

Face in View

Video calls have become a standard form of communication in the workplace, in schools, and in personal relationships. Before joining a video call, you want to make sure your setup is right and the camera is correctly focused on you. The new Face in View feature helps with this by alerting you to key visual details like:

- Is my face centered in the view?
- Am I looking directly at the camera?
- Is the lighting adequate?
- Are there additional items in the picture??

To activate Face in View, press the layered keystroke, **INSERT+SPACEBAR**, followed by **F**, and then **O**. Once enabled, Face in View continually monitors your face position and the lighting level. If anything changes, such as tilting your head left or right, or a decrease in brightness, you are automatically alerted. When focused in the Face in View application window, you can also use **TAB** or the **ARROW** keys to review information such as the position of your face in the picture, the current brightness level, and the camera in use.

Note: Face in View is not currently available during an active video call as it needs complete access to the camera.

While Face in View is active, the following layered keystrokes are available:

- Select a different camera (if multiple cameras are available): **INSERT+SPACEBAR, F, C**. Once in the Camera layer, use **UP** or **DOWN ARROW** to cycle through your cameras and press **ESC** to exit the layer once you've selected the one you want to use.
- Say detailed description, including face position and brightness: **INSERT+SPACEBAR, F, D**.
- Say brightness level: **INSERT+SPACEBAR, F, L**.
- Say background description: **INSERT+SPACEBAR, F, P**.
- Adjust face detection confidence level: **INSERT+SPACEBAR, F, U**. This is useful when encountering sporadic "no face detected" messages, even without any movement. The default and recommended detection confidence level is 75 percent. However, raising the detection confidence level to 80 percent or lowering it to 70 percent can improve consistency and allows you to fine-tune face recognition in your specific environment.

Note: The **INSERT+SPACEBAR, F, P** command is designed to identify potential items in your background using PictureSmart. However, it's important to understand that the accuracy of results may differ. While background descriptions might not always be completely precise, the intention is to offer hints about what's within your camera view.

Once you have verified your face is correctly centered in the camera view and the brightness level is good, press **INSERT+SPACEBAR, F, O** to turn off Face in View prior to activating your video call.

Split Braille

The new Split Braille feature in JAWS 2024 gives Braille display users powerful new functionality, including the ability to view content from different locations on the same Braille line using one of several types of views. When a Split Braille view is active, your Braille display is split into two halves or regions. Additionally, two vertical lines are displayed between the two regions to show the separation. The Split Braille feature is not restricted to displays of a certain size. It will work with Braille displays of any length, though using it with smaller displays may be less beneficial. To enable a Split Braille view, press **ALT+INSERT+V** (**ALT+CAPS LOCK+V** in Laptop layout) to open the new Select Braille View dialog box. Focus Braille display users can also press **LEFT SHIFT+DOTS 1-2-7**.

When this dialog box opens, you are placed in a list of available views. Select the one you want to use and select OK. The active view remains in effect for the current JAWS session. Restarting JAWS returns you to any defaults in effect before you enabled a specific view. By default, when a split view is active, your current location is displayed in the left region, while the results of the active view are displayed in the right region. If you want to change this, open the Select Braille View dialog box again and select the Swap split button.

For most views, you can independently navigate and even select text in the split region. To navigate text in the split view, use the **Right NAV** rocker to pan and the **Right Rocker** bar to move by line. To select text in region 2 for copying and pasting into a document (this even includes buffered math expressions in Word documents), press a **SHIFT** button along with a **Cursor Router** at the beginning of the text you want, and then once more where you want to end the selection. Just like when selecting text in a regular document, dots 7 and 8 indicates the selection. Once text is selected, it is automatically copied to the clipboard. You can then switch to a document and perform the standard **CTRL+V** keystroke to paste.

