# VoiceOver Basics

VoiceOver runs at the MacOS system level, so it can be used with any application or web browser. VoiceOver works best with Safari for website/web app testing.

## Enable Full Keyboard Access on Macs

Before testing with VoiceOver, you need to ensure these two settings are active:

- **System Settings:** Keyboard > Shortcuts > Full Keyboard Access > All controls
- **Safari Settings:** Advanced > Accessibility > Press Tab to highlight each item on a webpage.

## VoiceOver Activation Keys

The default VoiceOver (VO) activation/modifier keys are **control** + **option**. These keys are pressed together with another key(s) to navigate and interact with the computer using VoiceOver. Example notation is: **VO + H** (opens VoiceOver Help Menu). VoiceOver modifier keys can be locked so they don't need to be pressed each time by activating **VO + ;**.

## Essential VoiceOver Commands

| Action | Command |
|---|---|
| Turn VoiceOver on or off | command + F5 |
| Read next item | VO + Right Arrow |
| Read previous item | VO + Left Arrow |
| Perform the default action for the item in the VoiceOver cursor (click links, buttons, take the action of the control in focus) | VO + Space bar |

# Basic VoiceOver Commands

| Action | Command |
| --- | --- |
| Turn VoiceOver on or off | command + F5 |
| Interact with an item (enter a webpage) | VO + Shift + Down Arrow |
| Stop interacting with an item | VO + Shift + Up Arrow |
| Start reading (will read until end of document) | VO + A |
| Stop reading | control |
| Read next item | VO + Right Arrow |
| Read previous item | VO + Left Arrow |
| Perform the default action for the item in the VoiceOver cursor (click links, buttons, take the action of the control in focus) | VO + Space bar |
| Open the VoiceOver Rotor | VO + U |

# Additional Resources

- Apple VoiceOver Commands and Gestures
- Apple Accessibility: VoiceOver Getting Started Guide
- WebAIM: Using VoiceOver to Evaluate Web Accessibility
- Deque University: VoiceOver Keyboard Shortcuts on a Mac