High-Level Accessibility Evaluation (WCAG 2.1)

Zotero

October 18, 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

TABLE OF CONTENTS

SUMMARY

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

The Zotero application has practically no issues with WCAG 2.1 compliance. The tool works very well, is accessible using keyboard navigation, and has excellent screen reader support. The processes we tested were easy to perform using standard patterns for accessible navigation with screen reader support. Nevertheless, our top findings are important to address to improve system compliance.

Top Findings

1. **Column Sorting with Keyboard Navigation**: The only issue we were able to uncover was with one specific part of the interface not being accessible by keyboard navigation using common patterns. It seems that the column sorting feature is not accessible using the keyboard using common patterns, and we could not find a way to do it from the keyboard shortcuts section in the settings. The *sort* works perfectly; we just could not get to it using the keyboard.
2. **Zotero Connector:** The test cases for this evaluation also asked us to look at the Zotero Connector browser extension. We were able to test this across 3 different browsers in the allotted time for this evaluation: Firefox, Chrome, and Edge. The Chrome and Edge extensions had similar performance and pulled nearly identical information. Firefox on the other hand worked much better and was able to pull much more information from the provided article, including a PDF attachment, which neither the Chrome nor Edge versions were able to do.

ACCESSIBILITY FINDINGS

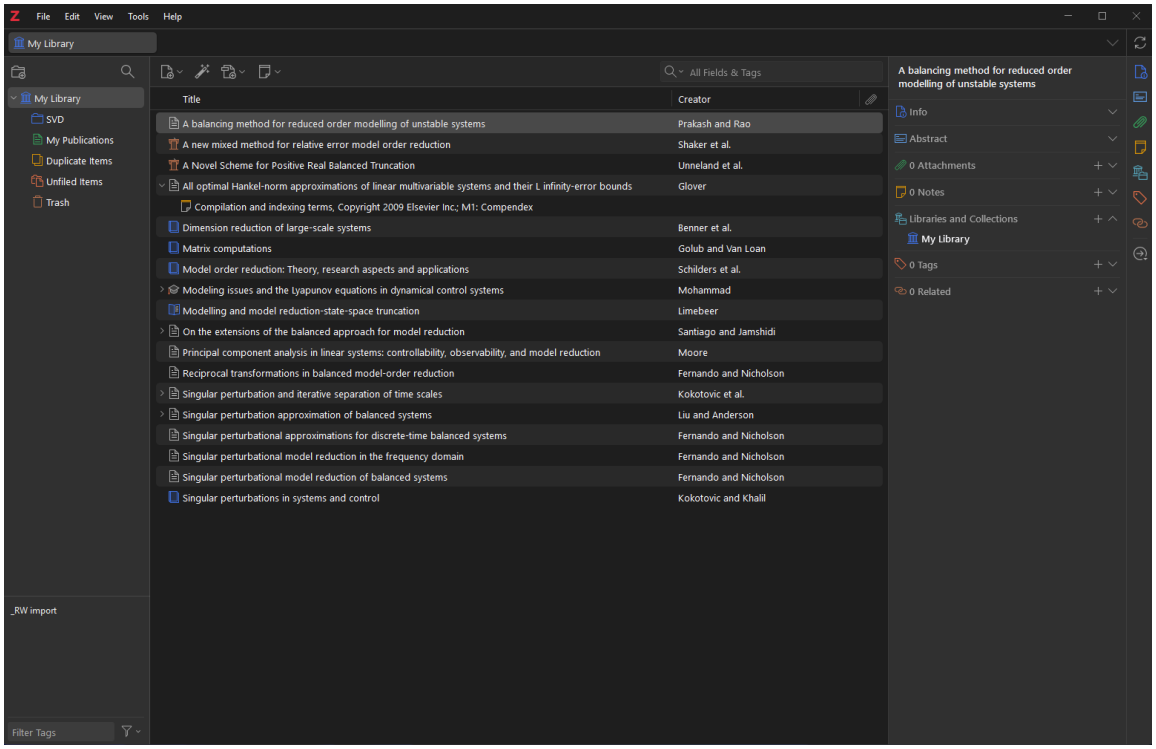
This report was conducted against Zotero Standalone and covers a selection of features and interfaces that were tested as a representative sample of the conformance of the tool to WCAG 2.1 AA standards. The resource was reviewed through manual analysis using the following tools:

- Colour Contrast Analyzer (CCA) v3.3.0
- NVDA v2025.1.2
- Firefox v144.0
- Chrome v141.0.7390.108
- Edge v141.0.3537.85

