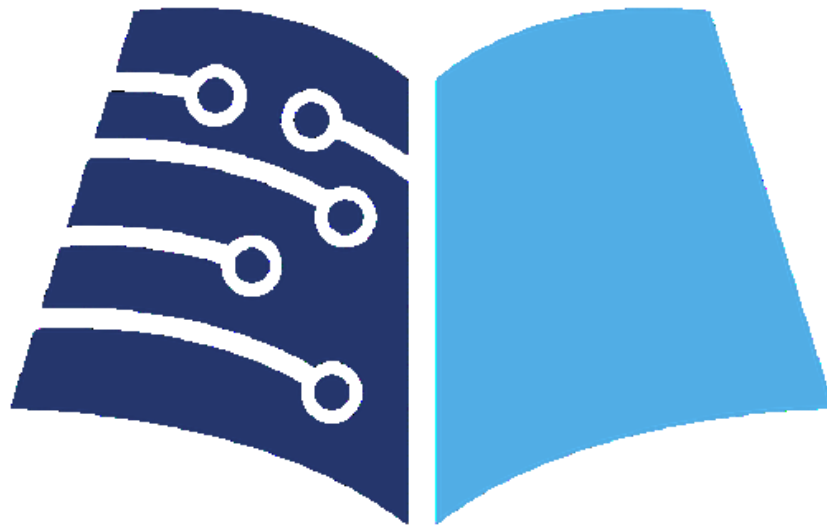




DIGITABILITY

Promoting people with disabilities' employment by enhancing their digital skills and competencies to support a remote working scheme.

Creating Content



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the European Union

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Contents

1	Introduction	2
1.1	The Learning Objectives Covered by the Topic	2
2	Brief repository of online tools for the development of accessible materials	2
3	Desktop Office. Mac OS Office Apps Accessibility Management	4
3.1	Accessibility features on Mac	4
3.1.1	Accessibility for People with Physical/ Motor/ Mobility Disabilities	4
3.1.2	Exercises (Mac OS Accessibility for People with Physical Impairments)	42
3.1.3	accessibility featuresMacOS General Accessibility Features	42
3.1.4	Exercises (Mac OS General Accessibility Features)	44
3.2	Resources	44

List of Figures

Figure 4.5-9	Accessibility Keyboard on Mac	20
Figure 4.5-10	Dwell on Mac	23
Figure 4.5-11	Dwell status menu	26
Figure 4.5-12	Options menu	27
Figure 4.5-13	The keys to use on a keyboard (the keys on the left) and on a numeric keypad (the keys on the right) when Mouse Keys is on	33
Figure 4.5-14	Head pointer is turned on	35
Figure 4.5-15	Head pointer is recalibrating	37
Figure 4.5-16	Switch Control Home panel	38
Figure 4.5-17	Accessibility Shortcuts on Mac Computers	42

1 Introduction

In completing this Topic You will learn how to make use of the accessibility features in various Office tools (open source and proprietary) and how to create accessible files. Topic is for people with Physical Disabilities.

1.1 The Learning Objectives Covered by the Topic

In completing this topic, the learner will be able to:

- Use Office tools to create and access accessible content.
- Use the accessibility features of MAC OS and use them to create content.
- Know some examples of resources for the preparation of accessible educational materials, based on the reference guide.
- Apply theoretical knowledge in practical exercises.
- Test theoretical knowledge and practical skills with tests.

2 Brief repository of online tools for the development of accessible materials

Logo	Link
	European standards to facilitate reading and understanding European standards for making information easy to read and understand – Easy-to-Read
	This page allows you to translate a Word document to speech (audio) Convert a File - RoboBraille
	To go from speech to text on the computer TalkTyper - Speech Recognition in a Browser
	PowerTalk 1.2.14 is speech-enabled software for PowerPoint presentations; it's free and automatically speaks any

Logo	Link
	presentation or slideshow. It runs in Microsoft PowerPoint for Windows. PREVENIR LA CEGUERA
	Virtual keyboard robotica.udl.cat
	Automatic video captioning Subly: Accessibility, Subtitles, Captions (CC), Translation, Audio Description & Transcription (getsubly.com)
	Catalog of ICT solutions for students with NEAE Catalogue of ICT Solutions for students with SESN (ticne.es)
	How to generate information accessible to all people Making information accessible for all European Blind Union (euroblind.org)
	Accessibility by disability: Find products and tools based on your needs: Accessibility help & learning (microsoft.com)

3 Desktop Office. Mac OS Office Apps Accessibility Management

3.1 Accessibility features on Mac

Some Office Program's accessibility features are common for each Software installed on MacOS. All of them will be reviewed below.

Get started with accessibility features on Mac

macOS accessibility features can help you with vision, hearing, physical motor activities, speech and more. If you didn't turn on accessibility features when you set up your Mac, you can do so at any time in Accessibility settings.

3.1.1 Accessibility for People with Physical/ Motor/ Mobility Disabilities

MacOS includes accessibility features that let you navigate and interact with your Mac using spoken commands, an onscreen keyboard, assistive devices and other alternative methods for controlling the pointer. You can also set options so it is easier to use a mouse or trackpad.

3.1.1.1 Voice Control features

With Voice Control you can speak commands to navigate the desktop and apps, interact with what's on the screen, dictate and edit text, and more. See [Get started with Voice Control](#).

Get Started with Voice Control On Mac

With Voice Control on your Mac, you can use your voice to navigate the desktop and apps, interact with what's on the screen, dictate and edit text, and more. Learn the basics to quickly get started.

- Turn on Voice Control
 - Choose Apple menu  > System Settings, click Accessibility  in the sidebar, click Voice Control on the right (you may need to scroll down), then turn on Voice Control.
 - When you turn on Voice Control for the first time, your Mac must be connected to the internet so it can complete a one-time download from Apple. Afterward, you do not need an internet connection to use Voice Control.
- Learn and Practice
 - With the interactive Voice Control Guide, you can learn how Voice Control works and practice essential commands.

- Start Using Commands
 - To navigate your Mac and interact with what's on the screen, just say a command.
 - Voice Control: Say, for example, "Open Mail", "Scroll down" or "Click Done".
 - If you say something that is similar to an accepted Voice Control command, suggested commands appear at the top of the screen.
 - Voice Control: Say "Open Voice Control Guide".
- See What Commands You Can Use
 - Display a list of available commands, based on the app you are using and what you are currently doing.
 - Voice Control: Say "Show commands".
- Show Numbers, Names or a Grid
 - If you are not sure what to call something, you can display a name or number next to each item on the screen, or show a numbered grid.
 - Voice Control: Say "Show names", "Show numbers" or "Show grid".
 - To interact with an item or area of the screen, say its name or number or say a command — such as "Click" — followed by the name or number. The grid and item labels disappear after you say the command.
 - If the name of an item on the screen is not apparent or you need to interact with a precise area of the screen, you can [label onscreen items](#) or [show a numbered grid](#) so it is easier to select items or navigate the screen.
 - You can make it easier to interact with a precise area of the screen by superimposing a grid.
 - Voice Control: Say "Show grid". To display a grid only over the active window, say "Show window grid".
 - **Interact with a location on the grid:** If a number is at the location you want to interact with, say any command — such as Click — followed by the grid number. The grid disappears after you say the command.
 - **Drill down on an area of the grid:** If you need to further refine the location, say a grid number to drill down in that area.
 - **Tip:** When item names, numbers or a numbered grid are shown, you can drag and drop an item using the names or numbers of the item and the drop location. Say "Drag <item name or number> to <location name or number>".
 - Say "Hide names", "Hide numbers" or "Hide grid" to turn the overlay off.

- Dictate Words and Custom Spellings

- When working in a text input area, you can dictate word by word (using Dictation mode) or character by character (using Spelling mode). Switch to Command mode — Voice Control responds only to commands — when you want to avoid entering text by mistake.
-  **Voice Control:** Say “Dictation mode” to dictate word by word.
- Any words you say that aren’t Voice Control commands are entered as text. Dictation mode is on by default.
-  **Voice Control:** Say “Spelling mode” to dictate character by character.
- Spelling mode is helpful when you need to enter a password, a web address or another sequence of characters that wouldn’t be recognised as a word in Dictation mode.
- **Tip:** To increase accuracy when entering letters, you can use the letter’s phonetic alphabet code word (for example, say “Alfa Bravo Charlie” to enter “abc”).
- When Spelling mode is on, an icon  appears in the text input area.
- **Note:** Spelling mode is not available in all Voice Control languages.
- Commands for working with text are shared between Dictation mode and Spelling mode. For example, while editing text in Dictation mode, you could say “Replace cat with dog”; to do the same thing in Spelling mode, you could say “Replace Charlie Alfa Tango with Delta Oscar Golf”.
- On your Mac, you can see a list of dictation and text editing commands you can use. Choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Voice Control on the right (you may need to scroll down). Click Commands, then scroll down. You can also click the “Dictation mode” or “Spelling mode” command to see a list of characters you can enter and what to say to enter them.
-  **Voice Control:** Say “Command mode” to have Voice Control respond only to commands.

