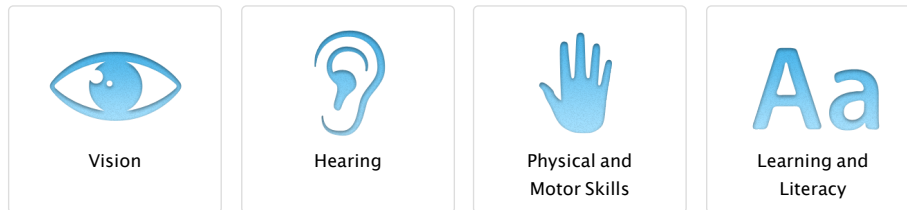# OS X. Designed with your abilities in mind.

Every Mac comes standard with assistive technologies that help people with disabilities enjoy the power and simplicity of OS X. It includes features like an advanced screen reader, FaceTime, and literacy tools that help those with a wide range of abilities get more from their Mac.

Vision

Hearing

Physical and Motor Skills

Learning and Literacy
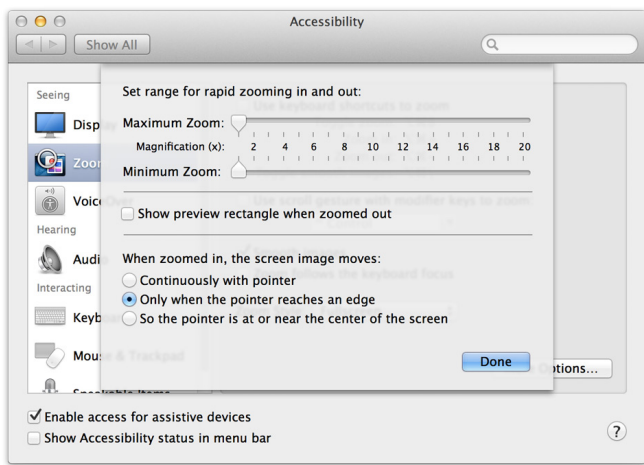
# Mac speaks to your needs.

If you are blind or have low vision, a variety of assistive technologies in OS X — a built-in screen reader, screen and cursor magnification, and Dictation — help you get the most out of your Mac.

## VoiceOver

VoiceOver is the remarkable screen reader that comes standard with every Mac. But it's much more than a text-to-speech tool. It tells you exactly what's happening on your Mac, and lets you fully interact with it using gestures, a keyboard, or a braille display. And it uses Alex, the voice of Mac, who speaks to you in a natural tone. Learn more about VoiceOver ›

"21 rooms with wonderful white walls. What could be fresher than..."

## Zoom

Zoom is a powerful built-in magnifier that lets you enlarge your screen up to 20 times, so you can better see what's on the display. You can use it full screen or picture-in-picture, allowing you to see the zoomed area in a separate window while keeping the rest of the screen at its native size. The hardware acceleration engine lets you boost the size of everything on your screen — text on a web page, family photos, a place on a map.

## Dictation

Dictation lets you talk where you would type. So you can reply to an email, search the web, or write a report using just your voice. Navigate to any text field, activate Dictation, then say what you want to write. Dictation converts your words into text.
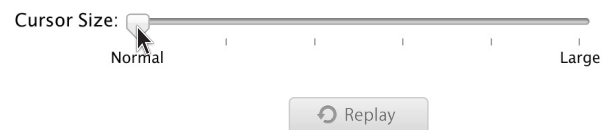
This is me talking.

## Invert Colors

If a higher contrast helps you better see what's on your display, OS X lets you invert colors onscreen. You can also increase and decrease contrast or switch to grayscale. Once you set your colors, the settings apply systemwide, so you get the same view in every app.

## Cursor Size

OS X lets you magnify your cursor so it's easier to see where you are and follow along as you move around your Mac. Set the cursor size once and it stays magnified even when its shape changes. And your Mac remembers your cursor size settings even after you log out, shut down, or restart.

