



Possibility with Accessibility

Erica Gorman

Sue Vencill



Why accessibility

1,000,000,000 (1B) Estimated number of people with disabilities worldwide



only **1 in 10** have access to the products needed

70% of disability is invisible

Disability is something that can affect **any of us** at any time

Source: World Health Organization



Disability



Personal
health
condition

Disability



Mismatched
interactions

Bake accessibility in your day-to-day

“ **Accessibility is not a bolt-on—it’s something that must be built into every product** we make so that our products work for everyone—only then will we empower every person and every organization on the planet to achieve more. This is the inclusive culture we aspire to create.

–**Satya Nadella,**
Chief Executive Officer



Investing in Accessibility



Vision

Make your device easier to see or use without a screen



Hearing

Make your device easier to hear or use without sound



Mobility

Make your device easier to use if you have limited reach or strength

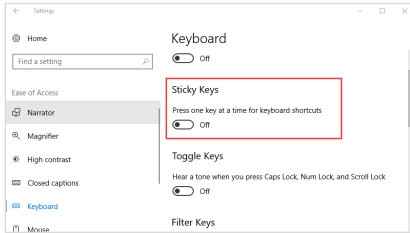


Neurodiversity

Make it easier to focus and get things done with Windows

Technical

Sticky keys (1994)



Windows (1995)



Screen reader (2000)



Disability Answer Desk (2012)



Our journey at Microsoft

2022
New cultural
approach to
accessibility



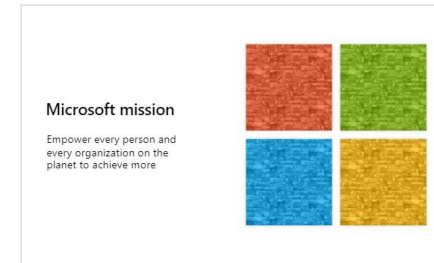
Bill G Commitment (1997)



Disability ERG (2008)



1st Ability Summit (2011)



New company mission (2015)

Cultural

Vision Accessibility Features



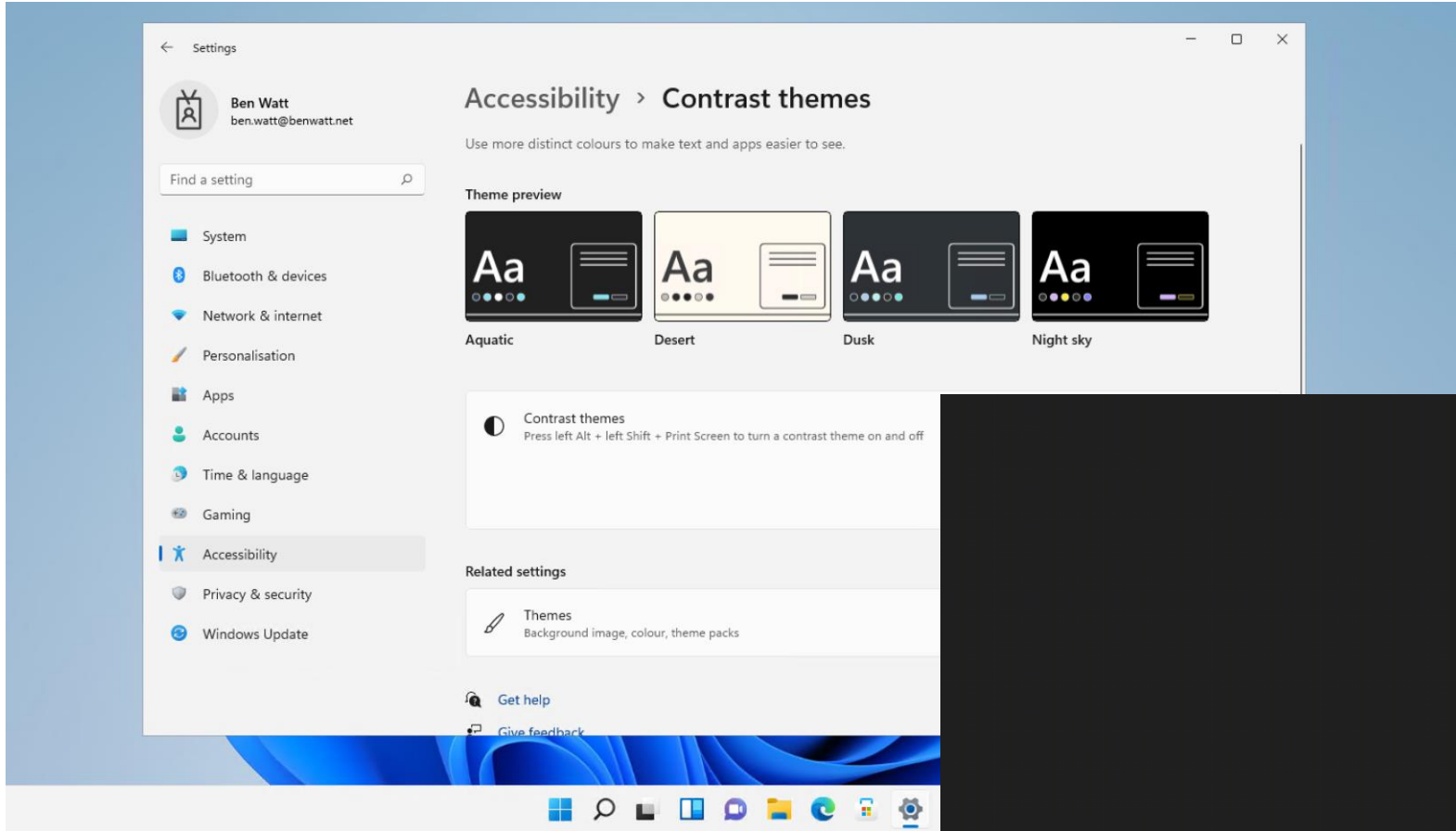


Windows 11 -Vision Accessibility features

- Change the size, color and thickness of your cursor/mouse
- Magnifier: Press the Windows logo key and Plus (+) or Minus(-). Control zoom increments.
- Narrator is a screen reader with controls for different voices, speed, pitch, volume and many other settings. (For Windows not the immersive reader tool)
- New contrast themes: aquatic, desert, dusk & night sky ~ Press left Alt + left Shift + Print screen

The screenshot shows the Windows 11 Settings application. At the top, the user's profile is identified as Erica Gorman (She/Her) with the email ergorm@microsoft.com. Below the profile is a search bar labeled "Find a setting". A list of settings categories is shown on the left, with "Accessibility" selected and highlighted. The main content area displays the "Accessibility" settings, which are organized into a "Vision" section. This section includes several settings: "Text size" (Text size that appears throughout Windows and your apps), "Visual effects" (Scroll bars, transparency, animations, notification timeout), "Mouse pointer and touch" (Mouse pointer color, size), "Text cursor" (Appearance and thickness, text cursor indicator), "Magnifier" (Magnifier reading, zoom increment), "Color filters" (Colorblindness filters, grayscale, inverted), "Contrast themes" (Color themes for low vision, light sensitivity), and "Narrator" (Voice, verbosity, keyboard, braille).