- Words and characters that aren't commands are ignored and aren't entered as text. Command mode is helpful when you need to say a series of commands and do not want them inadvertently entered in a text input area.
- When Command mode is on, an icon  appears in the text input area to indicate you cannot dictate to enter text.
- Use Voice Control with VoiceOver
 - To use Voice Control with VoiceOver on your Mac, just say a command.
 -  **Voice Control:** Say, for example, "VoiceOver rotor", "VoiceOver read all" or "VoiceOver select first item".
 - To see a list of the Voice Control commands you can use with VoiceOver, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Voice Control on the right. (You may need to scroll down.) Click Commands, then scroll to the set of Accessibility commands.
 - **Tip:** If you use Voice Control with VoiceOver, try using headphones to help ensure Voice Control hears only you speaking.
 - macOS provides a standard set of Voice Control commands, but you can create your own commands and use a custom vocabulary. See [Customise Voice Control](#).
- Customise Voice Control on Mac

When you [use Voice Control to interact with your Mac](#), you can customise settings such as the language you use with Voice Control, the microphone you want to have listen for commands, options for showing item names, numbers or a numbered grid on the screen and more.

You can also turn standard commands on or off and create your own commands, delete them and import or export custom commands.

- Customise Voice Control

Change the language you use with Voice Control, choose the microphone you want to have listen for commands, set options for showing item names, numbers or a numbered grid on the screen and more.

- On your Mac, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Voice Control on the right. (You may need to scroll down.)
- Set any of the following:

- ✓ **Language:** Change the language you want to use with Voice Control or add an additional language.

If you downloaded additional languages to use with Voice Control, you can quickly switch

languages as you work — click the Voice Control icon  in the menu bar, then choose a language.

- ✓ **Microphone:** Choose a microphone to use for spoken commands or choose Automatic to have your Mac listen to the device you are most likely to use.
- ✓ **Show hints:** Display command suggestions when you say something that is similar to an accepted command.
- ✓ **Play sound when command is recognised:** When Voice Control recognises a command, a sound is played.
- ✓ **Overlay:** Always show item names, numbers or a numbered grid on the screen to make it easier to select items or navigate.
- ✓ **Fade overlay after inactivity:** When item names, numbers or a numbered grid are shown, dim the overlay after the specified period of inactivity. Drag the “Fade by” slider to set how much the overlay fades.

Most Voice Control commands are on by default, but you can customise commands to suit your needs. See [Turn standard commands on or off](#) and [Create your own commands](#) below.

If a language supports it, you can [add vocabulary terms](#) to ensure that specialised words or phrases are entered correctly when you use Voice Control.

- Turn standard commands on or off

- ✓ On your Mac, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Voice Control on the right. (You may need to scroll down.)
- ✓ Click Commands, then do any of the following:
 - **Show commands for a language:** If you added languages to use with Voice Control, click the Show commands for pop-up menu to choose the language whose commands you want to display.
 - **Search for a command:** Enter a word or phrase in the search field.

- **Show more information about a command:** Click the command in the list. On the right, find a description and examples of how to use the command.
- **Turn a command on:** Select its tickbox. Voice Control listens only for selected commands.
- **Turn a command off:** Deselect its tickbox.
- Create your own commands
- ✓ On your Mac, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Voice Control on the right. (You may need to scroll down.)
- ✓ Click Commands.

If you added languages to use with Voice Control, make sure the language you want to use for the command is chosen from the Show commands for pop-up menu.

- Below the list of commands, click the Add button .
- In the “When I say” field, enter a name for your command, following these guidelines:
 - ✓ Use two or more words, and avoid names with a single syllable. For example, use “Make text smaller” rather than “Smaller”.
 - ✓ Avoid proper names, names that sound similar to other words, or names that could be confused with other commands.
 - ✓ Do not use names that are used for other commands. If you do, a warning icon appears next to the duplicate commands in the list of commands.
- Indicate whether the command is to be used in any app or in a specific app.
- Choose the action the command performs.

Some actions require additional information. For example:

- ✓ For Paste Text, you must enter the text to be pasted whenever you say your command.
- ✓ For Press Keyboard Shortcut, you must press a keyboard key (you do not need to also press a modifier key). For example, if you want your command to play or pause a video, press the Space key.
- ✓ For Run Shortcut, choose a shortcut or choose Open Shortcuts App to create another shortcut.
- ✓ Click Done.

Your command appears in the Custom section at the top of the commands list.

Tip: You can easily create commands while you are working. Say “Make this speakable” to open the New Voice Control Command window. Then specify the command name, an app and an action. If you select text or an item, such as a file, before opening the window, an action is selected by default; you can change it, if needed.

- Import Custom Commands

- ✓ On your Mac, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Voice Control on the right. (You may need to scroll down.)
- ✓ Click the Advanced Actions menu  in the lower-right corner, then choose Import Custom Commands.
- ✓ Select the file of custom Voice Control commands, then click Import.
- ✓ **Note:** The file can include both iOS and macOS commands; only macOS commands are imported.

- Export custom commands

- ✓ On your Mac, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Voice Control on the right. (You may need to scroll down.)
- ✓ Click the Advanced Actions menu  in the lower-right corner, then choose Export Custom Commands.
- ✓ Choose a location, then click Export.

Note: Files referenced by custom commands, such as apps, documents, Shortcuts and Automator Workflows, are not included in the export and must be transferred separately.

- Delete custom commands

- ✓ On your Mac, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Voice Control on the right. (You may need to scroll down.)

✓ Do one of the following:

- **Delete one custom command:** Click Commands, select the command to delete in the Custom section at the top of the commands list, click the Remove button , click Delete, then click Done.
- **Delete all custom commands:** Click the Advanced Actions menu  in the lower-right corner, choose Delete All Custom Commands, then click Delete.

3.1.1.2 Keyboard features

When you turn on Full Keyboard Access, you can navigate all UI elements on your Mac using the Tab key and other keys, instead of a mouse or trackpad. See [Navigate your Mac using Full Keyboard Access](#).

Navigate your Mac Using Full Keyboard Access

With Full Keyboard Access enabled, you can use the Tab key and other keys to navigate every UI element on the screen and navigate your Mac, instead of using a mouse or trackpad. Full Keyboard Access highlights the item on the screen that has focus. You can customise the colour, contrast and size of the highlight.

- Turn on Full Keyboard Access

✓ On your Mac, choose Apple menu  > System Settings, then click Accessibility  in the sidebar. (You may need to scroll down.)

✓ Go to Motor on the right, click Keyboard, then turn on Full Keyboard Access.

Click the Info button  to change the appearance of Full Keyboard Access (for example, the colour of the highlight) and to view a complete list of Full Keyboard Access commands.

Tip: When Full Keyboard Access is turned on, press Tab-H to open Commands Help, where you can view the available Full Keyboard Access commands.

- Navigate using Full Keyboard Access

When Full Keyboard Access is enabled on your Mac, do any of the following using the default commands:

✓ **Move to the next UI element:** Press the Tab key.

- ✓ **Move to the previous UI element:** Press Shift-Tab.
- ✓ **Select an item:** Press the Space bar.
- ✓ **Move inside a group (such as a list of files in a folder or items in a sidebar):** Press the Up Arrow or Down Arrow key or the Left Arrow or Right Arrow key. Full Keyboard Access highlights the group and the item within the group that has focus.
- ✓ **Search for items:** Press Tab-F.
- ✓ **Open the Window Chooser:** Press Tab-W.
- ✓ **Open the Application Chooser:** Press Tab-A.
- ✓ **Jump to the menu bar:** Press Fn-Control-F2.
- ✓ **Jump to the Dock:** Press Fn-A.
- ✓ **Open Control Centre:** Press Fn-C.
- ✓ **Open Notification Centre:** Press Fn-N.
- ✓ **Move the pointer to where the keyboard focus is:** Press Tab-C.

Many additional default and advanced commands are available when navigating with Full Keyboard Access. To see a complete list of Full Keyboard Access commands, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Keyboard on the right (you may need to scroll down). Click the Info button  next to Full Keyboard Access, then go to Commands.

- Customise default and advanced Full Keyboard Access commands

You can change the keyboard shortcuts associated with the default Full Keyboard Access commands. You can also set keyboard shortcuts for additional advanced commands.

- ✓ On your Mac, choose Apple menu  > System Settings, then click Accessibility  in the sidebar. (You may need to scroll down.)
- ✓ Go to Motor on the right, then click Keyboard.
- ✓ Click the Info button  next to Full Keyboard Access, then go to Commands.
- ✓ Do any of the following:

- **Set a custom keyboard shortcut for a default command:** Click the command you want to customise the shortcut for, then press the keyboard key or keys you want to use as the shortcut.
- **Set a keyboard shortcut for an advanced command:** Scroll to Advanced, click the command you want to set a shortcut for, then press the keyboard key or keys you want to use as the shortcut.
- **Restore default keyboard shortcuts:** Scroll to the bottom, then click Restore Defaults. This also removes keyboard shortcuts for advanced commands, if any.