For HumanWare displays, the Brailiant BI 40 series and Mantis Q40 displays are supported. The following commands are available:

- Open the Select Braille View dialog: **Fourth Thumb Key+C1+C2+C3+C6**. On the Mantis Q40, use **ALT+CAPS LOCK+V** (requires Laptop Keyboard Layout).
- Toggle Buffered Text mode: **C1+C2+C3** (not available on the Mantis Q40).
- Pan the split view region: **Third and Fourth Thumb Keys**.
- Navigate by line through the split view region: **C6+Third and Fourth Thumb Keys** (not available on the Mantis Q40).
- Select text in the split view region: press the **First Thumb Key** along with a Cursor Router at the beginning of the text you want, and then once more where you want to end the selection.

For Papenmeier displays, the following commands are available:

- Open the Select Braille View dialog: simultaneously press **K1** and pan the **Easy Access Bar** right.

- Swap the split view and active document regions: simultaneously press **K1** and pan the **Easy Access Bar** left.
- Pan the split view region: simultaneously press **K4** and pan the **Easy Access Bar** right or left.
- Navigate by line through the split view region: simultaneously press **K4** and pan the **Easy Access Bar** up or down.

The following sections describe each available view.

No Split

JAWS sends content to the Braille display as it always has, using the full length of the display for the current line. This is the default.

Buffered Text

This view captures the text at your current location and places it in a buffer which is displayed on the right half of the split line. Once the buffer is created, you can navigate to another location in the current document and even switch to a completely different document while your buffered text remains available. For example, you could buffer some text on a Web page, **ALT+TAB** to an open document in Word or Notepad, and your buffered text remains available in region two of your display.

Other examples of when you might use the Buffered Text view include:

- Quickly comparing information between two sources.
- Keeping a block of text or string of numbers available for easy reference so you don't have to remember it.
- Keeping an exam question or math equation in view while composing an answer if the response needs to be placed in a different location than the question.
- Keeping text available while researching a topic.

By default, this view buffers the current paragraph. To change what text is buffered, open the Select Split View dialog, make sure Buffered Text is selected in the list of views, select Options, and change the Buffer Unit setting.

Available choices are:

- **Paragraph** : Buffers the current paragraph.
- **Document** : Buffers text from the current document (up to 64KB).
- **Selected Text**: Buffers any currently selected text. Note that the selected text in region 2 does not automatically update if the selection changes. If you select different text, you will need to choose Buffered Text again from the Select Braille View dialog and then choose Selected Text from the Options dialog to refresh the buffer.
- **Clipboard Text**: Buffers the contents of the Windows Clipboard, enabling you to effectively use region 2 as a notes area where you can bring in content from a variety of locations and easily reference it. For example, you could copy some text using CTRL+C , select additional

blocks of text from other sources and append them to the Clipboard using **INSERT+WINDOWS+C**, and then activate Buffered Text view and choose Clipboard Text to display all of your gathered information in region 2 to use as needed. Note that buffered Clipboard text is always displayed in Computer Braille regardless of your Braille output setting and you may also see control characters such as hard returns as part of the text.

If you want to buffer new text, move to the specific content you want to buffer, open the Select Braille View dialog, and choose the Buffered Text option again to capture the text at your current location. Focus display users can also press **LEFT SHIFT+DOTS 2-3** to toggle this view on or off.

Annotations

This view is primarily useful in Word for reviewing comments, revisions, footnotes, or endnotes. If the cursor is positioned on text that includes an annotation, the document text is shown in the first display region while the text of the annotation is shown in the second region. If the current line or text at the cursor location does not include any annotations, the entire display is used for the line and is not split. With this view, the text of a comment, revision, footnote, or endnote can be shown simultaneously with the main text they refer to. You can edit and read the document text while keeping the annotation text in view.

Note: For best results when reviewing revised text with Annotations view, make sure to enable All-Markup view in Word.

Attribute indicators

In this view, text from the current line is displayed in the first display region, while any text attributes such as bold, italics, or underline corresponding to the current line are shown in the second region. Pressing a **Cursor Router** on an attribute automatically moves the cursor to the character matching that attribute. Panning through the document also causes the attributes to update.

This view improves the experience when proofreading and editing as Braille can now show specifically whether text is underlined, bolded, italicized, and more, all while the main document text is still displayed.

If the text at the cursor location in region 1 has more than one attribute, such as bold and italics, the attributes in region 2 for that word or phrase will rotate with the letters "b" and "i." The remaining words without a particular attribute will show the letter "n" in region 2.