New high contrast themes

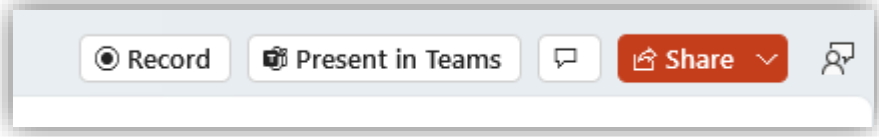


Video has no audio

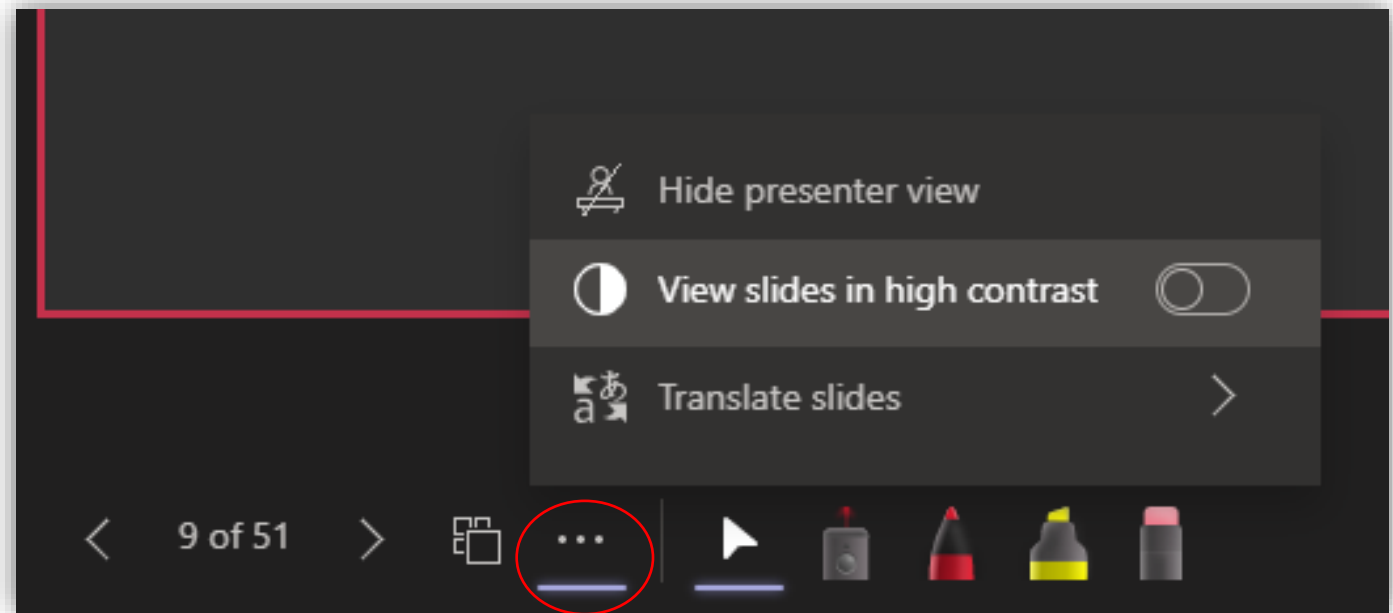
PowerPoint Live High Contrast



Step 1: Present in Teams from PowerPoint



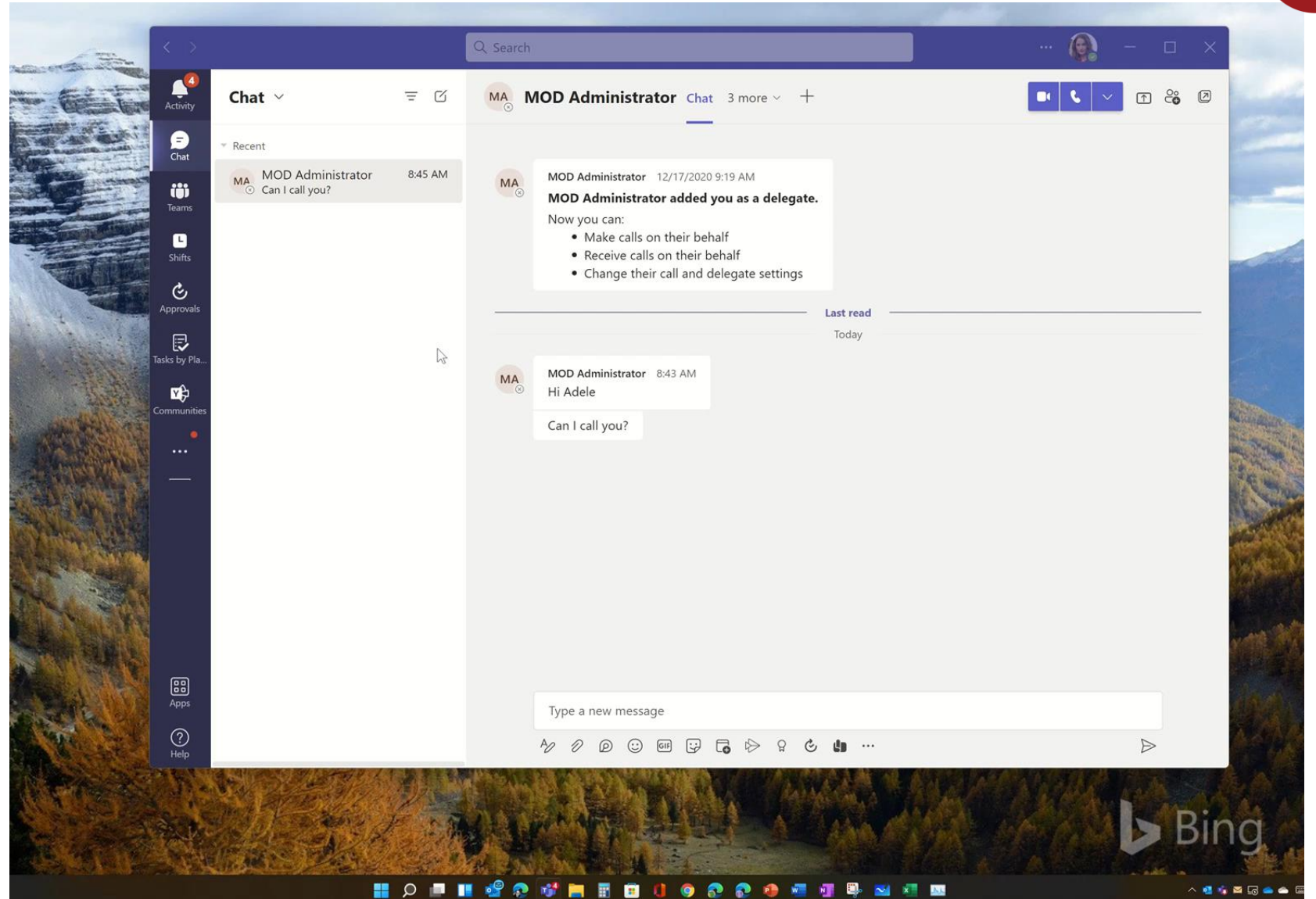
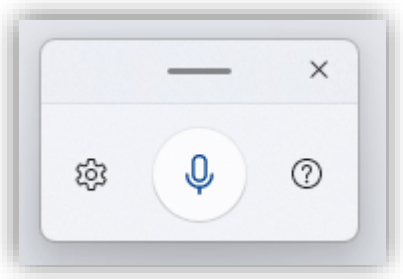
Step 2: From the ellipses toggle High contrast to ON



Type by Using Your Voice



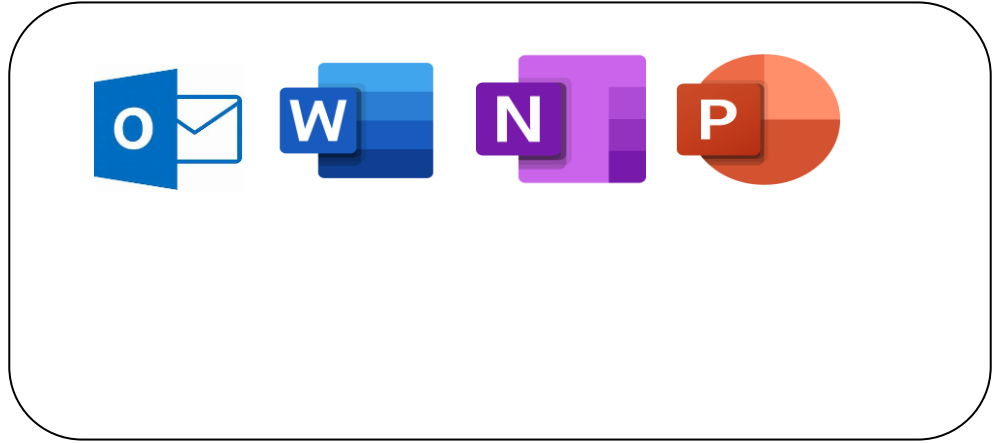
- Type by using your voice
- **Windows Key + H** to launch Windows Speech
- Select the microphone on your mobile keyboard



Collaborate and contribute using only your voice



- Use **speech-to-text capabilities** to draft content directly in Teams
- Navigate the mobile and desktop versions of Teams hands-free with **voice commands**
- Streamline communication, collaboration, and meeting-related tasks using spoken natural language and suggested replies provided by **Cortana, built directly into Teams**
- Select Dictate – use Dictate inside of applications like Word Power Point, & Excel (Win 11: Windows key H works in apps)



Voice commands:

- **New Line:** Takes cursor to new line
- **Delete:** Removes the last line you dictated
- **Stop Dictation:** Terminates the dictation session
- **Full stop or period:** Types period character (.)
- **Question mark:** Types (?)

