

Technology Report

June - September, 2022

Grants

Funds for 2021/2022 E-rate have been retrieved. Distribution of funds to libraries will take place in the next month. All but one of the 2022/2023 E-rate grants have been approved. We are still waiting for approval of the second round of ECF mobile hotspot and Chromebook grants.

The ARPA funded holds lockers were installed in all 8 participating libraries this week. There were a few “hiccups”, but overall the process went smoothly.

SCLS O365 email update

Microsoft will retire Basic Authentication beginning October 1, 2022. SCLS staff have contacted library staff whose accounts are still using Basic Auth – these accounts will stop working in October until they are updated to newer protocols. Information about this project: [Modern Authentication for O365](#).

Drupal 9 migration

As of September 27, 22 of 48 library sites have been migrated to Drupal 9 and 5 more sites are in progress. We have scheduled 1 site per week until mid-December, and will wait to schedule the remaining libraries’ migrations for January – March 2023.

Server updates

August: Some of our behind-the-scenes servers used for ILS database backups and reports received OS upgrades on August 9. On August 23, some servers hosting public-facing services (proxy services, authentication, iboss scripting, Don’t Miss Lists, MyPC) also received OS upgrades

September: Some servers hosting public-facing services (proxy services, authentication, iboss scripting, Don’t Miss Lists, MyPC) will receive additional updates on Wednesday, October 12 from 9:30pm – 2am.

Content Filtering Solution

August: SCLS staff held 2 meetings with libraries on 8/9 and 8/11 to share final configuration details for the new filtering product. The recording and slides from these meetings can be found on the Filtering FAQ page: <https://www.scls.info/untangle-filtering-faq>. The filtering pilot has been pushed out into September.

September: SCLS will begin piloting the first site this week (10/6). After one week, we will migrate another two or three sites to finish the pilot phase. The pilot phase should last 3-4 weeks depending on

evaluation and performance. If no additional challenges arise, we look to push full migration early November.

Data Services

Library service & salary data comparisons: I worked on multiple data requests from SCLS libraries for information on peer libraries, focusing on salary data for equivalent positions. In the most recent reports, I have incorporated the latest Annual Report service data released by the Wisconsin Department of Public Instruction, covering 2021. The frequency of these requests and their similarity have inspired planning for a long-term project to simplify and perhaps automate the data collection and compilation processes.

Mount Horeb Public Library strategic planning: I fulfilled a request from Jessica Gretzinger, Mount Horeb Public Library Director, for population forecasts and comparative service data visualizations to include in the Library's strategic plan.

- For population forecasts, I used an exponential smoothing method to generate models of population trends in Mount Horeb, both overall and for specific demographic groups. I did all of this work, including data visualization, with packages available in the R programming language.
- Using Tableau, I developed an interactive service data dashboard that compares year-to-year trends in Mount Horeb's data to cumulative trends among various groups of libraries. The comparison groups include peer SCLS libraries, Dane County libraries, all SCLS libraries, and all Wisconsin libraries. The dashboard also allows users to select a specific metric to compare, such as Total Circulation, Total Collection Expenditures, or library program and attendance counts.

- Tim Drexler (September)

Monthly stats summary report script: This month, I made significant progress on developing a Python script that will produce the "Library Statistics Summary" report using input data from other monthly ILS reports. This script will replace the current legacy script, which, as it ages, has become challenging to maintain. Thus far, I have a minimal working version of the replacement script, but it will require further development, code cleanup, and extensive testing before the Scripting & Reports Team can deploy it.

Local holds workgroup data gathering: In response to requests from the project workgroup, I began collecting circulation and holds data for preliminary analysis of the effects of the Local Holds pilot project. Based on a suggestion from workgroup member Eddie Glade of Portage County Public Library, I incorporated additional data sources providing daily transaction records to supplement the monthly summary data I used previously. Examining the results on multiple timescales will hopefully create a clearer picture of any changes in data patterns that developed after the pilot project began in late June 2022.