Speech History

When this view is active, the first display region shows the currently focused text, while the other region shows text from the JAWS Speech History. Examples of when you might use this view include:

- In Teams, verify the spelling of a participant's name who just joined a meeting. When a person joins a meeting, this information is currently only provided using speech.

- IN some situations, speech may provide additional information that is not always available in Braille. Setting the Split Braille view to Speech History enables deaf-blind users to access speech content without the need to switch the entire Braille output mode to Speech Output. This may also be beneficial for those who prefer Braille-only usage.
- Use it to keep track of important JAWS messages or text while Speech On Demand is enabled.

Translation Split

This view benefits teachers, students, and other users who are learning Braille, as it displays two different translation outputs of the current text. For example, if JAWS is configured to display Unified English Braille Grade 2, this will be displayed in the first display region, while the Computer Braille representation of the same text is displayed in the second region.

To customize the translation output displayed in the second region, open the Select Split View dialog, make sure Translation Split is selected in the list of views, select Options, and choose a translation mode from the Split Translation Region 2 list. By default, Computer Braille is selected. The remaining selections depend on your currently configured translation output mode and your currently active Braille language profile.

For example, if JAWS is configured to display text in Unified English Braille Grade 2, you can choose to display Computer Braille, U.S. English Grade 1, U.S. English Grade 2, or Unified English Braille Grade 1 in region 2. If your Braille language is set to Spanish with the translation output set to Grade 1, you can choose to display Computer Braille or Spanish Grade 2 in region 2. In addition, if your Braille Output mode is set to Computer Braille or Uncontracted Braille, enabling Translation Split causes JAWS to show you the Contracted Braille representation for your current language in region 1 while continuing to use your currently selected output mode in region 2. For example, if your default Output mode is Unified English Braille Grade 1, JAWS will show contracted Unified English Braille in region 1, while uncontracted Braille is shown in region 2. Translation Split is application-specific. So, you can enable this view, for instance, in Notepad, and use a different view in Word or Outlook.

JAWS Cursor

In this view, one display region shows the location of the PC Cursor while the other region shows the line of text at the JAWS Cursor location. If you are in an application or window where the JAWS Cursor is not supported, this display region will be blank. This view is helpful in situations where you may want to actively monitor a progress bar or application status bar while working on a document. It can also be used to read the title bar as you switch between multiple open documents.

Window Text

This view enables you to actively monitor the text in a specific dialog or application screen while you are focused in a different location. When active, text from the currently active window is

shown in the second display region. If the text in the window changes, it will immediately update on the display.

If the window closes, the region displaying the window text will become blank. The region will also be blank if you activate this view in an application that does not support obtaining window text.

Application-Specific Views

There are additional application-specific views available for Excel, Outlook, PowerPoint, and Teams to help improve productivity when accessing information in these apps using Braille. If you open the Select Braille View dialog box from one of these apps, the following additional views are available.

Excel Views

- **Excel:** JAWS behaves as it always has, displaying only the active cell as you navigate. This is the default.
- **Active view on 1, Monitor Cells on 2:** The currently active cell is displayed in region 1 while any assigned monitor cells are displayed in region 2. Monitor cells are assigned through JAWS Quick Settings and let you specify cells containing data that you need to keep track of as you work in your spreadsheet.
- **Active view on 1, Row and Column totals on 2:** The currently active cell is displayed in region 1 while row and column totals are displayed in region 2. The Quick Settings options for row and column totals must be set to Auto (or configured manually) to be displayed.
- **Titles and Formulas on 1, Active view on 2:** Row and column titles along with the active cell's formula (if available) are displayed in region 1 while the active cell is displayed in region 2.

Outlook Views

- **Message List plus Preview Pane:** If Message Preview is enabled in Outlook (default setting), the message list is displayed in region 1 while the contents of the current message are displayed in region 2. With both the Outlook Preview Pane and Message List plus Preview Pane view active, you can read your messages and pan through them without leaving your inbox.

