

Controls for screen readers

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Desktop PC: screen reader

NVDA

- **Read page** – Insert + down arrow
- **Move through interactive elements** – Tab
- **Move back to interactive elements** – Shift + Tab
- **Move through headings** – H
- **Move back to previous heading** – Shift + H
- **Move by heading level** – (1 = h1, 2 = h2, 3 = h3 etc.)
- **Move to a form** – F
- **Enter/exit forms mode** – Insert + Spacebar
- **Move to next/previous option in a checkboxes or radio button** – Up or down arrow
- **Select/deselect checkbox or radio button** – Spacebar
- **Move to next/previous paragraph** – Ctrl + up or down arrow
- **Move line by line** – Up or down arrow
- **Move to next link** – K
- **Move to next button** – B
- **View all links, headings and landmarks on a page** – Insert + F7
- **Launch** – Ctrl + Alt + N
- **Quit** – Insert + Q
- **Pause** – Ctrl

Controls for screen readers

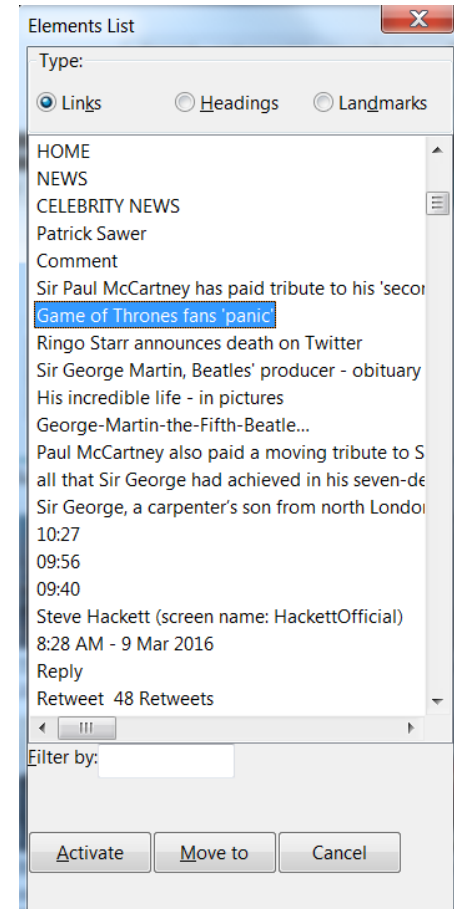
Voiceover on Mac

- **Launch / Quit** – ⌘ + F5
- **Pause** – Ctrl
- **Enter web area (to browse a page)**
Ctrl + Alt + Shift + Down
- **Move through interactive elements** – Tab
- **Move to (read) next/prev element** – Ctrl + Alt + Left/Right
- **Open rotor** – Ctrl + Option + U
- **Move between rotor options list e.g. headings, forms** – left and right arrow keys
- **Move between the options in the list** – Up and down arrow keys
- **Select rotor element** – Enter
Filter the available elements by typing characters e.g. ‘2’ will filter to heading level 2’s
- **Voiceover help** – Ctrl + Alt + H
- **Voiceover command help** – Ctrl + Alt + HH (H twice)
- **Move through headings**
– Ctrl + Option + ⌘ + H.
- **Move back through headings**
– Ctrl + Option + ⌘ + Shift + H
- **Move to next link** – Ctrl + Option + ⌘ + L
- **Activate a link or form control** – Ctrl + Option + Spacebar
- **Read page** – Ctrl + Alt + A
- **Read paragraph** – Ctrl + Alt + P
- **Read sentence** – Ctrl + Alt + S
- **Jump to top of the page** – Ctrl + Alt + Home
- **Open help menu e.g. commands help** – Ctrl + Alt + H
- **Move between menu options** – Arrow keys
- **Select menu item** – Space bar or Return
- **Close help menu** – Escape

