

Complete guide to Narrator

Narrator is a screen-reading app that's built into Windows 10, so there's nothing you need to download or install. This guide describes how to use Narrator with Windows so that you can start using apps, browsing the web, and more.

Below the table of contents, there's a section about what's new in Narrator.

Note: To obtain additional languages or formats, contact the [Disability Answer Desk](#).

Want to learn how to use Narrator to do things in Office apps, like Outlook and Word? Check out the articles on this page: [Use a screen reader and keyboard shortcuts with Office apps](#).

Table of Contents

Complete guide to Narrator.....	1
What's new	3
Other capabilities that are new to Narrator over the last few releases.....	5
Give feedback.....	7
Chapter 1: Introducing Narrator.....	8
Narrator Home.....	8
Two ways to start and stop Narrator	8
Start Narrator automatically before or after you sign in to your PC	8
Chapter 2: Narrator basics.....	10
Learn Narrator with QuickStart	10
Tab, arrow, and Enter keys	10
Narrator key	10
Explore your keyboard	10
Stop Narrator from reading	10
Make Narrator speak louder or faster	10
Windows keyboard shortcuts	11
Get around apps and webpages	11
Find out the time, day of the week, and date	12
Let Narrator grab info from the web	12
Chapter 3: Using scan mode	13
Scan mode basics.....	13
Scan mode commands.....	13

Selecting text in scan mode	15
Chapter 4: Reading text	16
Read certain amounts of text	16
Get more details about text	17
Get details on formatting	18
Hear punctuation	18
Hear capital letters and words	19
Read text in other languages	19
Chapter 5: Navigation	20
Narrator views	20
Navigate landmarks	20
Navigate suggestions	20
Use Narrator Find	20
Navigate links on a page	21
Navigate headings on a page	21
Navigate landmarks on a page	21
Use Narrator to navigate the web and read emails	21
Chapter 6: Using Narrator with touch	23
Starting and stopping Narrator	23
Touch gestures	23
Typing by touch	23
Chapter 7: Customizing Narrator	25
General settings (Use Narrator)	25
Personalize Narrator's voice	25
Change what you hear when reading and interacting	26
Change what you hear when typing	26
Choose keyboard settings	27
Use Narrator cursor	27
Use braille	28
Manage your data and services	28
Help make Narrator better	28
Chapter 8: Using Narrator with braille.....	29
Install braille	29

Using your braille display with other screen readers	29
Uninstalling braille	29
Change braille settings	29
Core Narrator commands	30
Braille keyboard commands	31
Using touch cursors on your braille display	32
Appendix A: Supported languages and voices	34
Add a TTS voice to your PC	35
Appendix B: Narrator keyboard commands and touch gestures	36
Narrator key	36
Narrator keyboard commands.....	36
Standard keyboard layout.....	36
Legacy keyboard layout	40
Narrator touch gestures.....	43
Appendix C: Supported braille displays	45
Appendix D: User guides for previous versions of Narrator	49
Appendix E: Narrator sounds	50

What's new

Version released in 2020

This release is all about helping you get things done faster. To give Microsoft feedback, press Narrator (Caps lock) + Alt + F while Narrator is running.

Email improvements in Outlook and Windows Mail

Use Scan Mode to read emails

Scan Mode turns on automatically when you open an email. Use the arrow keys and other Scan Mode commands—just like you would on the web—to navigate around.

Emails are read automatically

When you open an email, Narrator will start reading—no commands required.

Get the important info, skip the noise

In Outlook, Narrator will read an email's status (unread, forwarded, etc.), who sent it, the subject line, and any other characteristics of the email that are important or unique (for example, Narrator *will* read if an email is flagged, but it won't read if an email is unflagged).

Narrator won't read any unnecessary table info, like if there are 5 empty columns, and column headers won't be read by default. Turn column header reading in Outlook on or off by pressing **Narrator + H**.

Web improvements

No more unhelpful hyperlinks

Narrator will give you the title of the webpage for a link. Press **Narrator + Ctrl + D**, and Narrator will take the URL of the hyperlink you are on and send it to an online service that will provide the page title to Narrator. And when focus is on an image, the **Narrator + Ctrl + D** command provides a description of the image. If you would like to disable all online services used by Narrator, you can turn this feature off in Narrator settings.

Get a quick summary of a webpage

Hear a webpage summary that includes the number of links, landmarks, and headings by pressing **Narrator + S**.

Popular links and full webpage summary

Press **Narrator + S twice quickly** to pull up a dialog box on the screen with the following info: the number of links, landmarks, and headings on a page, and a list of popular links for a page (popular links are the links on the page that get the most engagement).

Webpages are read automatically

Narrator automatically reads webpages starting at the top of the page.

Sound improvements

New sounds for common actions

Narrator sounds are now more functional and responsive. For example, sounds now play for common actions, such as when you land on a link or when you turn on or off Scan Mode. To manage sounds for common actions, go to Narrator settings. To hear the Narrator sounds, refer to [Appendix E: Narrator Sounds](#).

Hear capital letters and words

By default, Narrator reads capital letters the same as lowercase ones. This means "Word," "WORD," and "word" all sound the same (even though different letters are capitalized in each).

If you'd like to hear when a letter is capitalized, Narrator can say "cap" before it, or read the word or letter in a higher pitch. To change how Narrator handles capitalization, go to the section "Change what you hear when reading and interacting" in Narrator settings.

Read with Magnifier

Magnifier, the screen-magnifying feature that comes with Windows 10, will now read text aloud. This might be useful if you are a low vision user who would like text read aloud on-demand. For more information, refer to [reading with Magnifier](#).

New or notable commands

Narrator + Ctrl + D: Get the webpage source of a link

Narrator + S: Get a webpage summary

Narrator + S twice quickly: Get the webpage summary and popular links dialog box

Narrator + H: Turn on or off Outlook column header reading

Narrator + Alt + F: Give feedback on Narrator

Windows logo key + Plus sign (+): Open Magnifier

Other capabilities that are new to Narrator over the last few releases

Narrator Home

Every time you turn on Narrator, you'll go to Narrator Home, which gives you one place where you can find everything you need, from changing your Narrator settings to learning the basics of Narrator with QuickStart. Also, when minimized Narrator Home goes into your system tray, so you won't need to navigate around it when using Alt + Tab to switch between things.

Read by sentence

Narrator can now read next, current, and previous sentences. Read by sentence is available whenever you use a keyboard, touch, or braille.

"Sentence" is also its own Narrator view. Press **Narrator + Page up** or **Narrator + Page down** to get to the sentence view, then press **Narrator + Left arrow** to move to the previous sentence and **Narrator + Right arrow** to move to the next sentence.

You can use these new commands on Braille displays by pressing dots 2-3-4 or 2-3-4-7 in command input mode.

New verbosity levels

Narrator provides five verbosity levels that impact the amount of information you hear when Narrator reads text, such as web sites, and when you interact with controls. Each level is documented in [Chapter 4](#) with a brief description of how you might want to use it.

Use scan mode in your favorite browser

Scan mode turns on automatically in Google Chrome and Microsoft Edge.

Standard keyboard layout

We wanted to make it easier for you to learn and use Narrator, so we've introduced a new Standard keyboard layout. The updated layout is more like the keyboard layout you may have experienced in other screen readers.

When keyboard commands are mentioned in this guide, they're for the new standard keyboard layout. Some of the new commands include updates to Narrator's page, paragraph, line, word, and character commands. You'll also notice new commands like Narrator Find, list of links, list of headings, and list of landmarks. For some commands, you can now use the numeric keypad.

You can explore all the new and updated commands in [Appendix B: Narrator keyboard commands and touch gestures](#). Find scan mode commands in [Chapter 3: Using scan mode](#).

Note: Your keyboard will default to the Standard layout. If you want to change this, go to **Settings > Ease of Access > Narrator**, and choose the **Legacy** layout. You can also get to your Narrator settings by pressing **Windows logo key + Ctrl + N**. New Narrator commands will not be available in the Legacy keyboard layout if keystrokes for legacy commands conflict with those used in new Narrator features.

[Open Narrator settings](#)

Narrator key

You can now choose what modifier key you want to use in Narrator commands. Both the Caps Lock and Insert keys serve as your Narrator key by default. You can use either of these keys in any command that uses the Narrator key. The Narrator key is referred to as simply "Narrator" in commands. You can change your Narrator key in Narrator settings.

Updated Change View commands

Change View commands are now mapped to the **Narrator + Page up** and **Page down** keys. You can also use Change View by pressing **Narrator + Ctrl + Up arrow** and **Down arrow**.

Improvements to scan mode

Scan mode's Primary and Secondary Action commands have changed. A Primary Action can be executed by pressing **Enter** or **Spacebar**. You can complete a Secondary Action by adding a

Shift key to each of those keys (**Shift + Enter** or **Shift + Spacebar**). You'll notice this change regardless of the keyboard layout you select.

Additionally, several new scan mode keyboard commands have been added that allow you to select text. You can learn more about them in [Chapter 3: Using scan mode](#).

Give feedback

Your feedback helps make Narrator better. When Narrator is turned on, press **Narrator + Alt + F** to open the Feedback Hub to provide feedback about Narrator. You can also leave comments on the [Microsoft Accessibility User Voice](#) website. Additionally, for technical support for Narrator or other Microsoft assistive technology, contact the Microsoft Disability Answer Desk.

If you want to provide Microsoft with additional diagnostic and performance data, press **Windows logo key + Ctrl + N** to open Narrator settings, turn on the toggle under **Help make Narrator better**, and then restart Narrator.

