

# Conclusion

The current landscape of electronic resources access issues is ever-evolving and greatly influenced by advances in information technology. In this report, we have defined the technological components required to facilitate e-resource access and discussed how the limitations of these components directly correlate to the amount of electronic resource troubleshooting required to keep them running smoothly. We have attempted to include and define all points of access common to library access chains; however, any attempt at comprehensiveness will invariably omit relevant systems, tools, or metadata.

Once a troubleshooter is able to understand their library's access chain, they are better equipped to diagnose and resolve access disruptions. We have gone into great detail concerning the common methods of authentication, systems, and tools used by libraries, which should inform a troubleshooter's base knowledge. With this base knowledge, a troubleshooter can then consider the source and types of metadata that flow in and out of their library's access chain. With this understanding they are ready to identify the common points of failure inherent to their systems and to begin to diagnose their access disruptions. Tools and techniques for diagnosing are many and varied, but we hope the sampling we have provided will prove useful and offer inspiration for discovering local solutions. Finally, there are many ongoing efforts that attempt to mitigate access disruptions. The contributions of

the various NISO standing committees and working groups to the health of the discovery environment cannot be overstated.

New developments in information technology and the library discovery market will greatly impact troubleshooting efforts in the years to come. Much like the cataclysmic event that moving from AACR2 to RDA represented for cataloging librarians, troubleshooting librarians will be dealing with the fallout from the phasing out of IP authentication for the foreseeable future. As holdings management shifts away from libraries and toward vendors, only time will tell how well these new automated workflows will be implemented. Logic states that troubleshooters will spend less time dealing with broken link issues and more with errant metadata and entitlement inaccuracies. Individual librarian oversight will likely be reduced as a benefit of these new technological efforts. However, much of the work of caring for these systems will not disappear but instead be transformed into new workflows troubleshooters are not yet familiar with.

Despite the great advances in improving the discovery, access, and management of e-resources, it may be premature to declare victory over any particular area of troubleshooting just yet. As long as there are electronic resources, there will be a need for a librarian to usher them through their life cycle. Troubleshooting librarians are irreplaceable.