

High-Level Accessibility Evaluation (WCAG 2.1)

EndNote (web version)

October 11, 2025

Prepared for:

BTAA-Library Accessibility Alliance

Prepared by:

Emily Mason, UX Researcher
User-Experience Lab
CCI Research & Innovation Center (RIC)
University of Tennessee
uxlab@utk.edu

Primary Point of Contact:

Amy Forrester, RIC Interim Director
aforres4@utk.edu

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SUMMARY

This report reflects the findings of a high-level assessment of the EndNote (web version) platform for its conformance with the W3C Web Content Accessibility Guidelines version 2.1 (WCAG 2.1).

Overall, there are very few issues with the EndNote platform. There are, however, some essential WCAG 2.1 A and AA level requirements that need to be met for compliance around the use of semantic HTML, accessible naming, and bypassing content blocks. There are also a few issues with keyboard navigation and focus. Below are the most critical issues to address to improve system compliance.

Top Findings

1. **Semantic HTML:** This is the most important issue with the system as it stands right now. Currently, the main content section of each page is structured using a semantic HTML `<table>` element. This presents significant issues for screen readers as they rely on the programmatic relationships of semantic HTML to read the page to non-sighted users. Because of the scale and complexity of the `<table>` element, this forces the screen reader to continue reading a large amount of table elements until it finds the element the user is actually looking for. We strongly recommend retooling this section to use CSS to structure the page and only use semantic elements when that element is actually being used as a table for information.
2. **Accessible Naming:** There are a few instances where select elements on the page lack an accessible name. This can also cause significant issues with screen reader support and should be addressed.
3. **Bypass Repeated Blocks of Content:** The site currently lacks skip links at the top of the page that allow the user to bypass the navigation and skip directly to the main content of the page. Adding these will allow users that require keyboard navigation to bypass this block of content to keep their workflow from being interrupted.
4. **Keyboard Navigation:** There are a few minor issues with keyboard navigation. In general keyboard navigation on the site works well, but there are a few areas where keyboard focus throws off the navigation of the site.

ACCESSIBILITY FINDINGS

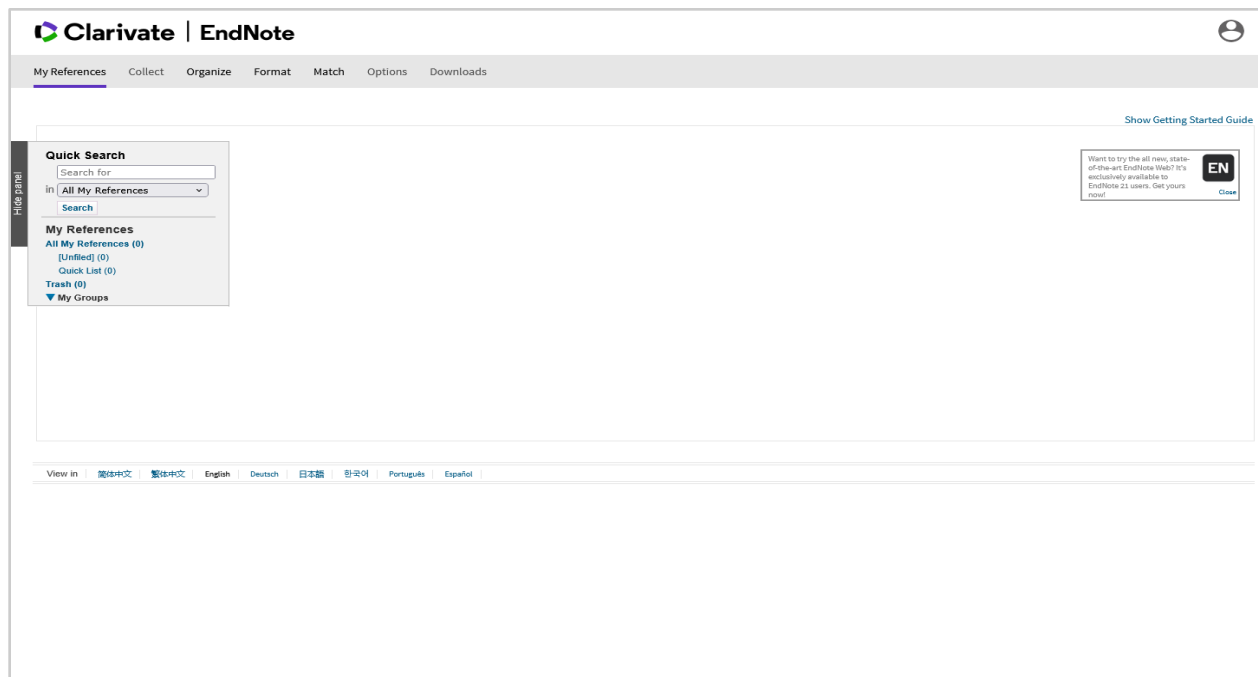
This report was conducted against the EndNote Platform and covers a selection of pages and features that were to be tested as a representative sample of the database's conformance to the WCAG 2.1 AA standards.

