eBooks and Accessibility: Frequently Asked Questions

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Are *EBSCO eBooks* accessible?

Yes: *EBSCO eBooks* are delivered on the EBSCO*host* and EDS platforms, which are Section 508 and WCAG 2.0 Level A compliant, and for which VPATs are available. EBSCO eBooks also follow ARIA best practices and the recommendations of the W3C Web Accessibility Initiative to make content accessible to all users.

Online, for PDF format eBooks, a hidden layer to enable the delivery of ASCII text for consumption by a screen reader is available. When the ASCII text is activated, title and alt tags, as well as introductory text are properly accessible. When using a keyboard to navigate, tab order within the online eBook Viewer is maintained.

eBooks in EPUB format are easily accessible, both online and offline, because EPUB delivers HTML text, which is consumable by screen readers and accessibility tools.

Offline (downloaded) eBooks utilize Adobe Digital Editions software (ADE). ADE leverages accessibility features on Windows and Mac OS to support blind and low-vision users, such as high-contrast modes and resizing of the book's text. ADE also offers keyboard support. Screen reader users can use many different tools to read books with Digital Editions. More information about accessibility via ADE is available here:

https://helpx.adobe.com/digital-editions/using/get-started-with-adobe-digital-editions.html

How do DRM-protected and DRM-free eBooks compare in terms of accessibility?

EBSCO recently made over 60,000 titles available to purchase DRM-free for the unlimited user model. Because Adobe's DRM protection makes eBooks partially or fully incompatible with many assistive technologies like screen readers and text-to-speech tools, we highly recommend DRM-free eBooks for users with accessibility needs whenever possible.

- DRM-free eBooks are explicitly identified as "DRM-free" in ECM and on GOBI at the title level, to support librarians who wish to acquire DRM-free eBooks.

- DRM-free eBooks are not explicitly identified as "DRM-free" on EBSCO*host* because in our user testing, EBSCO found that this term is not well-known across all end users and does not have a universal definition. As a result, on EBSCO*host* DRM-free eBooks are identified as completely unlimited on the detailed record and in the viewer.

- On the detailed record, for DRM-free eBooks, the concurrent user level will indicate unlimited concurrent user access, and publisher permissions will be displayed as unlimited print/save/email pages and unlimited copy/paste.

  - For DRM-protected eBooks, the concurrent user level will reflect the library's level of access or ownership (e.g., Limited User Access (3 copies)), and publisher permissions will reflect what the publisher allows the user to do with that specific eBook (e.g., print/save/email 100 pages).

- Within the eBook viewer, publisher permissions will be displayed as: unlimited print/save/email pages, unlimited copy/paste, and unlimited download; and eBook availability will be displayed as unlimited user access.

  - For DRM-protected eBooks, these permissions will reflect a page number for print/save/email, and that number will count down as the user leverages these tools and downloads eBook pages.

- When downloading a DRM-free eBook, the end user receives an EPUB or PDF file which they can open in any compatible reading application; no Adobe ID is required.

  - DRM-protected eBooks will continue to be delivered protected with industry-standard Adobe DRM.

What is the process for requesting a remediated eBook file?

If you discover that an eBook file available via EBSCO*host* does not include sufficient accessibility support, EBSCO can provide a DRM-free copy of the eBook to the librarian upon request. Please ask your librarian to send an email to accessibility@ebsco.com with the name of your library, title and ISBN of the eBook in question, and the targeted assistive technology.

EBSCO will return the DRM-free eBook file to the requesting librarian via email as soon as possible, within 3-5 business days of the request. If an alternate delivery method is preferred please provide EBSCO with instructions for accessing and uploading to that location.

Do *EBSCO eBooks* include image descriptions?

The images in *EBSCO eBooks* may or may not include image descriptions. As we rely on publishers to provide tags and descriptive information, we cannot certify that images within eBooks will have sufficient information for assistive technologies to interpret them. However, when images are appropriately tagged and described, those elements can be found and read aloud within the *EBSCO eBooks* online viewer.

How do PDF and EPUB books compare in terms of accessibility?

EBSCO's online reader provides books in two formats, PDF and EPUB. Many books are available in both formats, while others are available only in one format.

- EPUB books automatically reflow and will resize to fit your screen and the text can be resized easily by the end user. EPUB is by far the most accessible eBook format, and it was developed with accessibility in mind. EPUB books deliver HTML text, so they are easily read by screen reading software on any device. On some devices, they can be read aloud with native software and need no additional tools at all.

- PDF format books have distinct pages, which allow for page-level citations. However, they have a fixed page size that may not work well on all devices or screen sizes/zoom levels. PDF format books are broken into individual pages which can take more time for accessibility and Text-to-Speech (TTS) tools to navigate. EBSCO has implemented the ASCII text stream option, which screen reader users can activate from within the eBook Viewer page header for easier and quicker consumption of PDF eBooks.

Both formats can be downloaded for offline reading if allowed by the publisher. DRM-protected eBooks must be opened in a program which supports Adobe DRM, such as Adobe Digital Editions or Bluefire Reader.

What reading options are recommended for reading *EBSCO eBooks* with different assistive technologies?