[Open Narrator settings](#)

Chapter 1: Introducing Narrator

Narrator lets you use your PC without a mouse to complete common tasks if you're blind or have low vision. It reads and interacts with things on the screen, like text and buttons. Use Narrator to read and write email, browse the internet, and work with documents.

Specific commands let you navigate Windows, the web, and apps. Navigation is available using headings, links, landmarks, and more. You can read text (including punctuation) by page, paragraph, line, sentence, word, and character, as well as determine characteristics like font and text color. Efficiently review tables with row and column navigation.

Narrator also has a navigation and reading mode, which you'll learn more about in [Chapter 3: Using scan mode](#). Use it to get around Windows 10 using just the up and down arrows on your keyboard. You can also use a braille display to navigate your PC and read text, which you'll learn more about in [Chapter 8: Using Narrator with braille](#).

You can also customize the speaking rate, pitch, and volume of the voice that Narrator uses, and install other text-to-speech voices.

Narrator Home

Every time you turn on Narrator you'll go to Narrator Home, which gives you one place where you can open everything you need, whether you want to change your Narrator settings or learn basics with QuickStart. The links at Narrator Home include QuickStart, Narrator guide (which takes you to this online user guide), What's New, Settings, and Feedback. You can also control whether Narrator Home opens when Narrator starts in Narrator settings or by using the checkbox on Narrator home.

Two ways to start and stop Narrator

- Press the **Windows logo key + Ctrl + Enter** together to start Narrator. Press these keys again to stop Narrator. (On older versions of Windows, the command was the **Windows logo key + Enter**.) On many keyboards, the Windows logo key is located on the bottom row of keys, to the left or right of the Alt key.
- Press the **Windows logo key + Ctrl + N** to open Narrator settings, and then turn on the toggle under **Use Narrator**.

Note: When you're signing in or accessing some menus, the ease of access icon will appear in the bottom right corner of the screen. Selecting the ease of access icon opens a menu with a toggle switch that you can use to turn Narrator on or off. Narrator will turn off once you sign in or exit the screen.

Start Narrator automatically before or after you sign in to your PC

1. Press the **Windows logo key + Ctrl + N** to open Narrator settings.
2. To start Narrator automatically after you sign in, select the check box next to **Start Narrator after sign-in for me**.
3. To start Narrator automatically before sign-in for all users, select the check box next to **Start Narrator before sign-in for everyone**.

Next: [Chapter 2: Narrator basics](#)

Go back to the [Table of Contents](#)

Chapter 2: Narrator basics

This chapter explains Narrator keyboard navigation. This includes how to get around the screen, find and open apps, and change what Narrator reads. It also explains the basic details of adjusting Narrator speech rate, volume, and how to stop speech.

Scan mode gives you even more navigation options. We'll cover that in [Chapter 3: Using scan mode](#).

Learn Narrator with QuickStart

QuickStart is a tutorial that'll guide you through the basics of using Narrator. It shows you how to do things like navigate headings and landmarks, and there's even a sample webpage to help you get comfortable with using Narrator online. Get to QuickStart anytime from Narrator Home, which launches by default when you turn on Narrator.

Tab, arrow, and Enter keys

In Windows, use the Tab or arrow keys to move around apps and webpages. When you get to something you want to use, like a link, press Enter. You can also use the Tab, arrow, and Enter keys to move between and interact with things like check boxes and buttons.

Narrator key

You can choose what modifier key you want to use in Narrator commands. Both the Caps lock and Insert keys serve as your Narrator key by default. You can use either of these keys in any command that uses the Narrator key. The Narrator key is referred to as simply “Narrator” in commands. You can change your Narrator key in Narrator settings.

Note: If you're using a Japanese 106 keyboard, Insert and NonConvert are your default Narrator keys.

Explore your keyboard

Input learning tells you what keys you're pressing on your keyboard, and the Narrator command associated with them. Turn input learning on or off by pressing **Narrator + 1** (the number 1 key).

Stop Narrator from reading

To stop Narrator from reading at any time, press the **Ctrl** key.

Make Narrator speak louder or faster

To change Narrator volume, press:

- **Narrator + Ctrl + Plus sign (+)** or **Narrator + Ctrl + Add** (numeric keypad) to increase volume
- **Narrator + Ctrl + Minus sign (-)** or **Narrator + Ctrl + Subtract** (numeric keypad) to decrease volume

To change the rate at which Narrator speaks, press:

- **Narrator + Plus sign (+)** or **Narrator + Minus sign (-)**.

Note: The commands that include plus (+) and minus (-) refer to the physical key and don't require Shift as a modifier. Unless explicitly called out, it isn't necessary to include Shift before the equal key to make it the plus sign as you would when typing the plus sign. Using the Narrator volume command above as an example, Narrator + Ctrl + equal (=) is the literal command, not Narrator + Ctrl + Shift + equal (=).

Windows keyboard shortcuts

Windows and Windows apps have keyboard shortcuts that you can use alongside Narrator commands. For example, press the **Windows logo key** to open the Start menu, or, to open action center, press the **Windows logo key + A**.

For a list of the keyboard shortcuts you can use in Windows, refer to [Keyboard shortcuts in Windows](#). For a list of keyboard shortcuts in Windows apps, refer to [Keyboard shortcuts in apps](#). For a list of keyboard shortcuts in other Windows assistive technologies, refer to [Windows keyboard shortcuts for accessibility](#).

Get around apps and webpages

Find and open apps

To quickly find an app in Windows 10, press the **Windows logo key** on your keyboard to open the Start menu and place focus in the search box. Then, type the name of the app that you're looking for, use the arrow keys to select it in the list of search results, and press the **Enter** key to open it.

Switch between apps

To switch between open apps on your PC, hold down the **Alt** key and then press the **Tab** key. Narrator will speak the name of open apps as you cycle through them. When you find the app that you want to use, release both keys.

Anytime you want to know which app or Window has focus, press **Narrator + T** to read the title of the window that has focus. To read the title and contents of the window that has focus, press **Narrator + W**.

Find out the time, day of the week, and date

To find out the time, day of the week, and date at any time, press **Narrator + F12**.

Let Narrator grab info from the web

When connected to the internet, Narrator can give you more context for images, links, and webpages by sending them to Microsoft.

Note: To turn off these services, go to **Manage your data and services** in Narrator settings.

Hyperlinks

If you would like to know where a hyperlink will take you, press **Narrator + Ctrl + D** and Narrator can tell you the page title where the link will take you to. This works well in web and mail applications.

Image descriptions

If you come across an image you'd like described, press **Narrator + Ctrl + D**. Narrator will send the image to Microsoft, and then read a description of the image.

Webpage summary

Hear a webpage summary that includes the number of links, landmarks, and headings by pressing **Narrator + S**.

Popular links and full webpage summary

Press **Narrator + S twice quickly** to pull up a dialog box on the screen with the following info : the number of links, landmarks, and headings on a page, and a list of popular links for a page (popular links are the links on the page that get the most clicks).

[Microsoft Privacy Statement](#)

Next: [Chapter 3: Using scan mode](#)

Go back to the [Table of Contents](#)

Chapter 3: Using scan mode

This chapter describes a navigation and reading mode called scan mode. Scan mode lets you navigate apps, email, and webpages using the arrow keys. You'll also be able to use common keyboard shortcuts to read text and jump directly to headings, links, tables, and landmarks.

Scan mode basics

To turn scan mode on and off, press **Narrator + Spacebar**.

When scan mode is turned on, use the Up and Down arrow keys to navigate apps and webpages. Press Enter or Spacebar to activate an item that you want to use, such as a button in an app, a link in a webpage, or a text box.

Scan mode turns on automatically when you use Mail, Outlook, Microsoft Edge, Google Chrome, and Firefox. It also turns on automatically when you open any Windows app where you turned it on before.

If you turn scan mode off for an app, it will remain off for that app until you turn it on again. Scan mode automatically turns off in edit fields so you can enter text. Press the Up or Down arrow key again to leave the edit field and resume scan mode.

Scan mode commands

When scan mode is turned on, use the following keys to navigate apps and webpages.

Note: If you are hearing silent stops in scan mode, this may be because Narrator is stopping at a punctuation mark. To have Narrator tell you about that punctuation, increase your punctuation verbosity by pressing **Narrator + Alt + Plus sign (+)** or **Minus sign (-)**.

Press these keys	To do this
Narrator + Spacebar	Toggle scan mode on or off
Enter Spacebar	Primary action
Shift + Enter Shift + Spacebar	Secondary action
Home	Move to and read the first character of a line
End	Move to and read the last character of a line
P	Read next paragraph
Shift + P	Read previous paragraph
Ctrl + Down arrow	Read next line
Ctrl + Up arrow	Read previous line
Ctrl + Right arrow	Read next word
Ctrl + Left arrow	Read previous word
Right arrow	Read next character

Left arrow	Read previous character
Ctrl + Home	Move to and read the first line of text
Ctrl + End	Move to and read the last line of text
Down arrow	Jump to next text or item
Up arrow	Jump to previous text or item
1	Jump to next heading at level 1
Shift + 1	Jump to previous heading at level 1
2	Jump to next heading at level 2
Shift + 2	Jump to previous heading at level 2
3	Jump to next heading at level 3
Shift + 3	Jump to previous heading at level 3
4	Jump to next heading at level 4
Shift + 4	Jump to previous heading at level 4
5	Jump to next heading at level 5
Shift + 5	Jump to previous heading at level 5
6	Jump to next heading at level 6
Shift + 6	Jump to previous heading at level 6
7	Jump to next heading at level 7
Shift + 7	Jump to previous heading at level 7
8	Jump to next heading at level 8
Shift + 8	Jump to previous heading at level 8
9	Jump to next heading at level 9
Shift + 9	Jump to previous heading at level 9
B	Jump to next button
Shift + B	Jump to previous button
C	Jump to next combo box
Shift + C	Jump to previous combo box
D	Jump to next landmark
Shift + D	Jump to previous landmark
E	Jump to next edit box
Shift + E	Jump to previous edit box
F	Jump to next form field
Shift + F	Jump to previous form field
H	Jump to next heading
Shift + H	Jump to previous heading
I	Jump to next item
Shift + I	Jump to previous item
K	Jump to next link
Shift + K	Jump to previous link
R	Jump to next radio button
Shift + R	Jump to previous radio button
T	Jump to next table
Shift + T	Jump to previous table
X	Jump to next check box
Shift + X	Jump to previous check box

Selecting text in scan mode

Use these commands when you're copying text from content areas like websites or email.

