

# Innovation in Accessibility



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## Accessibility: Our Responsibility

As Cisco changes how the world collaborates and communicates, it is essential that we help ensure the same for people with disabilities. That's why we strive to make our products, services, websites, and documentation accessible and usable by people with disabilities, whether through the design of our own products or through making our products compatible with assistive technology produced by other manufacturers.

Accessibility is built into the way we work, the products we develop, and the standards and regulations we follow. It is a responsibility every Cisco employee embraces—because helping all people to contribute equally is the right thing to do. The positive impact of accessibility in technology products benefits all walks of life.

## Our Commitment to Accessible Products

The Cisco Accessibility Initiative is a global, companywide effort that stresses the importance of creating accessible products throughout Cisco, with customers, and with our deployment partners. We help ensure that Cisco® products conform to accessibility regulations, and we integrate accessibility as a priority at every stage of the Cisco product lifecycle, see figure 1 for more information.

The showcase of the initiative is the Cisco Accessibility Design and Evaluation Lab, located in San Jose, California. Cisco works with accessibility experts and people with disabilities to design and build products that are usable by all people. We test and validate with a full range of assistive technologies and demonstrate how our customers' employees with disabilities use our products. Often we benefit from immediate, relevant feedback from our most demanding customers—Cisco employees with disabilities. To schedule a tour of the facility or for more information, contact [accessibility@cisco.com](mailto:accessibility@cisco.com).

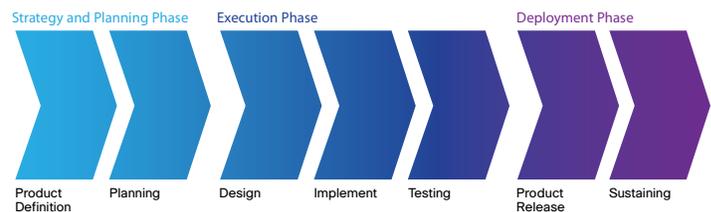
"Imagine being 15 years old with a hearing disability; you wouldn't want a captionist sitting next to you in class, drawing attention. But now students can pull out their computer and look just like everyone else. Remote services through Cisco WebEx® have given them an independence they wouldn't have otherwise."

—Kathy Mueller,  
Captionist,  
Center for Sight and Hearing

The Cisco Accessibility Initiative maintains detailed, current knowledge of global accessibility and usability laws, regulations, and standards. For example, Cisco tests products against U.S. standards that include Section 508 of the Rehabilitation Act, Section 255 of the Telecommunications Act, and the Americans with Disabilities Act. Internationally, Cisco adheres to guidelines such as those published by the World Wide Web Consortium (W3C). We also contribute to accessibility standards and guidelines created by the International Telecommunications Union (ITU), the Internet Engineering Task Force (IETF), and the Telecommunications Industry Association (TIA).

At Cisco, we approach accessibility with a philosophy of openness, sharing our technological innovations with others through wide participation in industry groups. We also work with third-party vendors to enhance our solutions for broader accessibility.

Figure 1. Cisco Product Lifecycle Services



Cisco Product Life Cycle  
Accessibility is considered at each phase of the development process.

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## A Range of Accessible Solutions

Cisco has been designing accessible products for more than 20 years—hardware, software, and services that are now an essential part of business, education, government, and home communications. Today, our innovative and collaborative spirit is shaped by a constant focus on accessibility across each of our major product lines.

### Cisco IOS Software

The foundation for Cisco routers, switches, and other types of networking devices, Cisco IOS® Software has always been fully accessible to people with disabilities. Cisco IOS Software-based routers and switches offer remote configuration and monitoring through the command-line interface (CLI), which is fully compatible with assistive technology such as screen readers. They also provide context-sensitive online help for users.

Cisco IOS Software operates on millions of systems—from small home-office routers to the world's largest service provider networks. However, intrinsic accessibility is described best by Sean Murphy, a blind Cisco customer support engineer who, at the young age of 15, lost 95 percent of his sight due to a genetic eye condition called retinitis pigmentosa.

“Since the IOS Software is text based,” Murphy says, “I can interact with the CLI with a range of screen readers. Because of this, I am able to support my customers and grow my technical expertise in the networking profession at the same time. Those who are reliant on magnification (large print) software can also use the IOS CLI to support and maintain Cisco IOS based routers.”

### Cisco and Tenacity Partnership

Cisco works closely with vendors to improve accessibility and usability in products. Cisco worked with Tenacity, one of the telephony industry's leaders, to certify their accessaphone™ product as a Cisco Preferred Solution. The Tenacity accessaphone allows users to operate the Cisco Unified IP Phone from their PC keyboards. It enables text-to-speech for caller ID, calls on hold, voicemail notification, and missed, received, and placed calls.

According to Murphy, the software allows him to “control the Cisco phone via my computer. The software comes with a built in text-to-speech (TTS) translator and permits me to use my screen reader software. This software is very useful in my daily job and allows me to find out who is calling, create a speed dial list, and use the common phone functionality which my sighted co-workers use on their desk phones.” For more information visit: <http://www.accessaphone.com>.



The Cisco TelePresence® portfolio creates an immersive, face-to-face experience over the network.

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Recently, Cisco and Tenacity worked together to ensure the U.S. Access Board had a Cisco Unified IP Phone solution that met the needs all of their employees, regardless of ability or disability. Cisco helped fund the Tenacity development of accessaphone to support a Cisco Unified IP Phone deployed by Cisco Unified Communications Manager Express. The U.S. Access Board has deployed the Tenacity accessaphone with Cisco Unified IP Phones and Cisco Unified Communications Manager Express, running on Cisco IOS Software. This was the first installation and deployment of the Cisco Unified IP Phone using Communications Manager Express and Tenacity, extending the reach to businesses globally.