✓ Click Done.

- Pause Full Keyboard Access

When Full Keyboard Access is on, you can use Pass-Through Mode to temporarily turn it off — for example, if you are playing an online game and do not want Full Keyboard Access to interfere with game interaction — then turn it back on.

✓ **Turn Pass-Through Mode on or off:** Press Control-Option-Command-P.

If the default Full Keyboard Access commands described above aren't working as expected, you may need to restore the default commands. On your Mac, choose Apple menu  >

System Settings, click Accessibility  in the sidebar, then click Keyboard on the right (you may need to scroll down). Click the Info button  next to Full Keyboard Access, scroll to the bottom, then click Restore Defaults.

- ✓ Sticky Keys and Slow Keys make it easier to press keys on a physical keyboard. See [Change Keyboard settings for accessibility](#).

Change Keyboard settings for accessibility on Mac

On your Mac, use Keyboard settings for accessibility to enable Full Keyboard Access to [navigate UI elements on the screen and your Mac using the Tab key and other keys](#), and change the appearance of the Full Keyboard Access cursor, enable and set options for Sticky Keys and Slow Keys, and enable and

set options for using the Accessibility Keyboard, an onscreen keyboard that lets you type and interact without using a physical keyboard. [Learn how to use the Accessibility Keyboard.](#)

To change these settings, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Keyboard on the right. (You may need to scroll down.)

Option	Description
Full Keyboard Access	Turn on Full Keyboard Access to use the Tab key and other keys to navigate the screen. To customise, click the Info button : Set any of the following options for the appearance of the cursor: Auto-hide: Automatically hide the Full Keyboard Access cursor after the specified number of seconds. Increase size: Make the Full Keyboard Access cursor wider so it is easier to see. High contrast: Increase the contrast of the Full Keyboard Access cursor so it is easier to see. Colour: Choose a colour for the Full Keyboard Access cursor. You can also view a complete list of Full Keyboard Access commands, customise keyboard shortcuts for default commands, set shortcuts for advanced commands or restore default shortcuts.
Keyboard Settings	Set additional keyboard shortcuts, options for keyboard and function keys, and more. See Keyboard settings.

Option

Description

Sticky Keys

Press a set of modifier keys one at a time in sequence instead of all at once. For example, enter the key combination Option-Command-F5 by pressing each key in sequence.

To customise, click the Info button :

Press the Shift key five times to toggle Sticky Keys: Use your keyboard to turn Sticky Keys on or off.

Beep when a modifier key is set: Have your Mac make a sound when you press a modifier key.

Display pressed keys on screen: Display symbols to indicate which modifier keys you press.

Screen area for display: If you turn on “Display pressed keys on screen”, choose the area of the screen where you want to display the symbol for the pressed modifier key.

Slow Keys

Adjust the delay between when you press a key and when it is activated.

To customise, click the Info button :

Use click key sounds: Have keys make a sound when pressed. One sound plays when you press a key and a different sound plays when the key press is accepted.

Acceptance delay: Set the delay between when you press a key and when it is accepted.

Accessibility Keyboard

Display and use the Accessibility Keyboard.

Click the Info button  to set General, Hot Corners and Dwell options for the Accessibility Keyboard. See below for more information about the options.

Option**Description**

Panel Editor

[Use the Panel Editor](#) to create custom panels that are available from the Accessibility Keyboard.

○ General options for the Accessibility Keyboard

Set general options for using the Accessibility Keyboard.

Option**Description**

Appearance

Use a light or dark appearance for the keyboard.
This setting is independent of whether you use a light or dark appearance on your Mac.

Fade panel after inactivity

After the specified period of inactivity, fade the keyboard by the specified percentage (at a lower percentage the keyboard is more visible, while at a higher percentage it is less visible; at 100% it is hidden). To make the keyboard fully visible again, move the pointer over the faded keyboard or, if it is hidden, move the pointer.

This option is useful when you do not need the keyboard for a while, for example, when watching a film or when you want to see the part of the desktop that is under the keyboard.

Play sounds for keys and dwell actions

Hear a sound when you select a key on the keyboard or when a dwell action is performed. (Selecting the Caps key makes a sound even when this option is not selected.)

Keys should be entered on

Choose whether input is entered or action is taken on mouse up or mouse down.

Option

Description

Keep your work private and secure

Select keys on the keyboard using either a left click or right click of the mouse or trackpad.

Insert and remove spaces automatically

Let the Accessibility Keyboard manage spaces when you are writing text. For example, it automatically corrects spacing after a full stop or between sentences, based on context.

Capitalise sentences automatically

Let the Accessibility Keyboard manage capitalisation when you are writing text. For example, it automatically capitalises letters after a full stop (end of sentence), based on context.

○ Hot Corners options for the Accessibility Keyboard

Set options for using Hot Corners with the Accessibility Keyboard.

Option

Description

Hot Corners

The action to take when you keep the pointer in a corner of the screen. Choose an action, such as Left Click.

Panel follows hide/show home panel

When you use a hot corner to show or hide the Accessibility Keyboard or a custom panel, have the keyboard or panel move to the hot corner.
If you do not want the keyboard or panel to move to the hot corner, turn this option off.

○ Dwell options for the Accessibility Keyboard

Set options that determine when to show Dwell action menus, which action to perform when you dwell on an item, how long to dwell on items, and more.

Option	Description
Allow dwell actions toolbar in panels	Make the toolbar available in the Accessibility Keyboard and custom panels.
Show dwell actions in menu bar	Show a status menu for dwell actions in the menu bar.
Always dwell in panels	Always use Dwell to select items in the Accessibility Keyboard and custom panels, even when Dwell is paused. Left-click is the default action when dwelling in panels.
Dwell colour	Choose the colour, such as green, of the dwell pointer  when it is shown.
Enable zoom	Show the zoom window after the pointer is idle for the specified amount of time. The window magnifies the area you dwell on and the pointer. The size of the zoom window is based on the size set for Picture-in-Picture zoom. To change that setting, see Zoom in and out on what's onscreen. Note: Avoid changing other options in Zoom settings for accessibility. They could interfere with the Dwell zoom window.
Hide dwell time indicators	Hide the dwell pointer  and the countdown when dwelling.
Default dwell action	Choose the default action to perform when you dwell on an item — for example, right click, show the Scroll Menu, or

drag and drop an item. Or choose to show the Options menu, which lets you switch between actions for once-only use.

You can also choose an action from the dwell status menu, if it is showing in the menu bar.

Auto revert to left click

After you select an action to perform, always make left click the next action performed.

This option is useful if you left-click items more often than you perform other actions.

Default dwell time

The amount of time to dwell on an item on the screen before an action is performed.

Panel dwell time

The amount of time to dwell on an item in a panel before a left-click action is performed.

Dwell movement tolerance

The distance, in pixels, you can move while dwelling on an item. If you move beyond this limit, the countdown starts again.

Post-action movement tolerance

The distance, in pixels, you need to move after performing an action for a new countdown to start.

To quickly turn Full Keyboard Access, Sticky Keys, Slow Keys or the Accessibility Keyboard on or off [using the Accessibility Shortcuts panel](#), press Option-Command-F5 (or if your Mac or Magic Keyboard has Touch ID, quickly press Touch ID three times).

To specify which options are available in the panel, choose Apple menu  >

System Settings, click Accessibility  in the sidebar, then click Shortcut on the right. (You may need to scroll down.)

- ✓ When you turn on the Accessibility Keyboard, an onscreen keyboard lets you use your Mac without a physical keyboard. It provides advanced typing (such as typing suggestions) and navigation features that you can customise for using your favourite apps. See [Use the Accessibility Keyboard](#).

3.1.1.3 Use the Accessibility Keyboard on Mac

The Accessibility Keyboard is an onscreen keyboard that lets you use your Mac without a physical keyboard. It provides advanced typing (such as typing suggestions) and navigation features that you can customise to make it easier to use your favourite apps.

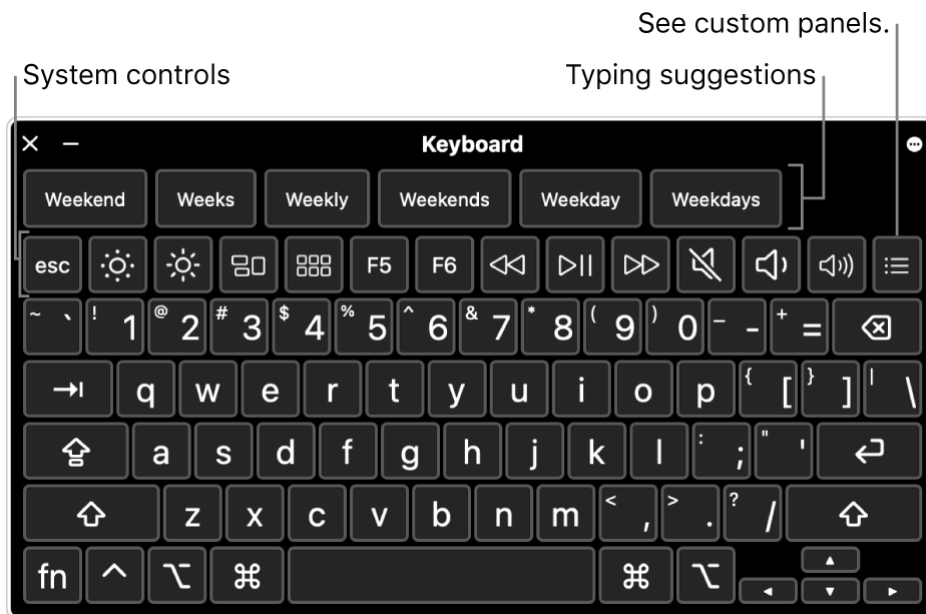


Figure 4.5-9 Accessibility Keyboard on Mac

When you use the Accessibility Keyboard, you can also turn on Dwell, which lets you perform mouse actions using eye- or head-tracking technology.