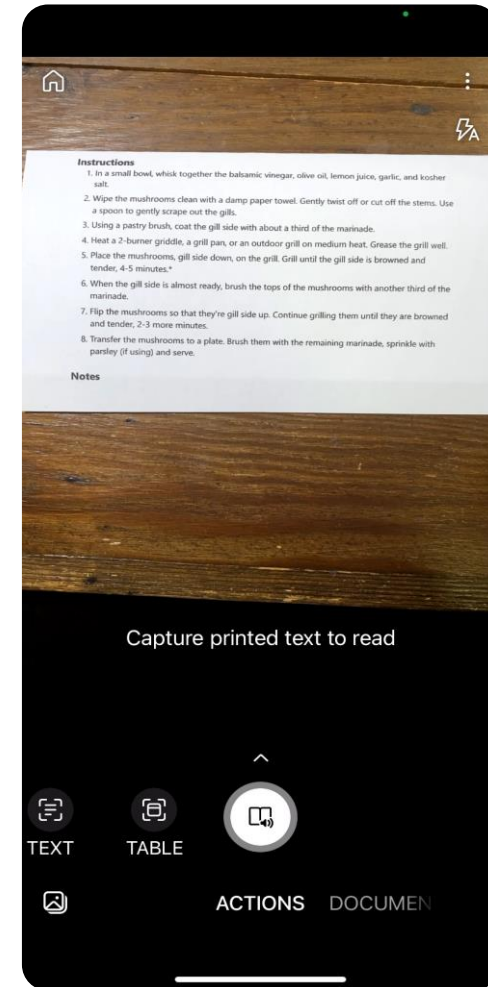


Office Lens



The Immersive Reader helps users to easily scan and read content.

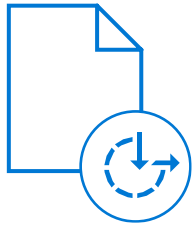
- **Read aloud**—Reads text out loud with simultaneous highlighting that improves decoding, fluency and comprehension while sustaining focus and attention.
- **Font size**—Allows the user to increase or decrease the size of fonts.
- **Wide text spacing**—Optimizes font spacing in a narrow column view to improve reading fluency for users who suffer from “visual crowding” issues.
- **Back five words** and **forward one page**—Allows the user to move backwards and forwards in the content.
- **Speaking rate**—Allows user to control the speed of the voice reading back the words.



Video: Immersive Reader Demo reading a doc scanned with Office Lens

Accessibility Checker

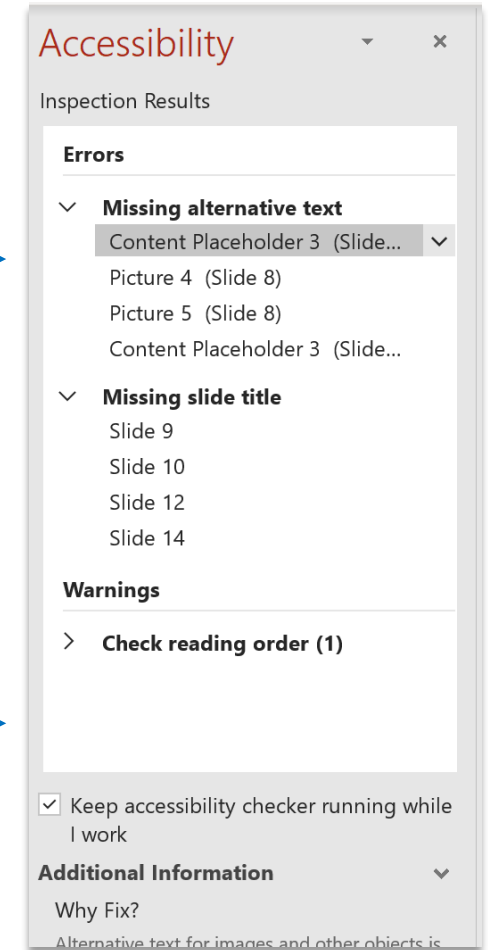
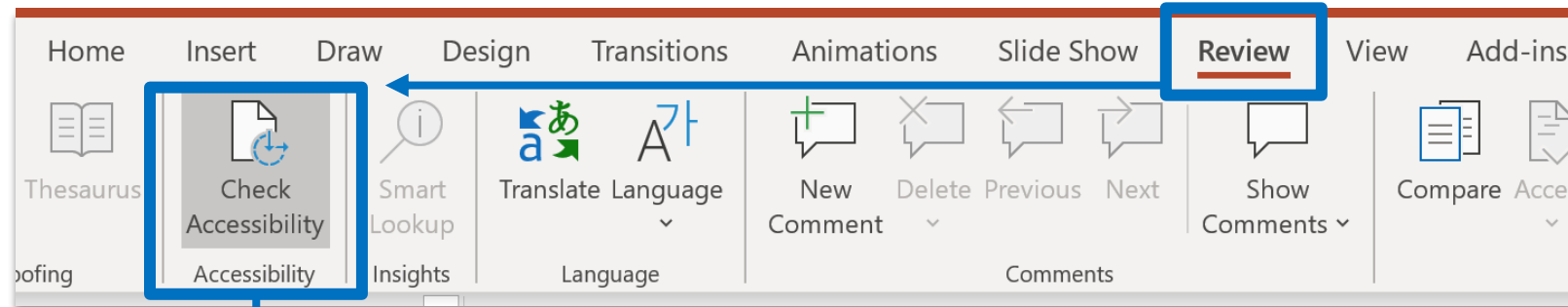
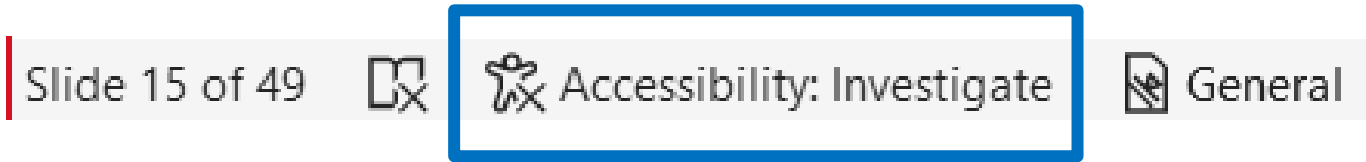
Analyze your material to create more accessible content



- Simply select '**Check Accessibility**' under the 'Review' tab to get started
- Now with the ability to be '**always on**'
- Easily available in Word, Excel, PowerPoint, OneNote, Outlook, Teams and Visio
- **Accessible templates, autogenerated alt text** to add a text description for images and **captions for audio** make it easier to collaborate inclusively



Accessibility checker in M365 Apps



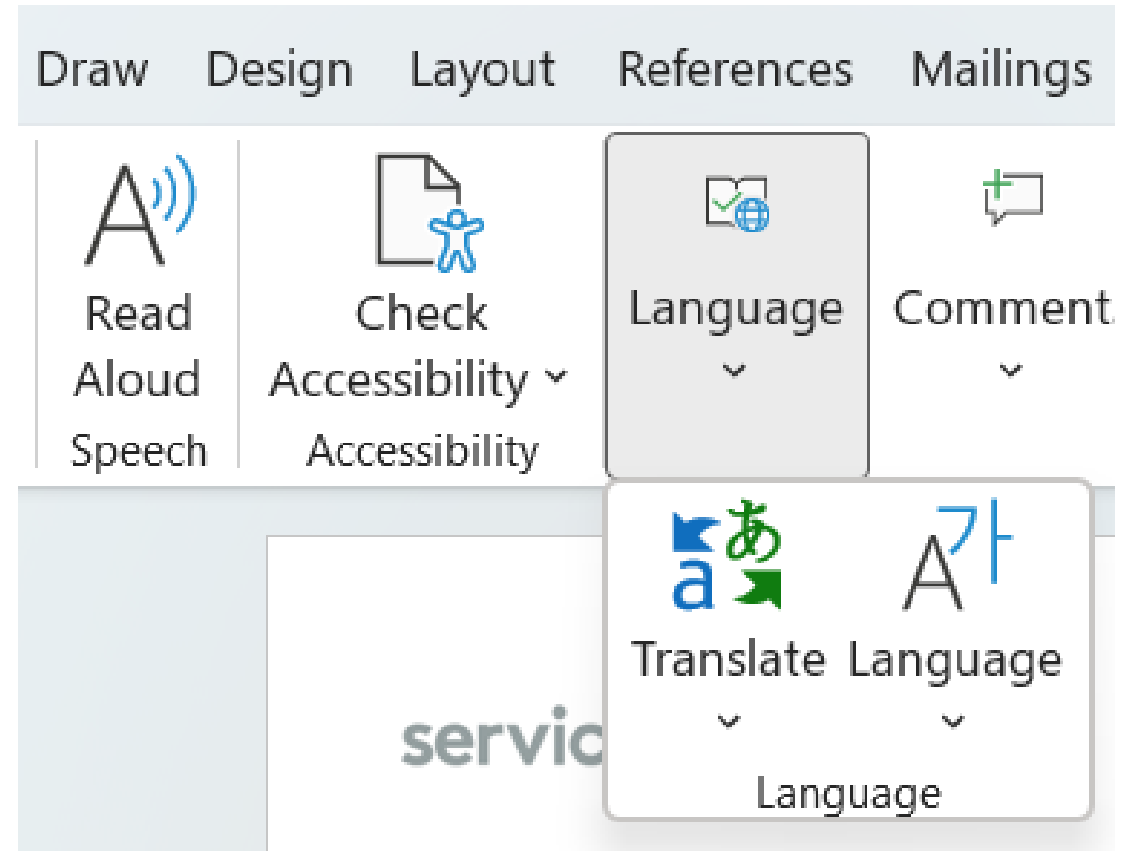
Steps for Success: How We Prepared

- ✓ [Followed guidelines these guidelines: Make PowerPoint accessible](#)
- ✓ Ran the Office [Accessibility Checker](#)
 - ✓ Added Live Captioning to all videos & start transcription
 - ✓ Added [alt text](#) to objects
 - ✓ Checked reading order for each slide
 - ✓ Checked color contrast
- ✓ Practiced as if there were no slides
- ✓ Used suggestions from a new Teams feature called 'Speaker Coach'
- ✓ Added the [Accessibility Reminder](#)