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

1. Initial Interface

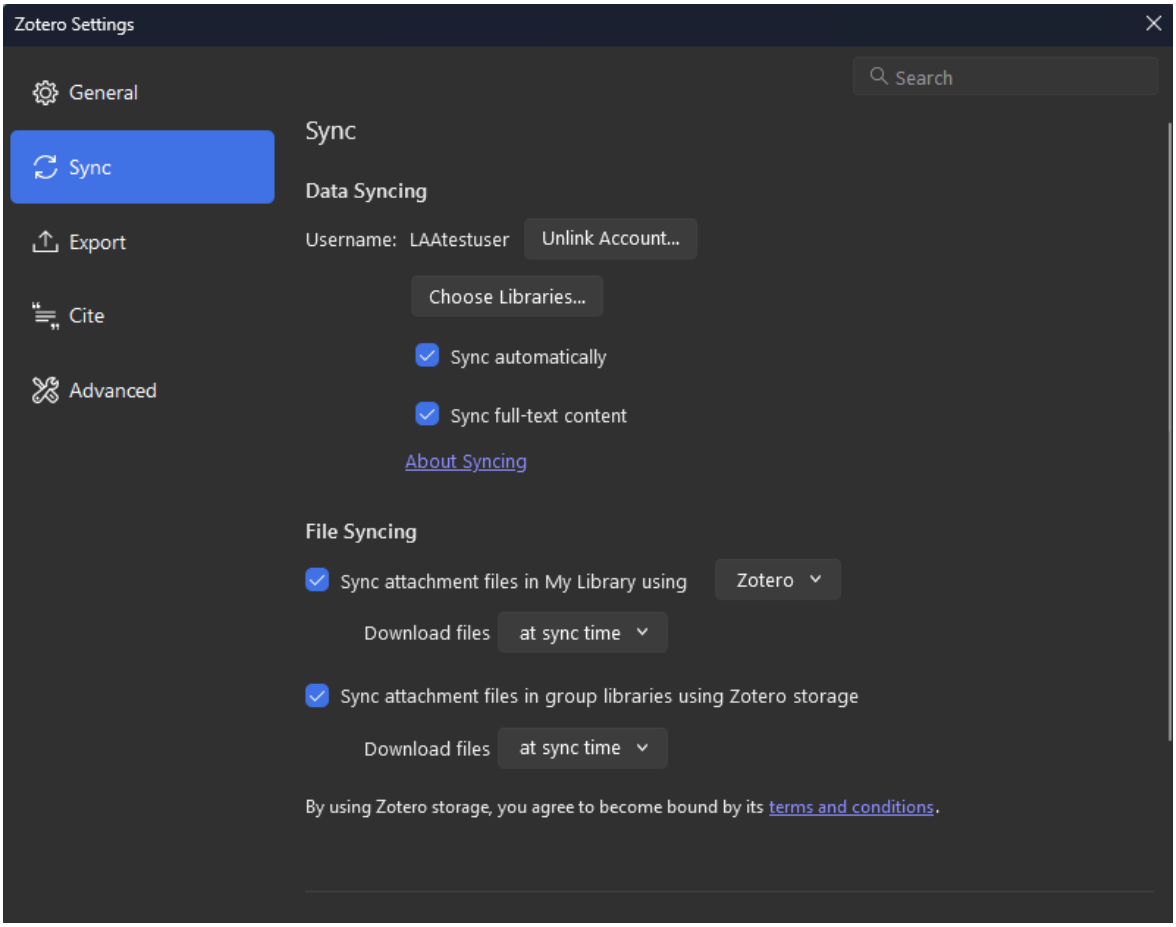
Test Case: With Zotero Standalone installed, test it to ensure menus, sub-menus, search box, images, icons, etc. are accessible.



❖ **No issues found**

2. Syncing

Test Case: Select Edit from the menu, then Settings. Select Sync from the modal window nav. Test the process of setting up database syncing.