Tip: The Accessibility Keyboard is used for the macOS Keyboard Viewer, which lets you type in different languages when you change input sources. See [Use the Keyboard Viewer](#).

- Turn the Accessibility Keyboard on or off

- ✓ **Turn it on:** On your Mac, choose Apple menu  > System Settings, click Accessibility  in the sidebar, click Keyboard on the right, then turn on Accessibility Keyboard. (You may need to scroll down.)

You can also turn on the Accessibility Keyboard by clicking the Input menu in the menu bar, then choosing Show Keyboard Viewer. (The Input menu is identified in the menu bar by either the Character Viewer icon  or — if you use more than one input source — an icon representing the currently active input source.)

If you cannot see the menu in the menu bar, [set the option to show the Input menu in the menu bar](#).

- ✓ **Turn it off:** In the top-left corner of the Accessibility Keyboard on your Mac, click the Close button .

- Use the Accessibility Keyboard

While you are using the Accessibility Keyboard on your Mac, do any of the following in the keyboard:

- ✓ **Adjust system settings:** Click the system control buttons to adjust display brightness, sound volume, and video or music playback, or to access features such as Mission Control.
- ✓ **Use typing suggestions:** As you type, suggested words are shown. Click a suggestion to insert it in your text.
- ✓ **Enter alternative characters:** Click Option or Option-Shift, then click a character. Or click Option to highlight the dead keys (a dead key is a modifier key pressed with another key to enter a letter with a diacritical mark), click a dead key, then click a letter.

See [Enter characters with accent marks](#).

- ✓ **Simplify typing:** In the top-right corner of the keyboard, click the Panel Options button , choose Typing, then choose to automatically insert and remove spaces or capitalise sentences (a tick indicates an option is on).
- ✓ **Use Dwell:** In the top-right corner of the keyboard, click the Panel Options button, choose Dwell, then choose an option. See [Control the pointer using Dwell](#).
- Show additional items in the Accessibility Keyboard

While you are using the Accessibility Keyboard on your Mac, do any of the following in the keyboard:

- ✓ **Show or hide toolbars:** In the top-right corner of the keyboard, click the Panel Options button , choose Toolbars, then choose toolbars to show or hide (a tick mark indicates that a toolbar is shown). For example, you can show the Current Text toolbar, which displays text as you are typing it in a document or text field, or the Suggestions toolbar, which displays suggested words based on what you are typing.

To [use the Panel Editor](#) to change where the toolbars appear in the keyboard, choose Customise Toolbar Ordering.

- ✓ **Show custom panels:** Click the Custom button  to display available custom panels created using the Panel Editor. To return to the Accessibility Keyboard, click the Home icon  in the top-right corner of the custom panel.

- Resize the Accessibility Keyboard

While you are using the Accessibility Keyboard on your Mac, do any of the following:

- ✓ **Make the keyboard bigger or smaller:** Drag a corner of the keyboard.

To resize it without keeping the proportions, click the Panel Options button  in the top-right corner of the keyboard, then choose Resize Proportionally (to remove the tick).

- ✓ **Reset the keyboard to the default size:** Click the Panel Options button  in the top-right corner of the keyboard, choose Zoom, then choose 100%.

- Change Accessibility Keyboard options

While you are using the Accessibility Keyboard on your Mac, do any of the following to change options for it:

- ✓ In the top-right corner of the Accessibility Keyboard, click the Panel Options button , then choose options (a tick mark indicates that an option is on). For example, you can change the appearance of the keyboard to use dark text on a light background, fade the keyboard after a period of inactivity, or turn Dwell on or off.
- ✓ [Use the Panel Editor](#) on your Mac to customise the Accessibility Keyboard for use with your favourite apps.

If you set the option to fade or hide the Accessibility Keyboard after a period of inactivity, you can make the keyboard fully visible again by moving the pointer over the faded keyboard or, if it is hidden, moving the pointer.

- ✓ When you use the Accessibility Keyboard, you can turn on Dwell to perform mouse actions using eye- or head-tracking technology. See [Control the pointer using Dwell](#).

3.1.1.4 Control the pointer using Dwell on Mac

If you [enable the Accessibility Keyboard](#), you can use Dwell, which lets you perform mouse actions using eye- or head-tracking technology. You can easily access dwell actions, such as Left Click, in the Accessibility Keyboard and custom panels or in the menu bar.

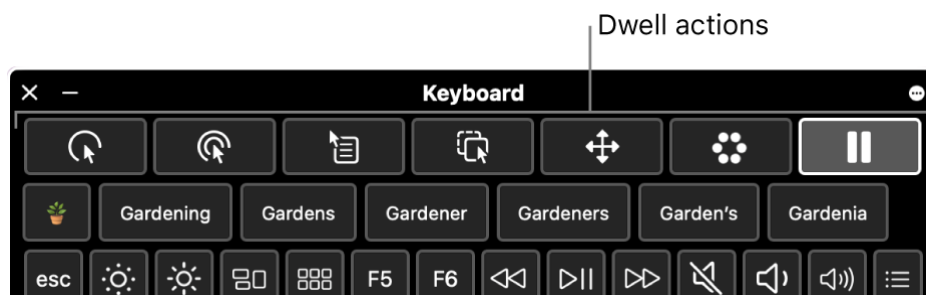


Figure 4.5-10 Dwell on Mac

After you select a dwell action, you rest, or **dwell**, for a set amount of time (called the **dwell time**) on the item that you want to click, drag or scroll, before the action is performed.

- Turn on Dwell

- ✓ On your Mac, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Keyboard on the right. (You may need to scroll down.)
- ✓ Turn on Accessibility Keyboard.

For information about the Accessibility Keyboard options, click the Help button  in the lower-right corner of the window.

- Click the Info button , go to Dwell, then turn on any of the following:
 - ✓ **Allow dwell actions toolbar in panels:** A Dwell toolbar appears across the top of the Accessibility Keyboard and custom panels.

- ✓ **Show dwell actions in menu bar:** A Dwell status menu appears in the menu bar.
- ✓ **Always dwell in panels:** Always use Dwell to select items in the Accessibility Keyboard and custom panels, even if Dwell is paused.

You can also turn on these options from the Accessibility Keyboard. In the top-right corner of the keyboard, click the Panel Options button , choose Dwell, then choose an option.

- Use Dwell actions

If you are using Dwell with the Accessibility Keyboard on your Mac, you can access dwell actions from the Accessibility Keyboard and custom panels or from the Dwell status menu in the menu bar, depending on how you set Dwell options.

- On your Mac, select one of the following dwell actions:

- ✓ **Left Click**  : Performs a left click when you dwell on an item.
- ✓ **Double Click**  : Performs a double click when you dwell on an item.
- ✓ **Right Click**  : Performs a right click when you dwell on an item.
- ✓ **Drag & Drop**  : Drags and drops the item you dwell on.

When the countdown is over, the pointer indicates the item can be dragged. As you dwell where you want to drop the item, the item moves there, the countdown begins, and when it is over, the item is dropped.

- ✓ **Scroll Menu**  : Scrolls the item you dwell on.

Make sure you dwell on content that can be scrolled — for example, a web page or a document. When the countdown is over, scroll indicators appear at the top, bottom and sides of the content (depending on how it can be scrolled). Dwell on a scroll indicator to scroll in that direction.

Note: The colour of the scroll indicators in the Scroll Menu is determined by the highlight colour set in Appearance settings. To change the highlight colour, on your Mac choose Apple

menu  > System Settings, then click Appearance  in the sidebar. (You may need to scroll down.)

✓ **Options Menu**  : Shows the Options menu when you dwell on an item.

When you choose an action from the Options menu, it is used once only — the action is not repeated. See [Use the Options menu](#) below.

✓ **Pause**  : Pause and take no action as you move around the screen or dwell on items. This action is useful when you want to take a break from actions — for example, to read a web page or watch a movie.

When you are ready to resume and perform dwell actions again, dwell on any dwell action in the Accessibility Keyboard. If the Accessibility Keyboard is hidden, dwell on the hot corner assigned to show it (as set in [Keyboard settings for accessibility](#)).

