

Discovery Disconnect

Auditing Your E-Resource Access and Fixing What's Broken

SESSION OVERVIEW

What We'll Cover

Users who can't find or access your e-resources might as well not exist — and yet broken links, missing metadata, and misconfigured authentication issues quietly erode the value of every dollar spent on electronic collections. This session guides participants through a practical access audit: identifying discovery gaps, diagnosing common authentication failures (OpenAthens redirector and federated SAML), and building a workflow for ongoing maintenance.

Attendees will leave with a checklist they can apply at their own institutions right away.

BY THE END OF THIS SESSION

Learning Outcomes

1

Conduct a systematic discovery and access audit for your e-resource portfolio

2

Identify the most common points of failure in e-resource access chains

3

Build a sustainable internal workflow for ongoing access quality control

THE PROBLEM

Discovery Gaps

90/96

Highlight online resources

93.8% of the consortium

26/90

Reachable in 1 click from homepage

Just 29% of those with a page

29

Distinct labels used

Across 90 libraries

Labels used, grouped by keyword



Why Authentication Matters

Vendors typically support several “authentication” methods:

- IP authentication
- Barcode
- Username/password
- SIP2
- Proxy (EZproxy)
- SAML/OpenAthens

Vendors often *push* towards using the easiest method:

- Typically, not the most secure
- Not the most stable

Key takeaway: A library's authentication choices directly affect link stability and patron privacy

OpenAthens Redirector vs Federated (SAML)

OpenAthens Redirector

- Wraps the vendors URL and routes the user through OpenAthens
- Required when a vendor is not in the OpenAthens federation
- Works even without SAML support
- Relies on accurate institutional IP ranges
- Easy for vendors to implement
- Common failures: missing `url=`, vendor specific parameters, staff copying post-login URLs, incorrect IP bypass zones

OpenAthens Federated (SAML)

- Vendor asks OpenAthens directly: “Who is this user?”
- Stronger identity assurance
- No URL rewriting
- Fewer broken links
- Cleaner authentication flow
- Common failures: wrong entityID, missing attributes, incorrect return URL, WAYFless links copied after login

Key takeaway: We prefer SAML for stability and security – but if a vendor isn’t in the OpenAthens federation, the redirector is our only option

Misconfigured or Malformed Redirector Links

Why this matters:

Redirector requires the vendor URL to be **exact** and **properly encoded**. If staff copy or alter the vendor link, even slightly, the Redirector cannot parse it or cannot match it to the registered resource.

Common failure patterns:

- Vendor URL is not encoded
- Vendor URL is double-encoded

Correct vendor link:

`https://lote4kids.com/us-library-name`

Correct OpenAthens redirector link:

`https://go.openathens.net/redirector/swanlibraries.net?url=https%3A%2F%2Flote4kids.com%2Fus-library-name%0A`

Vendor Updates Without Notifying OpenAthens

What happens:

Vendors sometimes update their:

- Login flow
- Landing page
- Platform structure
- Post-authentication routing

What staff will see:

- OpenAthens link looks correctly formatted/structured
- No error message
- Vendor loads successfully

OpenAthens is still pointing to the old version, so authentication completes but authorization fails

The screenshot shows a web browser displaying a page from Teachables. The URL in the address bar is `teachables-scholastic.com.eu1.proxy.openathens.net/teachables/books/I-Love-My-Yak-ack-Poem-Word-Ladders-9781338792904_002.html`. The page features a search bar and navigation links. A red button labeled "FREE TRIAL TRY US RISK FREE" is highlighted with a black box. Below it, a preview of a worksheet titled "I Love My Yak" is shown. To the right, the title "I Love My Yak (-ack): Poem & Word Ladders" is displayed, followed by a description of the activities. A "Printable Details" section is also visible, containing metadata such as Grade, Subject, Theme, Genre, Number of pages, Type, and Common Core standards.

I Love My Yak (-ack): Poem & Word Ladders

The -ack word family comes alive with this fun trio of activities. Using an engaging partner poem, two word ladders, and a phonics lesson, students explore one of the most common word families for early learners.

Printable Details

Grade:	K - 2	Number of pages:	5
Subject:	Word Families, Adjectives, Nouns, Verbs	Type:	Lesson Plans and Ideas, Texts, Skills Sheets
Theme:	National Poetry Month, April	Common Core:	L.K.2.C, L.K.2.D, L.1.2.E, L.1.4.A, L.2.4.A, RF.K.2.A, RF.K.2.B, RF.K.2.C, RF.K.2.D, RF.K.2.E, RF.K.3.A, RF.K.3.B, RF.K.3.D, RF.K.4, RF.1.2, RF.1.2.A
Genre:	Poems and Songs		

Example of a Broken SAML Link

What this is:

A URL copied **after** a user logged in through OpenAthens. It contains a **single-use SAMLRequest**, a **session-bound RelayState**, and references to the user's active **OpenAthens session cookie**.