The resource was reviewed using a combination of manual and automatic review tools and assistive technologies, including the WAVE Accessibility Assessment tool, Axe Accessibility Assessment tool, WCAG Color Contrast Checker, and NVDA screen reader. PDF content was tested against Section 508 requirements using Adobe Acrobat's accessibility tools and manual analysis. All problems identified by automatic tools were verified manually. This evaluation was performed using Firefox on Windows 11.

Below are the errors revealed during the accessibility evaluation of the EndNote platform. Each result shows a summary of accessibility issues and the reason it was flagged. Screenshots are included.

1. Initial Interface

Test Case: Test initial interface/landing page to ensure menus, sub-menus, search box, images, icons, etc. are accessible. <https://www-myendnoteweb-com.utk.idm.oclc.org/EndNoteWeb.html>



SC 1.3.1: Information, structure, and relationships conveyed through presentation can be programmatically determined or are available in text.

Reason flagged:

- The main content of this page is structured using an HTML <table> element, and this makes navigating the content with a screen reader nearly impossible. Screen readers pick up on the semantic html and read the entire structure to the user, and because of the complexity of this table element, the screen reader just keeps going through the different layers until it finds the element the user is actually looking for. We strongly recommend restructuring this page to use CSS to structure the elements on the page instead of an html table.

SC 2.4.1: A mechanism is available to bypass blocks of content that are repeated on multiple web pages.

Reason flagged:

- There isn't a way to bypass the navigation content and skip directly to the content section.

SC 2.4.3: If a web page can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components receive focus in an order that preserves meaning and operability.

Reason flagged:

- There are focusable elements on the page that don't appear visually on the page. This content is hidden from sighted users, but appears for non-sighted users using keyboard navigation.

SC 2.4.7: Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible.

Location(s):

1. `My References`

Reason flagged:

- The currently selected tab is focusable, but does not have a focus ring to indicate that it is selected when navigating using the keyboard.

SC 3.1.1: <html> element must have a lang attribute

Location(s):

1. `<html>`

Reason flagged:

- The <html> element does not have a lang attribute.

SC 4.1.2: Select element must have an accessible name.

Location(s):

1. `<select id="idQuickSearchGroups" name="selectedFolderId" class="formBoxesSave" onchange="if(options[selectedIndex].disabled) {options[0].selected=true; }">`

Reason flagged:

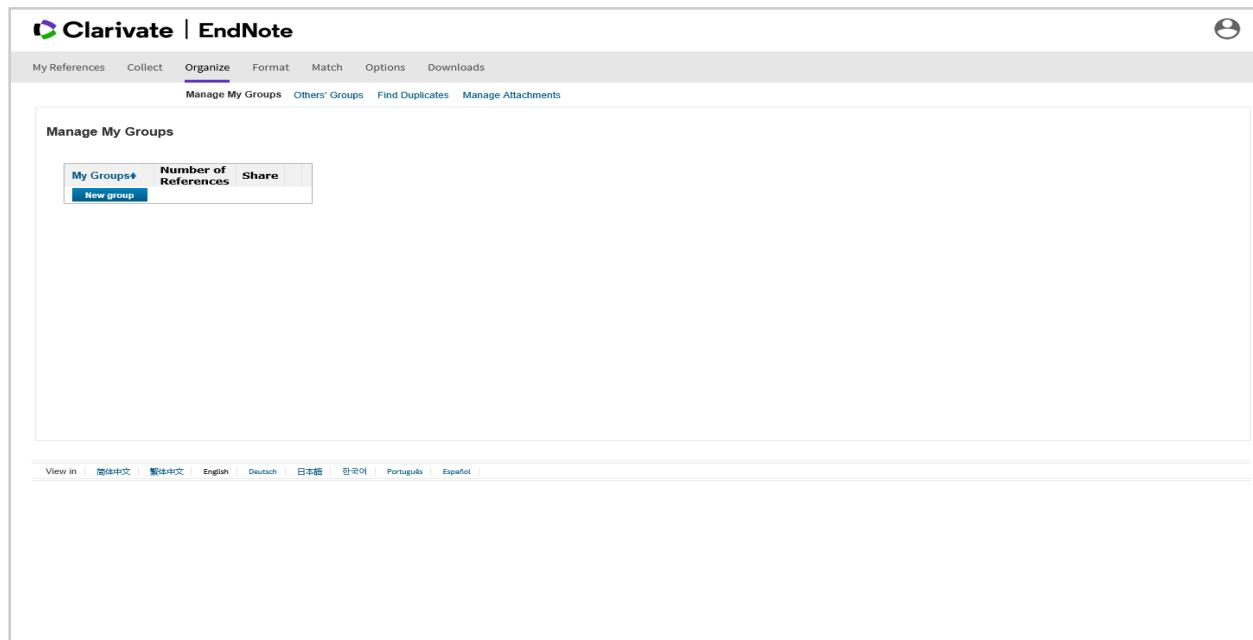
- Element does not have an implicit (wrapped) <label>
- Element does not have an explicit <label>
- aria-label attribute does not exist or is empty
- aria-labelledby attribute does not exist, references elements that do not exist or references elements that are empty
- Element has no title attribute
- Element's default semantics were not overridden with role="none" or role="presentation"