Desktop: screen reader tips

NVDA and Voiceover

1. **Tab through all interactive elements on a page** and make sure everything can be accessed by a keyboard, there is a clear focus area and the tab order is logical
2. **Check all the links** to make sure they make sense out of context **and the headings** to make sure they are descriptive and the levels are sequential (using Insert + F7 on NVDA and Rotor on Voiceover)
3. **Go through all the headings on a page** and make sure they go in a logical and sequential order (using H and 1, 2, 3 etc. on NVDA and Ctrl + Alt + ⌘ + H on Voiceover)
4. **Make sure the content is read out to a screen reader user correctly** (using up and down arrow keys on NVDA and left and right arrow keys on VoiceOver)



Mobile: screen reader

VoiceOver (iOS)

- **Launch** - Settings > General > Accessibility > VoiceOver
- **Mute/Unmute** - 3 fingers double tap
- **Pause** - 2 fingers on screen
- **Explore by touch** - hold finger down to select what's on screen
- **Focus on next element** - swipe left or right with 1 finger
- **Select an element** - double tap
- **Read page from the top** - swipe up with 2 fingers
- **Read from certain point** - swipe down with 2 fingers
- **Move down /up a page** - swipe up / down with 3 fingers
- **Move to the next / previous page on the site** - swipe left / right with 3 fingers
- **Navigate by headings/buttons/links using rotor settings** - 2 finger turn like a dial

Tips

- Swipe up and down to navigate between page elements based on your Rotor selection e.g. headings, links, etc.
- Swipe left and right to navigate to the next and previous element on a page

TalkBack (Android - Marshmallow)

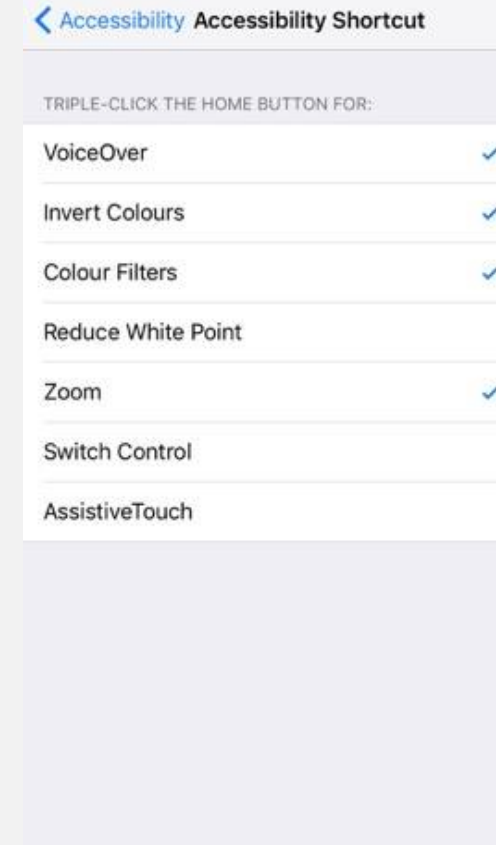
- **Launch** - Settings > Accessibility > TalkBack or Hearing > Voice assistant
- **Move up/down a page** - swipe up/down with 2 fingers
- **Read page from the top** - make a capital L shape on screen
- **Move to the next / previous page on the site** - swipe left / right with 2 fingers
- **Access Local context menu (navigate by word, line, headings, links)** - swipe up and then right (like a lower case r)
- **Access Global context menu (pause, read page)** - swipe down and then right (like a capital L)