These values only work once, and only for the original user.

Why it breaks:

- The OpenAthens session cookie is missing
- The **SAMLRequest** has already been consumed
- The **RelayState** no longer matches an active session
- It is **not** a reusable login link – it's part of the internal SAML handshake

How to recognize this failure:

- Extremely long URL
- Results in “Bad Request” or login loops

```
https://login.openathens.net/auth/swanlibraries.net/o/68879752?
t=%2Fsaml%2F2%2Fsso%2Fswanlibraries.net%2Fo%2F68879752%2Fc%2Foa
fed%3FSAMLRequest%3DfZLNTsMwEIRfJfK9cZL%252BJLGaSqU9UK1A1RYOXJC
TLI01xxu8DoW3J21AwKXnGX%252B7M%252Bs5yVo3Ytm6yuzhrQVy3ketDYmLkL
HWGoGSFAkjayDhCnFY3m1F5AeiseiwQM28JRFYp9Cs0FBbgz2AfVcFP063Gauca
0hwTpXKc9TgKh9yKrBCcn6BNT%252F8CkTIE37Edw%252BHI%252FPW3ULKyB79
C9J4UsbHBjqhAk0%252BAcf7fXnEewCdpdEqt9IqGETksySJ03ga8YKjfIWSeZt
1x16CMkhneRmP42ACaToukzJJk3E%252BjcNpGgR5ZyNqYWPISeMyFgXRbBRMR2
F6jEIRjsUkfWbe7ruIG2VKZU7XW8sHE4nb43E3GmI%252BgaVLxM7AFvM%252Bi
7gMtn%252BucR0rf07AFn1PV%252Fqe8z%252F8YVgj7jvgZr1DrYpPb6k1nlcW
pIOMhYwvhif%252F%252F8niCw%253D%253D%26RelayState%3Dhttps%253A%
252F%252Fshibboleth.ebscohost.com%252FShibAgent.aspx%253Fshib_r
etur1%253Dhttps%25253a%25252f%25252fsearch.ebscohost.com%25252f
WebAuth%25252flogin.aspx%25253fclientid%25253dawgyCIX57MrwnDQ5h
4Ue6yCVEP0r5Mt9%252526authtype%25253doauth2%2525252Cshib%252526
reqId%25253d8f679da8-19b3-4e03-9014-
21b7e4dd8142%252526uselogon%25253dy%252526custid%25253ds9061251
%252526ref%25253dhttps%2525253a%2525252f%2525252flogin.ebsco.co
m%2525252f%252526shibcallback%25253dtrue&redirect=true
```

Four Tiers, by Skill & Resources

Link-auditing approaches for public library websites, ranked by technical investment

1 Tier 1 NO-CODE

- W3C Link Checker
- Google Search Console
- Manual audit check

2 Tier 2 LOW-CODE

- Screaming Frog SEO Spider
- Xenu's Link Sleuth

TIER 2.5

In-Browser Automation

- *JavaScript snippets in DevTools*

3 Tier 3 EXISTING PLATFORMS

- Springshare LibGuides Link Checker
- Siteimprove
- CORAL

4 Tier 4 CUSTOM SCRIPTS

- Python
- Google Apps Scripts
- PowerShell
- Selenium/Playwright
- Involves IT / dev support
- Scheduled jobs

How the Tiers Compare

Skill, cost, and effort across the four link-auditing tiers

	Tier 1 No-code	Tier 2 Low-code	Tier 3 Existing Platforms	Tier 4 Custom Scripts
Skill Level	None — anyone can run it	Basic — install software or paste a script	Basic–moderate — platform admin skills	Programming knowledge required
Example Tools	W3C Link Checker, Google Search Console, manual check	Screaming Frog, Xenu’s Link Sleuth, DevTools JS snippets	LibGuides Link Checker, Siteimprove, CORAL	Python, PowerShell, Selenium, Playwright
Installation Required?	No	Screaming Frog / Xenu need install; DevTools JS needs none	No — uses your existing platform	No install, but a script must be built
Cost	Free	Free–low cost	Often a paid subscription (may already be bundled)	Free tool, but costs staff / IT time
Setup Effort	None — use as-is	Light — download and run, or paste a snippet	Moderate — depends on platform configuration	Higher — build and maintain a script
Involves IT?	No	No	Rarely	Usually yes
Best Scale	Small sites, spot-checks	Full-site crawls or quick single-page checks	Ongoing, scheduled audits	Large or recurring, automated audits
Best For	Quick, occasional checks	Regular audits without dev help	Libraries already paying for the platform	Large systems needing automation or custom logic