EBSCO eBooks can be used with a variety of different assistive technologies. Visit the EBSCO eBook Accessibility Guide for specific guidance. Following are our general recommendations for the best reading experience with each type of assistive program:

- Screen readers: we recommend reading *EBSCO eBooks* in our online viewer, or downloaded offline if your preferred screen reader works well with Adobe Digital Editions

- Screen magnifiers: we recommend reading *EBSCO eBooks* in our online viewer, which we've designed to work well with screen magnifiers

- Text to speech tools: we recommend downloading key eBook chapters and opening them with the user's text-to-speech tool, or copying the text from the viewer into the text-to-speech tool

- Color and contrast changers: we recommend reading *EBSCO eBooks* in our online viewer, or downloading key eBook chapters and opening them with a reader that supports the user's preferred color and contrast changing tools

How should users with assistive technology navigate the *EBSCO eBooks* experience?

Please visit the EBSCO eBook Accessibility Guide for details on how to navigate with different assistive technologies.

What screen readers work with *EBSCO eBooks*?

EBSCO tests specifically with the JAWS and NVDA screen readers for online eBook support. However, a range of screen readers should be able to read the ASCII text, when activated. For eBooks in the EPUB format, any screen reader should work properly, since EPUB was developed with accessibility in mind.

What are the recommended screen reader and browser combinations for *EBSCO eBooks*?

The recommended screen reader and browser combinations are as follows:

- **Desktop**: Internet Explorer 11 + JAWS
- **Desktop**: Firefox (latest) + NVDA
- **Desktop**: Safari (latest) + VoiceOver
- **Mobile Apple devices**: Safari + VoiceOver
- **Mobile Android devices**: Chrome + TalkBack

How are saved PDF chapters accessible?

When sections or chapters of *EBSCO eBooks* are saved (or printed) by a user, a PDF document is created. These saved PDF excerpts maintain and deliver the publisher's original text, which means they can be read by a screen reader or TTS tool and can be searched for a word or phrase.

EBSCO does not deliver scanned image files of *EBSCO eBooks* – image files do not deliver text and are not accessible at all. (Scanned image files require transformation using Optical Character Recognition software to create a text layer for consumption by accessibility tools).

How can I tell if a PDF is an image/scan or if text is being delivered?

To determine whether a saved PDF section from a vendor delivers text or not (i.e., is an image file), simply attempt to highlight a portion of text. If the file is an image, the text will not highlight, because there is no text to grab. If it is a text file, you will be able to highlight, as in the image below:

If you can highlight text and copy it, then a screen reader can read it too.

Note: There is a very small percentage of "legacy" NetLibrary PDF eBooks from before 2004 with scanned page images, where the text is not accessible to screen readers. For these titles, the publishers will supply accessible versions of content to users upon request. Contact accessibility@ebsco.com if you need to obtain an accessible version of a legacy title.

Are *EBSCO eBooks* compatible with other tools like Read and Write Gold, Natural Reader, ClaroRead, or any clipboard reader tools? These are commonly used by dyslexic readers.

We do not regularly or officially test with these tools, but if they are compatible with PDFs, they should work with *EBSCO eBooks* chapters. Adobe DRM may conflict with some of these tools so a DRM-free or remediated file may be necessary for full compatibility. Additionally, Adobe Acrobat Reader has a text-to-speech feature that is available to non-commercial users for PDFs. If a tool relies specifically on what may be copied to a clipboard, it's functionality is limited to the publisher's copy/paste allowance for the title.

Is there a way for users to search for only eBooks with particular access features?

There is not a search limiter for accessibility features because all *EBSCO eBooks* are accessible, with the rare exception of a few pre-2004 NetLibrary titles (for which we can obtain accessible versions for users upon request). For users that prefer EPUB/HTML content over the accessible PDF format, they can type **FM EK** in the search box. This will pull up search results that are in EPUB format (whether or not there is an accompanying PDF version). In the future, we will have limiters available to help users locate EPUBs more intuitively.

As of now, we do not display any publisher-supplied metadata relevant to accessibility. If we determine that this is of interest/use to our users, we will certainly work to do so.

How does JAWS deal with images and charts? In PDF? In EPUB?

For native PDFs and EPUB, JAWS should read whatever metadata / alternative text is provided by the publisher and tagged to be associated with the image or chart, if the chart is an image file. If the chart is an actual table, then JAWS should the read the table, left-to-right, top-to-bottom (for English and non-right-to-left languages). If the title is in EPUB format, the publisher likely included instructions for how to read the chart or image, and the screen reader will read from those instructions. An advantage of the EPUB3 format is that images and charts will be searchable as well as accessible.

What are the accessibility advantages of the EPUB3 format?

EBSCO has integrated thousands of EPUB3 format titles to leverage the accessibility features, such as enhanced navigation and interoperability, as well as non-English language support – EPUB3 provides much better support for non-Roman characters (which the EBSCO eBook viewer currently supports) and languages that read up/down and right to left (which the EBSCO eBook viewer will support in future). The EPUB3 standard also supports / encapsulates the DAISY talking book standard, for publishers that would like to take advantage of it, and provides support for fixed-format titles (such as comics and graphic novels) and MathML.