❖ **No issues found**

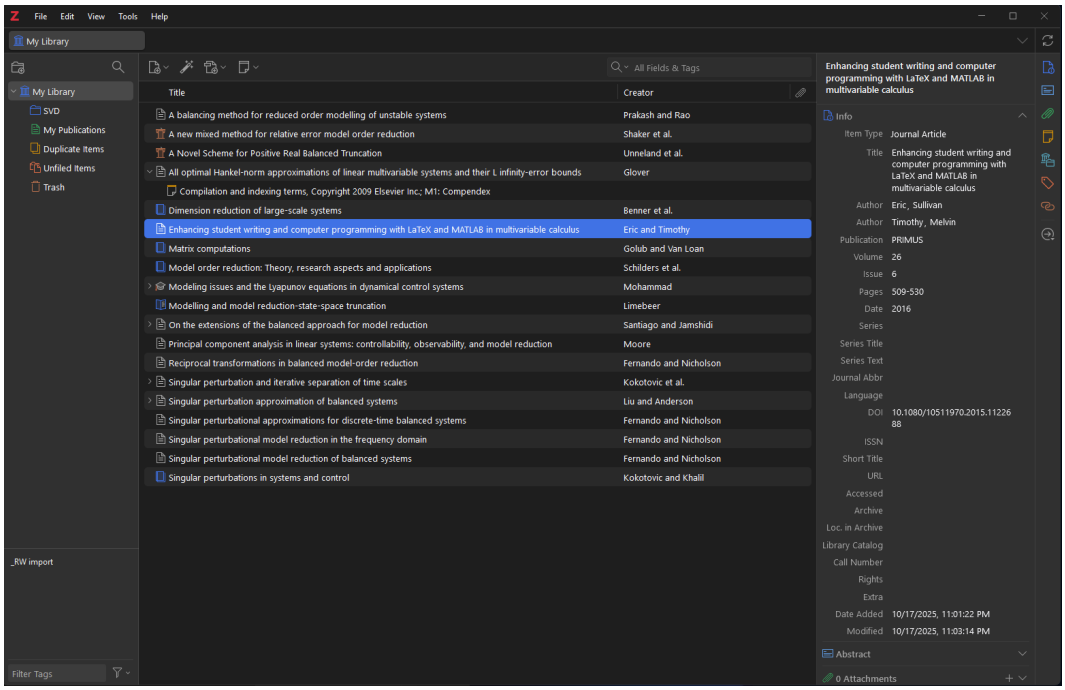
3. Adding and Editing References

Test Case:

- Add a journal article using the New item button. Leave the other fields empty.
  - For authors, be sure to try the buttons: switch to single field, add, and delete.
  - Please attach a PDF to the record using the Info panel (where you have been entering the fields). I attached an unrelated PDF to attach for your convenience.
  - Add two tags using the Info panel: 1) accessibility and 2) testing.
- Install the browser connector. Test on multiple browsers if time ; otherwise, use either Chrome or Firefox.
- Add a document using the browser connector. Select tools from the main menu, then Install browser connector.
  - It is ok if some information in the fields isn't quite right. Just test the process of getting it into the database.

- Import the book chapter, Carbon Redux Chemistry: Deep Carbon Dioxide and Carbonates
- Add a document by selecting the Add by Identifier button, then enter: 10.1016/0895-7177(90)90219-D into the text box.

- Add a Note to this entry by using the New note button above the list of references.

