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Making the Most of SUSHI in Alma: Tips for Smooth Maintenance and Reporting

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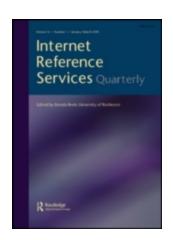
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Making the Most of SUSHI in Alma: Tips for Smooth Maintenance and Reporting

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Making the Most of SUSHI in Alma: Tips for Smooth Maintenance and Reporting

Abstract: SUSHI is a widely used protocol in academic libraries. This article discusses maintaining SUSHI vendor accounts in Alma, troubleshooting irregularities, and finding technical support. This article also includes sample analyses for the ACRL survey 60B Digital/Electronic Circulation or Usage and 63 E-serials Usage using COUNTER 5 reports.

Keywords: usage stats; business intelligence; library automation; academic libraries

Subject classification codes: 519120 Libraries and Archives

Introduction

The SUSHI protocol to harvest COUNTER usage reports from publishers is a laborsaving feature of Alma, a popular library services platform from Ex Libris (part of Clarivate) that is used worldwide. In this article we will discuss our experience maintaining SUSHI accounts in an academic library setting, including how to use Alma and Alma Analytics and determining where to focus limited time on upkeep. We account for some common inaccuracies in data and provide strategies to repair SUSHI vendor accounts. We point to resources for troubleshooting and becoming aware of potential problems. We also share examples using the resulting data in analyses for national reporting requirements.

SUSHI (Standardized Usage Statistics Harvesting Initiative) is an ANSI/NISO Standard for harvesting e-resource usage data (NISO, 2023). SUSHI is an API, a standard for software developers, that enables automatic retrieval of usage reports for a particular library or consortium (COUNTER, n.d.). While there are articles and presentations available to librarians about what SUSHI is and how to implement it in Alma for major vendors, there are few articles on maintaining or troubleshooting the harvesting process or the usage data.

Setting up SUSHI in Alma

Alma is fully compliant with COUNTER Release 5 as of the January 2020 release (Ex Libris, 2020). COUNTER is a joint effort that "provides the Code of Practice that enables publishers and vendors to report usage of their electronic resources in a consistent way. This enables libraries to compare data received from different publishers and vendors" (COUNTER, n.d.).

Chen and Day (2021) provide links to documentation and suggestions about planning the project and implementing the protocol; they conclude that implementing SUSHI is a realistic project for most libraries using Alma as their LSP. Boardman (2023) discusses SUSHI account set-up as "user-friendly" and "quick."

Every computer system and program will require adjustments to be made from time to time for various reasons; therefore, it is reasonable to expect that maintenance will be required and prudent to factor it into your workload.

Troubleshooting SUSHI

As with any complex process, problems may occur; it is unreasonable to expect that multiple feeds from multiple vendors over months and years will run indefinitely maintenance-free. Vendors change platforms, usage reports may change to a non-COUNTER-compliant format, Alma has failed loads, etc.

When you realize that the usage data in Alma is not what you expected, the process of troubleshooting begins. According to Talbott and Zmau (2020), troubleshooting is a specialized form of problem solving (p. 1). Troubleshooting generally has four stages of understanding the problem: evaluating options and planning

a solution, implementing a solution, and reviewing the results (p. 4-5). They state that "[t]he biggest differentiator in success between a novice and an expert troubleshooter is level of technical knowledge, but troubleshooters can further increase their effectiveness by learning various troubleshooting strategies and methodologies." (p. 10) We agree that "internal qualities like motivation, curiosity, and cognitive flexibility also play an important role. A can-do attitude along with patience and perseverance are important factors in success; fortunately, these are qualities that human beings can decide to have and put towards their and their organization's goals."

Common problems

Your SUSHI connection is not working

Under the Usage Data SUSHI connection for the vendor, there is an option to test the connection. The response comes back from the vendor in the form of a JSON file, which the Firefox browser can open in a human-readable format. If that connection status comes back as "true" then you are up and running (Figure 1). However, if it comes back as failed or disconnected (Figure 2), then you have to do some troubleshooting to reconnect your vendor data to Alma. The first step in doing this is to check that the elements in the Account Identifier and Request Details section of your SUSHI account are correct. Compare this information with the information from the vendor, which is usually found somewhere in the password-protected librarian administration site provided by most large publishers. Save the updated information and test the connection again. Usually this will solve the problem and the test will come back as "true".