Outlook / Word / Excel / PowerPoint



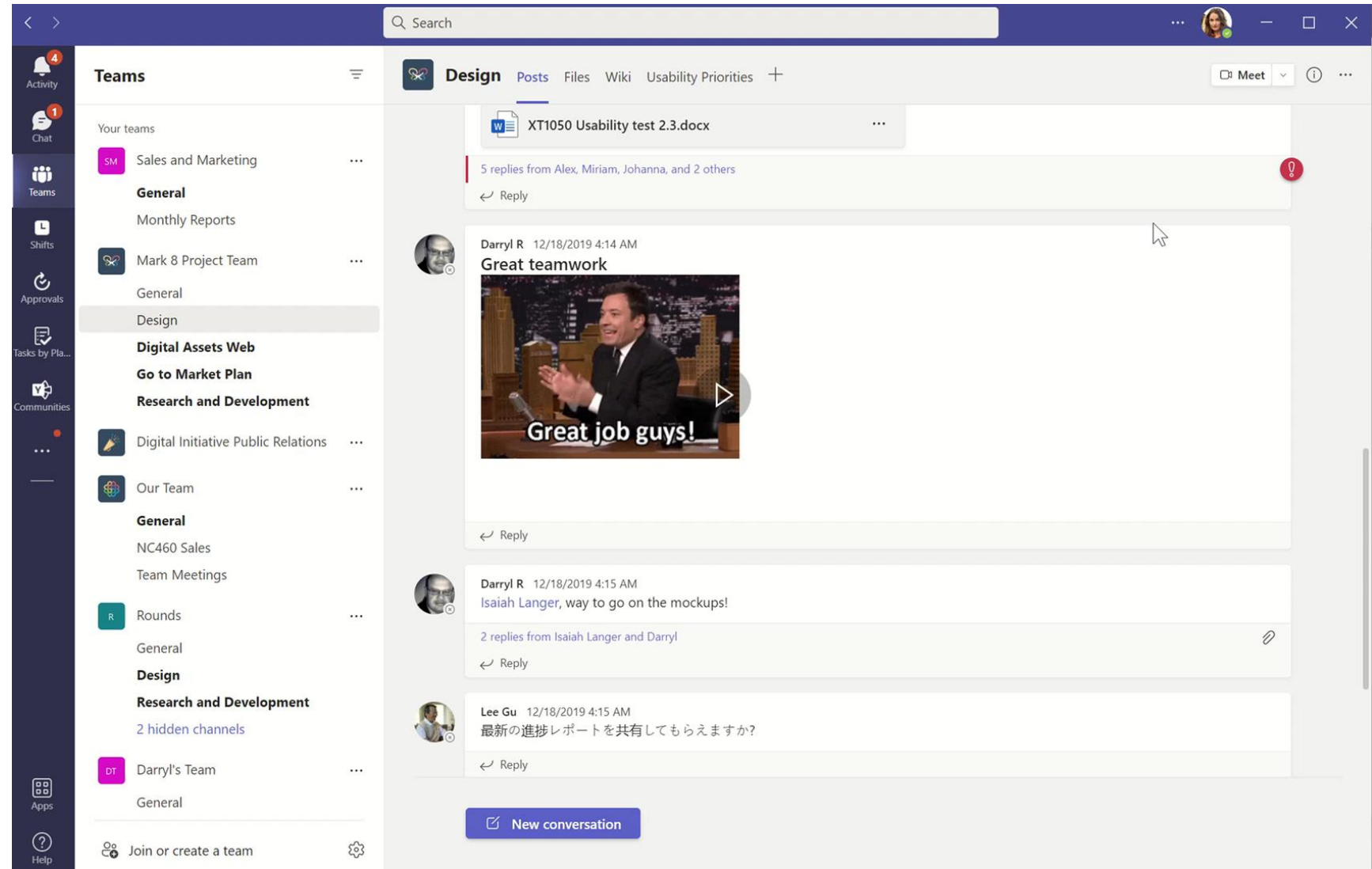
- Read Aloud (Word & Outlook)
- Immersive Reader (PowerPoint)
- Check Accessibility
- Translate
- Alt Text



Adjust the size of the Teams Client Elements



- Increase or reduce the size of the Teams Elements
- Via ellipses
- CTRL + or CTRL -
- CTRL and Mouse wheel



Video has no audio

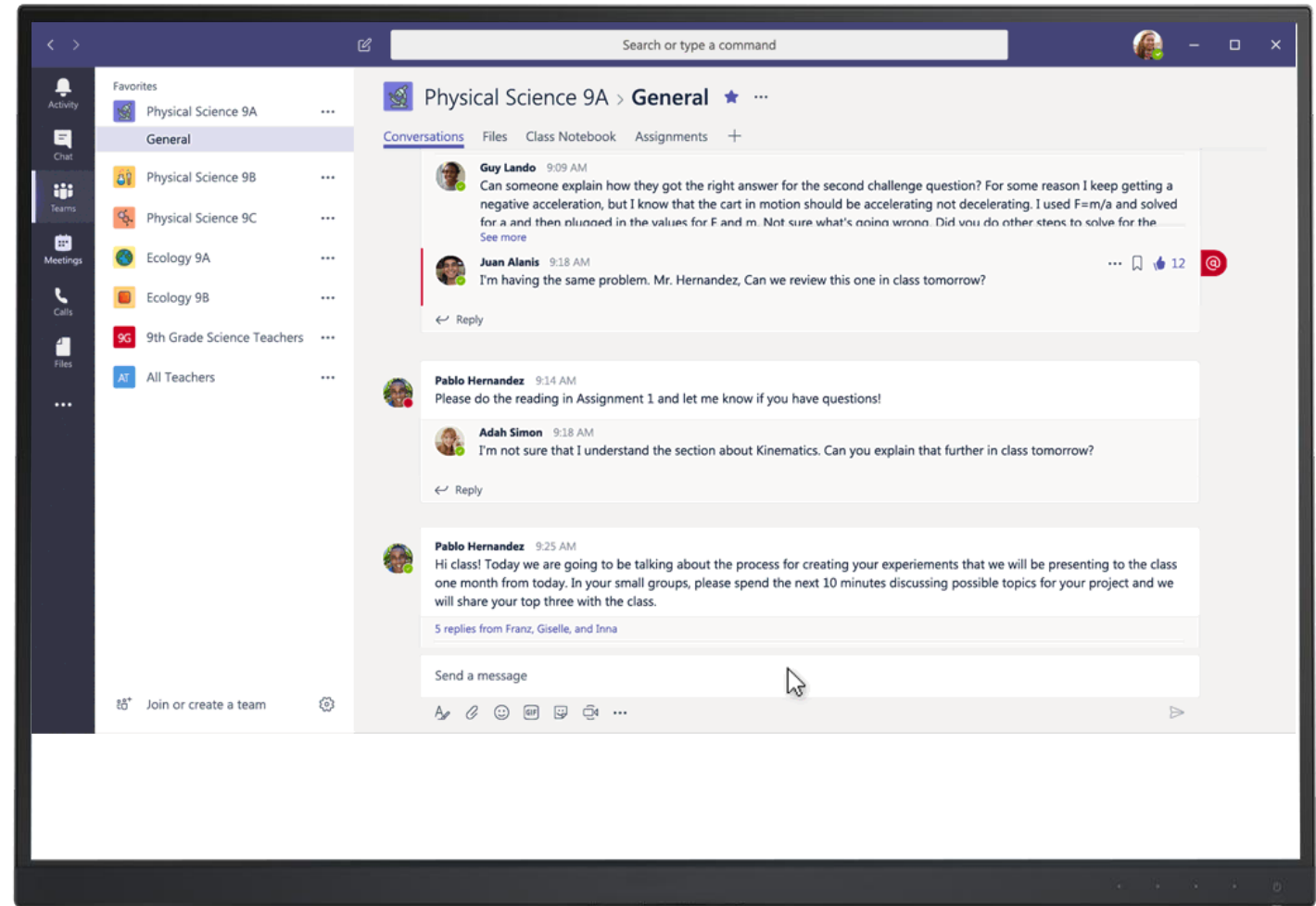


Immersive Reader

Built into Teams and Edge to improve reading and writing

2015 Hackathon Award winner

- Initially designed to help dyslexic student with reading.
- Narrates screen text in over **30 languages**
- Helps to increase reading speed and comprehension
- Available in **OneNote, Word, Outlook, Teams, and Edge browser**