****Important Note:** We were unable to fully test this system due to a critical error. This appears to be server-side and caused by a failed script. We tried to resolve the issue but were unable to find a solution. Because the test case we were provided does rely on this step, this is a cascading issue, but we did evaluate the available pages and content for everything that we could.

```
⚠ Loading failed for the <script> with source "https://www-myendnoteweb-com.utk.idm.oclc.org/dojo/dojo/dojo.js". EndNoteweb.html:46:57
! ▶ Uncaught ReferenceError: dojo is not defined EndNoteweb.html:2841:7
  <anonymous> https://www-myendnoteweb-com.utk.idm.oclc.org/EndNoteweb.html?func=folderOptions&page=manageFolders&:2841
  [Learn More]
```

2. Creating a New Group

Test Case: From the initial landing page, create a new EndNote Group (by going to Organize->Manage My Groups). Is this process accessible?



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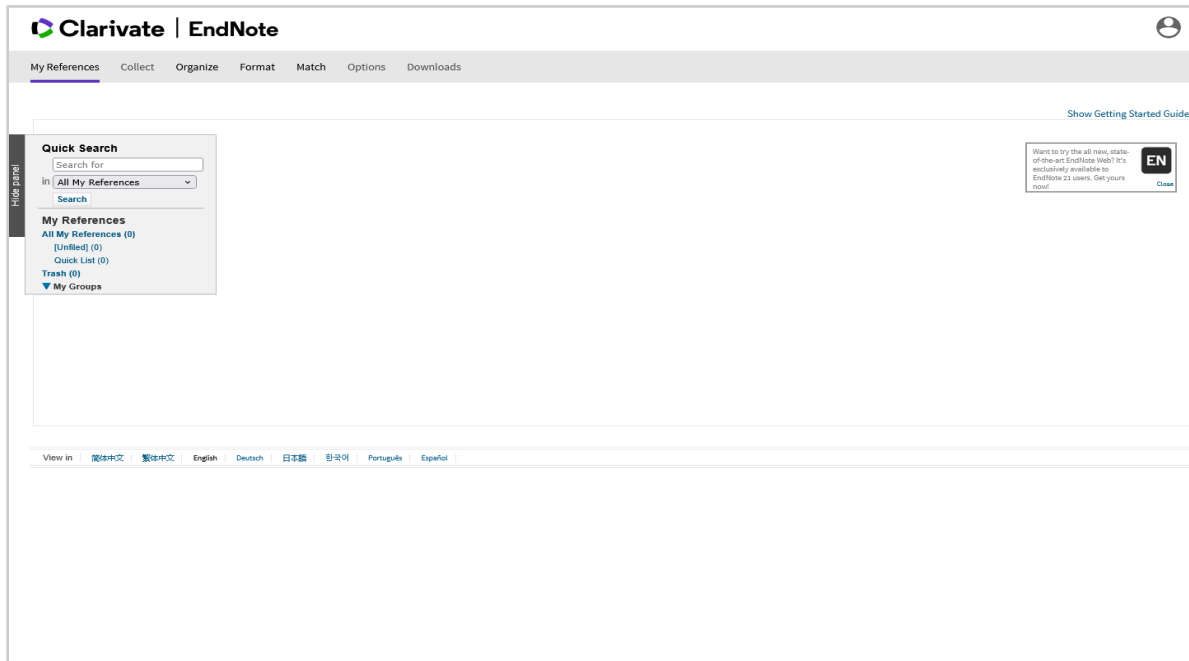
1. `<html>`

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3. Importing a Reference List

Test Case: Import the savedrecs.ris citation file provided to UTK in scoping email (Go to Collect->Import References->browse to upload file->Web of Science as Import Option->To the new group created above). Is this process accessible?