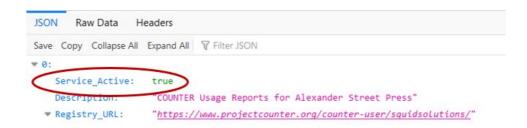


Figure 1. Connection Status "true"

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Your SUSHI account has incomplete data

If your connection has been out for a long time, then you may need to harvest the SUSHI report again. Doing so will rerun the report and ensure that the data is available from that particular SUSHI connection. A Custom Harvest allows you to select the exact date range that you would like the report to pull the data from. This option is useful because you can pull any date range and be sure that the data will pull from your new connection. Alma states that "If the selected date range contains months previously uploaded to Alma, these will be overridden." (Ex Libris n.d.*b*) This process is useful for months when the connection was not working correctly so that the new, correct data is stored for future use.

Vendor updates

To effectively monitor and manage the electronic resource usage data gathered, the employee tasked with SUSHI account administration would ideally have access to the institutional account credentials permitting log-in to the administrative platforms of the relevant content providers. Should they not have this access, then they would need to work closely with the person who does, which would considerably slow the process of troubleshooting.

Many publishers rely on a subcontractor for usage statistics, and it may happen that vendors make platform changes without notification or with the notification failing to reach the library employee who handles the SUSHI accounts. For example, when pulling this year's reports for the ACRL Benchmark Survey, we found no usage from a well-known university press showing up under TR J1 for 63, E-Serial Usage. When we logged in to our institutional account on the vendor site, we pulled a report on the vendor usage data site for our last fiscal year and found quite a bit of usage. We also found that our Requestor and Customer IDs were different than what was in Alma. In the end, it turned out that we had failed to update our SUSHI credentials after the vendor updated their platform. Although our SUSHI accounts in Alma were still returning a true value, no usage for TR J1 had been available. This circumstance was frustrating, because we had already checked that our SUSHI accounts were working. It was only because we knew that that particular vendor should show up in the list that we caught the error. Our experience in Alma Analytics is that if there are no items in a category, the category will be absent from reports. That is, the category will not show up with its name and a zero or null indication; it will simply be excluded entirely. This circumstance could possibly even result in an error instead of a results table being

generated in some reports. In some cases, selecting "Include rows with only Null values" in the table properties may be helpful (Figures 3 and 4).

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Figure 3. View Table Properties

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Figure 4. Null Values under Table Properties

Manually adding COUNTER 5 reports:

Due to the fact that not all vendors allow the use of APIs for automated harvesting of usage data, manual uploading of COUNTER data may need to be carried out in some cases. While it is possible to upload nonstandardized datasets, incorporating such heterogeneous data into usage reports would amount to an "apples to oranges" comparison that compromises the integrity of the results. In order to provide a

statistically valid and methodologically sound comparison across providers, adhering to accepted data standards is advisable when aggregating multi-vendor usage trends.

In Alma most of the SUSHI account information is added under the Vendor in the Usage Data tab. However, manually uploaded COUNTER 5 data is a little different. You can manually add data under Acquisitions and then Load Usage Data. On the Uploaded Files tab of the Usage Data Loader, simply select "Upload File" and enter the following information. First, Vendor. Select the vendor associated with the uploaded data. This often will not be a SUSHI vendor since we are manually uploading their COUNTER 5 data, but it can be a SUSHI vendor if you want to manually upload their data for some reason. For example, this can be useful if the SUSHI connection is not working as you expect and you want to manually upload their data instead. Next upload your file that contains the COUNTER data. Then select the subscriber (i.e., your institution). Finally select "Upload File" and the data will be imported into Alma (Figure 5).

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Figure 5. Manually uploading usage data

Another area where you can upload data is under the vendor details in the Usage Data tab. There is a section below SUSHI accounts that shows uploaded files. It also is a good place to check on the list of uploaded files for that vendor.

Why are my columns in a different order than I put them in?

In Alma Analytics, columns laid out in the Criteria view may appear in a different order in the Results view. The order that your columns appear can be important to the integrity of your results. Changes made to the order of fields in the criteria tab may only save before the report is initially run; once it has been run, changes may need to be made in the Results tab.