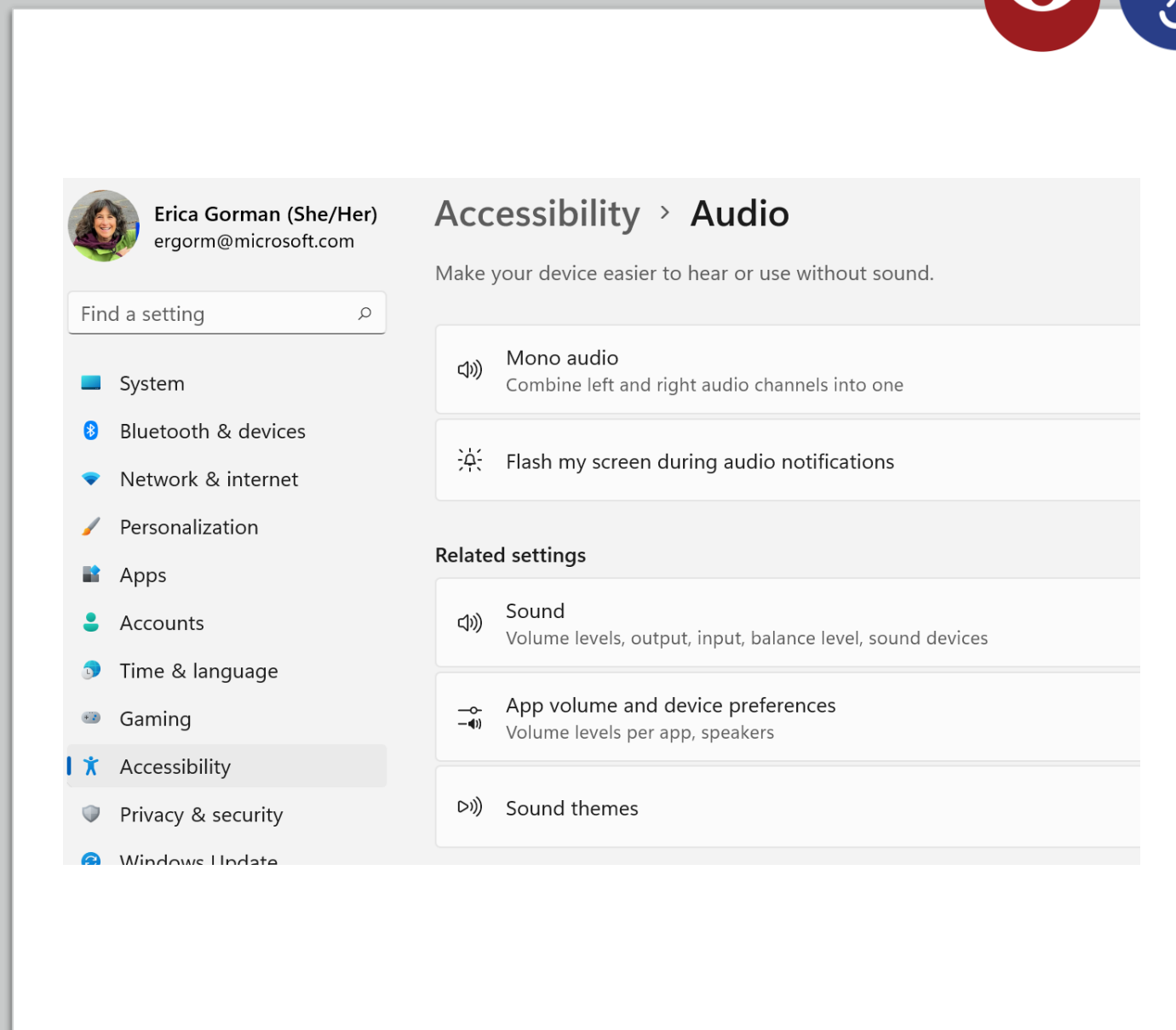
Hearing Accessibility Features





Windows 11 Hearing Accessibility features

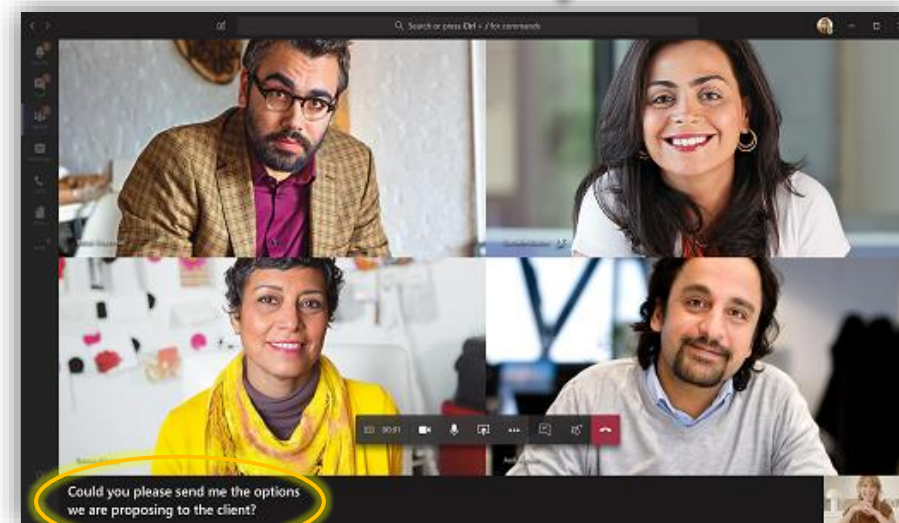
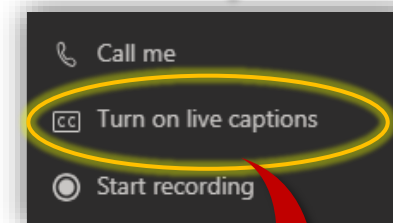
- Flash screen during audio notifications
- The start up chime plays when the lock screen is displayed so that people who are blind know when to enter their login information
- Control the sound themes for various actions like calendar reminder, mail, close program and more





Live captions in a Teams meeting

- **Live captions** can make your meeting more inclusive to participants who are deaf or hard-of-hearing, people with different levels of language proficiency, and participants in loud places by giving them another way to follow along.
- Live captions are turned on by individuals and only they see them.
- To use live captions in a meeting, **go to your meeting controls and select More options (...) > Turn on live captions**
- “Change spoken language” feature allows users to set the language being spoken for more accurate captioning
- **Transcription** can be turned on for the entire meeting and is saved at the end of the meeting