Tips

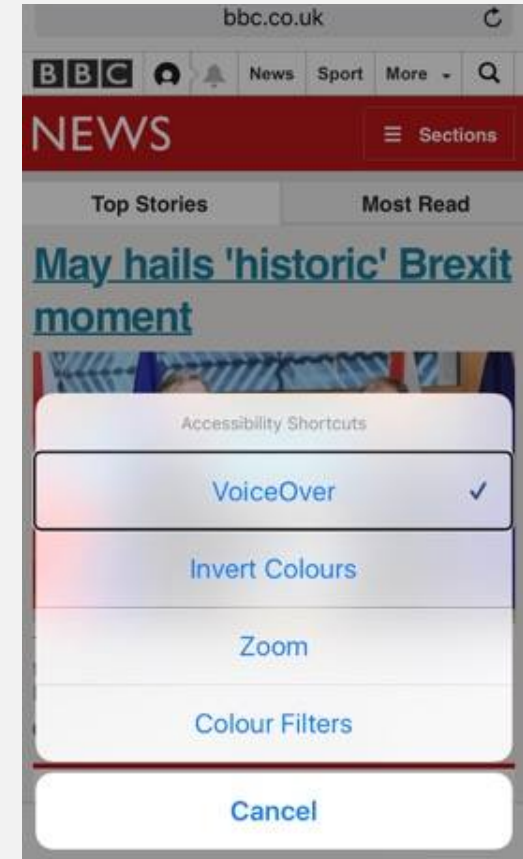
- Swipe up and down to change navigation style (or use the Local context menu) e.g. default, headings, links, etc.
- Swipe left and right to navigate between page elements based on your selection

Mobile: adding VoiceOver to accessibility shortcuts

- The screen reader on iOS (VoiceOver) can be toggled on and off by using the accessibility shortcuts: Settings > General > Accessibility > Accessibility Shortcut: select VoiceOver
- To access the shortcut menu, triple tap the home button
- Other accessibility features can also be added to the shortcuts such as zoom and colour filters



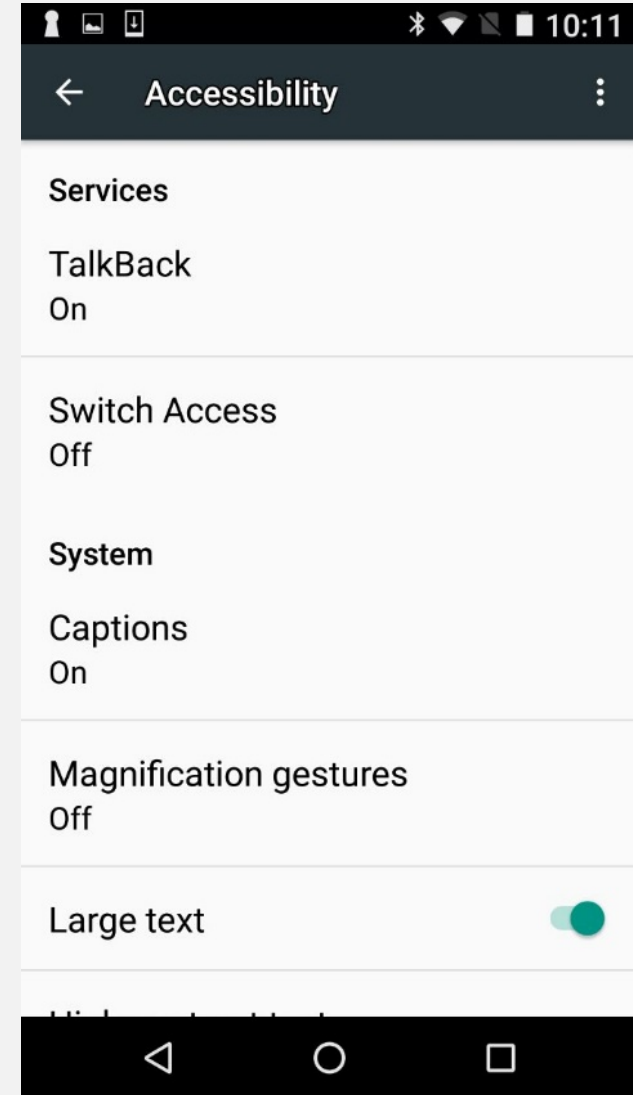
Adding items to the accessibility shortcut on iOS



Accessing the accessibility shortcuts by triple tapping the home button to toggle VoiceOver on and off

Mobile: toggling TalkBack on and off

- Similarly to iOS, Nexus devices can toggle the screen reader on and off by pressing the volume up and down buttons at the same time
- Some Android devices do not have this option, which makes Nexus easier to use for navigating by a screen reader
- This also lets you test pages that you might not be able to reach with a screen reader (because accessibility blockers earlier in the journey get in the way!)



Accessibility settings on Nexus