Press these keys	To do this
Shift + Right arrow	Select current character
Shift + Left arrow	Select previous character
Ctrl + Shift + Right arrow	Select current word
Ctrl + Shift + Left arrow	Select previous word
Shift + Down arrow	Select current line
Shift + Up arrow	Select previous line
Ctrl + Shift + Down arrow	Select current paragraph
Ctrl + Shift + Up arrow	Select previous paragraph
Shift + Home	Select to beginning of line
Shift + End	Select to end of line
Ctrl + Shift + Home	Select to beginning of document
Ctrl + Shift + End	Select to end of document
Shift + Page down	Select current page
Shift + Page up	Select previous page
F9	Mark the beginning or end of a block of text
F10	Select all text between a mark and the current point
Ctrl + C	Copy selection
Ctrl + X	Cut selection
Ctrl + V	Paste selection
Ctrl + A	Select all
Narrator + Shift + Down arrow	Read selection
Narrator + Shift + Down arrow twice quickly	Spell selection

Next: [Chapter 4: Reading text](#)

Go back to the [Table of Contents](#)

Chapter 4: Reading text

This chapter explains a few ways you can start reading text with Narrator. You can also get detail on the formatting of the text you're reading.

The first and simplest way to read with Narrator is to use the arrow keys to navigate text if you're interacting with a document in a word processor, such as Microsoft Word.

You can also use scan mode to read text. To turn on scan mode, press **Narrator + Spacebar**. Then use the up and down arrow keys to read by paragraph and the left and right arrow keys to read by character. To learn more about scan mode, go to [Chapter 3: Using scan mode](#).

When you want more control over what text you read, Narrator provides a series of text-reading commands to help navigate and read text. Below are some basics to get you started. To view all reading commands, go to [Appendix B: Narrator keyboard commands and touch gestures](#).

- To stop reading, press **Ctrl**.
- To read the window title, press **Narrator + T**.
- To read a window, press **Narrator + W**.

Tip: When reading a web page or an email, Narrator commands will apply to the content of the page or email and not to the browser or application. To navigate out of the content, just press the Tab key or use an application shortcut.

Read certain amounts of text

Narrator provides ways to read text by page, paragraph, line, sentence, word, and character.

Read text from the current location

- To read the current item, press **Narrator + Tab**.
- To read from where focus or your cursor is, press **Narrator + R**.
- To start reading a document from the beginning, press **Narrator + Ctrl + R** or **Narrator + Down arrow key**.
- To read text from the beginning to where your cursor is, press **Narrator + Shift + J** or **Narrator + Alt + Home**.

Read text line by line

- To read the current line, press **Narrator + I** or **Narrator + Up arrow key**.
- To read the next line, **Narrator + O**.
- To read the previous line, **Narrator + U**.

Read text by sentence

- To read the next sentence, press **Narrator + Ctrl + Period (.)**.

- To read the current sentence, press **Narrator + Ctrl + Comma (,)**.
- To read the previous sentence, press **Narrator + Ctrl + M**.

Read text by word

- To read the current word, press **Narrator + K** or **Narrator + Ctrl + 5** (numeric keypad). When you press **either command** twice in a row, Narrator will spell the word.
- To read the next word, press **Narrator + L** or **Narrator + Ctrl + Right arrow key**.
- To read the previous word, press **Narrator + J** or **Narrator + Ctrl + Left arrow key**.

Read text by character

- To read the current character, press **Narrator + Comma (,)**. When you press the command twice in a row, Narrator will read the character phonetically.
- To read the next character, press **Narrator + Period (.)**.
- To read the previous character, press **Narrator + M**.

Read text by page

- To read the current page, press **Narrator + Ctrl + I**.
- To read the next page, press **Narrator + Ctrl + O**.
- To read the previous page, press **Narrator + Ctrl + U**.

Read text by paragraph

- To read the current paragraph, press **Narrator + Ctrl + K**.
- To read the next paragraph, press **Narrator + Ctrl + L**.
- To read the previous paragraph, press **Narrator + Ctrl + J**.

Get more details about text

Narrator provides different levels of detail about controls and the characteristics of text, known as verbosity. To change the level of verbosity, press **Narrator + V** or **Narrator + Shift + V** until you hear the level of detail that you want.

- **Verbosity level 1: Text only**
This level lets you read quickly without hearing details about text that you don't need to know. For example, Narrator doesn't announce links, doesn't describe text formatting, and lets you work very quickly with an application that you know well. This level provides an ideal experience as you read text-heavy articles, books, and web sites.
- **Verbosity level 2: Some control details**
This level provides more information than level 1 does as you interact with an application. It's best if you're familiar with an application and only need guidance with some controls.

- **Verbosity level 3: All control details**
This is the default level for Narrator. It provides a full reading experience along with all details about an application's controls as you interact with them.
- **Verbosity level 4: Some text details**
This level provides most attributes and information about text. It's best in situations when you're writing text, such as when you create a document.
- **Verbosity level 5: All text details** This level gives you complete details about text, such as heading level, font type, size, formatting, bullet shape, list type, and more. It's especially useful when you proofread or edit a document.

Get details on formatting

Narrator provides details about formatting, such as font name, font size, and text alignment. To hear formatting attributes, press **Narrator + F**. To hear the next group of formatting attributes, press **Narrator + F** again. To hear the previous group of formatting attributes, press **Narrator + Shift + F**.

Formatting information is separated into the following groups:

- **Font information.** Font name, weight, size, italic, underline, underline color, strikethrough, background color, foreground color.
- **Advanced font information.** Hyperlink, style, bullet style, subscript, superscript, capitalization style, outline style, overline color, language.
- **Object color and outline information.** Fill type (none, color, gradient, picture, or pattern), fill color, outline color, outline thickness.
- **Paragraph spacing Information.** Line spacing, before paragraph spacing, after paragraph spacing.
- **Page margin information.** Top margin, bottom margin, leading margin, trailing margin.
- **Alignment information** Horizontal text alignment, text flow direction, indentation first line, indentation leading, indentation trailing.
- **Visual effects information.** Animation style, visual effects (reflection, glow, soft edges, and bevel).
- **Object layout information.** Center point, size, rotation.
- **Annotation information.** Annotations such as spelling and grammar suggestions and comments.

Hear punctuation

Narrator gives you control over how much punctuation you hear when reading text. To change how punctuation is read out, press:

- **Narrator + Alt + Subtract (numeric keypad)**
- **Narrator + Alt + Minus sign (-)**
- **Narrator + Alt + Add (numeric keypad)**
- **Narrator + Alt + Plus sign (+)**

You can select from the following levels of description:

- **Default.** Hear little to no punctuation. Natural pauses will indicate items such as commas and periods.
- **Math.** Hear most mathematical symbols.
- **Some.** Hear most conversational punctuation, such as commas and periods.
- **Most.** Hear additional symbols, such as parentheses.
- **All.** Hear all punctuation, including all special symbols.

Hear capital letters and words

By default, Narrator reads capital letters the same as lowercase ones. This means “Word,” “WORD,” and “word” all sound the same (even though different letters are capitalized in each).

If you’d like to hear when a letter is capitalized, Narrator can say “cap” before it, or read the word or letter in a higher pitch. To change how Narrator handles capitalization, in Narrator settings, go to **Change how capitalized text is read** under the section **Change what you hear when reading and interacting**.

Read text in other languages

When reading text in a different language, Narrator will automatically select the text-to-speech (TTS) voice for that language if it's installed. To learn more about installing additional TTS voices, go to [Appendix A: Supported languages and voices](#).

If the TTS voice for a language isn’t installed, Narrator will state the name of the language and read the text using the default TTS voice.

Next: [Chapter 5: Navigation](#)

Go back to the [Table of Contents](#)

Chapter 5: Navigation

Narrator views

The different views in Narrator include items, characters, words, sentences, lines, paragraphs, headings, links, form fields, tables, landmarks, and suggestions. To change views, you can use the following commands:

- **Narrator + Page up** and **Narrator + Page down**
- **Narrator + Ctrl + Up arrow key** and **Narrator + Ctrl + Down arrow key**

To navigate by the view that you've selected, press **Narrator + Left arrow key** or **Narrator + Right arrow key**.

Tip: Views are especially useful when you're navigating by touch. Learn more about using touch with Narrator in [Chapter 6: Using Narrator with touch](#).