PowerPoint Views

- **Show Speakers Notes during Presentation:** Your main slide presentation is displayed in region 1 while speakers' notes are displayed in region 2. During a PowerPoint presentation, the ability to simultaneously review notes along with the current slide helps maintain the flow of the presentation.

Teams Views

- **Show History during Chat:** When editing a Teams message, the chat history is displayed in region 2. This lets you independently review the history and not lose your place in the message you are editing or composing.

MathCAT

MathCAT is an open-source library that translates math content from web pages and Word documents to speech and Braille and is included in JAWS 2024. At this time, this feature is currently only supported in English and not supported on ARM devices. Additionally, only Nemeth Code is supported for Braille, and MathCAT settings are not exposed in the JAWS user interface yet. However, some improvements over our existing math support include:

- Improved speech for various math symbols.
- Speech and Braille column and row math expression cell content in tables on web pages and Word documents.
- Math Viewer improvements for navigating math content with speech.
- Improved results when entering equations into Word through the Math Editor.

By default, as we continue to refine our functionality with MathCAT, JAWS still uses our legacy support for reading math content that has been available for several versions. If you would like to experience how math is accessed using MathCAT, you can enable this feature through the Early Adopter Program, located in the JAWS Options menu.

Once enabled, you can access our MathML Examples page to see how JAWS reads various math equations using MathCAT. Just like with our prior math support, once you navigate to an expression, press **ENTER** to display it in the Math Viewer, where you can use the **ARROW** keys to explore its elements.

Note: You can disable using MathCAT and return to the legacy support for reading math expressions from the Early Adopter Program dialog.

Early Adopter Program

The Early Adopter Program lets you preview new and updated product features that are in development. As we gradually introduce features, you can evaluate them and provide feedback to help us improve before the final release. MathCAT is our first feature available for evaluation using the Early Adopter Program. MathCAT is a commonly used translator to convert MathML content into Speech and Braille output.

Using the Early Adopter Program

To turn on or off Early Adopter Program features, do the following:

1. In the JAWS Options menu, choose Early Adopter Program. The Early Adopter Program dialog appears and shows the features available to evaluate. The dialog is empty if no features are currently available.
2. Select one or more checkboxes to activate features. Clear one or more checkboxes to deactivate features.

Note: If you are evaluating changes to an existing product feature, it will revert to its original operation when you clear the check box.

Select OK and restart the software. Features that were turned on are available for use.

Submitting Feedback

While evaluating a feature, you are encouraged to give feedback about your experience. Feedback can be given whether the feature is activated or not.

To give feedback, do the following:

1. In the JAWS Options menu, choose Early Adopter Program. The Early Adopter Program dialog displays the features available to evaluate.
2. Select the Send Feedback button for the feature you are evaluating. The Early Adopter Program Feedback form appears.

Complete the Early Adopter Program Feedback form and select Send Feedback.

Seamless Updates for Scripts

JAWS scripts have enabled us to improve the usability of entire apps, and in some instances, add unique functionality to help improve productivity. Traditionally, scripts tend to be updated with the main product roughly every eight weeks. If a change in a particular app caused a particular script to no longer work properly, users would be stuck until the fix was rolled out in the next software update.

The seamless updates for scripts feature allows us to provide updates to scripts outside of the normal JAWS update cycle. For example, if an update to Microsoft Office causes certain status messages in Outlook to no longer be spoken, we can quickly respond with a fix to the Outlook scripts in a matter of days instead of users needing to potentially wait weeks or even months for a fix. When new scripts are available, JAWS automatically applies the updates without the need for any user intervention. To confirm if a script update was applied, open the JAWS Help menu, select the About dialog, and check the Scripts Revision number.

Seamless scripts updates are enabled by default. To turn this feature off, open the JAWS Options menu, select Basics to open the Basics Settings dialog, and clear the Seamless Updates for Scripts check box.

Note: Admin privileges are required to change this option.

Frequently Asked Questions

Q: Are my custom scripts affected?

A: No. The Updater will only update scripts stored in the \ProgramData\Freedom Scientific folder structure, which is a shared folder. Any user scripts or settings will continue to override shared scripts and settings.

Q: How can I restore the original scripts?