✓ Dwell on the spot where you want the action performed — for example, on a tickbox or an image.

The dwell pointer  appears over the item and the dwell time countdown begins (the pointer circle starts to empty). When the countdown is over, the action is performed.

Tip: You can assign a colour, such as green, to the dwell pointer  so it is easier to spot during the dwell time countdown. If you do not want to see the dwell time countdown, turn on Hide dwell time indicators in Dwell settings.

- Use the Dwell status menu

If you are using Dwell with the Accessibility Keyboard on your Mac and you chose to show dwell actions in the menu bar, you can easily access the actions using the Dwell status menu. The icon shown in the menu bar changes as you use different dwell actions.

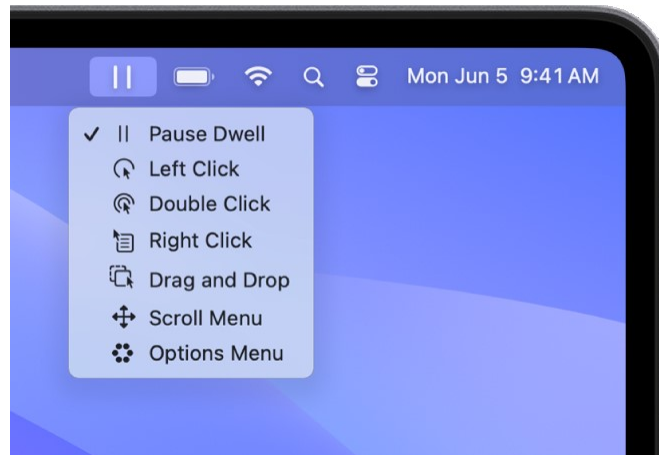


Figure 4.5-11 Dwell status menu

The Dwell status menu on your Mac is useful for changing dwell actions when the Accessibility Keyboard or a custom panel is hidden. A left click to select an action is always performed in the status menu, regardless of the current dwell action.

- ✓ **Open the menu:** On your Mac, dwell on the status menu in the menu bar. The pointer  appears over the status menu and the dwell time countdown begins (the pointer circle starts to empty). When the countdown is over, the menu opens.

Note: If you do not want to see the dwell time countdown on the screen, turn on Hide dwell time indicators in Dwell settings.

- ✓ **Choose an action from the menu:** On your Mac, dwell on an action. When the countdown is over, the action is selected.
 - Use the Options menu

If you are using Dwell with the Accessibility Keyboard on your Mac, you can use the Options menu to quickly switch between various dwell actions. When you select an action from the Options menu, it is used once only — the action is not repeated.

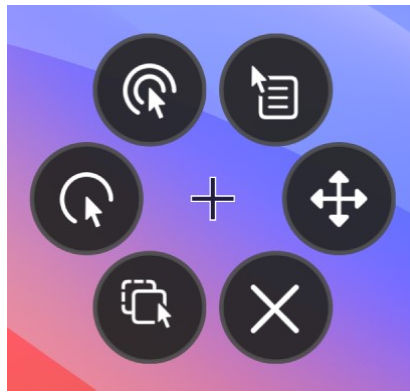


Figure 4.5-12 Options menu

Tip: The crosshair in the middle of the Options menu indicates the target location where the action will be performed.

- ✓ **Select an action:** In the Options menu on your Mac, dwell on the action you want to select — for example, the double-click action. The pointer  appears over the button and the dwell time countdown begins (the pointer circle starts to empty). When the countdown is over, the button is selected and the action is performed at the target location.

Note: If you do not want to see the dwell time countdown on the screen, select “Hide dwell time indicators” in Dwell Options.

- ✓ **Close the menu:** In the Options menu on your Mac, dwell on the close button  at the bottom of the menu. When the countdown is over, the Options menu closes.

If you are in a custom panel and want to return to the Accessibility Keyboard or the home panel, click the Home button  in the upper-right corner of the panel.

You can [use the Panel Editor](#) to create custom panels to streamline common tasks and actions for apps.

Tip: You can set an option to have the Accessibility Keyboard or home panel shown when you dwell on a corner of the screen. See [Change Keyboard settings for accessibility](#).

3.1.1.5 Pointer Control features

Set options to make it easier to use the mouse and trackpad. For example, adjust the mouse or trackpad’s reaction time when you double-click an item. Or drag items with or without drag lock, or with a three-finger drag.

Alternate pointer actions let you perform mouse actions (such as a left-click or drag-and-drop action) using keyboard keys, assistive switches or facial expressions (such as a smile or an open mouth). See [Change Pointer Control settings for accessibility](#).

Change Pointer Control settings for accessibility on Mac

On your Mac, use Pointer Control settings to make your mouse and trackpad easier to use, turn on Mouse Keys, perform certain mouse actions using keyboard shortcuts, assistive switches or facial expressions, or to move the pointer using head pointer. The options available depend on the Mac you are using.

To change these settings, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Pointer Control on the right. (You may need to scroll down.)

- Mouse & Trackpad

Option	Description
Double-click speed	Adjust the mouse or trackpad's reaction time when you double-click an item.
Spring-loading	When dragging and dropping, drag an item to a folder and hold to open the folder.
Spring-loading speed	With Spring-loading turned on, adjust how long after you drag an item to a folder and hold before the folder opens.
Ignore built-in trackpad when mouse or wireless trackpad is present	Disable the built-in trackpad on your Mac when you use a mouse or wireless trackpad. If you use a non-Apple mouse, the driver software that came with your mouse may prevent this option from working as expected. For information, see the documentation for your mouse.
Trackpad Options	Set options for your trackpad: Use trackpad for scrolling: Turn scrolling on or off.

Option

Description

Use inertia when scrolling: Control what happens when you lift your finger from the trackpad. With this option turned on, scrolling comes to a gradual stop. Otherwise, scrolling stops immediately.

Scroll speed: The speed at which you scroll through documents and windows using the trackpad.

Use trackpad for dragging: Turn dragging on or off.

Dragging style: Choose an option to control dragging.

- ✓ **Without Drag Lock:** Double-tap an item, then drag it without lifting your finger after the second tap; when you lift your finger, the item stops moving.

The item can still be dragged for a fraction of a second (so you can reposition your finger if it is at the edge of the trackpad). To immediately prevent further dragging, tap the trackpad once.

- ✓ **With Drag Lock:** Double-tap an item, then drag it without lifting your finger after the second tap; dragging continues when you lift your finger, and stops when you tap the trackpad once.

- ✓ **Three Finger Drag:** Drag an item with three fingers; dragging stops when you lift your fingers.

Mouse Options

Click to set options for your mouse:

Use mouse for scrolling: Turn scrolling on or off (for a mouse such as a Magic Mouse).

Use inertia when scrolling: Control what happens when you lift your finger from the mouse (a mouse such as a Magic Mouse). With this option turned on, scrolling comes to a gradual stop. Otherwise, scrolling stops immediately.

Scroll speed: The speed at which you scroll through documents and windows using the mouse.

- Alternative Control Methods

Option	Description
Mouse Keys	Move the pointer and press the mouse button using the keyboard or a numeric keypad. See Control the pointer using Mouse Keys. Note: When Mouse Keys is on, you cannot use the keyboard or numeric keypad to enter text. To customise, click the Info button : ✓ Press the Option key five times to toggle Mouse Keys: Use your keyboard to turn Mouse Keys on or off. ✓ Ignore built-in trackpad when Mouse Keys is on: Disable the trackpad on your Mac when you use Mouse Keys. ✓ Initial delay: Set how quickly the pointer starts moving when you press a key. ✓ Maximum speed: Set the maximum speed at which the pointer moves.
Alternate pointer actions	Perform a left-click, right-click, double-click or drag-and-drop action using keyboard keys, assistive switches or facial expressions (such as a smile or an open mouth). To specify keys, switches and facial expressions or to see the ones currently specified, click the Info button : ✓ To change the name or action assigned to a key, switch or facial expression, double-click the item in the list, then follow the onscreen instructions. ✓ To add a new key, switch or facial expression to the list, click the Add button , then follow the onscreen instructions. ✓ To remove a key, switch or facial expression from the list, select it, then click the Remove button .

Option	Description
	✓ To hear confirmation that your switch is recognised, turn on Play sounds. ✓ To see onscreen confirmation that your switch is recognised, turn on Show actions visually. ✓ To choose the camera to use to detect facial expressions, click Camera Options, then click the Camera pop-up menu. To customise the level of expressiveness the camera needs to detect in your facial expressions for an action to be taken, click the pop-up menu for an expression, then choose Slight, Default or Exaggerated. (The same camera and level of expressiveness are used for both alternative pointer actions and head pointer.) Note: A left-click, right-click or double-click action occurs as soon as you use the specified switch. For example, if you set the switch for Left Click to the facial expression Stick Out Tongue, a left click occurs as soon as you stick out your tongue. A drag-and-drop action requires you to use a switch twice: once to drag, then again to drop. For example, when you stick out your tongue, drag is activated; to drop, you must stick out your tongue again.
Head pointer	Move the pointer using the movement of your face or head as detected by the camera that is built into or connected to your Mac. See Move the pointer using head pointer. To customise, click the Info button : ✓ Pointer moves: Choose how you want the pointer to follow the movement of your face or head: When facing screen edges: The pointer follows the direction in which you turn your face away from the centre of the screen, similar to how you move a joystick. To stop the pointer, turn your face to the centre of the screen again.