- Tim Drexler (August)

Local Holds Work Group: In preparation for the local holds pilot project beginning in July, I've been collecting and cleaning historical data from ILS reports to use as a baseline comparison to the pilot period. I've also started creating data visualizations that provide a sense of the trends and variance for the measures selected by the workgroup.

Statewide Delivery data: In response to a request from SCLS Delivery Service Coordinator Corey Baumann, I worked on some preliminary drafts of data visualizations exploring weekly delivery volume counts from the 16 Wisconsin Public Library Systems. The data Corey provided included sample weeks from 2017 and 2022, enabling comparison within systems over time as well as between systems. Planned follow-up work will help refine the visualizations to enhance their analytic value.

Database usage dashboards: This month, I finished updating the workflows for monthly database usage dashboards, which had become a much more involved project than I originally anticipated. My next steps will include testing workflow outputs as dashboard inputs and creating documentation allowing Scripting and Reports Team members to rotate dashboard updating duties.

All Directors voting forms: Using Google Forms, I created a set of online ballots used at the All Directors meeting on July 21st for voting on SCLS service fees. I designed the forms to prevent repeat voting using the FormRanger extension and Google Sheets formulas. After a library submitted its vote, the extension removed its library code from a list of eligible voters. I also added calculations to the Sheets to track the voting results and display them on a dashboard with near-real-time updates.

Scripting and Reports Team

Python version upgrade: The Scripting & Reports Team completed the installation and testing of Python version 3.10 on the SCLS scripting server, an upgrade from version 3.7. By taking advantage of Python virtual environments to run legacy scripts, the Team should be capable of maintaining an upgrade schedule more closely aligned to the release schedule for future versions of Python. Virtual environments will also allow more flexibility to deploy scripts that use various Python packages without causing conflicts between programs.

- Tim Drexler

DPI Annual Report pre-fill testing: Cindy Weber completed an initial test of the scripts used to pre-fill sections of the DPI Annual Report for SCLS member libraries. Pre-fill data covers items such as counts of materials owned, number of registered borrowers, and circulation numbers broken down by various sets of patron categories. SCLS Public Library Administration Consultant Tracie Miller used an established process to check the accuracy of the results, and she reported no problems.

- Tim Drexler

Bibliovation backups and records retention: The Team discussed the potential impact of SCLS adopting the General Records Retention Schedule for Wisconsin Public Libraries and Public Library Systems related to Bibliovation data backup files. We decided that current backup storage policies probably exceed the minimum requirements set by the Public Records Board. Further discussion amongst the ILS Team may be necessary for the ILS team to verify SCLS is in compliance or plan for any necessary adjustments.

Help Desk Software Replacement

We have successfully deployed the Solar Winds Service Desk for all users, without issue. The old Help Desk “Spiceworks” has been closed off so that it can neither be seen, nor used, by the Library Staff, yet can still be used for reference for SCLS staff.

ESET Endpoint Security Migration

A new version of ESET will be deployed in September.

MyPC

We will be upgrading all components of our time and print service. TBS will upgrade the server software on August 30th and 31st. SCLS will test and deploy upgrades to the MyPC client, PaperCut client and Guest Pass utility after the server upgrades.

Windows 10 Feature Update 21H2

Windows 10 Feature Update 21H1 has an end-of-life set for December 2022. That is when Microsoft will stop creating updates for this version. We have installed Windows 10 Feature Update 21H2 on most patron and staff PCs, so we are ahead of schedule. The 21H2 end-of-life is set for June 2024.

Windows 11 Pro

Windows 11 Pro was officially released by Microsoft in October of 2021. SCLS has put together a team to develop a Windows 11 configuration for new staff and patron PCs. Windows 11 is a free upgrade for Windows 10 PCs. We have not decided yet if existing PCs will be upgraded to Windows 11.

Technology Policies

We reviewed the [SCLS technology policies](#) and added the policies that were approved at the [Dec 2020 Technology Committee meeting](#) but weren't posted to the website due to an oversight.

SCLS Network

Network Security Project: Completed