



Microsoft Accessibility Features

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1

Presenter

- RESNA Certified ATP
- M.S. in Rehabilitation Science and Technology
- Taught undergraduate and graduate level assistive technology courses at East Carolina University
- Developed an online graduate certificate program in AT for East Carolina University



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2

Objectives

- Explore accessibility features for six different disability categories.
- Discover Windows 10 built-in accessibility features.
- Describe Office 365 accessible design features.



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Accessibility: required by 1+ billion; benefits all

Accessible technology benefits everyone, including people with:

- Permanent disabilities like those listed below
- Temporary impairments like cataracts or a broken arm
- Situational requirements like working hands-free and eyes-free while driving.



Visual

- Colorblind
- Low vision
- Blind



Hearing

- Hard of hearing
- Deaf



Cognitive

- Learning disabilities
- Autism
- Seizure



Speech

- Speech impediment
- Unable to speak



Mobility

- Arthritis
- Quadriplegia
- Spinal cord injury



Neural

- Bipolar
- Anxiety
- PTSD
- OCD
- Depression

Disabilities come in many forms both visible and unseen



Enhancing Productivity with Windows 10 Assistive Technologies Webinar.

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4

Features at a Glance



Vision	Hearing	Physical	Cognition
<ul style="list-style-type: none"> • Narrator • Braille beta • Magnifier • Color Filters • Cursor and pointer adjustments • Display Customization • High Contrast Themes • Keyboard shortcuts 	<ul style="list-style-type: none"> • Closed Captions • Mono audio • Skype translator 	<ul style="list-style-type: none"> • Eye Control • Sticky, filter, and toggle keys • Mouse keys • Dictation 	<ul style="list-style-type: none"> • Learning Tools in Microsoft Edge • Text suggestions*

*coming in next build

Support articles for all features can be found at: <https://www.microsoft.com/en-us/Accessibility/windows>



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5

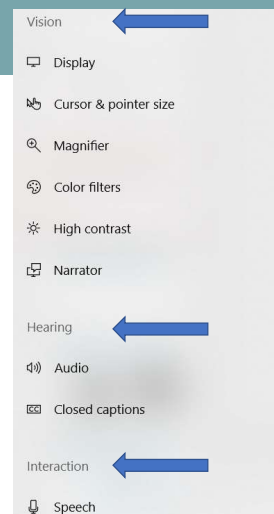
Ease of Access

- Start – Settings – Ease of Access
- Accessibility settings are categorized by area of need



Ease of Access

Narrator, magnifier, high contrast



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6

Vision

Narrator, Magnifier, Color Filters



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7

Vision

- [Narrator](#)

- Shortcut Keys
 - Windows + Ctrl + Enter
 - Windows + Volume
- Help links in settings
 - Quick Start
 - How-To Guides

Use Narrator

Use Narrator to read and interact with your device

☐ Off

☒ Allow the shortcut key to start Narrator

To turn Narrator off with a touchscreen, tap the Narrator slider, and then double-tap anywhere on the screen.

Press the Windows logo key  + Ctrl + Enter to turn Narrator on or off.

Press the Windows logo key  + Volume Up to turn Narrator on or off on touch devices.

[Learn Narrator basics with QuickStart](#)

[Learn how to use Narrator](#)



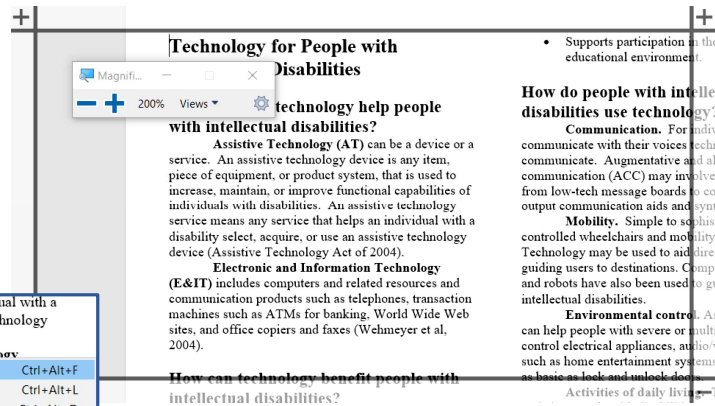
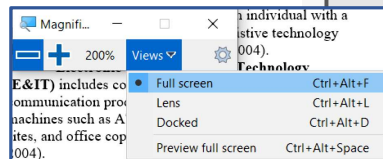
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8

Vision

- **Magnifier**

- Shortcut keys
 - Windows - +
 - Windows - -
 - Windows - Esc
- Mouse Docking
- Keyboard Focus



Vision

- Contrast - Color Filters
 - Shortcut Key – Windows + Ctrl + C
 - Three color filters
 - Filters for colorblindness

Color filters

Make photos and colors easier to see by applying a color filter to your screen.