A: Do the following:

1. Locate and run the installer executable for your current version.

2. Choose Repair.

The original scripts will be restored.

Q: Am I told when scripts are installed?

A: Not at this time. This feature is primarily meant to resolve small problems due to an app change. Significant features will not be introduced using this method. We will add information on any fixes to our What's New pages.

Q: How often will updates come?

A: We do not anticipate updates to come often. It depends on how often supported applications change in ways that can be addressed through scripting.

New Command for Managing Calls

Pressing **ALT+WINDOWS+C** now opens a dialog where you can quickly respond to an incoming call from Teams, Phone Link, or Skype. This enables you to respond to a call without having to move focus to the app and then locate the correct option or perform the correct keystroke. Once the dialog opens and you've selected an app from the list, you can then **TAB** to the specific control in the dialog, depending on what you would like to do. Actions include accepting with audio or video, declining the call, hanging up the call (if one is active), or setting the currently selected app as primary so it always appears at the top of the list.

New Scripts for Discord

Discord is a free chat application designed for communities to stay connected. JAWS now includes preliminary support for the Discord app, including:

- Support for native Discord commands for navigating between servers, and navigating between Unread Channels with Mentions.
- Pressing **INSERT+W** while the Discord app is in focus shows available Discord keyboard shortcuts.

New Keystroke to Announce the Time with Seconds

Pressing **INSERT+F12** announces the current time using hours and minutes. However, there are situations, such as a job that has strict clock-in and clock-out requirements, where more accurate detail is needed. In JAWS and Fusion 2024, you can now press **CTRL+INSERT+F12** to have the time announced using hours, minutes, and seconds.

ARIA and Web

- JAWS now indicates if a check box is read-only in both speech and Braille.
- Addressed issues in some web apps where JAWS was not indicating submenus. This includes menu navigation bars as well as items that use the `aria-haspopup` attribute.
- Resolved issues using the **ALT+INSERT+D** command to jump to elements that include the `aria-details` attribute.
- Resolved an issue where headings containing expanded buttons were not being announced by JAWS when navigating with **H** or **SHIFT+H**.

- When moving into a group of tabs on a web page, resolved an issue where JAWS was too verbose when the first tab gained focus.
- If multiple elements include an aria-describedby attribute, addressed an issue where the items were not read in the expected order by JAWS.
- When navigating a toolbar in a web app and focus moves to a check box, resolved an issue where JAWS would unexpectedly exit Forms Mode.
- If you tab from an edit field to a group of radio buttons with Forms Mode active, addressed an issue where the label for the radio button group was not automatically announced.
- JAWS now properly indicates in Braille when focused on a heading that also includes a button. If JAWS is configured to show the control type in status cells, you will see "bh#" (where # is the heading level). Otherwise, you will see "btn h#."
- Addressed issues with form fields not being read correctly on certain websites.
- When alt tabbing from the web browser to another application, resolved an issue where JAWS was saying "running applications group."
- Resolved an issue where JAWS was not reading all of the info for slider controls when using **INSERT+UP ARROW**.
- JAWS now provides additional info about menu items when using **INSERT+TAB**.
- In Chromium-based browsers, addressed an issue where JAWS table navigation was not working as expected if aria-colindex values in a row were not contiguous.
- When pressing the **AT** key in a Google Docs file to display the @mentions menu, resolved an issue where JAWS was not indicating the menu had opened.
- Resolved an issue where the Virtual Cursor was not automatically activating when moving to a document inside of an application region. By default, the Virtual Cursor should also now be restricted to the document area once it gains focus.
- If the Virtual Cursor is currently in a web dialog, you can now use **INSERT+R** to turn off restriction so you can move to other areas on the page.
- Addressed an issue where JAWS was not announcing the start or end of tab panels.
- If HTML entity codes (&) were used in an aria-label for a role of "group" or "radiogroup," addressed an issue where selecting options was not working as expected.