Cursor Size:

Normal                    Large

↻ Replay

## Braille Displays for OS X

The Mac provides true plug-and-play support for over 40 USB and Bluetooth refreshable braille displays — no additional software needed. You can even connect multiple braille displays to a single Mac so many users can follow along.
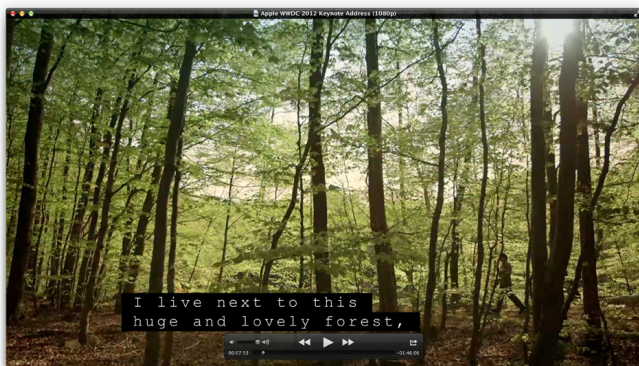
Learn more about OS X braille displays ›

# Clearly a better way to interact with your Mac.

If you are deaf or hard of hearing, you'll find many things to love on a Mac. Communicate easily with friends and family with FaceTime and iMessage, and use captions to watch your favorite content.



### FaceTime

FaceTime video calls let you communicate in more ways than one. Catch every gesture and facial expression — from raised eyebrow to ear-to-ear smile. Thanks to its high-quality video and fast frame rate, FaceTime is ideal for people who communicate using sign language. And because Mac, iPhone, iPad, and iPod touch all come equipped with FaceTime, you can talk to iOS and OS X users across the street or across the globe. As if you're face to face.*
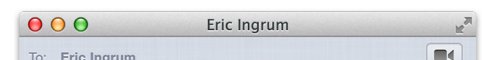


### Closed Captions

Watch movies, TV shows, videos, and podcasts using closed captioning, a feature supported in OS X apps like iTunes, QuickTime, and DVD Player. Just look for the small CC icon to buy or rent captioned movies from the iTunes Store or find captioned podcasts in iTunes U. You can even customize captions with different styles and fonts.

### Messages with iMessage

iMessage lets you start up a conversation — or keep it going — without needing to say or hear a word. Send unlimited messages to anyone on an iPhone, iPad, iPod touch, or Mac. Or send a group message to keep everyone in the loop. You can also share photos, videos, locations, links, or the occasional smiley.
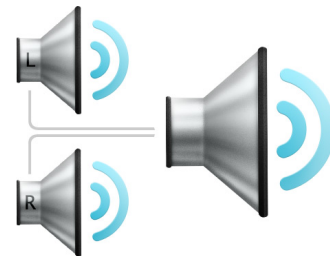
### Screen Flash

Think of it as a visual beep. Instead of playing an alert sound, your Mac can flash its screen when an app needs your attention. Screen Flash automatically works with every app that uses the system beep. So there's nothing more for you to do once you set it up.

↻ Replay Flash Alert

### Mono Audio

When you're using headphones, you may miss some audio if you're deaf or hard of hearing in one ear. That's because stereo recordings usually have distinct left- and right-channel audio tracks. OS X can help by playing both audio channels in both ears, and letting you adjust the balance for greater volume in either ear, so you won't miss a single note of a concerto or word of an audiobook.

### Purple Video Relay Services

Purple helps people who are deaf or hard of hearing communicate with the hearing world — and vice versa. Make video or phone calls from your Mac anywhere you have Internet access. Certified video interpreters translate between American Sign Language and spoken language, so the deaf and the hearing can communicate clearly with each other. Learn more ›

Back to top ▲

## Control your Mac with just the right touch. Even none.

If you have difficulties using the keyboard, mouse, or trackpad, OS X technologies like Switch Control can help you access your Mac like never before. You can even control elements of your computer by speaking. The features are easy to access and work across a range of apps.

## Switch Control

Switch Control is a powerful new accessibility technology for anyone with significantly impaired physical and motor skills, built directly into OS X. Switch Control gives you the ability to navigate onscreen keyboards, menus, and the dock using a system commonly referred to as scanning. And you can use a variety of adaptive devices such as a switch, joystick, keyboard space bar, or even a single tap on the Multi–touch trackpad for easy control.
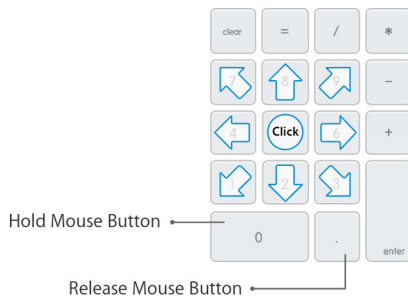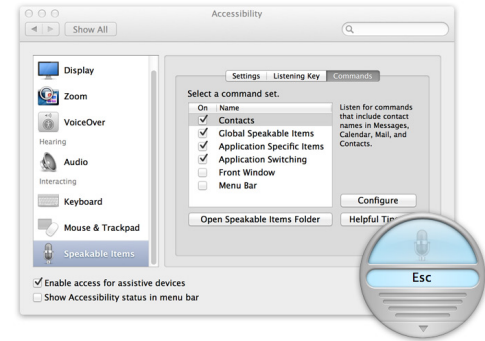
## Slow Keys

Slow Keys adjusts the sensitivity of the keyboard to process only the keystrokes you mean to make. It builds in a delay between when a key is pressed and when it's entered. You can adjust the delay and choose to have a sound play when a key is entered.