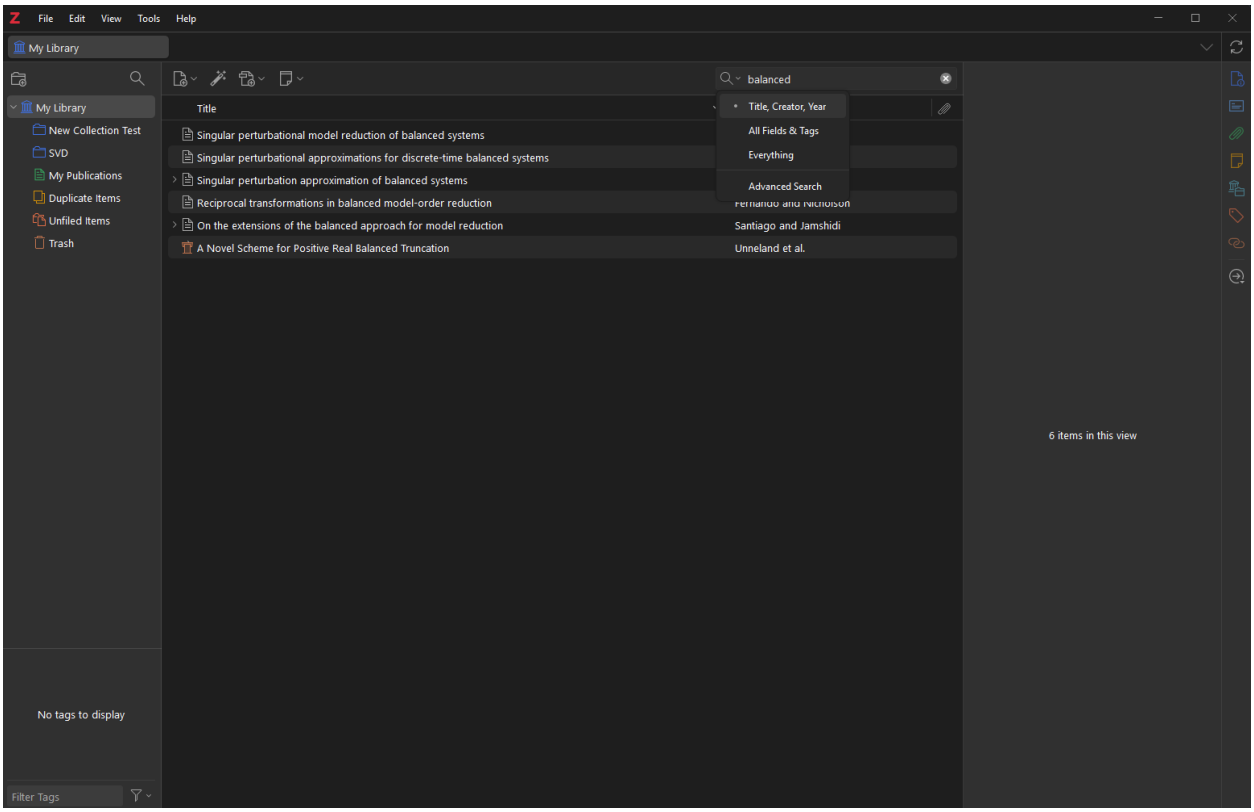


❖ **No issues found**

4. Finding References

Test Case:

- Using search from Zotero Standalone. Search everything for the term balanced. Try different sorting options (e.g., Title) of the search results.
- Add a collection (folder) by using the New Collection button.



SC 2.1.1 - All functionality of the content is operable through a keyboard interface without requiring specific timings for individual keystrokes, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints.

Reason flagged:

- We were unable to access the sorting functionality of each column of the table using the keyboard. The sort itself works well, but we were unable to access it using common keyboard shortcuts and functions.

5. Exporting a Bibliography

Test Case:

- Select multiple references from the list box. Next, select Edit from the main menu, then Copy Bibliography.
- Paste the clipboard into a word processing document, such as Microsoft Word.

Fernando, K., and H. Nicholson. "Singular Perturbational Approximations for Discrete-Time Balanced Systems." IEEE Transactions on Automatic Control 28, no. 2 (1983): 2.

Fernando, K., and H. Nicholson. "Singular Perturbational Model Reduction in the Frequency Domain." IEEE Transactions on Automatic Control 27, no. 4 (1982): 4.

Fernando, K., and H. Nicholson. "Singular Perturbational Model Reduction of Balanced Systems." IEEE Transactions on Automatic Control 27, no. 2 (1982): 2.

Fernando, K. V., and H. Nicholson. "Reciprocal Transformations in Balanced Model-Order Reduction." IEE Proceedings D Control Theory and Applications 130, no. 6 (1983): 6. https://doi.org/10.1049/ip-d.1983.0059.

Kokotovic, Petar V., John J. Allemong, James R. Winkelman, and Joe H. Chow. "Singular Perturbation and Iterative Separation of Time Scales." Automatica 16, no. 1 (1980): 1. https://doi.org/10.1016/0005-1098(80)90083-7.

Kokotovic, Petar V., and Hassan K. Khalil. Singular Perturbations in Systems and Control. IEEE Press, 1986.

Limebeer, David. "Modelling and Model Reduction-State-Space Truncation." In Mathematical Methods for Robust and Nonlinear Control, edited by M. C. Turner and D. G. Bates. Lecture Notes in Control and Information Sciences, edited by M. Thoma and M. Morari. Springer-Verlag, 2007.

Liu, Yi, and Brian D. O. Anderson. "Singular Perturbation Approximation of Balanced Systems." International Journal of Control 50, no. 4 (1989): 4.

Mohammad, Ahmad A. "Modeling Issues and the Lyapunov Equations in Dynamical Control Systems." Ph.D. Dissertation, The University of Akron, 1992.

Moore, B. "Principal Component Analysis in Linear Systems: Controllability, Observability, and Model Reduction." IEEE Transactions on Automatic Control 26, no. 1 (1981): 1.

Santiago, J. M., and M. Jamshidi. "On the Extensions of the Balanced Approach for Model Reduction." Control Theory and Advanced Technology 2, no. 2 (1985): 2.

Schilders, W. H. A., Henk A. van der Vorst, and Joost Rommes. Model Order Reduction: Theory, Research Aspects and Applications. Edited by Hans-Georg Bock, Frank de Hoog, Avner Friedman, et al. Vol. 13. Mathematics in Industry. Springer-Verlag, 2008.

- ❖ **No issue found**