Navigate landmarks

Landmarks group similar elements on your screen so you easily navigate to them. Some webpages and apps, like Microsoft Store in Windows 10, have landmarks. Some Windows features like the Start menu also have landmarks.

To move to the main landmark, press **Narrator + N**. To get a list of landmarks for a page or app, press **Narrator + F5**. For more ways to work with landmarks, go to [Chapter 3: Using scan mode](#).

Navigate suggestions

Suggestions are available when you enter information in a text box in some apps and parts of Windows 10. For example, when you enter text in the search box after pressing the Windows logo key, suggestions are provided as you type.

When a suggestion is available, Narrator indicates it by playing a sound and voice message. A Narrator view is available to navigate suggestions, but generally, you'll also be able to press the **Up** and **Down arrow** keys to move through suggestions, and **Enter** to select one.

Use Narrator Find

Use Narrator Find to find what you need on the web, in applications, and in documents. To open Narrator Find and search for a word or phrase, press **Narrator + Ctrl + F**. Then, to go to the first result (starting from your cursor position), select **Find next** or press **Enter**. Narrator will focus on the result and not on the search dialog. Then press **Narrator + F3** to go to the next result or **Narrator + Shift + F3** to go to the previous result.

Note: Turn on the alternate command key (Fn or F Lock) before you press the function keys (F6 or F7) in the following sections. To find out more about the alternate command keys, read [How do I use the Fn key/F Lock key/Alternate command keys?](#)

Navigate links on a page

If you'd like to explore a list of all the links on a page, press **Narrator + F7**. To navigate the list, press the **Up** or **Down arrow key**, and press **Enter** to go to that link's location on the page. When you already know part of the link you want, you can type some text to filter this list. Then, to follow the link, press **Enter**.

Navigate headings on a page

If you'd like to explore a list of all the headings on a page, press **Narrator + F6**. To navigate the list, press the **Up** or **Down arrow key**, and press **Enter** to go to that heading's location on the page.

Navigate landmarks on a page

If you'd like to explore a list of all the headings on a page, press **Narrator + F5**. To navigate the list, press the **Up** or **Down arrow key**, and press **Enter** to go to that landmark's location on the page.

Use Narrator to navigate the web and read emails

Get the important info, skip the noise

In Outlook, Narrator will read an email's status (unread, forwarded, etc.), who sent it, the subject line, and any other characteristics of the email that are important or unique (for example, Narrator *will* read if an email is flagged, but it won't read if an email is unflagged).

Narrator won't read any unnecessary table info, like if there are 5 empty columns, and column headers won't be read by default. Turn column header reading in Outlook on or off by pressing **Narrator + H**.

Web reading improvements

No more unhelpful hyperlinks

Narrator will give you the title of the webpage for a link. Press **Narrator + Ctrl + D**, and Narrator will take the URL of the hyperlink you are on and send it to an online service that will provide the page title to Narrator. If you would like to disable all online services used by Narrator, you can turn this off in Narrator settings .

Get a quick summary of a webpage

Hear a webpage summary that includes the number of links, landmarks, and headings by pressing **Narrator + S**.

Popular links and full webpage summary

Press **Narrator + S twice quickly** to pull up a dialog box on the screen with the following info: the number of links, landmarks, and headings on a page, and a list of popular links for a page (popular links are the links on the page that get the most clicks). If a page has popular links, you can press the Tab key to navigate through them, and press **Enter** to go to the linked webpage.

Webpages and emails are read automatically

Narrator automatically starts reading emails and webpages starting from the top.

Note: Refer to [Chapter 3: Using scan mode](#) for more information about how Narrator works with email messages in Windows Mail and Outlook.

Next: [Chapter 6: Using Narrator with touch](#)

Go back to the [Table of Contents](#)

Chapter 6: Using Narrator with touch

This chapter provides details about how to use Narrator with touch on supported desktop Windows PCs, and describes some basic Windows touch gestures.

Starting and stopping Narrator

To start Narrator on a Windows device that doesn't have a keyboard, press the Start button and the Volume Up button together on your device. Press these buttons again to stop Narrator.

Touch gestures

You can use gestures to interact with Narrator and your device.

To explore and hear items on a screen, drag one finger around the screen. When you hear an item that you want to use, double-tap the screen with one finger to activate it. To move through items on the screen, flick left and right with one finger.

If you want to move by characters, words, lines, or links, flick up or down to change the Narrator view. For example, to hear an item spelled out, flick up until you hear Narrator say "characters." Then flick left and right to move through that item a letter at a time.

The following are important gestures to help you get started:

- To change Narrator views, flick up and down with one finger.
- To scroll, flick up, down, left or right with two fingers.
- To show context menus, double-tap with two fingers.
- To change verbosity, tap once with three fingers.
- To read continuously from the current position, swipe down with three fingers.
- To tab forward or backward, flick left or right with three fingers.
- To show the Narrator command list, triple tap with four fingers.
- To open Action Center, swipe in from the right side of the screen.
- To open Task View to switch between apps and multiple desktops, swipe in from the left side of the screen.

For a complete list of touch gestures, refer to [Appendix B: Narrator keyboard commands and touch gestures](#).

Typing by touch

When in an editing area, such as a text box, a touch keyboard will appear in the lower part of the screen and Narrator will play a sound to indicate that a keyboard has appeared. To enter text, double-tap the characters you want to enter.

To enter text more quickly, select the **Start** button, then select **Settings**, select **Ease of Access**, and then select **Narrator**. Then, select the check box next to **On touch keyboards, activate keys when I lift my finger** to enter characters as soon as you lift your finger off the character.

Next: [Chapter 7: Customizing Narrator](#)

Go back to the [Table of Contents](#)

Chapter 7: Customizing Narrator

This chapter outlines how to customize Narrator so it works best for you, including changing how Narrator starts, how much feedback you hear when typing, whether the audio from other apps is decreased when Narrator is running, and changing Narrator commands to keyboard shortcuts of your choice. This chapter also provides details about how to use third-party text-to-speech (TTS) software to add more voices to Narrator.

You can find most of these options in your Narrator settings by pressing **Windows logo key + Ctrl + N**.

General settings (Use Narrator)

This section contains info on the toggle switch to turn Narrator on or off and links to open Narrator Home and this guide.

Start-up options

- **Allow the shortcut key to start Narrator.** Start and stop Narrator using the **Windows logo key + Ctrl + Enter** on a keyboard, or the **Windows button + Volume up** button on a touch device.
- **Start Narrator after sign-in for me.** Narrator will start automatically when you sign in to your PC.
- **Start Narrator before sign-in for everyone.** Narrator will run on your PC before anyone signs in.
- **Show Narrator Home when Narrator starts. You can also turn this on or off in Narrator Home.**
- **Minimize Narrator Home to the system tray.** When this is enabled, Narrator will minimize to the system tray instead of the taskbar.

Personalize Narrator's voice

- **Choose a voice.** Choose from different available Narrator voices in your language. Narrator voices average a maximum of approximately 400 words per minute. However, the English voices Microsoft David, Microsoft Zira, and Microsoft Mark offer a rate of approximately 800 words per minute.
- **Learn how to add more voices.** Narrator can be used with SAPI 5-based speech synthesizers. Once installed, voices will appear in the list of voices for you to choose. Third-party providers include Harpo Software, CereProc, NextUp, Eloquence, and Vocalizer Expressive. Learn more about adding voices in [Appendix A: Supported languages and voices](#).

Note: The options above are provided for informational purposes only. Microsoft does not endorse any particular third-party software, nor can it offer any support for their installation and use. For help with any of these products, please contact the original manufacturer.

- **Speed.** Control the speed at which Narrator speaks.
- **Pitch.** Adjust the pitch of Narrator’s voice.
- **Volume.** Adjust the volume at which Narrator speaks.
- **Lower the volume of other apps.** The audio volume from other apps is lowered so you can hear Narrator better.
- **Select where you hear Narrator’s voice.** Narrator lets you choose your default audio output device.

Change what you hear when reading and interacting

- **Change the level of detail Narrator provides about text.** Options include: Text only, Headers and errors, Basic formatting, Other annotations, Extended formatting, Layout and animation info.
- **Change how capitalized text is read.** Options include: Don’t announce, Increase pitch, and Say “cap.”
- **Have Narrator’s voice emphasize formatted text.** Narrator’s voice will put more emphasis on formatted text.
- **Hear phonetics as you read by character.** For example, Narrator will read the letter A as “alpha.”
- **Have Narrator use punctuation to determine pauses when reading.**
- **Hear advanced detail, like help text, on buttons and other controls.**
- **Change the level of context Narrator provides for buttons and other controls.** Options include: No context, Sounds only, Immediate context, Immediate context name and type, Full context of new control, and Full context of old and new controls.
- **Adjust when Narrator provides details about buttons and other controls.** Options include After controls or Before controls.
 - To hear the current context at any time, press **Narrator + Forward slash (/)**.
 - To change the level of context that’s read, press **Narrator + Alt + Forward slash (/)**.
 - To change whether context is read before or after the current item, press **Narrator + Ctrl + Forward slash (/)**.
- **Hear hints on how to interact with buttons and other controls.**
- **Hear Narrator announce why an action can’t be performed.**
- **Hear only sounds for common actions.** Common actions include actions like turning on and off scan mode and landing on a link.
- **Have Narrator be more efficient in Outlook (experimental).** When this is selected, Outlook will allow you to triage your email in a more natural way.