## Cisco Unified Communications

Cisco technologies deliver innovation, including accessibility features and capabilities, through the convergence of voice and data networks. Cisco Unified Communications, a system of voice and IP communications products and applications, is based on open interfaces and industry standards, allowing the easy integration of accessibility tools.

A clear example of the benefits comes from Don Barrett, a blind employee at the U.S. Department of Education. Previously, when Barrett traveled, he was unable to respond to urgent messages. Unlike his co-workers who checked email frequently with mobile devices, Barrett couldn't use smartphones and tablets because of their lack of accessibility features. Now Cisco Unity® software handles his email through his personal voicemail, enabling rapid response when necessary. Barrett's Cisco Unified IP Phone announces the names of incoming callers through Tenacity accessaphone. accessaphone with integrated text-to-speech provides audible notification based off of the status of the Cisco Unified IP Phone. It can be controlled via the keyboard only, mouse and keyboard, and has speech recognition controls for individuals who are blind, low vision, or mobility impaired. Employees who prefer to use another screen reader may use accessaphone's text-to-speech for audible caller ID only.

Cisco Unified Video Advantage gives deaf people the ability to communicate in sign language using video telephony that's as easy as making a phone call. Using related technologies, SignVideo, the United Kingdom's first video contact center for deaf people, began offering callers immediate access to sign language interpreters. This service dramatically reduces the time and cost for the country's deaf users of sign language to communicate with local authorities and other public sector organizations.

## Cisco and Purple Partnership

Purple Communications has developed Video Relay Service (VRS) for Cisco Unified Communications. It is a convenient, on-demand or scheduled interpreting service delivered over a live Internet video connection. With certified interpreters and high-quality video, it's as if the interpreter is in the room with you.

Purple has also created ClearCaptions™ for Cisco, a product meant to be installed in your Cisco Unified Communications Manager environment. Through this solution, ClearCaptions displays near-real-time captions on Cisco Unified IP Phones so that employees with hearing loss never miss a word. By hearing and reading calls, employees get the whole conversation, enabling them to be more productive, and more confident in their jobs. For more information, visit: <http://www.purple.us/>.

## Security and VPN

Users of the Cisco ASA 5500 Series Adaptive Security Appliances and Cisco VPN Client can choose from CLI or a graphical interface to configure and monitor the products, depending on their needs. CLI-based applications are fully accessible to screen reader technology and keyboard use without a mouse.

"When I work from home," says Murphy, "I use the Cisco VPN client software, which is compatible with my Windows screen reader. This tool permits me to access the Cisco network externally in a secure way, providing me with the ability to fulfill my duties."



Cisco Jabber™ for Mac offers best-in-class unified communications and accessibility compliance through keyboard navigation and also meets accessibility design requirements for low-vision users.

# Innovation in Accessibility

## Accessibility Equals Success: Workplaces that Work for Everyone

Each employee brings unique knowledge and skills—and sometimes a disability—to the job. At Cisco, we believe workplace collaboration and productivity should never be limited by inaccessible technologies. When you consider Cisco products for your organization, you can be sure of our commitment to accessibility regulations and standards. It's an important part of providing a solution that meets your needs.

To learn more about the Cisco Accessibility Initiative and how Cisco customers have improved productivity for employees with disabilities, visit: [www.cisco.com/go/accessibility](http://www.cisco.com/go/accessibility).

“We now have the opportunity to extend our hearing and vision services outside our physical building, helping anyone, anywhere. My vision is to have medical and rehabilitation services all available in one place, whether that's onsite or virtually. What we're doing now with remote services is just the beginning. With Cisco technologies, we hope to do much more.”

—Diane Jones,  
President,  
Center for Sight and Hearing



Cisco WebEx Meeting Center™ is a cost-effective alternative to face-to-face meetings and includes accessibility features such as a closed captioning panel, chat features which are helpful to those with hearing impairments, support for screen readers, and keyboard navigation for most major use cases.

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## Frequently Asked Questions

### What is Cisco's commitment to accessibility?

At Cisco, accessibility means driving and providing “access” to products, services, websites, and documentation for people with disabilities. The “Cisco Accessibility Initiative” incorporates global accessibility and usability into design requirements, the product development process, testing, and training.

### Why is accessibility important to Cisco?

The Cisco Accessibility Initiative is a corporate-wide initiative to foster creativity, innovation, and collaboration. Cisco not only connects networks, we also connect people with and without disabilities. With the deployment of over 40 million Cisco Unified IP Phones, the acquisition of Cisco WebEx® and Tandberg, and the development of other end-user interfaces and products, the Cisco brand has moved away from wiring closets and onto the desktops of end users worldwide. Cisco works internally and with industry leaders in assistive technology to integrate better overall accessibility for all.

### Where can I go for more information on accessibility and this initiative?

For any questions regarding accessibility or to schedule a tour of the San Jose facility, contact the Cisco Accessibility Team: [accessibility@cisco.com](mailto:accessibility@cisco.com).

“Every piece of equipment we buy has to meet the needs of both the deaf and the hearing, and that's a hard job. Realizing the uniqueness of the Kentucky School for the Deaf (KSD), Cisco built equipment just for us. It's two huge screens side by side—one for the interpreter and one for the presenter. KSD has made good use of its Cisco video equipment, connecting its students with other schools for the deaf, taking virtual field trips, and providing professional development as well.”

—Deby Trueblood,  
Director of Technology,  
KSD



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