## Wired to the World

# **Tech Troubleshooting Tips and Tricks**

Having a great deal of electronic content, both created and managed internally by the library and externally by publishers and vendors, is nothing new to the library profession. Yet the art of troubleshooting is something that many librarians must learn on their own or from conversations in the halls of conferences. This short column seeks to share tips and techniques that librarians can use to get started on troubleshooting issues either as a solo endeavor or before escalating to a specialist or third party. It is based on the author's own experience fixing links, search boxes, and authentication systems, both on the library side as an electronic resource librarian and now as a library service engineer for EBSCO.

#### Lesson One:

## One's ability to troubleshoot is only as good as the information one receives.

While sometimes issues arise via a reference interview or a phone call, frequently they are discovered at the point of trying to access electronic content or interact with a system. Developing a form that can be used to report an issue at that point of need can greatly help library staff with their investigation. Though having a more formal ticketing system can be useful when dealing with a high volume of issues, often a Google form is enough. Many catalogs and discovery layers can add a link to a Google form on result lists, individual records, or the landing page for link resolvers. Some catalog and discovery vendors can also make a form like this for a library.

In terms of what is valuable to be on a form, they should encourage screenshots and allow for the sharing of links to screencasts of the issue. A screenshot is worth 1,000 words and a screencast or video of the issue occurring is worth at least 10,000. Linking a free method of screen capture, such as Screencastify (https://www.screencastify.com/) or TechSmith Capture (https://www.techsmith.com/jing-tool.html) on the form helps remove some of the barriers for users. Forms should also include a way to best contact the person submitting the issue, their affiliation (guest or patron), if they were accessing the resource in the library or off campus, and a space for patrons to describe the how, what and where of their issue.

## Lesson Two:

## Librarians know how to ask questions.

Library staff have a skill that makes them often excellent troubleshooters: the reference interview. This job teaches library staff to dig into the root of a patron's need through open ended questions, active listening, repeating patron statements to check understanding and avoiding assumptions. Questions such as "Explain to me where the process failed," "What was the process that took you to this issue?" and "What have you tried already?" provide important insight and help guide next steps. Do not be afraid to use these skills, even with fellow library staff.

## Lesson Three:

#### There are cool free tools out there to help.

Once information has been gathered, there are many tools out there to help investigate a problem. One of the biggest stumbling blocks when it comes to troubleshooting is when the troubleshooter cannot reproduce the issue. Forcing off-campus access via a mobile device with Wi-Fi turned off can help in these situations, especially if the issue appears to be limited to off-site access. Another useful technique is to keep one browser always clear of all history (clearing caches, deleting history, removing cookies). For example, if a librarian regularly uses Google Chrome, they can choose to not use this browser for troubleshooting. Instead, they can use something like Firefox, and after every session, go into historyclear recent history—clear all history. Keeping one browser clean will ensure that troubleshooting does not get thrown off by saved credentials or cached pages. Though incognito or private browsing can do something similar, some content, especially in Chrome, persists into those modes.

If none of these techniques work, there are a few cross-platform tools that allow you to take control of another's screen, with their permission. Zoom has the option to "Request Remote Control" underneath viewing Options whereas Teams calls the option "Request Control." Both of these will allow you through the screensharing interface to interact with another desktop. For Chrome users, there also is a site called Chrome Remote Desktop (https://remotedesktop. google.com/?pli=1). From here, the troubleshooter should select "Share my screen." The other user will need to also go to the site, select "share my screen" and then download a small helper app. Once this is downloaded, they will get a 12-digit code which the troubleshooter can then use to connect to another computer. This allows full remote control.

While the above tools are more general, there are a few tools that can be life savers when dealing with troubleshooting broken links and issues with access to content. The first is a free browser plugin called Redirect Path ( https://chrome.google.com/webstore/ detail/redirect-path/aomidfkchockcldhbkggjokdkkebmdll). This plugin allows the user to visually trace the many interactions and redirects a link passed through in order to determine exactly where the link may have failed. Using this tool helps the troubleshooter identify the problem so either they can fix it, or they can send it on to the right person, such as a vendor. Often, however, these links are encoded making them hard to parse. An encoder/decoder, such as Meyerweb's URL Encoder/Decoder (https:// meyerweb.com/eric/tools/dencoder/) helps clear up the confusion.

#### Lesson Four: Sharing is Caring.

Some problems are one off situations, but many issues that libraries face will come up again. Keeping a shared space where all staff involved in troubleshooting can record solutions, share useful updates and tools, or even note that the issue is caused by a vendor and can't be fixed right now are all valuable bits of information. If the library has access to Microsoft One Note, this can be a good tool as it is easier to organize and search than something like a Google Doc.

Though sharing among one's library can help, sharing knowledge across libraries can be even more powerful. This is why the Technology and Trends section of the North Carolina Library Association has started an initiative where members can ask the board and others who volunteer technology questions (https://forms.gle/A54fKGXscMxHSKGE9). Not only will the questioner receive an answer, but answers will be compiled on the Technology and Trends website.

Together, let us help each other make troubleshooting less scary.