Change what you hear when typing

- **Hear letters, numbers, and punctuation as you type.** Characters are announced immediately after you type them. This setting can also be toggled on or off by pressing **Narrator + 2**.
- **Hear words as you type.** Typed words are announced immediately after you type them.
- **Hear function keys as you type**
- **Hear arrow, Tab, and other navigation keys as you type**

- **Hear when toggle keys, like Caps lock and Num lock, are turned on or off**
- **Hear Shift, Alt, and other modifier keys as you type**

Choose keyboard settings

- **Select keyboard layout.** Narrator's Standard layout is more like the keyboard layouts you may have experienced in other screen readers. If you want to use Narrator's original keyboard layout, choose the Legacy keyboard. Learn the commands for each keyboard in [Appendix B: Narrator keyboard layouts and touch gestures](#).
- **Select Narrator key.** You can choose if you want to use Caps lock, Insert, or both keys in Narrator commands. Both the Caps lock and Insert keys serve as your Narrator key by default. You can use either of these keys in any command that uses the Narrator key.

Note: If you're using a Japanese 106 keyboard, Insert and NonConvert are your default Narrator keys.

- **Lock the Narrator key so I don't have to press it for each command.** When you press one of the keys, it will remain in a "pressed" state until you press it again to turn it off. You can also lock the Narrator key by pressing **Narrator + Z**. This functionality can be disorientating if you aren't used to it, so use caution if you choose to use it.
- **On touch keyboards, activate keys when I lift my finger .** Characters are entered as soon as you lift your finger off the touch keyboard.
- **Create your own keyboard commands**
 1. Choose the command to customize.
 2. Select **Change command keyboard shortcut**.
 3. In the **Type a keyboard shortcut** window, type the keyboard shortcut you want to use on your keyboard. Use any combination of modifier keys (Control, Shift, Alt, Caps lock, or the Windows logo key) together with a non-modifier key. Use function and numeric keypad keys without any modifiers.
 4. Select **Restore all default** to return all commands back to their default settings. To find this setting, press **Alt + Tab** after Narrator launches, select the Narrator Settings window, and choose **Commands**.

Use Narrator cursor

- **Show the Narrator cursor.** The Narrator cursor is highlighted with a blue focus box.
- **Move my cursor with the Narrator cursor as Narrator reads text.** When this is turned on, Narrator will move the text insertion point when navigating by views such as characters and words.
- **Sync the Narrator cursor and system focus.** When this is turned on, the Narrator cursor and the system cursor will be synchronized when possible.
- **Read and interact with the screen using the mouse.** When this is turned on, Narrator reads what is under the mouse cursor. Use the numeric keypad to move the mouse.
- **Select the Narrator cursor navigation mode.** Two modes are available: normal and advanced. Normal mode is recommended and allows Narrator to move between various

items such as links, tables, and other elements. Advanced mode lets you use the four arrow keys to move the Narrator cursor through a programmatic representation of an application.

Use braille

To use a braille display with Narrator, select the **Download and install braille** button. For more information, go to [Chapter 8: Using Narrator with Braille](#), and for a full list of supported displays, go to [Appendix C: Supported braille displays](#).

Manage your data and services

- **Sync my settings.** Select the **Use current settings before sign-in** button if you want anyone who uses your PC to use your Narrator settings. This is recommended if you use a serial braille display.
- **Get image descriptions, page titles, and popular links.** For more information about this service, go to “Let Narrator grab info from the web” in [Chapter 2](#).

Help make Narrator better

Turn on the toggle to send diagnostic and performance data as you use Narrator. To give feedback on Narrator, press **Narrator + Alt + F**.

Next: [Chapter 8: Using Narrator with braille](#)

Go back to the [Table of Contents](#)

Chapter 8: Using Narrator with braille

This chapter provides information about how to use a braille display with Narrator. It includes info about how to install braille on your PC, navigate your PC, and read text.

Narrator supports braille displays from several manufacturers. To learn more about which braille displays are supported, including specific key commands for each display, refer to [Appendix C: Supported braille displays](#).

Install braille

Narrator works with braille displays that use a USB or serial port. To use your braille display with Narrator, download and install braille:

1. Press the **Windows logo key + Ctrl + N** to open Narrator settings.
2. Under **Use braille**, select **Download and install braille**. (This will take some time. Windows will also ask if you're sure that you want to allow Windows to make changes to your PC.)
3. When download and installation is complete, select **Turn on braille**.
4. Next, add your braille display. Select **Add a braille display** and then choose your braille display manufacturer and connection type (USB or serial port).

Using your braille display with other screen readers

If you already use your braille display with another screen reader, or Narrator doesn't work immediately with your braille display, you may need to change the driver Windows uses to communicate with your display. To do this, go to Narrator settings and select an option under **Change your braille display driver**. The driver used by Narrator is preceded by "(Narrator)."

Note: You only need to change your driver if a different driver is installed for your braille display. If you're not sure, contact your braille display manufacturer.

Uninstalling braille

To remove Narrator braille from your PC:

1. Press **Windows logo key + I** to open Settings.
2. Select **Apps**, choose **Apps & features**, and then select **Optional features**.
3. Select **Accessibility – Braille support**, and then choose **Uninstall**.

Change braille settings

Manage your braille preferences in Narrator settings. Under **Use braille** choose from the following options:

- Language for input and output
- Table type for input and output (grade 1, grade 2, or 8 dot computer braille)
- Notification timeout
- How the cursor is displayed and if you want the cursor to blink on your braille display

If you want to use a serial braille display before you sign-in to your PC, select **Use current settings before sign-in** after choosing your preferred settings.

Core Narrator commands

Most braille displays can perform 12 Narrator commands to navigate and interact with apps. And supported displays with a braille keyboard can use it for entering text, or performing familiar single-letter scan mode commands. These 12 core commands are listed in the table below.

Note: To quickly dismiss a flash message or notification using a braille display, pan the length of the message. And if you'd like to change the amount of time a notification or flash message is displayed, you can do that in Settings.

Narrator command	Keyboard equivalent	Description
Primary action	Narrator + Enter	Often described as “click.”
Secondary action	Shift + Enter in scan mode	Often “select” or “expand” depending on the control.
Display context menu	Shift+F10	Shows a menu of additional actions.
Pan braille right	N/A	Displays the next set of characters from the current line. At end, performs Braille next.
Pan braille left	N/A	Displays the previous set of characters from the current line. At beginning, performs Braille previous.
Braille Next*	Narrator + Right	Displays the next item in the current navigation mode.
Braille Previous*	Narrator + Left	Displays the previous item in the current navigation mode.
Braille home*	Home in scan mode	Go to beginning of line.
Braille end*	End in scan mode	Go to end of line.
Braille first*	Ctrl + Home in scan mode	Go to first line.
Braille last*	Ctrl + End in scan mode	Go to last line.
Select navigation mode	Narrator + Page Up/Page Down	Perform this command, then use braille next/previous to choose a new navigation mode and perform primary action to select the new mode.

Note that braille next, previous, home, end, first, and last all change with the current navigation mode. For example, with a navigation mode of paragraph:

- Next/previous will navigate to the next/previous paragraph
- Home/end will navigate to the beginning/end of the current paragraph
- First/last will navigate to the first/last paragraph.

You can find the mapping for a specific braille display in [Appendix C: Supported braille displays](#).

Braille keyboard commands

If your braille display has a braille keyboard, you can use it to enter text or do the following commands. The command to toggle the keyboard is **Space + Dots 1-3**.

Use the following commands for keyboard input.

Braille dots	Narrator command
1-2-3-4 or 1-2-3-4-7	Go to the next or previous paragraph
1-2-5 or 1-2-5-7	Go to the next or previous heading
2-3-4-5 or 2-3-4-5-7	Go to the next or previous table
1-3 or 1-3-7	Go to the next or previous link
2-4 or 2-4-7	Go to the next or previous item
1-4-5 or 1-4-5-7	Go to the next or previous landmark
1-2-4 or 1-2-4-7	Go to the next or previous form field
1-2 or 1-2-7	Go to the next or previous button
1-4 or 1-4-7	Go to the next or previous combo box
1-5 or 1-5-7	Go to the next or previous edit field
1-2-3-5 or 1-2-3-5-7	Go to the next or previous radio button
1-3-4-6 or 1-3-4-6-7	Go to the next or previous check box
1-6 or 1-6-7	Go to the next or previous heading level 1
1-2-6 or 1-2-6-7	Go to the next or previous heading level 2
1-4-6 or 1-4-6-7	Go to the next or previous heading level 3
1-4-5-6 or 1-4-5-6-7	Go to the next or previous heading level 4
1-5-6 or 1-5-6-7	Go to the next or previous heading level 5
1-2-4-6 or 1-2-4-6-7	Go to the next or previous heading level 6
1-2-4-5-6 or 1-2-4-5-6-7	Go to the next or previous heading level 7
1-2-5-6 or 1-2-5-6-7	Go to the next or previous heading level 8
2-4-6 or 2-4-6-7	Go to the next or previous heading level 9
Space + 1-2-3	Turn on input learning, press twice to turn off
2-3-4 or 2-3-4-7	Read by sentence

Use the following commands for keyboard input.

Braille dots	Keyboard input
Space + 4-5	Tab key
Space + 1-2	Shift + Tab key
Space + 2-3-4-5	Alt + Tab key

Space + 2-4-5-6	Windows logo key
Space + 1-2-3-5	Windows logo key + Tab key
Space + Routing Key 1 through 12	F1 through F12 keys
7	Backspace key
8	Enter key
Space + 2-6	Escape key
Space + 3	Cursor left key
Space + 6	Cursor right key
Space + 1	Cursor up key
Space + 4	Cursor down key
Space + 2-3	Page up key
Space + 5-6	Page down key
Space + 2	Home key
Space + 5	End key
Space + 3-5	Insert key
Space + 2-5-6	Delete key

The following commands allow you to enter and hold a modifier key followed by another letter or key.