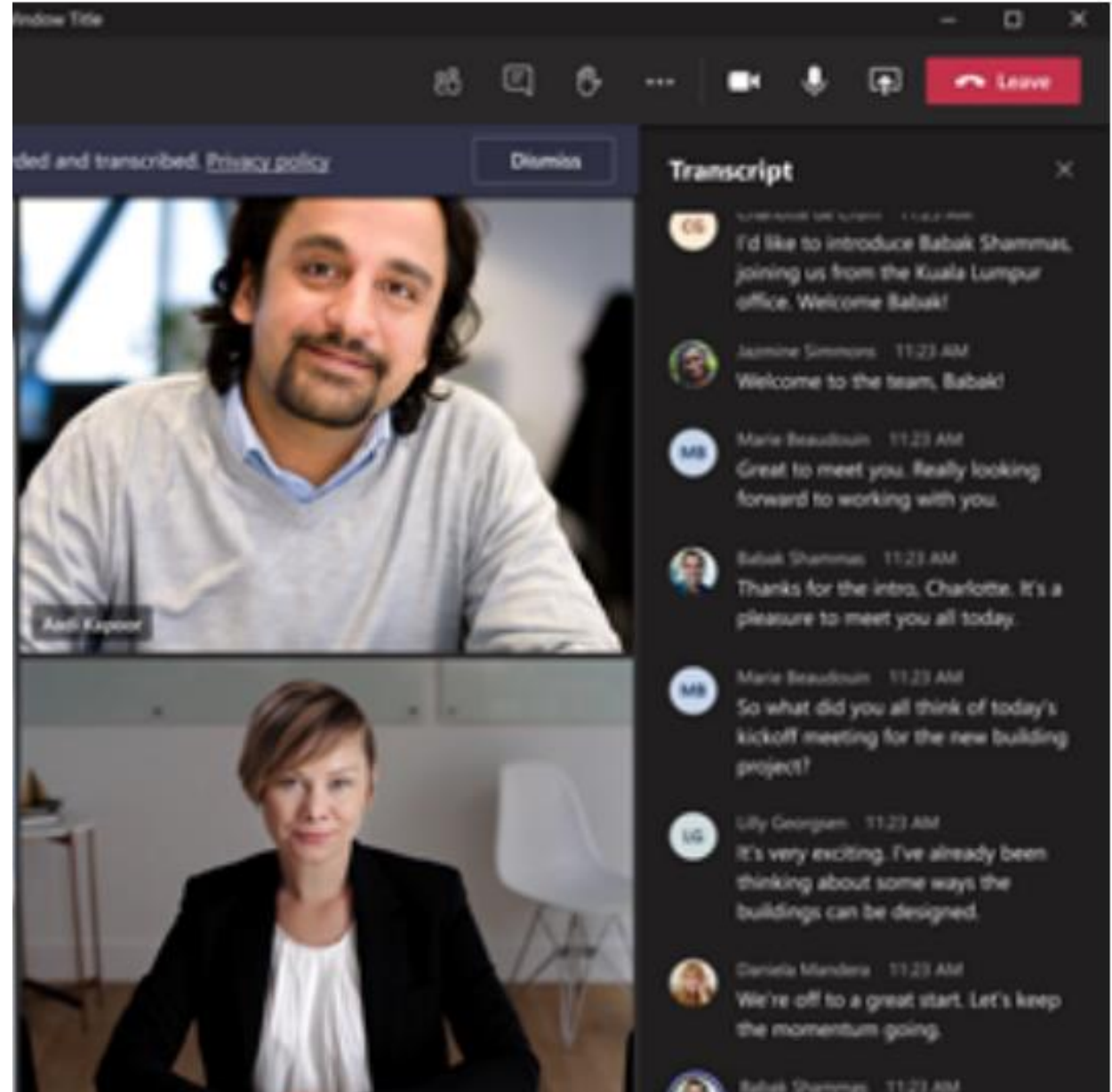




Transcription

During any Teams meeting, you can start a live transcription of the proceedings. The text appears alongside the meeting video or audio in real time, including the speaker's name (unless they chose to hide it) and a time stamp.

- Attendees are notified when transcription starts
- **Spoken** language of the transcript can be changed
- Transcriptions are saved with the meeting invite and can be shared





When do I use what?

For me

- **Live Caption** – Captions occur in real time for only the individuals that turn them on. Only a few sentences are viewable at a time.
- **Pin** – You can pin multiple people such as the presenter and an ASL translator.

For everyone

- **Transcription** – Transcription is saved with the Teams meeting and can be shared with everyone after the call is over.
- **Spotlight** – You can spotlight up to 7 participants simultaneously.



CART captioner

Communication access real-time translation (CART) is a service in which a trained CART captioner listens to the speech and instantaneously translates all speech to text. CART captions are used for many reasons including fields such as medical when the words spoken may be specific to that industry.

- After a meeting has been created, **go to your meeting options inside of Teams and select > Provide CART captions**
- A unique link is sent to the CART captioner who joins the meeting and provides captioning in real time

Allow mic for attendees?	Yes	<input checked="" type="checkbox"/>
Allow camera for attendees?	Yes	<input checked="" type="checkbox"/>
Record automatically	No	<input type="checkbox"/>
Allow meeting chat	Enabled	<input type="checkbox"/>
Allow reactions	Yes	<input checked="" type="checkbox"/>
Provide CART Captions	Yes	<input checked="" type="checkbox"/>
Generate new URL		Yes <input checked="" type="checkbox"/>
https://api.captions.office.microsoft.com		Copy link
<input type="button" value="Save"/>		

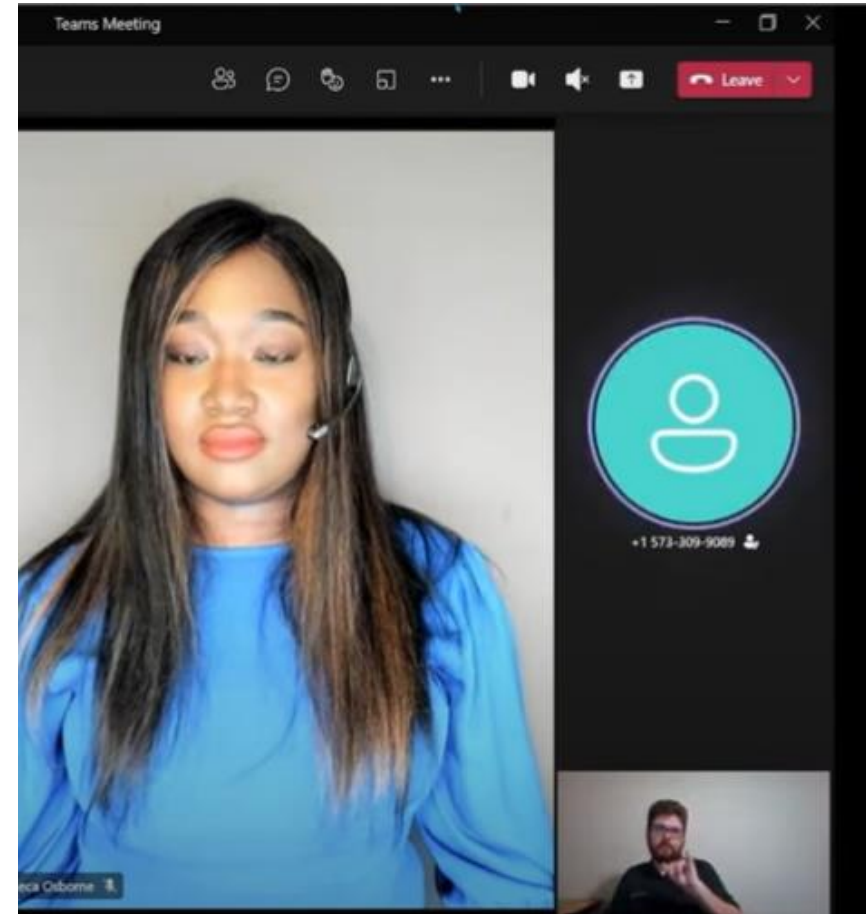


ASL translators in Teams Meetings

Individual users can pin an ASL interpreters for just themselves

ASL translators can be “spotlighted” for all meeting participants

How to video: [Accessibility Webinar - Using Teams with sign language interpreters, captions, and more](#)



Inline 譯本 ترجمة translation in Teams



Microsoft Teams inline translation empowers you to read Teams messages and posts in your preferred language.

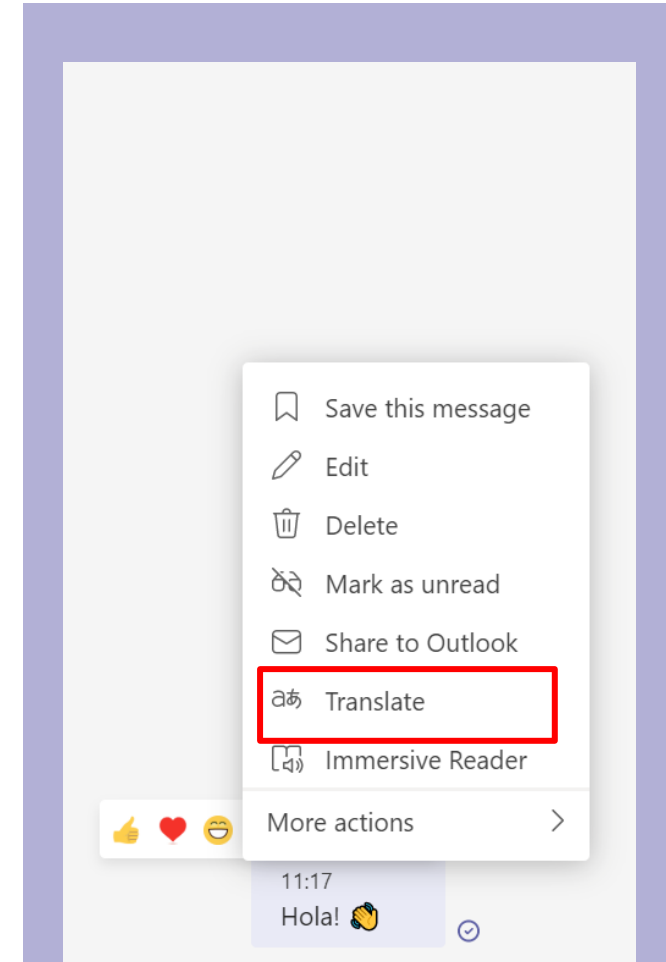
On a desktop/laptop

If you receive a message in another language on your desktop PC, [select More options \(...\)](#) > [Translate](#) at the top of the message.