## Sticky Keys

Sticky Keys combines your keystrokes for you by letting you press keys one at a time, instead of simultaneously, to enter commands. Enter a key combination — such as Command–S (for Save) — and OS X displays each pressed key, accompanied by a sound effect, so you can make sure the right keys are entered.

## Speakable Items

With Speakable Items, you can control the computer using your voice instead of the keyboard. And you don't have to train your Mac to use it. Use Speakable Items to do things like close or minimize windows, navigate menus, open and switch between apps, turn text into sticky notes, or start a screen saver. You can even have your Mac acknowledge when it's heard you.

## Mouse Keys

If you have difficulty using a mouse or trackpad, use Mouse Keys to control the cursor with the numeric keypad. Press a number key as the mouse button, and use other number keys to move around the screen or to drag and drop items. Easily navigate menus, the Dock, and all your windows.

Hold Mouse Button

Release Mouse Button

## Onscreen Keyboard

Sometimes it's easier to use a pointing device than a keyboard. The Keyboard Viewer in OS X lets you do exactly that. It's an image of a keyboard that floats above other applications (so it's always handy) and you can customize it to fit your screen. Then "type" using a mouse or other pointing device. Turn on Sticky Keys and you can enter keyboard shortcuts via the onscreen keyboard, too.

# Mac. A much smarter way to learn.

The Mac has several features designed for people with cognitive and learning disabilities. Simplify the Finder to improve focus. And use the handy reference tools to improve language skills wherever you are in OS X.
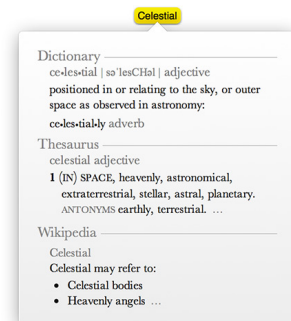
## Simple Finder

Using parental controls, the Mac can be set up to provide a greatly simplified experience that may be easier for people with cognitive and learning disabilities. Simple Finder reduces the Dock to just three folders. Teachers can limit the list of apps a student can open to only the ones they choose, so students can stay focused. Files, folders, and apps are displayed in a single window of neatly arranged icons so everything is easier to find.

## Dictionary

Say you're reading an article on astronomy and are stuck on some terminology. Just look it up in the powerful built-in Dictionary app — from anywhere in OS X. Get quick access to definitions and synonyms that help with grammar, spelling, and pronunciation.

## Text to Speech

We all learn in different ways. Some of us learn better when more than one sense is engaged simultaneously. With Text to Speech, you can highlight any text, and Alex will read it aloud. Or choose from other male or female voices to do the reading. You can even adjust the speaking rate. And if you speak

### Hear Alex Speak

▶ Fast    ▶ Normal    ▶ Slow

more than one language, you can choose from over 20 built-in languages.

### Word Completion

To help with vocabulary and word-building skills, OS X provides word completion in apps such as TextEdit and Pages. After typing just a few letters, hit the escape key and OS X suggests words. Select the word you want, and OS X completes it for you.

The Banquet, first draft

Last night, she had a revelation

revelation
revelation's
revelations
revelations'
revelatory

---

## Speech

Those who have difficulty with expressive speech can also benefit from the assistive features in OS X. FaceTime lets you communicate visually, whether through the use of sign language, gestures, or facial expressions. iMessage lets you chat with others via text. And Text to Speech lets you hear words read aloud to help with expressive speech development — or even communicates for you by speaking the words you type.

**Entertain more products that have accessibility features.**
Learn about features like VoiceOver and closed captions built into iPod nano, iTunes, and Apple TV that help you get to your content, and get the most from it. Easily access movies, TV shows, photos, audiobooks, and more. Learn more ›

*FaceTime video calling requires a FaceTime-enabled device for the caller and recipient and a Wi-Fi connection. Availability over a cellular network depends on carrier policies; data charges may apply.