Braille dots	Keyboard input
Space + 1-8	Hold Windows logo key
Space + 2-8	Hold Alt key
Space + 3-8	Hold Ctrl key
Space + 4-8	Hold Shift key
Space + 5-8	Hold AltGr key
Space + 6-8	Hold Narrator key
Space + 7-8	Release all modifier keys

Using touch cursors on your braille display

If your braille display has touch cursors you can use them to do certain actions.

Working with interactive elements

When the displayed content is an interactive element, tap any touch cursor above that content to do its primary action. Tap two adjacent touch cursors above the content to do its secondary action if one is available.

When the displayed content isn't text, tap two nonadjacent touch cursors above the content to display a context menu if one is available.

Editing text

Use the following touch cursor commands when editing text:

- To move the text insertion point to a specific character, tap the touch cursor above the corresponding cell. You can also tap the touch cursor above a cell representing a character or its preceding modifier (such as a capital or a number). Caret representation will be on the cell after the modifier.
- To move the text insertion point to the last character on the display, tap the touch cursor above a blank cell at the end of the display.
- To do a secondary action, tap on two adjacent touch cursors on a corresponding character.
- To show a context menu, tap two nonadjacent touch cursors above the character closest to the center of the two nonadjacent touch cursors.

Note: Some displays don't support simultaneous pressing of two touch cursors. Therefore, there are additional commands for each display. To learn more about specific key commands for each display, refer to [Appendix C: Supported braille displays](#).

Next: [Appendix A: Supported languages and voices](#)

Go back to the [Table of Contents](#)

Appendix A: Supported languages and voices

The following table explains what languages and text-to-speech (TTS) voices are available in the latest version of Windows.

Language, country, or region	Male TTS voice	Female TTS voice
Arabic	Not applicable	Hoda
Arabic (Saudi Arabia)	Naayf	Not applicable
Bulgarian	Ivan	Not applicable
Catalan	Not applicable	Herena
Chinese (Simplified)	Kangkang	Huihui, Yaoyao
Cantonese (Traditional, Hong Kong SAR)	Danny	Tracy
Chinese (Traditional, Taiwan)	Zhiwei	Yating, Hanhan
Croatian	Matej	Not applicable
Czech (Czech Republic)	Jakub	Not applicable
Danish	Not applicable	Helle
Dutch	Frank	Not applicable
English (Australia)	James	Catherine
English (Canada)	Richard	Linda
English (Great Britain)	George	Hazel, Susan
English (India)	Ravi	Heera
English (Ireland)	Sean	Not applicable
English (United States)	David, Mark	Zira
Finnish	Not applicable	Heidi
Flemish (Belgian Dutch)	Bart	Not applicable
French (Canada)	Claude	Caroline
French (France)	Paul	Hortence, Julie
French (Switzerland)	Guillaume	Not applicable
German (Austria)	Michael	Not applicable
German (Germany)	Stefan	Hedda, Katja
German (Switzerland)	Karsten	Not applicable
Greek	Stefanos	Not applicable
Hebrew	Asaf	Not applicable
Hindi (India)	Hemant	Kalpana
Hungarian (Hungary)	Szabolcs	Not applicable
Indonesian (Indonesia)	Andika	Not applicable
Italian	Cosimo	Elsa
Japanese	Ichiro	Ayumi, Haruka
Malay	Rizwan	Not applicable
Norwegian	Jon	Not applicable
Polish (Poland)	Adam	Paulina
Portuguese (Brazil)	Daniel	Maria
Portuguese (Portugal)	Not applicable	Helia
Romanian (Romania)	Andrei	Not applicable

Russian (Russia)	Pavel	Irina
Slovak (Slovakia)	Filip	Not applicable
Slovenian	Lado	Not applicable
Korean	Not applicable	Heami
Spanish (Spain)	Pablo	Helena, Laura
Spanish (Mexico)	Raul	Sabina
Swedish	Bengt	Not applicable
Tamil	Valluvar	Not applicable
Thai (Thailand)	Pattara	Not applicable
Turkish	Tolga	Not applicable
Vietnamese	An	Not applicable

Add a TTS voice to your PC

To use one of these voices, add it to your PC:

1. Open Narrator Settings by pressing the **Windows logo key** + **Ctrl + N**.
2. Under **Personalize Narrator's voice**, select **Add more voices**. This will take you to the Speech settings page.
3. Under **Manage voices**, select **Add voices**.
4. Select the language you would like to install voices for and select **Add**. The new voices will download and be ready for use in a few minutes, depending on your internet download speed.
5. Once the voices for the new languages are downloaded, go to Narrator settings, and select your preferred voice under **Personalize Narrator's voice** > **Choose a voice**.

Next: [Appendix B: Narrator keyboard commands and touch gestures](#)

Go back to the [Table of Contents](#)

Appendix B: Narrator keyboard commands and touch gestures

This appendix lists the [keyboard commands](#) and [touch gestures](#) available in the latest version of Windows.

To view a list of all other keyboard shortcuts in Windows, see [Keyboard shortcuts in Windows](#). To view a list of keyboard shortcuts in Windows apps, see [Keyboard shortcuts in apps](#).

Narrator key

You can choose what modifier key you want to use in Narrator commands. Both the Caps lock and Insert keys serve as your Narrator key by default. You can use either of these keys in any command that uses the Narrator key. The Narrator key is referred to as simply “Narrator” in commands. You can change your Narrator key in Narrator settings.

Note: If you’re using a Japanese 106 keyboard, Insert and NonConvert are your default Narrator keys.

Narrator keyboard commands

Narrator has two possible keyboard layouts: [Standard](#) and [Legacy](#). Commands for each are listed below. For the scan mode commands, go to [Chapter 3: Using scan mode](#).

Note: The commands that include plus (+) and minus (-) refer to the physical key and don’t require Shift as a modifier. Unless explicitly called out, it isn’t necessary to include Shift before the equal key to make it the plus sign as you would when typing the plus sign. Using the Narrator volume command above as an example, Narrator + Ctrl + equal (=) is the literal command, not Narrator + Ctrl + Shift + equal (=).

Standard keyboard layout

General commands

Press these keys	To do this
Windows logo key + Ctrl + Enter	Start or stop Narrator
Narrator + Esc	Exit Narrator
Narrator + 1	Toggle input learning
Narrator + Right arrow	Move to next item
Narrator + Left arrow	Move to previous item
Narrator + Page up Ctrl + Narrator + Up arrow Narrator + Page down Ctrl + Narrator + Down arrow	Change view

Narrator + F1	Show commands list
Narrator + F2	Show commands for current item
Narrator + Enter	Do primary action
Narrator + Ctrl + Enter	Toggle search mode
Narrator + F12	Read current time and date
Narrator + Ctrl + D	Describe image using an online service or get the webpage source of a link
Narrator + S	Get a webpage summary
Narrator + S twice quickly	Get webpage summary and popular links dialog box
Narrator + Alt + F	Provide Narrator feedback
Narrator + Z	Lock Narrator key
Narrator + Ctrl + F12	Toggle developer mode
Narrator + 3	Pass keys to application
Narrator + Alt + M	Toggle mouse mode
Narrator + H	Turn on or off Outlook column header reading

Adjust speech

Press these keys	To do this
Ctrl + Narrator + Plus sign (+) Ctrl + Narrator + Add (numeric keypad)	Increase voice volume
Ctrl + Narrator + Minus sign (-) Ctrl + Narrator + Subtract (numeric keypad)	Decrease voice volume
Narrator + Plus sign (+)	Increase voice speed
Narrator + Minus sign (-)	Decrease voice speed
Alt + Narrator + Subtract (numeric keypad) Alt + Narrator + Minus sign (-) Alt + Narrator + Add (numeric keypad) Alt + Narrator + Plus sign (+)	Change punctuation reading mode
Narrator + V	Increase verbosity mode
Shift + Narrator + V	Decrease verbosity mode
Narrator + 2	Toggle character reading
Narrator + Forward slash (/)	Read context
Alt + Narrator + Forward slash (/)	Set read context verbosity
Ctrl + Narrator + Forward slash (/)	Change read context order

Read and work with text

Press these keys	To do this
Ctrl	Stop reading
Narrator + Tab Narrator + 5 (numeric keypad)	Read item

Narrator + Tab twice quickly Narrator + 5 twice quickly (numeric keypad) Narrator + K twice quickly Narrator + Ctrl + 5 twice quickly (numeric keypad)	Read item spelled out
Narrator + O	Read item advanced
Narrator + T	Read window title
Narrator + W	Read window
Narrator + X	Repeat phrase
Narrator + R	Read from cursor
Ctrl + Narrator + R Narrator + Down arrow	Start reading document
Narrator + C	Read document
Shift + Narrator + J Narrator + Alt + Home	Read text from start to cursor
Ctrl + Narrator + U	Read previous page
Ctrl + Narrator + I	Read current page
Ctrl + Narrator + O	Read next page
Ctrl + Narrator + J	Read previous paragraph
Ctrl + Narrator + K	Read current paragraph
Ctrl + Narrator + L	Read next paragraph
Narrator + Ctrl + M	Read previous sentence
Narrator + Ctrl + comma (,)	Read current sentence
Narrator + Ctrl + period (.)	Read next sentence
Narrator + U	Read previous line
Narrator + I Narrator + Up arrow	Read current line
Narrator + O	Read next line
Narrator + J Ctrl + Narrator + Left arrow	Read previous word
Narrator + K Ctrl + Narrator + 5 (numeric keypad)	Read current word
Narrator + L Ctrl + Narrator + Right arrow	Read next word
Narrator + M	Read previous character
Narrator + Comma (,) 5 (numeric keypad)	Read current character
Narrator + Period (.)	Read next character
Narrator + F	Read next group of formatting information
Shift + Narrator + F	Read previous group of formatting information
Narrator + B Ctrl + Narrator + Home	Move to beginning of text
Narrator + E Ctrl + Narrator + End	Move to end of text
Narrator + Shift + Down arrow	Read selection
Narrator + Shift + Down arrow twice quickly	Spell selection