Improvements in Office Apps

- Resolved an issue in Excel where JAWS and Fusion mouse echo was not reading column and row headers or sheet names.
- Resolved an issue where the content of certain Outlook dialogs was not automatically being read. For instance, the dialog that displays when Outlook launches and you had windows opened when you previously closed it.
- Addressed an issue where JAWS was not consistently reading the status bar in Outlook when pressing **INSERT+PAGE DOWN**.
- Resolved an issue where JAWS was not always indicating the replied status of an Outlook message, even with the Indicate Replied option enabled in Quick Settings.
- When pressing the **APPLICATIONS** key or SHIFT+F10 to open a context menu in Outlook, resolved an issue where JAWS was not indicating the menu had opened until **UP** or **DOWN ARROW** was pressed.

- When creating a new contact in Outlook and an Autocomplete menu appears, addressed an issue where JAWS was not automatically reading the first item in the list.
- Resolved an issue where JAWS would not say anything when using **TAB** to move through links in certain Outlook messages.
- Resolved an issue in Word where JAWS was double speaking "undo" when pressing **CTRL+Z**.
- If a Braille display is connected and you are viewing a PowerPoint presentation containing a video, resolved an issue where JAWS would continuously repeat the word "video."

JAWS Application Improvements

- The Liblouis Braille translator used by JAWS and Fusion has been updated to version 3.27.0.
- You can now use Voice Assistant to turn Keyboard Help on or off. For instance, "hey Sharkey, toggle Keyboard Help." This is the same as pressing **INSERT+1**.
- You can now use the **ESC** key to exit Keyboard Help if you inadvertently turned it on with **INSERT+1** without realizing it.
- Resolved an issue where custom scripts could not be assigned to the **APPLICATIONS** key with unified keyboard processing enabled.
- Addressed instances where using **SPACEBAR** to select or clear certain checkboxes was not working as expected with unified keyboard processing enabled.
- Addressed an issue in the Spanish version of JAWS where pressing **ALT** was not activating ribbons with Unified Keyboard Processing enabled.
- For German users, JAWS 2024 includes the latest RTFC German Braille translator update.

Other Improvements

- Pressing **INSERT+W** while focused in the Slack app now lists keystrokes specific to Slack.
- In Teams, when focus moves to the edit field for typing a new chat message, addressed an issue where JAWS was indicating the message contained text even if it was blank.
- In WhatsApp, resolved an issue where JAWS was not correctly reading the time at the end of messages. Also, removed extra characters that were appearing in speech and Braille when using **ALT+1** through **9** to review the most recent messages.
- When moving focus to the Search edit field in the Windows 11 File Explorer, JAWS now automatically announces the placeholder text indicating the location that will be searched.
- Resolved an issue where random characters were being displayed in the status cells of a Braille display when viewing a table.
- Addressed an issue reported by some users where JAWS would crash the first time Microsoft Edge was launched after a system boot and JAWS was configured to start automatically.
- Addressed an issue where pressing **ENTER** on a link in the JAWS Clipboard Viewer (**INSERT+SPACEBAR, C**) was not opening the specific page in the default web browser as expected.

About New England Low Vision and Blindness

New England Low Vision and Blindness brings hope through technology, training, and care. We are a full-service assistive technology rehabilitation training provider. We offer nearly 100% of all major electronic low vision, blindness, and software products and an assistive technology showroom center.

We provide 'patient choice' showcasing numerous technology options from the world's most respected suppliers, all in line with one's individualized budgetary limits and personal, educational, or professional goals. We also provide custom training solutions and troubleshooting support.

Widely known, tested, and trusted throughout New England, our team brings over 100 years of low vision experience. Our talent, technology, and training offerings are unmatched and highly respected. We are an extremely unique and extraordinary resource for anyone suffering from vision loss in New England. We are here to help.

Through our free demonstrations - either at one of our conveniently located assistive technology showrooms or in their home, office, or school - clients experience a relaxed 2-hour free personal demonstration of almost 100% of all low vision and blindness technologies available on the market.

To learn more about how we Bring Hope to people who are blind or with low vision, contact a Technology Specialist at New England Low Vision and Blindness please call our toll-free number 888-211-6933 or email us at info@nelowvision.com. You can also use the form above to request information about our services or a free demonstration on this or any of our products.