Option

Description

For example, if you turn your face towards the bottom right of the screen, the pointer moves towards that end of the Dock.

Relative to head: The pointer follows the direction in which you move your head (regardless of where your face is turned), similar to how you move a mouse. To stop the pointer, stop moving your head. For example, if you move your head left (even though your face is turned to the right), the pointer moves to the left.

- ✓ **Pointer speed:** The speed at which the pointer moves when you turn your face or move your head. The lower the number, the slower the pointer moves; the higher the number, the faster it moves.
- ✓ **Distance to edge:** If head pointer is set to “When facing screen edges”, specify how far your face must be turned away from the centre of the screen before the pointer starts moving. Set a higher number to help the camera differentiate between intentional and accidental movements.
- ✓ **Use a switch or facial expression to pause or resume:** To specify a facial expression to use to pause or resume head pointer, click the Info button , then follow the onscreen instructions. Pausing head pointer can be useful if you are going to be away from your Mac for a while.
- ✓ **Use a switch or facial expression to recalibrate:** To specify a facial expression to use to recalibrate head pointer, click the Info button , then follow the onscreen instructions. See [Recalibrate head pointer](#).
- ✓ **Camera Options:** To choose the camera to use to detect movement of your face or head, click Camera Options, then click the Camera pop-up menu.

Option

Description

To customise the level of expressiveness the camera needs to detect in your facial expressions for an action to be taken, click the pop-up menu for an expression, then choose Slight, Default or Exaggerated.

(The same camera and level of expressiveness are used for both head pointer and alternative pointer actions.)

Tip: You can use [Accessibility Shortcuts](#) to quickly turn Mouse Keys or head pointer on or off.

- With Mouse Keys, you can move the pointer and press the mouse button using the keyboard or a numeric keypad. See [Control the pointer using Mouse Keys](#).

3.1.1.6 Control the Pointer Using Mouse Keys on Mac

With Mouse Keys on your Mac, you can move the mouse pointer and press the mouse button using the keyboard or a numeric keypad. To use Mouse Keys, choose Apple menu  >

System Settings, click Accessibility  in the sidebar, click Pointer Control on the right, then turn on Mouse Keys. (You may need to scroll down.)

The following illustration shows the keys to use on a keyboard (the keys on the left) and on a numeric keypad (the keys on the right) when Mouse Keys is on.

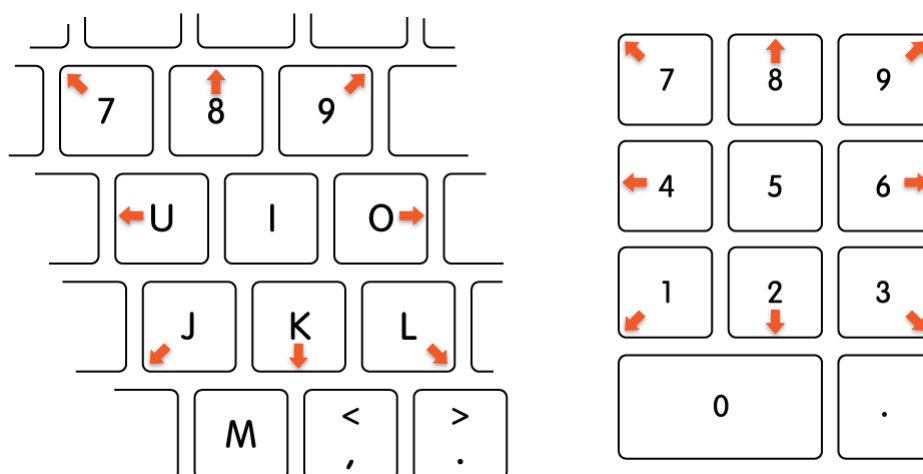


Figure 4.5-13 The keys to use on a keyboard (the keys on the left) and on a numeric keypad (the keys on the right) when Mouse Keys is on

Note: When Mouse Keys is on, you cannot use the keyboard or a numeric keypad to enter text.

- ✓ Move the mouse pointer:

With a numeric keypad: Use the 7, 8, 9, 4, 6, 1, 2, 3 keys on the keypad.

With the keyboard: Use the 7, 8, 9, U, O, J, K, L keys.

- ✓ Click a mouse button:

With a numeric keypad: Press 5 on the keypad.

With the keyboard: Press I.

- ✓ Press and hold the mouse button:

With a numeric keypad: Press 0 (zero) on the keypad.

With the keyboard: Press M.

- ✓ Release the mouse button:

With a numeric keypad: Press “.” (full stop) on the keypad.

With the keyboard: Press “.” (full stop).

Tip: You can use [Accessibility Shortcuts](#) to quickly turn Mouse Keys on or off.

You can also use keyboard shortcuts, assistive switches or facial expressions to perform mouse

actions, such as left, right or double clicks. Choose Apple menu  > System Settings, click

Accessibility  in the sidebar, click Pointer Control on the right, then turn on “Alternate pointer

actions”. (You may need to scroll down.) To customise the actions, click the Info button .

- Use head pointer to move the pointer based on the movement of your face or head, as detected by the camera that is built into or connected to your Mac. See [Move the pointer using head pointer](#).

3.1.1.7 Move the Pointer Using Head Pointer on Mac

If you have difficulty using a mouse or trackpad, you can use head pointer on your Mac. Head pointer lets you move the pointer on the screen using the movement of your face or head, as detected by the camera that is built into or connected to your Mac. For example, if you move your head to the left, the pointer follows in that direction on the screen.

- Turn on and customise head pointer

- ✓ On your Mac, choose Apple menu  > System Settings, then click

Accessibility  in the sidebar. (You may need to scroll down.)

- ✓ Go to Motor on the right, then click Pointer Control.

- ✓ Turn on “Head pointer”.

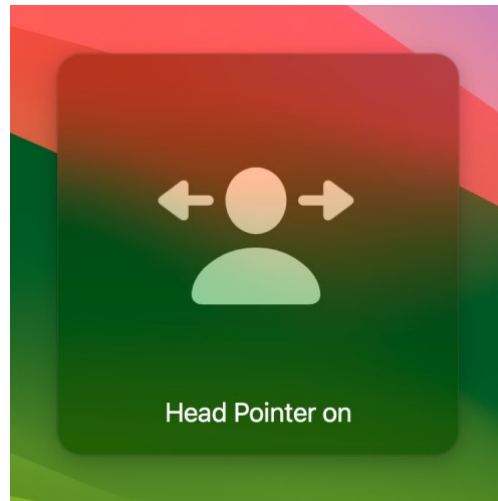


Figure 4.5-14 Head pointer is turned on

- ✓ Click the Info button .

You can set options to specify the way the pointer moves, how fast it moves, which switches to use for head pointer actions and which camera to use. For information about the options, see [Change Pointer Control settings](#).

- Use head pointer
 - ✓ On your Mac, make sure the camera you [selected in head pointer options](#) is on.
 - ✓ If you are using your Mac computer’s built-in camera, a green light beside the camera (at the top of the display) glows to indicate the camera is on.
 - ✓ Centre yourself in front of the screen, making sure your head is not too far to the left or right.
 - ✓ Depending on the options you set for how the pointer moves, either turn your face away from the centre of the screen or move your head in the direction you want the pointer to move; you do not need to exaggerate movements or move your shoulders or body.
 - ✓ For example, to move the pointer to the right, turn your face towards the right edge of the screen or move your head to the right. The farther you turn your face to the right or the faster you move your head, the faster the pointer moves across the screen.
 - ✓ To stop the pointer, either turn your face to the centre of the screen or stop moving your head.

When the pointer is at the location you want, you can perform left-click, right-click, double-click or drag-and-drop actions using [Mouse Keys](#), [switches](#) (such as keyboard keys, assistive switches or facial expressions) or [Voice Control](#).

If you specified a switch to pause or resume head pointer in head pointer options, use the switch to pause it at any time. For example, if you specified the keyboard key “z” as the switch, use the key to pause head pointer when you are away from your Mac for a while.

- Troubleshoot head pointer

If you cannot move the pointer the way you expected using head pointer on your Mac, try these suggestions.