To fix the order, go into the edit table option in the Results tab. From here, under Layout in the Columns and Measures area, you can click and drag to rearrange your columns as you need. Once you click Done, that layout is saved. You can also drag and drop columns in the Results view. Be sure to click Save (a diskette icon) in the top right-hand corner or use the keyboard shortcut (Ctrl + S or Cmd + S).

Aggregation rules and where to find them

Aggregation rules define how your data is grouped in Alma Analytics. This can be done using Sum, Count, Average, etc. A common way this feature shows up is in the form of totals at the bottom of a report. Using Aggregation in your reports can be an effective way to check that your SUSHI accounts are all connected and pulling data correctly. For example, when you have the grand total for the month or year you can quickly compare the data in Alma Analytics with the vendor data directly. If there is a large difference, typically something is wrong with the connection or the loaded files.

Verifying the aggregation rule in your report is a simple step that can be easily missed in Alma Analytics (Figure 6), especially if you lack previous training or experience as a data analyst. In addition to gaining familiarity with possibilities for data manipulation by using the software, it is worthwhile to seek out training if analyzing data is a part of your daily work. Professional development workshops in statistics, data

visualization, and the like are becoming more common. Professional service opportunities may also be available that will bring one in contact with others working in this rapidly expanding area.

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Figure 6. Choosing the aggregation rule from the results pane

One indicator that the aggregation rule needs to be adjusted is that grand totals are incorrect. You may use a calculator or MS Excel to total an exported spreadsheet. The default aggregation is not always SUM (Ex Libris, 2019).

The aggregation rule setting may be a significant cause of errors in library reporting. During testing of the ACRL/IPEDS dashboard added in the June 2023 Release in order to optimize it for use by our consortium, I [MD] found that the performance tile did not necessarily reflect the title count of the report, and in fact, did not match any of the aggregation rules at all, even after I deselected the option to round the number off for display. It was only after I specified the aggregation rule to be SUM that the actual total appeared at the bottom of the results table and in the performance tile.

To incorporate totals, subtotals, and additional elements into your report, go to "Edit View" on the results tab of your report. If the Results view is inaccessible, the alternative is in the Criteria Tab, where you would select the column that requires totalling, followed by selecting "edit formula". Subsequently, navigate to the dropdown menu for "Aggregation Rule (Totals Row)" and select "SUM". This sequence of actions will ensure the successful addition of totals and subtotals to your report (Ex Libris, 2019 October).

Grand Totals:

Under Columns and Measures, select the Σ [sigma] button directly to the right of the "Columns and Measures" heading and choose "After". This will add a "Grand Total" row at the very bottom of the sheet after all of the data.

Subtotals:

Like Grand Totals except you select the Σ button next to the column name that you want the subtotal to be applied after. This will add a subtotal after items in the specified column.

Other Aggregation:

When you select the Σ [sigma] button, it will automatically add a subtotal at the end of your columns at the level you set it to based on your specifications. However, sometimes you may want a different form of aggregation such as Average, Count, Min, or Max. To do this, you can click the gear button next to the column names and select "Aggregation Rule" and choose which option you want to see. This can be really useful when counting or adding a total to a non-numeric field.

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 Examples of adding totals, subtotals, and specifying the aggregation rule are available online at https://knowledge.exlibrisgroup.com/Alma/Knowledge_Articles/Adding_Totals_and_S ubtotals_to_Analytics_Report_Tables

Routine maintenance

Generally speaking, SUSHI is smooth automated process in Alma that saves a great deal of time and labor visiting multiple vendor sites. However, problems involving SUSHI are not patron-facing problems and may not be brought to our attention by an external source, such as a vendor or supervisor. How will problems come to our attention? We check our accounts at least once a year as well as when vendors notify us of changes; however, some follow their uploads much more closely. It is worthwhile seeking out examples from conference presentations and discussion lists (discussed in more detail below). There is a gap in the literature here that many librarians and library workers would like to see filled.

Based on our experience at a university library system, we created a method to look for a breakdown in the harvesting process before using the data for our annual ACRL reports by using statistical analysis to find outliers in the usage data (Stanley & Day, 2022). Outliers are data points that differ significantly from the others in the data set and are calculated in Excel. Using outliers to find possible problems in our harvested usage data allows us to investigate those platforms that seem to have anomalous data instead of double-checking every single platform.