30+ different languages

On a mobile device

Touch and hold briefly on the message > chose Translate




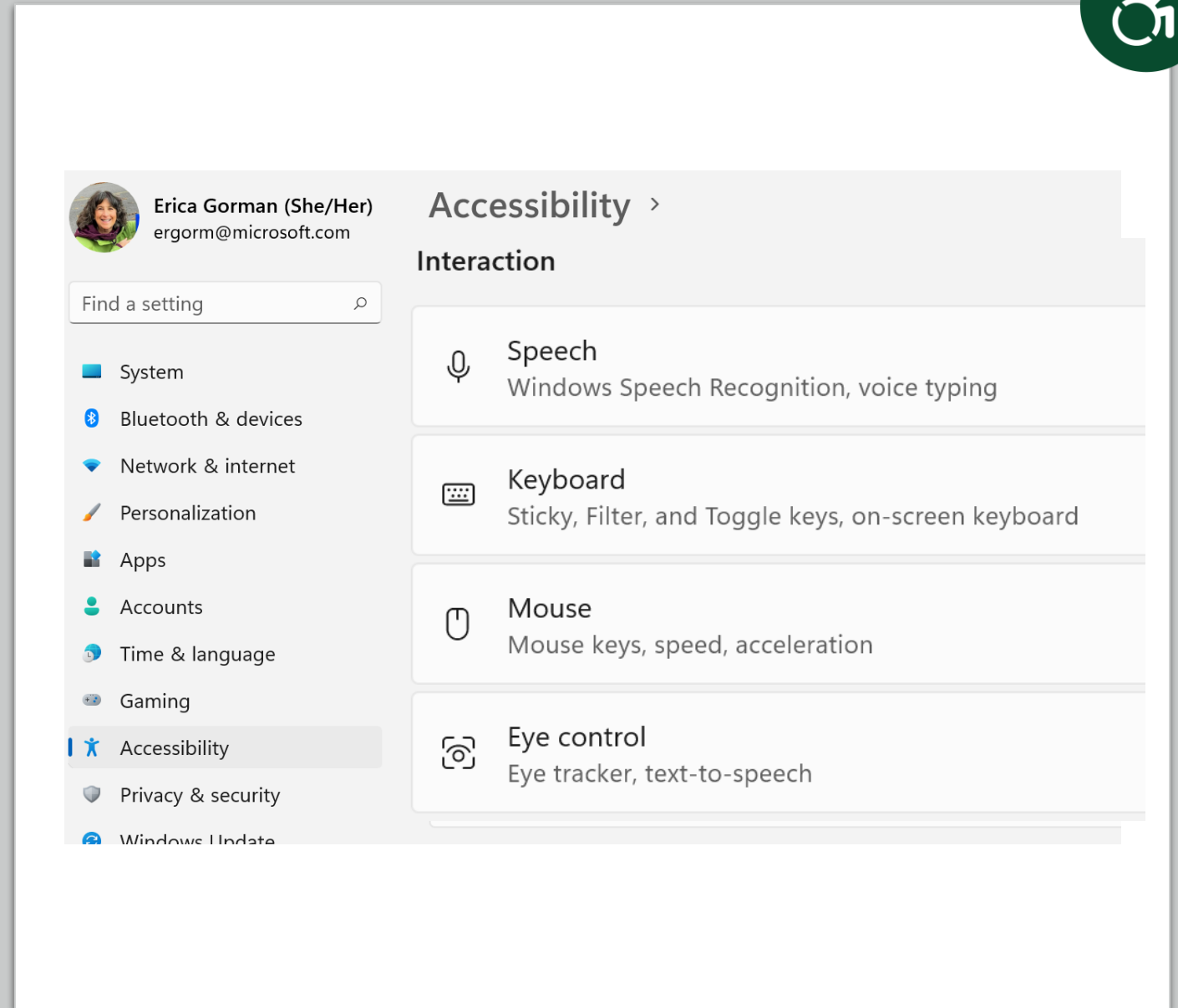
Cognitive, Neurodiverse & Mobility Features





Windows 11 Interaction Accessibility features

- Voice typing and speech recognition (dictation) Window key  + H
- Display controls beyond monitor brightness include night light to reduce blue light
- Sticky keys, filter keys and mouse controls allow users to modify the behavior of your keyboard to match your mobility
- Connect to eye tracker to use an eye control device



The screenshot displays the Windows 11 Settings application. At the top left, the user profile for Erica Gorman (She/Her) is shown. The main heading is 'Accessibility >'. Below this, the 'Interaction' category is expanded, showing four sub-sections: 'Speech' (Windows Speech Recognition, voice typing), 'Keyboard' (Sticky, Filter, and Toggle keys, on-screen keyboard), 'Mouse' (Mouse keys, speed, acceleration), and 'Eye control' (Eye tracker, text-to-speech). On the left side of the settings window, a list of categories is visible, with 'Accessibility' highlighted in blue. A search bar at the top of the settings window contains the text 'Find a setting'.

Translation for PowerPoint



00:22:06 Audience View

Key Sustainability Purchasing Drivers

Consumers will pay more for products and services that come from companies that are committed to positive social and environmental impact.

Percentage	Icon	Driver
62%	Thumbs up	The products are made by a Brand/Company that I trust ▼
45%	Hand holding a plant	The product is from a Company known for being environmentally friendly ▼
30%	Leaf	The product packaging is environmentally friendly ▼

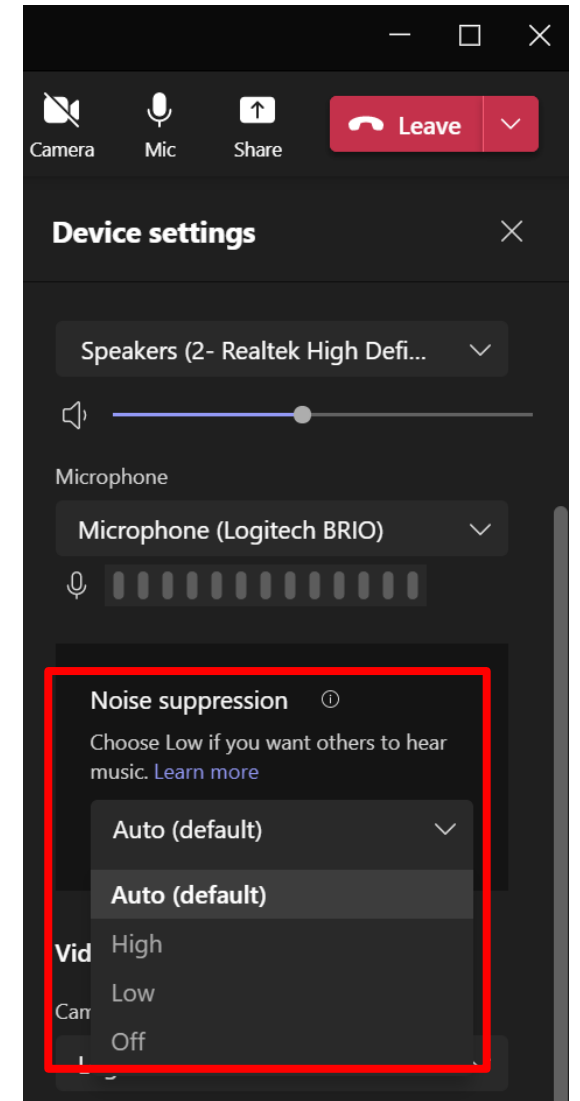
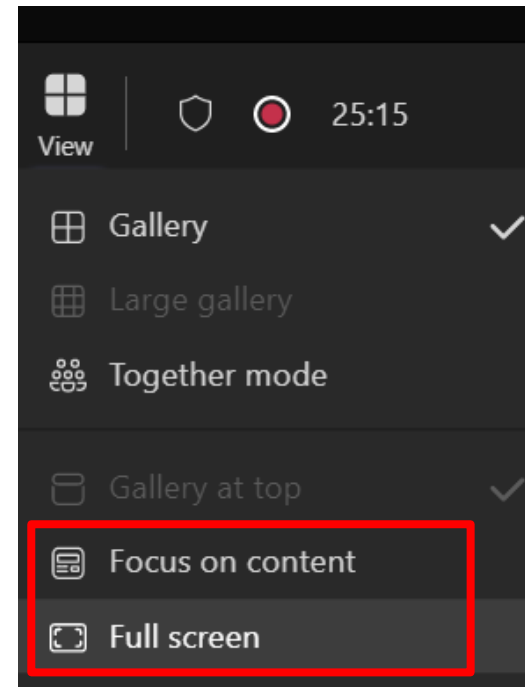
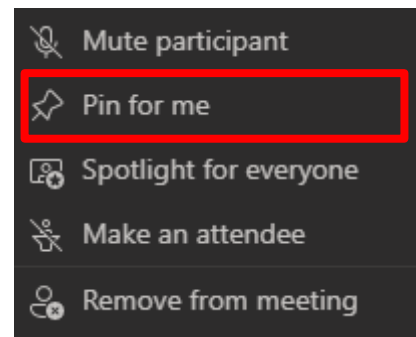
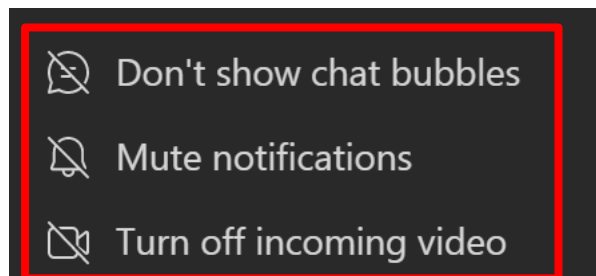
6 of 18