- ✓ **If head pointer does not seem to work:** Make sure it is [turned on in Pointer Control settings](#). If it is turned on but still is not working, make sure it is not paused. Also check that the camera you are using is turned on, facing you, and unobstructed.
- ✓ **If the pointer does not move:** If you or someone else is moving the pointer using a mouse or trackpad, head pointer pauses; when you stop using the mouse or trackpad, head pointer automatically resumes.
- ✓ **If the pointer moves erratically:** Adjust the lighting around you to ensure your face and head are clearly detected by your camera.
- ✓ **If the pointer moves too far or not far enough:** Adjust the pointer speed you set for head pointer. The lower the speed, the less distance the pointer moves when you move your face or head; the higher the speed, the farther the pointer moves.
- ✓ **If the pointer moves too slowly or quickly:** Turn your face or move your head more quickly or more slowly.
- ✓ **If the pointer seems stuck on an edge of the screen:** Make sure you are centred in front of the screen and that your head is not too far to the left or right. You may need to adjust the position of your display or camera.
- ✓ **If a message appears that head pointer failed:** It is possible the lighting is too bright or dark, that you are too close to or far from the camera, or not centred in front of the screen. Try adjusting the lighting or repositioning yourself in front of your display or camera.
- ✓ **If the pointer is difficult to locate on the screen:** Try [recalibrating head pointer](#).
- Recalibrate head pointer

You can recalibrate head pointer to reposition the pointer in the middle of the screen and reset your default face or head position, depending on the option you set to control how the pointer moves.

- ✓ On your Mac, choose Apple menu  > System Settings, then click Accessibility  in the sidebar. (You may need to scroll down.)
- ✓ Go to Motor on the right, then click Pointer Control.
- ✓ Turn on “Head pointer”, then click the Info button .
- ✓ Turn on Use a switch or facial expression to recalibrate, then click the Info button  to choose a switch to perform the action.
- ✓ Adjust the position of your face or head, then use your switch to start recalibration.

The onscreen countdown is displayed and counts down from 3. When the countdown is at 1, refrain from moving so you are still during recalibration.

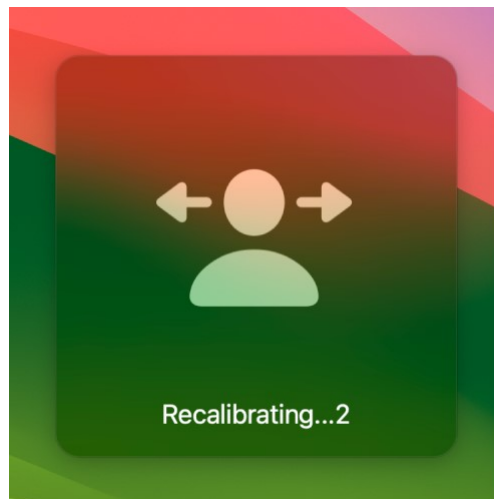


Figure 4.5-15 Head pointer is recalibrating

- ✓ When the onscreen countdown disappears, head pointer is recalibrated and you can continue to use head pointer.

You can repeat these steps anytime you want to recalibrate head pointer.

3.1.1.8 Switch Control

Switch Control lets you use one or more adaptive accessories to enter text, interact with items on the screen and control your Mac. Switch Control scans a panel or the user interface until you select an item or perform an action using a switch. See [Use Switch Control](#).

Use Switch Control on Mac

With Switch Control, you can use an adaptive device (such as a switch or joystick) to enter text, interact with items on the screen and control your Mac. You use controls in the Switch Control Home panel to scan a panel or the user interface until you use a switch to select an item or perform an action.

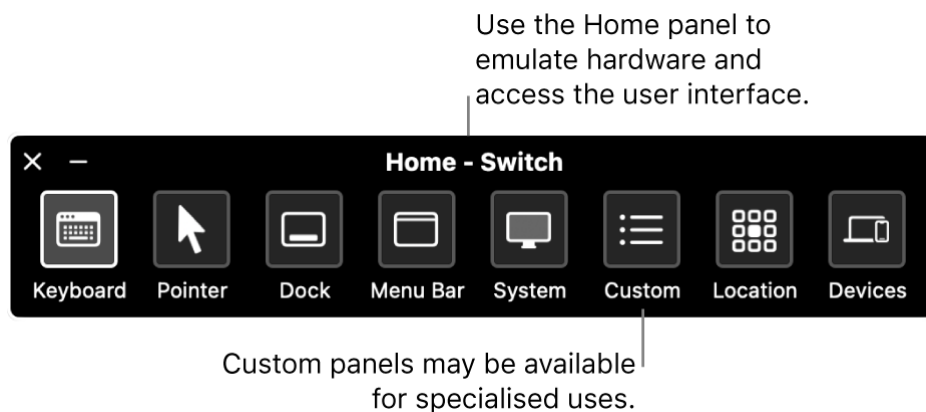


Figure 4.5-16 Switch Control Home panel

- Turn on Switch Control

- ✓ On your Mac, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Switch Control on the right. (You may need to scroll down.)
- ✓ Turn on Switch Control.

The Switch Control Home panel is shown on your desktop.

By default, the Switch Control panel uses white text on a dark background. If you prefer dark text on a light background, choose a light appearance in Switch Control settings.

- Set up switches

You can use Switch Control settings on your Mac to set up one or more adaptive switches to perform an action when pressed, or assign an existing switch a different action.

- ✓ On your Mac, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Switch Control on the right. (You may need to scroll down.)
- ✓ Scroll down to Switches, then do any of the following:
 - **Add a switch:** Click the Add button , then press your adaptive switch. Enter a name, then select an action, such as Stop Scanning. To have the switch run a script or open an app, click Custom, then select a script or an app.
 - **Remove a switch:** Select a switch in the list, then click the Remove button .
 - **Change a switch:** Select a switch in the list, click the Edit Switch pop-up menu , then change the name or action. To use a different switch for the action, click Reassign.

- Use the Home Panel

While you are using Switch Control on your Mac, the Home Panel is shown on the desktop. The Home Panel contains the following items:

- ✓ **Keyboard:** Shows the default keyboard. Type text in a document or field by scanning the keyboard in the panel, opening a group of keys, then selecting a key. Keep an eye on the group across the bottom of the keyboard; it contains suggested words, based on the keys pressed so far. You may save typing time by selecting a suggested word.
- ✓ **Pointer:** Provides buttons to move and click the pointer. To move the pointer to an area of the screen, select Move. To automatically click the pointer when you get to an area of the screen, select Move & Click.

For both the Move and the Move & Click options, a *vertical* blue line starts to glide across the screen. When you press the Select Item switch, the line stops and a *horizontal* blue line starts to glide across the screen. The pointer moves to the intersection of the two blue lines; if you used Move & Click, the item located at the intersection of the two blue lines is selected.

If you want even more precision, set Pointer precision to High in Switch Control settings. Then, after the first vertical and horizontal lines stop, press the Select Item switch. A slower vertical (or horizontal) line moves across the screen, and you can stop exactly where you want.

- ✓ **Dock:** Scans the items in the Dock.
- ✓ **Menu Bar:** Scans the menu bar group, then the menu extras group.
- ✓ **System:** Provides buttons to control the volume or display brightness of your Mac and control media playback.

If your Mac has a Touch Bar, System includes Toggle Touch Bar, which shows the Touch Bar across the bottom of the screen. This allows you to use Switch Control to point to and select items in the Touch Bar.

- ✓ **Custom:** Shows custom panels that are available. You can create custom panels ([using the Panel Editor](#)) to streamline common tasks and actions for apps.
- ✓ **Location:** Provides buttons to reposition the Switch Control panel on the screen.
- ✓ **Devices:** Shows available Apple devices — such as iOS and iPadOS devices or Apple TV — that you can control using Switch Control on your Mac, without having to pair your switch with the other device. Your Mac, iOS and iPadOS devices, and Apple TV must be on the same Wi-Fi network and you must be signed in with the same Apple ID on all the devices.

If you turned on “Allow platform switching to control your computer” in Switch Control settings, you can also use your other devices to control your Mac.

See the Apple Support article [Use Switch Control on your device to control another Apple device](#).

- Scan and select items

While you are using Switch Control on your Mac, do any of the following:

- ✓ **Scan items with auto scanning:** Press the Select Item switch to start auto scanning. For groups and user interface items, Switch Control highlights each item or group as it scans. For panels, it either highlights each button or group, or sets of buttons in an overlapping sequence, depending on how the panel was designed.

If you select an item, the scan pauses, unless Auto scanning is turned on in Switch Control settings. To resume the scan, press the switch. Switch Control repeats (or loops) a scan, as set in Switch Control settings.

- ✓ **Scan items without auto scanning:** If you turned auto scanning off, press the Move To Next Item switch.
- ✓ **Select an item:** When an item is highlighted, press the Select Item switch. If the selected item is a group, press the switch again to scan the items in the group, then press the switch once more to select an item. To exit a group, press the switch when the group is highlighted (or when step out is announced, if you set the option to have Switch Control speak while navigating).

If you turn on Resume auto scanning after selection in Switch Control settings, Switch Control automatically starts scanning the items in the group when you select it.

- Use panels

While you are using Switch Control on your Mac, do any of the following:

- ✓ **Set panel options:** In a panel, press the Select Item switch when the Panel Options button  in the top-right corner is highlighted. Then press the switch again when the option you want to set is highlighted. You can decrease or increase the size of the panel, and increase or decrease its transparency.
- ✓ **Return to the Home Panel:** In a panel, press the Select Item switch when the Home button  in the top-right corner is highlighted. In the user interface, press the switch when the Home Panel is highlighted.