Navigate tables

Press these keys	To do this
Ctrl + Alt + Home	Jump to first cell in table
Ctrl + Alt + End	Jump to last cell in table
Ctrl + Alt + Right arrow	Jump to next cell in row
Ctrl + Alt + Left arrow	Jump to previous cell in row
Ctrl + Alt + Down arrow	Jump to next cell in column
Ctrl + Alt + Up arrow	Jump to previous cell in column
Ctrl + Shift + Alt + Left arrow	Read current row header
Ctrl + Shift + Alt + Up arrow	Read current column header
Ctrl + Shift + Alt + Right arrow	Read current row
Ctrl + Shift + Alt + Down arrow	Read current column
Ctrl + Shift + Alt + Forward slash (/) Ctrl + Shift + Alt + 5 (numeric keypad)	Read which row and column Narrator is in
Ctrl + Alt + Page up	Jump to table cell
Ctrl + Alt + Page down	Jump to cell contents

Narrator focus commands

Press these keys	To do this
Narrator + Home	Move to first item in window
Narrator + End	Move to last item in window
Narrator + Backspace	Go back one item
Narrator + N	Move to main landmark
Narrator + Open square bracket ([) Narrator + Subtract (numeric keypad)	Move Narrator cursor to system cursor
Narrator + Single quote (') Narrator + Add (numeric keypad)	Set focus to item
Narrator + A	Jump to linked item
Shift + Narrator + A	Jump to annotated content
Alt + Narrator + Up arrow	Navigate to parent (when structural navigation is provided)
Alt + Narrator + Right arrow	Navigate to next sibling (when structural navigation is provided)
Alt + Narrator + Left arrow	Navigate to previous sibling (when structural navigation is provided)
Alt + Narrator + Down arrow	Navigate to first child (when structural navigation is provided)
Narrator + F7	List of links
Narrator + F5	List of landmarks
Narrator + F6	List of headings
Narrator + Ctrl + F	Narrator Find
Narrator + F3	Continue Find forward

Narrator + Shift + F3	Continue Find backward
-----------------------	------------------------

Numeric keypad commands

Press these keys	To do this
Narrator + Home	Move to first item in window
Narrator + End	Move to last item in window
Narrator + Alt + Home	Read text from start to cursor
Ctrl + Narrator + Home	Move to beginning of text
Ctrl + Narrator + End	Move to end of text
Narrator + Left arrow	Move to previous item
Narrator + Right arrow	Move to next item
Narrator + 5 (numeric keypad)	Read item
Narrator + 5 twice quickly (numeric keypad)	Read item spelled out
Narrator + Ctrl + 5 twice quickly (numeric keypad)	
Narrator + Up arrow	Read current line
Narrator + Down arrow	Start reading document
Ctrl + Narrator + Left arrow	Read previous word
Ctrl + Narrator + 5 (numeric keypad)	Read current word
Ctrl + Narrator + Right arrow	Read next word
5 (numeric keypad)	Read current character
Narrator + Page up	Change view
Ctrl + Narrator + Up arrow	
Narrator + Subtract (numeric keypad)	Move Narrator cursor to system cursor
Narrator + Add (numeric keypad)	Set focus to item
Ctrl + Narrator + Add (numeric keypad)	Increase voice volume
Ctrl + Narrator + Subtract (numeric keypad)	Decrease voice volume
Alt + Narrator + Add	Change punctuation reading mode
Alt + Narrator + Subtract	
Narrator + Enter	Do primary action
Narrator + Shift + Enter	Toggle search mode

Legacy keyboard layout

General commands

Press these keys	To do this
Windows logo key + Ctrl + N	Open Narrator settings
Windows logo key + Ctrl + Enter	Start or stop Narrator
Narrator + Esc	Stop Narrator
Narrator + 1	Toggle input learning
Narrator + Right arrow	Move to next item

Narrator + Left arrow	Move to previous item
Narrator + Up or Down arrow	Change view
Narrator + F1	Show commands list
Narrator + F2	Show commands for current item
Narrator + Enter	Do primary action
Narrator + Shift + Enter	Toggle search mode
Narrator + C	Read current time and date
Narrator + Shift + D	Describe image using an online service
Narrator + E Narrator + Alt + F	Provide Narrator feedback
Narrator + Z	Lock Narrator key
Narrator + Shift + F12	Toggle developer mode
Narrator + X	Pass keys to application
Narrator + Num lock	Turn mouse mode on or off
Press Caps lock twice in quick succession	Turn Caps lock on or off

Adjust speech

Press these keys	To do this
Narrator + Page Up	Increase voice volume
Narrator + Page Down	Decrease voice volume
Narrator + Plus sign (+) Narrator + Add (numeric keypad)	Increase voice speed
Narrator + Minus sign (-) Narrator + Subtract (numeric keypad)	Decrease voice speed
Narrator + Alt + Plus sign (+) Narrator + Alt + Minus sign (-) Narrator + Alt + Add (numeric keypad) Narrator + Alt + Subtract (numeric keypad)	Change punctuation reading mode
Narrator + A Narrator + Ctrl + Plus sign (+) Narrator + Ctrl + Add (numeric keypad)	Increase verbosity mode
Narrator + Ctrl + Minus sign (-) Narrator + Ctrl + Subtract (numeric keypad)	Decrease verbosity mode
Narrator + F12	Toggle character reading
Narrator + Forward slash (/)	Read context
Alt + Narrator + Forward slash (/)	Change how much context is read (verbosity)
Ctrl + Narrator + Forward slash (/)	Change read context order

Read and work with text

Press these keys	To do this
------------------	------------

Ctrl	Stop reading
Narrator + D	Read item
Narrator + S	Read item spelled out
Narrator + 0 (zero)	Read item advanced
Narrator + T	Read window title
Narrator + W	Read window
Narrator + V	Repeat phrase
Narrator + R	Read from cursor
Narrator + M	Start reading document
Narrator + H	Read document
Narrator + Close square bracket (])	Read text from start to cursor
Narrator + Shift + U	Read previous page
Narrator + Ctrl + U	Read current page
Narrator + U	Read next page
Narrator + Shift + I	Read previous paragraph
Narrator + Ctrl + I	Read current paragraph
Narrator + I	Read next paragraph
Narrator + Ctrl + M	Read previous sentence
Narrator + Ctrl + comma (,)	Read current sentence
Narrator + Ctrl + period (.)	Read next sentence
Narrator + Shift + O	Read previous line
Narrator + Ctrl + O	Read current line
Narrator + O	Read next line
Narrator + Shift + P	Read previous word
Narrator + Ctrl + P	Read current word
Narrator + P	Read next word
Narrator + Shift + Open square bracket ([)	Read previous character
Narrator + Ctrl + Open square bracket ([)	Read current character
Narrator + Open square bracket ([)	Read next character
Narrator + F	Read next group of formatting information
Shift + Narrator + F	Read previous group of formatting information
Narrator + Y	Move to beginning of text
Narrator + B	Move to end of text
Narrator + J	Jump to next heading
Narrator + Shift + J	Jump to previous heading
Narrator + L	Jump to next link
Narrator + Shift + L	Jump to previous link
Narrator + Shift + Down Arrow	Read current selection

Navigate tables

Press these keys	To do this
Narrator + F3	Jump to next cell in row
Narrator + Shift + F3	Jump to previous cell in row

Narrator + F4	Jump to next cell in column
Narrator + Shift + F4	Jump to previous cell in column
Narrator + F10	Read current row header
Narrator + F9	Read current column header
Narrator + F8	Read current row
Narrator + F7	Read current column
Narrator + F5	Read which row and column Narrator is in
Narrator + F6	Jump to table cell
Narrator + Shift + F6	Jump to cell contents
Narrator + K	Jump to next table
Narrator + Shift + K	Jump to previous table

Narrator focus commands

Press these keys	To do this
Narrator + Home	Move to first item in window
Narrator + End	Move to last item in window
Narrator + Backspace	Go back one item
Narrator + N	Move to main landmark
Narrator + G	Move Narrator cursor to system cursor
Narrator + tilde (~)	Set focus to item
Narrator + Insert	Jump to linked item
Narrator + Shift + Insert	Jump to annotated content
Ctrl + Narrator + Up arrow	Navigate to parent (when structural navigation is provided)
Ctrl + Narrator + Right arrow	Navigate to next sibling (when structural navigation is provided)
Ctrl + Narrator + Left arrow	Navigate to previous sibling (when structural navigation is provided)
Ctrl + Narrator + Down arrow	Navigate to first child (when structural navigation is provided)
Narrator + Q	Move to last item in containing area

Narrator touch gestures

Use this gesture	To do this
Touch or drag a single finger	Read what's under your finger
Double-tap or hold with one finger and then tap anywhere on the screen with a second finger	Activate primary action
Triple-tap or hold with one finger and then double-tap anywhere on the screen with a second finger	Activate secondary action
Hold with one finger and then tap anywhere on the screen with two fingers	Start dragging or extra key options
Flick left or right with one finger	Move to next or previous item
Flick up or down with one finger	Change view
Tap once with two fingers	Stop Narrator from reading
Tap once with three fingers	Change verbosity mode

Tap once with four fingers	Show Narrator commands for the current item
Double-tap with two fingers	Show context menu
Double-tap with three fingers	Read text attributes
Double-tap with four fingers	Open search mode
Tap three times with four fingers	Show all Narrator commands
Swipe left, right, up, or down with two fingers	Scroll
Swipe left or right with three fingers	Tab forward or backward
Swipe up with three fingers	Read current window
Swipe down with three fingers	Start reading on explorable text
Swipe up or down with four fingers	Turn semantic zoom on or off where supported
Swipe left or right with four fingers	Move Narrator cursor to beginning or end of unit

Next: [Appendix C: Supported braille displays](#)

Go back to the [Table of Contents](#)

Appendix C: Supported braille displays

Narrator supports the following braille displays. To learn more about braille support in Narrator, refer to [Chapter 8: Using Narrator with braille](#).