Boardman argues that "one tedious drawback is that there is currently no option to delete files in bulk (2023)." Deleting more than one file at a time is a planned proposal on the Ex Libris Idea Exchange to be implemented in February 2024 (Ex Libris, 2023*b*). The Load Usage Data page under Acquisitions > Import is where unsuccessful or incorrect files can be deleted; finally, select "Upload File" and the data will be imported into Alma (Figure 7). Note that this screen is called "Load Usage Data" in the menu and "Usage Data Loader" on the opened page.

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Figure 7. Usage Data Loader

Files can also be individually deleted from the Vendor Details > Usage Data tab under the menu Acquisitions / Acquisitions Infrastructure (Figure 8).

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Figure 8. Vendor Details

The Load Usage Data option under the Acquisitions menu has two tabs: Uploaded Files and Monthly Usage Data. Instances of uploaded files can be searched by the Load File ID (assigned by Alma), the Uploading User (including SUSHI Scheduler),

the Upload Method, and File Name (Figure 9). Files also can be downloaded from this page. (Ex Libris, n.d.*b*)

Usage Data Loader

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Figure 9. Usage Data Loader search options in Alma

The Monthly Usage Data tab shows green, yellow, or red icons for a quick overview of a successfully uploaded file (green tick mark), a successful connection without data (yellow exclamation point), or an unsuccessful attempt to connect to the vendor (red exclamation point) according to Ex Libris (n.d.*b*). While this page gives a nice visual overview of the situation, some find that it is not to their liking and create custom reports to run an overview of the uploaded files from the Usage Data (COUNTER) subject area. An out-of-the-box dashboard that may be useful is the Monthly Usage Data dashboard at Alma > Usage via COUNTER Reports – Release 5 > Dashboards > Monthly Usage Data. It shows a 1 for every loaded file and allows you to click for details about the file, such as platform, load file ID, and material type indicator (Figure 10).

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	PR - Total Item Investigations PR - Total Item Requests PR - Unique Item Investigations PR - Unique Item Requests	1	1 1 1 1 1	1 1 1 1	1 1 1 1 1 1	1 1 1 1 1	1 1 1 1	1 1 1 1 1	1 1 1 1	1 1 1 1 1 1 1		November	Decem
	PR - Total Item Investigations PR - Total Item Requests PR - Unique Item Investigations PR - Unique Item Requests PR - Unique Title Investigations	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1 1 1	1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1	1 1 1 1 1 1 1 1		November	Decem
	PR - Total Item Investigations PR - Total Item Requests PR - Unique Item Investigations PR - Unique Item Requests PR - Unique Title Investigations PR - Unique Title Requests	1 1 1 1 1	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1			
	PR - Total Item Investigations PR - Total Item Requests PR - Unique Item Investigations PR - Unique Item Requests PR - Unique Title Investigations PR - Unique Title Requests PR_P1 - Searches Platform	1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1			

Figure 10. Monthly Usage Data dashboard

Chen (2023) reports having had to overwrite data and questions whether the accuracy of the data in Alma Analytics can be relied upon. We have also found that the SUSHI data in our instance is not without flaws and that checking, upkeep, and maintenance is required. Fitchett (2023) reports that "Currently Alma requires the error message to completely follow the standard before they accept that it's an error message. If so, they'll flag the job to try it again later, and all's well. If not, it's treated as if it was successfully harvested and we're stuck with a "0" unless we run the job manually later." Ex Libris had scheduled a fix as of this writing (Fitchett, 2023). Ralph (2023) gives examples of criteria to use in constructing Alma Analytics reports for determining if there is a complaint vendor in the Community Zone not yet enabled as well as which reports are currently being pulled.

As the reader may deduce from this discussion, finding and fixing the errors depends on details that would escape the casual user of Alma. Indeed, valid analyses in Alma Analytics may produce erroneous numbers for this reason (which is only one of many). The axiom *garbage in; garbage out* applies.

 Libraries, in considering the e-resource lifecycle, will benefit from setting expectations around how much accuracy is expected. In this time of big data and pressure to show results on dashboards, there are limits on how much time and attention that personnel can spend on troubleshooting the finer details. An automated process cannot be considered a useful addition to the workflow if it requires more than occasional attention.

Documentation

The Ex Libris Knowledge Center page entitled "Troubleshooting Tips for COUNTER 5 SUSHI Harvesting" includes five sections on steps to take as well as links to additional resources (Ex Libris, 2020). The page "SUSHI files are fully harvested but data is missing" provides step-by-step instructions on how to remove and replace files that are incomplete (Ex Libris, 2019, March). Before contacting customer service, it is worthwhile to find out if other libraries are having a similar problem. Online discussion lists are well-suited to this purpose.