- Control the pointer

While you are using Switch Control on your Mac, you can use panels to move and control the pointer. For example, the Pointer panel in the Home Panel offers Move and Move & Click. The following methods may also be used in panels:

- ✓ **Glide:** The action is the same as Move in the Pointer panel.
- ✓ **Rotate:** When you press the Select Item switch, a sector (shaped like a pie slice) starts to rotate around the screen from the current location of the pointer, or around the frontmost window from the centre of the window (depending on how Boundary was set in the Panel Editor). When you press the switch a second time, the sector stops on the screen, then a blue line starts to glide across the sector. When you press the switch a third time, the blue line stops, then the pointer starts to glide along the blue line. Press the switch again to stop the pointer on the blue line.

If you set Pointer precision to High in Switch Control settings, Switch Control adds intermediate stages to provide greater control of the pointer. For example, the third time you press the Select

Item switch, the blue line moves much slower as it glides across the sector. Press the switch a fourth time to start the pointer gliding along the blue line. Press it a fifth time to slow the pointer even more. Press the switch a sixth time to stop the pointer on the blue line.

- ✓ **Directional Move:** When you press the Select Item switch, the pointer moves across the screen from its current location in one of several ways: It either moves in one direction (for example, left, down or diagonally). Or, it repeats or reverses the last directional move it made. If you press the switch, the pointer stops moving; if you do not, the pointer continues until it reaches a boundary, where it reverses direction, or stops if Reverse cursor direction after hitting edge is turned off in Switch Control settings.

3.1.2 Exercises (Mac OS Accessibility for People with Physical Impairments)

3.1.3 accessibility features MacOS General Accessibility Features

Mac OS includes accessibility features to make it easier to turn various accessibility features on or off and to type your Siri requests.

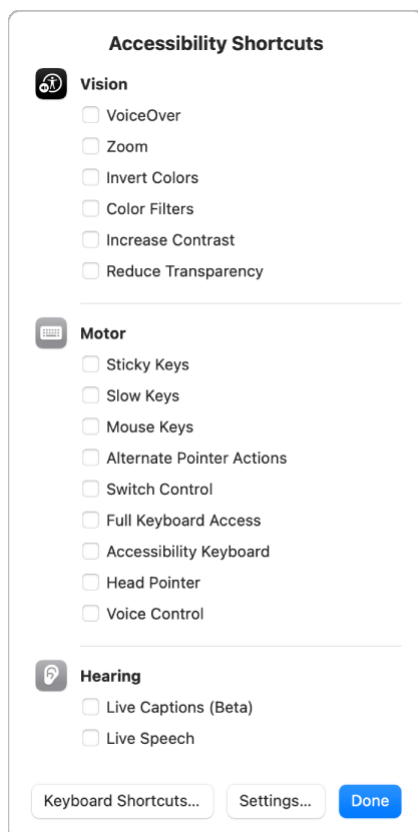


Figure 4.5-17 Accessibility Shortcuts on Mac Computers

3.1.3.1 Siri

Type your Siri requests instead of saying them. See [Change Siri settings for accessibility](#).

Change Siri Settings for Accessibility on Mac

On your Mac, use Siri settings for accessibility to type your requests to Siri instead of speaking them. This feature can be useful if speech is difficult or you do not want others to hear your Siri requests.

To change these settings, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Siri on the right. (You may need to scroll down.)

Option	Description
Type to Siri	Type your requests to Siri instead of saying them. If a headset with a microphone is connected to your Mac, Siri speaks your typed command.
Siri Settings	Additional options, such as setting a keyboard shortcut to activate Siri and showing what Siri says on screen, are available in Siri & Spotlight settings .

3.1.3.2 Shortcut

Quickly turn various accessibility features on or off using Accessibility Shortcuts. See [Quickly turn accessibility features on or off](#).

Quickly Turn Accessibility Features On or Off on Mac

You can quickly turn many accessibility features on or off using a keyboard shortcut, the [menu bar](#), [Control Centre](#) or Siri.

- Use a keyboard shortcut

You can use a keyboard shortcut to open the Accessibility Shortcuts panel, where you can turn accessibility features on or off.

- ✓ Press Option-Command-F5.

Or, if your Mac or Magic Keyboard has [Touch ID](#), quickly press Touch ID three times.

- ✓ In the panel, select the features you want to turn on or off, then click Done. Or, click anywhere outside the panel to close it.

Additional accessibility shortcuts you can use and customise can be found in Keyboard settings.

On your Mac, choose Apple menu  > System Settings, then click Keyboard  in the sidebar. (You may need to scroll down.) Click Keyboard Shortcuts on the right, then in the dialogue that appears, click Accessibility in the sidebar. See [Use macOS keyboard shortcuts](#).

- Use the menu bar or Control Centre

To turn accessibility features on or off right from the desktop, add the Accessibility Shortcuts or module to the menu bar or Control Centre.

- ✓ On your Mac, choose Apple menu  > System Settings, then click Control Centre  in the sidebar. (You may need to scroll down.)
- ✓ Go to Accessibility Shortcuts on the right, then turn on Show in Menu Bar or Show in Control Centre.

You can also add the Hearing module to play calming sounds right from the desktop. See [Play background sounds](#).

- Add or remove features from Accessibility Shortcuts

You can change which features appear when you use the Accessibility Shortcuts panel or the Accessibility Shortcuts module in the menu bar or Control Centre.

- ✓ On your Mac, choose Apple menu  > System Settings, click Accessibility  in the sidebar, then click Shortcut on the right. (You may need to scroll down.)
- ✓ Select or deselect the tickbox next to a feature to show or hide it when you use Accessibility Shortcuts.

If you select only one feature, the Accessibility Shortcuts panel is not displayed when you press the keyboard shortcut; instead, the feature is immediately turned on or off.

3.1.4 Exercises (Mac OS General Accessibility Features)

Using Siri please do one of the exercises for Pages, Numbers or Keynote, optionally.

3.2 Resources

- 1 Use VoiceOver to create a Pages document on Mac. [Use VoiceOver to create a Pages document on Mac – Apple Support \(UK\)](#);

- 2 Use VoiceOver to preview comments and track changes in Pages on Mac. [Use VoiceOver to preview comments and track changes in Pages on Mac – Apple Support \(UK\)](#);
- 3 Use VoiceOver to create a Numbers spreadsheet on Mac. [Use VoiceOver to create a Numbers spreadsheet on Mac – Apple Support \(UK\)](#);
- 4 Use VoiceOver to create formulas and autofill cells in Numbers on Mac. [Use VoiceOver to create formulas and autofill cells in Numbers on Mac – Apple Support \(UK\)](#);
- 5 VoiceOver User Guide. [VoiceOver User Guide for Mac – Apple Support \(UK\)](#);
- 6 Use VoiceOver to create a Keynote presentation on Mac. [Use VoiceOver to create a Keynote presentation on Mac – Apple Support \(UK\)](#);
- 7 VoiceOver modifier. [VoiceOver modifier – Apple Support \(UK\)](#);
- 8 MacOS accessibility features for vision. [macOS accessibility features for vision – Apple Support \(UK\)](#);
- 9 Use Voice Control commands to interact with your Mac. [Use Voice Control commands to interact with your Mac – Apple Support \(UK\)](#);
- 10 AirPods User Guide (for Using Spatial Audio). [Control Spatial Audio and head tracking – Apple Support \(UK\)](#);
- 11 MacOS accessibility features for hearing. [macOS accessibility features for hearing – Apple Support \(UK\)](#);
- 12 Use Voice Control commands to interact with your Mac. [Use Voice Control commands to interact with your Mac – Apple Support \(UK\)](#);
- 13 Customise Voice Control on Mac. [Customise Voice Control on Mac – Apple Support \(UK\)](#);
- 14 Navigate your Mac using Full Keyboard Access. [Navigate your Mac using Full Keyboard Access – Apple Support \(UK\)](#);
- 15 Use the Accessibility Keyboard on Mac. [Use the Accessibility Keyboard on Mac – Apple Support \(UK\)](#);
- 16 Change Keyboard settings for accessibility on Mac. [Change Keyboard settings for accessibility on Mac – Apple Support \(UK\)](#);
- 17 Control the pointer using Dwell on Mac. [Control the pointer using Dwell on Mac – Apple Support \(UK\)](#);
- 18 Change Pointer Control settings for accessibility on Mac. [Change Pointer Control settings for accessibility on Mac – Apple Support \(UK\)](#);
- 19 Use Switch Control on Mac. [Use Switch Control on Mac – Apple Support \(UK\)](#);

- 20 Have what you type spoken out loud on Mac. [Have what you type spoken out loud on Mac – Apple Support \(UK\)](#);
- 21 Mac OS general accessibility features. [macOS general accessibility features – Apple Support \(UK\)](#);