Choose a link in the table below to check the supported commands for supported displays.

Manufacturer	Supported displays
Albatross	<ul style="list-style-type: none">• All models
Alva	<ul style="list-style-type: none">• ABT [3nn] and Delphi [4nn] (large)• ABT [3nn] and Delphi [4nn] (small)• BC640, BC624• Optelec Easylink 12 Touch• Satellite [5nn] (large)• Satellite [5nn] (small)• Voyager Protocol Converter
B2G	<ul style="list-style-type: none">• All models
Baum	<ul style="list-style-type: none">• All models (default)• All models (with Vario keys)• VarioConnect / HWG BrailleConnect• Conny• DM 80 Plus• Inka• Orbit Reader• Vario Pro• Pronto!• PocketVario• APH Refreshabraille• SuperVario / HWG Brailliant• VarioUltra• Vario 40• Vario 80
BrailleLite	<ul style="list-style-type: none">• BrailleLite 18• BrailleLite 40, M20, and M40
BrailleMemo	<ul style="list-style-type: none">• BrailleMemo Pocket• BrailleMemo Smart
BrailleNote	<ul style="list-style-type: none">• All models

Cebra	<ul style="list-style-type: none"> • All models
CombiBraille	<ul style="list-style-type: none"> • All models
EcoBraille	<ul style="list-style-type: none"> • All models
EuroBraille	<ul style="list-style-type: none"> • AzerBraille, Clio, NoteBraille, PupiBraille, Scriba • Esys 80 • Esys 40, 64 • Esys 12, 24 • Esytime • Iris
Freedom Scientific	<ul style="list-style-type: none"> • Focus 1 and Focus 2 40 • Focus 2 80 • Focus Blue • PAC Mate
HandyTech	<ul style="list-style-type: none"> • Active Braille 40 • Actilino • Active Star 40 • Basic Braille • Bookworm • Brailino • Braille Star 40 • Braille Star 80 • Connect Braille 40 • Easy Braille • Modular Connect 88 • Modular • Modular Evolution 64 • Modular Evolution 88 • Braille Wave
Hedo	<ul style="list-style-type: none"> • MobiLine • ProfiLine
HIMS	<ul style="list-style-type: none"> • Smart Beetle • Braille Edge • Braille Sense with Two Scroll Keys • Braille Sense with QWERTY keyboard • Braille Sense with Four Scroll Keys • SyncBraille
HumanWare	<ul style="list-style-type: none"> • Brailliant BI (32, 40)

	<ul style="list-style-type: none"> • Brailliant B 80
Innovision	<ul style="list-style-type: none"> • Braille Me
Iris	<ul style="list-style-type: none"> • With braille keyboard • With PC keyboard
MDV	<ul style="list-style-type: none"> • Unrecognized Model (all keys defined) • Models with Function Keys • Models with Function Keys and Status Cells • Models with a Keyboard
Metec	<ul style="list-style-type: none"> • All models • BD I with 3 Keys and Status Cells • BD I with 6 Keys • BD I with 6 Keys and Status Cells
MiniBraille	<ul style="list-style-type: none"> • All models
MultiBraille	<ul style="list-style-type: none"> • All models
NinePoint	<ul style="list-style-type: none"> • All models
Papenmeier	<ul style="list-style-type: none"> • BrailleX 2D Lite (plus) • BrailleX 2D Screen Soft • BrailleX Compact 486 • BrailleX Compact/Tiny • BrailleX EL2D-40 • BrailleX EL2D-66 • BrailleX EL2D-80 • BrailleX EL2D-80s • BrailleX EL40c • BrailleX EL40 P • BrailleX EL40s • BrailleX EL60c • BrailleX EL66s • BrailleX EL70s • BrailleX EL80c • BrailleX EL80-II • BrailleX EL 80 • BrailleX EL80s • BrailleX Elba 20 • BrailleX Elba 32 • BrailleX Elba (Trio 20) • BrailleX Elba (Trio 32) • BrailleX IB 80 CR Soft

	<ul style="list-style-type: none">• BrailleX Live• BrailleX Trio
Pegasus	<ul style="list-style-type: none">• All models
Seika	<ul style="list-style-type: none">• Braille Displays• Note Takers
TSI	<ul style="list-style-type: none">• Navigator 20• Navigator 40• Navigator 80• Power Braille 40• Power Braille 65• Power Braille 80
Voyager	<ul style="list-style-type: none">• All models• Braille Pen 2

Next: [Appendix D: User guides for previous versions of Narrator](#)

Go back to the [Table of Contents](#)

Appendix D: User guides for previous versions of Narrator

Narrator gets better each time Windows releases a major update. We hope you're using the latest version of Windows 10, but if you're not, here are some older versions of the Narrator user guide. These files are in English only—to obtain additional languages or grades, contact the [Disability Answer Desk](#).

- Narrator for Windows 10, version 1903
 - [1903 Word version](#)
 - [1903 PDF version](#)
 - [1903 Braille version](#) (US English non-UEB grade 2 braille)
- Narrator for Windows 10 version 1803
 - [1803 Word version](#)
 - [1803 PDF version](#)
- Narrator for Windows 10 version 1809
 - [1809 Word version](#)
 - [1809 PDF version](#)

To see which version of Windows 10 is installed on your device:

1. Select the **Start** button, and then select **Settings > System > About**.
2. On the right, under **Windows specifications**, see the information next to **Edition**.

[Check your version of Windows](#)

Windows 10 periodically checks for the latest updates and security features and installs them automatically to keep your device running smoothly and securely. To update quickly, select **check for updates now** below, and then select **Check for updates**. Or select the **Start** button, and then go to **Settings > Update & Security > Windows Update**, and select **Check for updates**.

[Check for updates now](#)

Next: [Appendix E: Narrator sounds](#)

Go back to the [Table of Contents](#)

Appendix E: Narrator sounds

To reduce how often you hear Narrator make common announcements, like when you've made a typo or turned off scan mode, some announcements can be replaced with only a sound. The table below lists the names of the sounds, a description of when you'd hear them, and an option to play the sound. When you select Play sound, a new tab will open, and the sound will play.

The common announcements that can be replaced with only sound are when something is autocorrected, when you land on a link, when scan mode is turned on or off, when there is a spelling error, and when suggestions are available.

To replace those announcements with only the sounds, go to Narrator settings by pressing the **Windows logo key + Ctrl + N**, go to the section **Change what you hear when reading and interacting**, and select the checkbox next to **Hear only sounds for common actions**.

Sound	Description	Play sound
Caps lock on	When you press Shift while Caps lock is on	Play caps lock on sound
Autocorrected (controlled by setting)	<ul style="list-style-type: none">• When a list is automatically created• When a misspelling is autocorrected• When capitalization is autocorrected	Play autocorrected sound
Confirmation of action (touch only)	<ul style="list-style-type: none">• When a control is collapsed, expanded, invoked, or toggled• When an element is selected	Play confirmation of action sound
Element (touch only)	<ul style="list-style-type: none">• When you do item navigation with touch• When you touch an element	Play element sound
Error message	When an error occurs	Play error message sound
Gesture 3 finger	When you 3-finger gesture	Play gesture 3 finger sound
Grammar error	When a grammar error is made	Play grammar error sound
Input method editor opens	When the input method editor menu opens	Play IME opens sound
Keyboard closed	When the software keyboard closes	Play keyboard closed sound
Keyboard opened	When the software keyboard opens	Play keyboard opened sound

Link (controlled by setting)	When you land on a link	Play link sound
Scan mode off (controlled by setting)	When scan mode turns off	Play scan mode off sound
Scan mode on (controlled by setting)	When scan mode turns on	Play scan mode on sound
Screen edge (touch only)	When you touch the edge of the screen	Play screen edge sound
Scroll command (touch only)	When you scroll with two fingers	Play scroll command sound
Spelling error (controlled by setting)	When a word is misspelled	Play spelling error sound
Suggestions available (controlled by setting)	When the suggestion box opens	Play suggestions available sound
Suggestions closed	When the suggestion box closes	Play suggestions closed sound
White space (touch only)	When you touch something that is not an element	Play white space sound
Zoom (touch only)	When you pinch and expand to zoom	Play zoom sound