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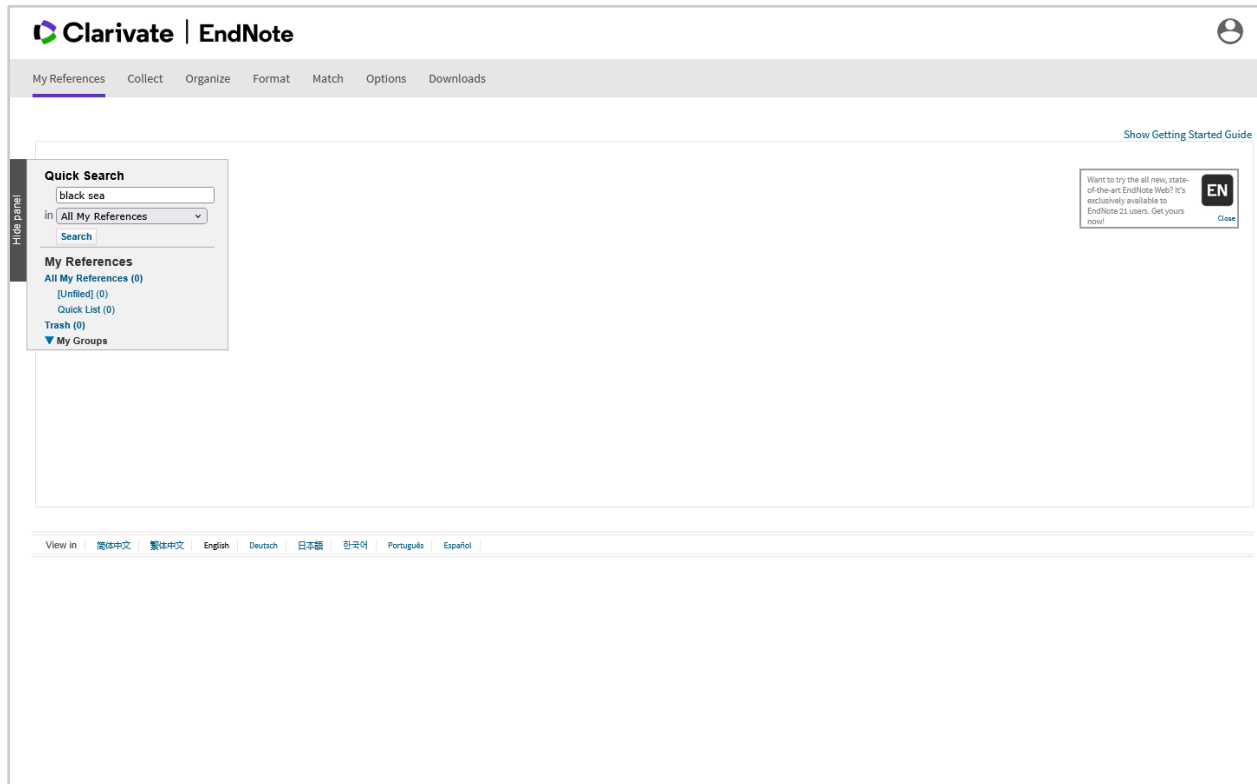
- <html/>

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4. Performing a Search

Test Case: From My References, do a quick search for “black sea” by selecting the search in (the new group you created above).



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5. Creating a Bibliography

Test Case: Create and export a bibliography by going to: Format->Bibliography. Select the new group, APA 7th as the bibliographic style and HTML as the file format.

The screenshot shows the EndNote web interface for creating a bibliography. The 'Format' tab is selected, and the 'Bibliography' sub-tab is active. The 'References' dropdown is set to 'Select...', 'Bibliographic style' is set to 'Select...', and 'File format' is set to 'Select...'. There are buttons for 'Save', 'E-Mail', and 'Preview & Print'. The interface is clean and modern, with a clear navigation bar and a focused content area.

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Location(s):

- <html/>

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SC 4.1.2: Select element must have an accessible name.

Location(s):

1. `<select id="idRefSource" name="RefSource">`
2. `<select id="idBibFormat" name="BibFormat">`
3. `<select name="FileFormat"><option value="" selected="">Select...</option><option value="HTML">HTML</option><option value="TXT">TXT (plain text file)</option><option value="RTF">RTF (rich text file)</option></select>`

Reason flagged:

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- Element does not have an explicit `<label>`
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Disclaimer: This high-level evaluation was conducted for the Library Accessibility Alliance and represents a good faith effort conducted within a limited time frame. It should not be assumed to be complete or free from error. No warranties or guarantees are implied. UT is not responsible for direct, indirect, or incidental damages based on this work; its use or interpretation by any individual, group, or organization; or on conditions beyond our control.