Discussion lists for Alma and Alma Analytics

Joining an active online discussion group has both tangible and intangible benefits. Being part of the professional community of librarians allows us to benefit from a wide range of experience and expertise, in part because Alma is used by many libraries worldwide, and in part because the library profession is characterized by collegial, supportive, and collaborative interactions. Community members may be regular or irregular posters; however, most questions will receive a useful answer in a short period of time. It is hard to underestimate the time saved and grief avoided when one finds the answer to a problem--that may be local or systemwide--on a worldwide discussion list. The Ex Libris user community discussion list for Alma may be accessed at <u>https://exlibrisusers.org/postorius/lists/alma.exlibrisusers.org/</u> Once an account has been created, the archive can be searched by keyword. The IGeLU/ELUNA Analytics Community of Practice < <u>Analytics – IGeLU</u>> maintains a discussion list and archives at <u>https://exlibrisusers.org/postorius/lists/analytics.exlibrisusers.org/</u> Concerns include data understanding, data access, evidence gathering, and education and advocacy.

Subjects on the discussion list range from a simple "how do I do this particular thing?" to very complex reporting questions. For example, a recent message titled "SUSHI error messages - when to double check" resulted in several tips and sample reports being shared (Lee, 2023). And another led to several suggestions for reading and using JSON files (O'Brien, 2023). It may also be that the connection information available to you in the documentation doesn't work; for example, one person reported receiving no reports from a particular university press, and others replied that they had had to use an override URL (Hammons, 2023).

In reading posts, it becomes clear that some libraries have more expertise, time, and attention devoted to this area than others. While discussion lists cannot replace devoting time and attention and developing expertise with SUSHI vendor accounts and files, they can be a source of early warning about problems with data. The value of the combined experience shared is certainly worth the time spent sorting through the large volume of messages.

Using Alma Analytics

Current library service platforms, such as Alma, offer data warehousing and analyzing capabilities. Librarians are enabled or called upon to act as data analysts when given a question to answer about their library's items and services. According to the Berkeley School of Information (2021), "Data analysts bridge the gap between data scientists and

business analysts. They are provided with the questions that need answering from an organization and then organize and analyze data to find results that align with high-level business strategy. Data analysts are responsible for translating technical analysis to qualitative action items and effectively communicating their findings to diverse stakeholders." This article addresses the practicalities of finding and organizing library information accurately to answer questions in the context of automatic usage harvesting with Alma and Alma Analytics; alignment with strategy and translation to action items are outside the scope of this article.

Boardman and Thompson (2022) advise taking into consideration the learning curve required for using Alma Analytics, even when one has a background in analytics. We [the authors] agree that there is a steep learning curve for this complicated system. In addition to initial learning, designating time to focus on working in Alma Analytics without distraction is necessary to create good quality reports that accurately answer the question asked. Due to the complex nature of library catalogs, it is easy to measure something other than what one intended to measure.

Entity relationships between Alma and Alma Analytics can be difficult to discern. Some field names are duplicated yet have different possible data types; alternately, the same data field may have a slightly different name. For example, "access type" appears in more than one place. In Alma's Electronic Portfolio Editor Access Type may be populated with *Current, Perpetual*, or *Current and perpetual*. In the Alma Analytics Usage Data subject area, Access Type may be populated with one or all of *NULL, CONTROLLED, Controlled, OA_GOLD, OTHER_FREE_TO_READ* in our instance.

Once a report has been created, it is relatively simple to run it again; however, the initial design can take significant time, attention, and revision. A good quality control measure is to discuss the analysis/report with a colleague who has previous experience producing reports for your library or consortium.

It may also be necessary to consult your library's cataloger or metadata specialist if you have difficulty determining how to isolate particular items solely based on the choices in Analytics. One useful process is to run an analysis with several fields to see how they intersect. For example, some commonly used fields in ACRL reports are Material Type (Bibliographic), Resource Type (Bibliographic), Material Type (Item), and Item Policy (Item). When you create an analysis with all of them, the resulting table can help you decide how to filter results in order to meet the ACRL Survey definitions. For a methodology and examples, see *ACRL/IPEDS Title, Volume, and Circulation Counts in Alma Analytics* (Nauenburg & Day, 2022).