Use color filters

Turn on color filters

☒ On

☐ Allow the shortcut key to toggle filter on or off

Press the Windows logo key  + Ctrl + C to toggle filter on or off.

Vision

Select a color filter to see elements on the screen better

☐ **Inverted** (reverse colors on the display)

☐ **Grayscale**

☐ **Grayscale inverted**

Select a color filter to see elements on the screen better

☐ **Inverted** (reverse colors on the display)

☒ **Grayscale**

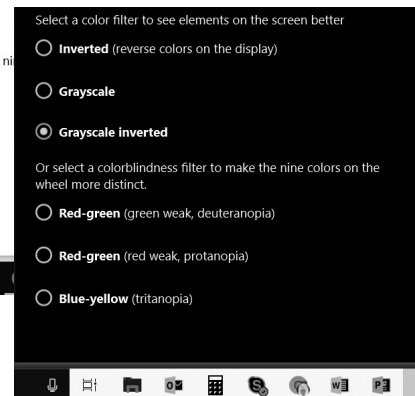
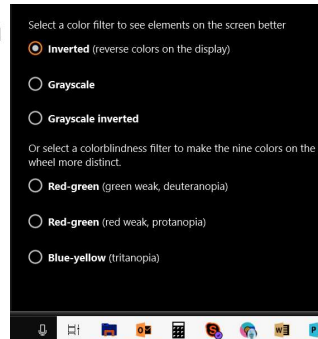
☐ **Grayscale inverted**

Or select a colorblindness filter to make the nine colors on the wheel more distinct.

☐ **Red-green** (green weak, deuteranopia)

☐ **Red-green** (red weak, protanopia)

☐ **Blue-yellow** (tritanopia)



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11

Vision

Or select a colorblindness filter to make the nine colors on the wheel more distinct.

☐ **Red-green** (green weak, deuteranopia)

☒ **Red-green** (red weak, protanopia)

☐ **Blue-yellow** (tritanopia)

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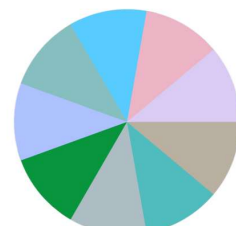
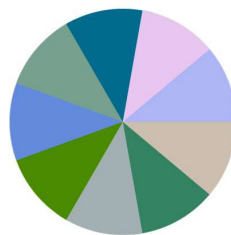
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12

Hearing

Closed Caption, Mono Audio, Skype Translator

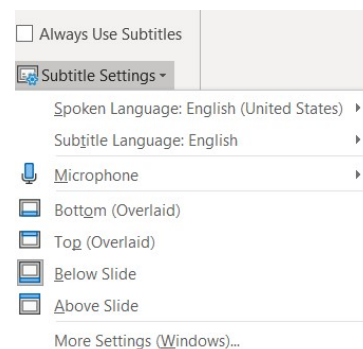


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13

Hearing

- [Presentation Translator](#)
- PPT for Windows with a microphone
- Slide Show Tab – Always Use Subtitles (Show Subtitles)
 - Settings include:
 - Language
 - Microphone
 - Location of captions/translation



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14

Hearing

- Closed Captions
 - Caption Font
 - Color
 - Transparency
 - Style
 - Size
 - Effects
 - Caption Background
 - Dim Window Content

Closed captions

Make your device easier to use without sound by displaying audio as text.

Preview

Use the dropdown menus to change how closed captions appear in Windows



Change caption font

Caption color

Default

Caption transparency

Default

Caption style

Default

Preview

Use the dropdown menus to change how closed captions appear in Windows



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15

Hearing

- Visual Notifications
 - Flash title bar
 - Flash active window
 - Flash entire screen

Show audio alerts visually

Select how visual alerts for notifications are displayed

- No visual alert
- Flash the title bar of the active window
- Flash the active window
- Flash the entire screen



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Hearing

- ASL Answer Desk
 - ASL Agents
 - Videophone support
 - Communicate through sign language
 - Use LogMeIn program, for troubleshooting

Disability Answer Desk

The Disability Answer Desk is where people with disabilities can get support with Microsoft products and accessibility features.