Participants: Serena Davis, Aadi Kapoor, Charlotte de Crum, Beth Davies, Miguel Silva, MJ Price, +6



Set up the meeting environment for optimal focus

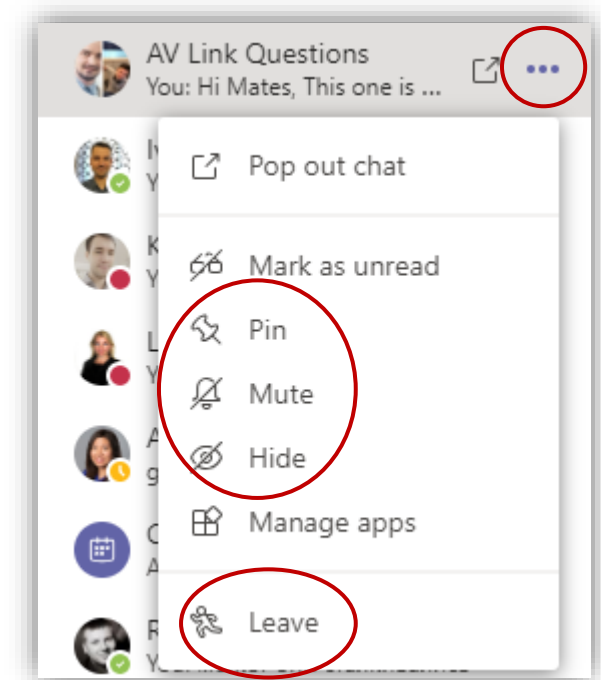
- Minimize distractions for yourself by:
 - Hiding chat bubbles
 - Muting notifications
 - Turning off incoming video
 - Pinning people you want to keep on screen
 - Enlarging to full screen mode and focusing on content
- Minimize distractions for others by enabling noise suppression





Quiet the noise

- **Pin** – keep important conversations at the top.
- **Hide** – you can hide a chat from your chat list if it's not relevant to you anymore. The chat will be hidden until someone posts a new message to it.
- **Mute** – when you mute a chat you won't get notifications from it, you'll still be included in the conversation.
- **Leave** – after you join a group chat, you can decide whether you want to remain a member or leave the group chat.



Keyboard Shortcuts

Navigate Teams without the mouse using shortcuts
CTRL + Period to display all the shortcuts



Keyboard shortcuts

Keyboard language is: English (United States)

General

Show keyboard shortcuts	Ctrl .	Go to Search	Ctrl E
Show commands	Ctrl /	Open filter	Ctrl Shift F
Goto	Ctrl G	Open apps flyout	Ctrl `
Start new chat	Ctrl N	Pop out new chat	Ctrl Shift N
Open Settings	Ctrl ,	Open Help	F1
Close	Escape	Zoom in	Ctrl =
Zoom out	Ctrl -	Reset zoom level	Ctrl 0
Report a problem	Ctrl Alt Shift R	Sign out	Ctrl Shift Q

Navigation

Open Activity	Ctrl 1	Open Chat	Ctrl 2
Open Teams	Ctrl 3	Open Calendar	Ctrl 4
Open Calls	Ctrl 5	Open Communities (Dogfood)	Ctrl 6
Open Viva Insights (Int)	Ctrl 7	Open Viva Learning	Ctrl 8
Open Microsoft	Ctrl 9	Go to previous list item	Alt ↑



Conclusion



Changing how we deliver accessibility support

Our responsibility extends beyond getting products out the door

Disability Answer Desk (DAD)



Technical support for customers with disabilities



Available in 16 markets and in English, French, and Spanish



Call, chat, American Sign Language, or Be My Eyes app

aka.ms/DisabilityAnswerDesk

Enterprise Disability Answer Desk (eDAD)



Accessibility support for organizations, businesses, and schools

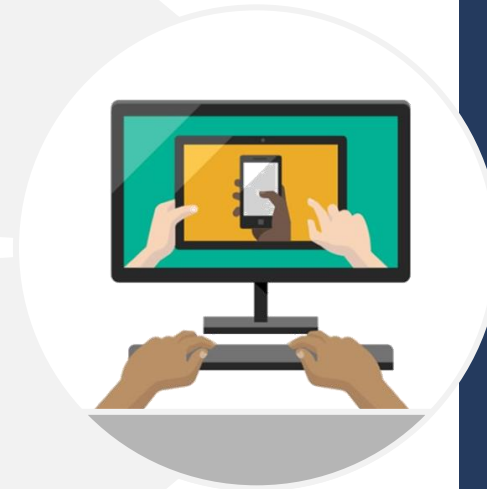


Assist with accessibility questions for Microsoft products and services



Request product accessibility conformance reports

aka.ms/eDAD



Disability Answer Desk Playbook

How to build an inclusive support team for your customers with disabilities

Get help 24/7 with Microsoft accessibility support

Teams and Microsoft 365 accessibility support



Chat with us
Launch chat

Chat with an expert 24/7 to answer questions about disability support



Call us
Call 1-800-936-5900

Available weekdays from 6am – 10pm (PST), and weekends from 7am – 6pm (PST)



ASL
Videophone 1-503-427-1234

American Sign Language (ASL) support by videophone weekdays from 8:30am – 5pm (PST)



Be My Eyes
Get the app

A free app connecting blind and low-vision people with visual assistance through live video call

Microsoft has a repository of helpful, detailed support articles on Microsoft Teams, Microsoft 365, and Windows as well as a Disability Answer Deck for end users, and an Enterprise Disability Answer Desk for organizations. Both offer support on Microsoft 365 and Windows via phone, chat, videophone, or the Be My Eyes app. Learn more at aka.ms/edad.

Learning Opportunities for customers

- [Disability Desk Webinar Series](#)
- Microsoft Accessibility Solutions Level 100
 - One-hour live session that shows your end users how to use the accessibility tools
- Accessibility Fundamentals Learning Path
 - [Accessibility fundamentals - Learn | Microsoft Docs](#)
- Accessibility 101: Designing products with everyone in mind
 - A one-day workshop for developers and designers introducing the basics of accessibility and how you can implement changes in your product so they can be used by a diverse audience
- Accessibility in the Modern Workplace
 - 1- or 2-day ideation, discovery and immersive workshop aimed at expanding your knowledge on the importance of accessibility and becoming an accessibility leader
- Inclusive U.I. Design: Designing User Interfaces with everyone in mind
 - A one-day workshop providing attendees with the tools and activities to identify and remedy potential accessibility issues in their existing user-interfaces and learn how to build more inclusive UI in the future

Tools and links for you to make Windows, Office & Teams more inclusive

Accessibility Webinar Series: Using Teams with sign language interpreters, captions, and more

<https://aka.ms/AccessibilityWebinars>

Windows

[Windows Accessibility Features | Microsoft Accessibility](#)

Office

[Getting Started with Accessible Content](#)

[How to build an accessible PowerPoint Deck](#)

[Outlook Create Accessible Content](#)

[Word Create Accessible Content](#)

Teams

[Accessibility overview of Microsoft Teams](#)

[Quick Start Guide: Using Microsoft Teams with a screen reader](#)

Microsoft Awesomeness

- [Microsoft - Bridge the Disability Divide](#)
- [Microsoft Disability Scholarship](#) (High Schoolers)
- [LinkedIn Learning series for Modern Office](#)
- [Resources for People with Disabilities](#)
- [Resources for people with disabilities](#)
- [Don't Leave Out Users with Invisible Disabilities](#)
- [Make Your SharePoint Site Accessible](#)
- [The Basics of Web Accessibility](#)
- [Disability:IN mentorship program](#)
- Subscribe to the Industry Accessibility News: [subscribe to IAN here](#)
- Neurodiversity at Microsoft: <https://aka.ms/nd>
- [Empathy & Innovation: How Microsoft's Cultural Shift is Leading to New Product Development](#)



Thank you!