THE WORKAROUND

Worksheet-Based Link Inventory

Resource Name	URL	Location/Page Found	Type	Last Checked	Status	Error
JSTOR	https://www.jstor.org	Databases A-Z	Database			
EBSCO Academic Search	https://search.ebscohost.com	Databases A-Z	Database			
Nature (journal)	https://www.nature.com	E-Journals List	E-Journal			
Sample PDF Link List item	https://example.com/resource1	Subject Guide PDF	PDF-embedded			
EBSCOhost (all databases)	https://search.ebscohost.com/login.aspx?authtype=cookie%2Cip%2Curl&community=y	Resources	Database	6/1/2026	Broken	Login Fail
Creativebug	https://go.openathens.net/redirector/swanlibraries.net?url=https%3A%2F%2Fwww.creativebug.com%2Flib%2Fpubliclibrary	Resources	Database	6/2/2026	OK	
Cricket Media Ebook Collect	https://search.ebscohost.com/login.aspx?authtype=ip,shib&custid=library&groupid=main&profile=ehost&defaultdb=e863mww	Resources	Database	6/3/2026	OK	
Diversity and Ethnic Studies	https://search.ebscohost.com/login.aspx?authtype=ip,shib&custid=library&groupid=main&profile=ehost&defaultdb=e091sww	Resources	Database	6/4/2026	OK	
Driving-Tests.org	http://publiclibrary.driving-tests.org/	Resources	Website	6/5/2026	Not Checked Yet	
eRead Illinois	https://thepalaceproject.org/	Resources	Website	6/6/2026	Not Checked Yet	
ERIC (Education Resources)	https://search.ebscohost.com/login.aspx?authtype=ip,shib&custid=library&groupid=main&profile=ehost&defaultdb=eric	Resources	Database	6/7/2026	Not Checked Yet	
Ethnic Diversity Source	https://search.ebscohost.com/login.aspx?authtype=ip,shib&custid=library&groupid=main&profile=ehost&defaultdb=ets	Resources	Database	6/8/2026	Not Checked Yet	
FinancialFit	https://learn.financialfit.com/?authtoken=public-library	Resources	Database	6/9/2026	Not Checked Yet	

From Spreadsheet to Auto-Checked

Paste-and-Scan Checkers

1 W3C Link Checker

Enter a URL to check:

https://example.edu/resource-list

Check

Free, no signup — validates individual pages against the W3C spec and flags every broken link on them.

2 Dead Link Checker

/journals/vol12-issue3	200
/databases/access-portal	200
/archive/1998-report.pdf	404

Crawls a full site or URL list and returns status codes for every link in one pass.

In-Browser Extension

3 Check My Links (Chrome extension)

Library databases

JSTOR access

 and

EBSCOhost

10 ok 1 broken

portal require login. See the

renewal form

 for details.

Archived issues are listed on the

1999 index page

.

Contact the

reference desk

 with questions.

Highlights every link directly on the live page — green for working, red for broken — with a one-click summary count, no separate report to read.

Pulling URLs Automatically

WHAT IT IS

A JS snippet pasted into the browser console. It reads the library databases page, pulls every external resource's name and link, and copies the list to your clipboard.

HOW TO USE IT

1. Open the library databases page
2. Open console (F12 → Console)
3. Paste the script, hit Enter
4. Review results, then paste into your sheet

GOOD TO KNOW

Extracts resource names from page content · dedupes entries · read-only, safe to run

This snippet is for demonstration purposes only

```
() => {  
  const links = getLinks(), seen = new Set(), names = [];  
  
  links.forEach(l => {  
    let n = clean(l);  
    if (isJunk(n)) return;  
    if (isAccessTag(n)) n = getContainerName(l);  
  
    if (!seen.has(n)) { seen.add(n); names.push(n); }  
  });  
  
  output(names);  
})();
```

Your Take-Home Checklist

Every audit moves through the same five phases, start to finish.

PHASE 1 • DISCOVERY AUDIT

- ☐ Inventory every e-resource you offer
- ☐ Confirm visibility & click-depth from homepage
- ☐ Check label/terminology consistency

PHASE 2 • AUTHENTICATION LANDSCAPE

- ☐ Identify each resource's auth method
- ☐ Know what a valid Redirector/SAML link looks like
- ☐ Recognize post-login continuation URLs

PHASE 3 • CHOOSE YOUR TOOL TIER

- ☐ Match tier to skill level, budget, and IT support
- ☐ No-code through custom scripts, by need

PHASE 4 • ASSEMBLE YOUR INVENTORY

- ☐ Set up a tracking worksheet
- ☐ Auto-pull URLs with the Console Script (or similar)
- ☐ Note public vs. login-gated resources
- ☐ Record auth method + tool used per resource

PHASE 5 • ONGOING AUDIT CADENCE

- ☐ Decide how often to re-check
- ☐ Assign ownership for each cycle
- ☐ Treat the worksheet as a living record

Questions?

Submit a Ticket: <https://swanlibraries.haloitsm.com/portal>

Email: help@swanlibraries.net | olivia@swanlibraries.net

Website: swanlibraries.net