Connect with a Microsoft expert:

Call +1 (800) 936-5900

Chat online

American Sign Language
+1 (503) 427-1234
[Learn about ASL](#)



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17

Physical

Dictation, Keyboard, Eye Control,



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18

Physical

- Dictate

- Dictate Icon (Home Tab)
- Windows key + H
- Word, Outlook, PowerPoint
- Insert punctuation

- Speech Recognition

- Windows + Ctrl + S
- Ease of Access - Speech
- Control your computer/device with only your voice

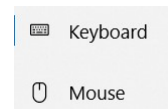


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19

Physical

- Mouse keys - Use the number pad to move the cursor
- Sticky Keys – one key press keyboard shortcuts
- Filter Keys – ignore brief or repeated keystrokes



Use Sticky Keys

Press one key at a time for keyboard shortcuts

☐ Off

☒ Allow the shortcut key to start Sticky Keys

Press the Shift key five times to turn Sticky Keys on or off



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20

Physical

• Eye Control – Windows 10

- Setting - Ease of Access – Eye Control
- Need an eye tracker installed

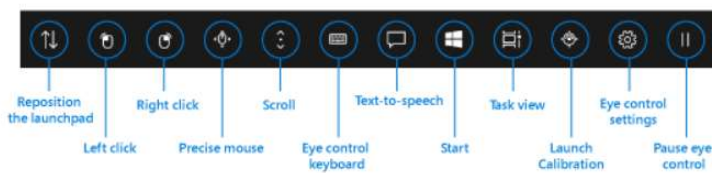
Eye control

Eye control lets you use eye tracking technology to control the mouse, type using an on screen keyboard, and communicate with people using text-to-speech.

Use eye control (preview)

To use eye control, connect a supported eye tracking device

[Get more info about eye control](#)



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Tobii

- Tobii Eye Tracker 4C
- Tobii EyeX
- Tobii Dynavox PCEye Plus
- Tobii Dynavox EyeMobile Mini
- Tobii Dynavox EyeMobile Plus
- Tobii Dynavox PCEye Mini
- Tobii Dynavox PCEye Explore
- Tobii Dynavox I-Series+
- Selected laptops and monitors that include eye tracking integrations

EyeTech

- TM5 Mini

aka.ms/eyecontrol



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22

Cognition

Focus Assist, Text Suggestions, Editor



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Cognition

- [Focus Assist](#)

- Settings – System – Focus Assist
- Automatic Rules - Alarms or Priority Only*
 - During these times*
 - When duplicating display
 - When playing a game*
 - When home*

Focus assist

- ☐ Off
Get all notifications from your apps and contacts.
- ☒ Priority only
See only selected notifications from the priority list. The rest will go straight to action center.
[Customize your priority list](#)
- ☐ Alarms only
Hide all notifications, except for alarms.



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24

Cognition

- Minimize distractions
 - Various areas in Settings section
 - Ease of Access
 - Personalization
 - Tiles
 - Microsoft Edge
- Visual Distractions
 - Taskbar Clutter
 - Live Tiles
 - [Reading View](#)

Simplify and personalize Windows

Show animations in Windows



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25

Cognition

- Text Suggestion
 - Settings – Devices – Typing
 - Word prediction for onscreen keyboards
 - Turn on for using a hardware keyboard

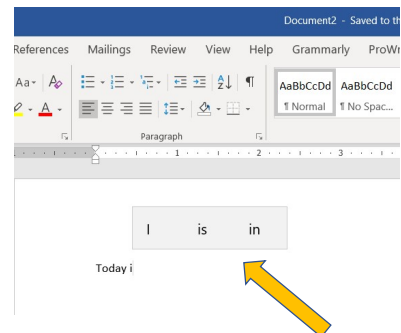
Hardware keyboard

Text suggestions for the hardware keyboard aren't available in some languages

Show text suggestions as I type



Autocorrect misspelled words I type



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26

One Note

Built-in accessibility

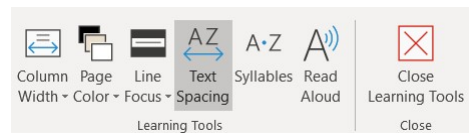


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27

Office 365

- Learning Tools
 - Word – View – Learning Tools
 - Background color
 - Read Aloud
 - Line Focus
 - OneNote
 - Same learning tools
 - Office Lens
 - Translate



This guide describes accessibility features built into Windows and Microsoft Office, as well as different types of [assistive technology products](#) that are designed for individuals who are Deaf or Hard of Hearing. Note that some sections of this guide may be useful to individuals with different types of disabilities like learning or mobility.

Microsoft wants to give the best possible

**who are Deaf or
Hard of Hearing**

This guide describes accessibility features built into Windows and Microsoft Office, as well as different types of [assistive technology products](#) that are designed for individuals who are Deaf or Hard of



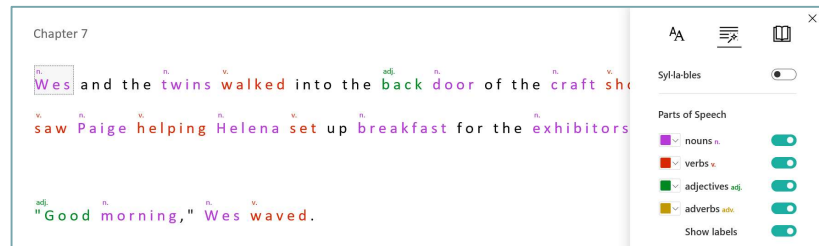
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28

Office 365

Immersive Reader

- OneNote and Word
 - Grammar
 - Syllables
 - Parts of Speech



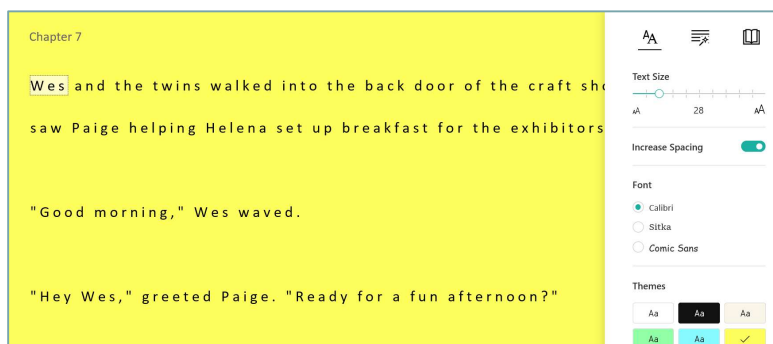
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29

Office 365

Immersive Reader

- OneNote and Word
 - Text
 - Size
 - Spacing
 - Font
 - Themes (color)



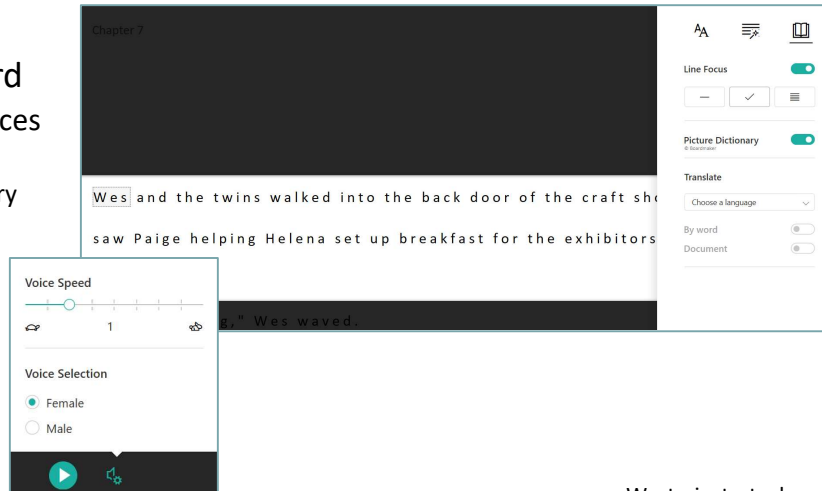
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30

Office 365

Immersive Reader

- OneNote and Word
 - Reading Preferences
 - Line Focus
 - Picture Dictionary
 - Translate
 - Voice Settings
 - Voice Speed
 - Voice Selection

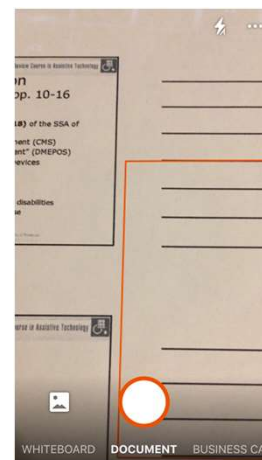


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31

OneNote

- Office Lens
 - App for Windows and iOS devices
 - Choose picture type:
 - Whiteboard
 - Document
 - Business Card
 - Photo
 - Take picture
 - Filter
 - Crop
 - Rotate
 - Add Text
 - Draw

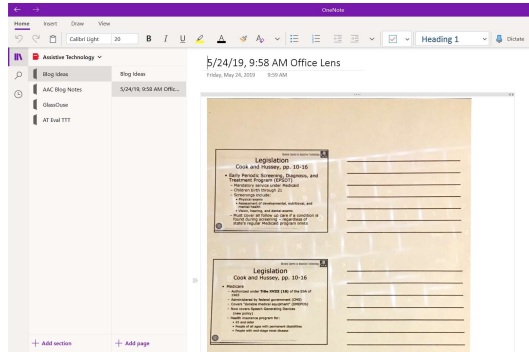


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32

OneNote

- Office Lens
 - Export To
 - 'Save To' options
 - Photo Library
 - PDF
 - OneNote
 - OneDrive
 - Word
 - PPT
 - 'Share To' options
 - Outlook
 - Mail
 - Immersive Reader
 - Other Apps



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33

Accessibility Checker

Accessible Content

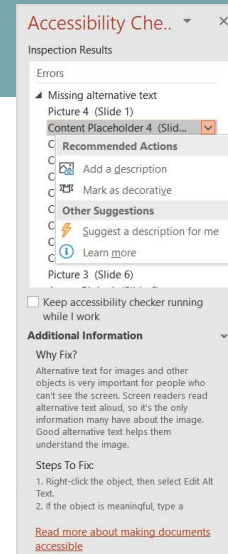
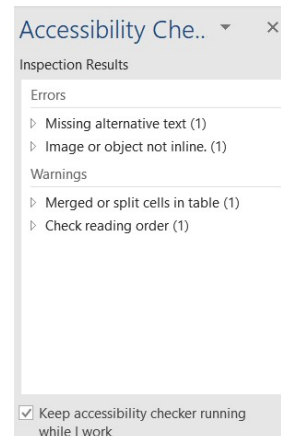


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34

Accessibility Checker

- Available in office programs
 - Review Tab – Check Accessibility
 - Shows errors & warnings
 - Clicking on drop-down provides recommended actions
 - Additional Information
 - Why Fix?
 - Steps to Fix



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35

Accessibility Learning Content

5 links to bookmark and share

1. Educator Training on Inclusive Content
aka.ms/accessiblecontenttraining
2. Educator Training for Personalizing Learning
education.microsoft.com/GetTrained/accessibility
3. Office 365 Accessibility Support Documentation
aka.ms/OfficeSupport
4. Answer Desk for Accessibility Support
aka.ms/Edad
5. Microsoft Accessibility Overview
Microsoft.com/Accessibility



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36

Resources

- Accessibility learning webinar series, <https://sway.office.com/ofnj0y3PT7dnqb0Z?ref=Link>
- Center, SETC Special Education Technology, director. Enhancing Productivity with Windows 10 Assistive Technologies Webinar. YouTube, YouTube, 30 May 2018, www.youtube.com/watch?v=5zNS0fH7l3o&list=PLLHYiCCtuxdOLdiacVRNQ8MH373qPm0gX.
- Disability Answer Desk, <https://www.microsoft.com/en-us/accessibility/disability-answer-desk>



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37

Resources

- Get started with eye control in Windows 10, <https://support.microsoft.com/en-us/help/4043921/windows-10-get-started-eye-control>
- Guide for people who are blind or low vision, <https://support.microsoft.com/en-us/help/4089827/windows-10-guide-for-people-who-are-blind-or-low-vision>
- Guide for people who are deaf or hard of hearing, <https://support.microsoft.com/en-us/help/4456772/windows-10-guide-for-people-who-are-deaf-or-hard-of-hearing>



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38

Resources

- Make it easier to focus on tasks, <https://support.microsoft.com/en-us/help/27930/windows-10-make-it-easier-to-focus-on-tasks>
- “Microsoft Accessibility.” Microsoft Accessibility, www.microsoft.com/en-us/accessibility.
- Presentation Translator for PowerPoint, <https://www.microsoft.com/en-us/translator/apps/presentation-translator/>

39

Questions

40

Any Questions after Webinar

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