A good practice is to regularly review the Alma release notes for updates, because Ex Libris is constantly making improvements. Updates could include important aspects such as the harvest schedule, new fields in various subject areas, and fixes for unexpected behavior. For example, in August 2023, a new layout was made the default and a link to a webinar about its capabilities and functionality was provided, and in October, one resolved issue was that "Usage data from several SUSHI files did not appear in Analytics. This was fixed" (Ex Libris, 2023*a*).

Remember that data is imported into Alma Analytics from Alma overnight on a daily basis. Data is usually available by the next business day, with the exception of Tiles and Benchmark subject areas that are updated monthly, the Analytics Usage Tracking subject area that is updated weekly, and the Cost Usage section of the E-Inventory subject area that is updated monthly. (Ex Libris, n.d.*a*)

The behavior of Alma and Alma Analytics changes according to how frequently a particular query is run and whether it has existed before. In my [MD] experience,

 when an entirely new query is created, the initial results may be nonsensical. A day or two... or a week later, the report may work as expected. In 2018, Smith reported that, "I have found in the past that occasionally reports created by others don't always work in my environment but when I recreate it, it will" (Goldfarb, 2018). This state of affairs is another reason to allow yourself ample time to investigate options, consult experts, and check and re-check your work.

Although improvements have been made to the timeout interval, be sure to refresh your Alma tab while working in Analytics. Report and search results should be reproducible. If at any time you receive obviously strange results, close your browser or open a private/incognito window and log back in again.

Report Examples

Every year, academic libraries submit statistics to ACRL and IPEDS. Having the usage data already loaded in the library services platform via SUSHI greatly simplifies two of these reports. Final accuracy of the totals depends on multiple factors, including the fact that not all publishers offer SUSHI as an option.

ACRL 60 Column B

ACRL 60 Column B asks libraries to "report usage of digital/electronic titles whether viewed, downloaded, or streamed." The definition specifies that "Relevant COUNTER Release 5 reports for e-books are: TR_B1: Book Requests (Excluding OA_Gold). As to the COUNTER 5 metric type for e-books, report 'unique title requests.' For e-media, use IR_M1: Multimedia Item Requests, report metric type for 'total_item_requests' is the most relevant." (2022 Survey Instructions

https://acrl.libguides.com/ld.php?content_id=70233803)

To construct a report for 60B in Alma Analytics, create a new analysis and choose the Usage Data (COUNTER) subject area. When adding fields, I (MD) started with Vendor Name and Platform (vendor interface), although one would suffice. Then I added the key fields TR_B1 - Unique Title Requests and IR_M1 - Total Item Requests. I filter the results by Material Type Indicator (TR_B1, IR_M1) and Usage Date Fiscal Year (Figure 11). While other fields could be added for exploratory purposes when initially creating the report, it is possible to complicate matters by using too many fields, because one field may limit another and change the final results. In Figure 12, Access Type was used in the previous year and provides further information that vendors mark items as "controlled," meaning behind a paywall, but do not mark access them as "open access."

Note that the fiscal year has to be defined ahead of time; if it displays unexpected behavior, consult with the person who manages your instance of Alma or its acquisitions area. Alternately, you could filter by the specific months comprising the previous fiscal year at your institution.

ACRL 60 Column B Electronic Circu	lation or Usage			DV Home Catalog	Favorites • Dashboards • Cre	ate 👻 Open 👻	6
Criteria Results Prompts Advanced							0
4 Subject Areas 🔍 🌐 🗸 📰 😏	T Z m						
Usage Data (COUNTER) Imuto Usage Data Details - Release 5	A Selected Columns					T	×
Usage Data Details - Release 4	Usage Data Details - Release 5		Uploading Vendor	Institution	Usage Date	Platform	
TR5 Usage (Release 4) Table Identifier Platform	👔 Material Type Indicator 🎲 🧯 TR_B1 - Unique Title Requests 🔅	📕 IR_M1 - Total Item Requests 🔅 🔡 Access	i Type 🔅 🔹 Vendor Name 🔅	Data Updated As Of 🔅	👔 Usage Date Fiscal Year 🔅	Platform	ž
Publisher Subscriber	4 Filters					To %	>>
im Load File im Uploading Vendor im Institution	Usage Date Fiscal Year is equal to / is in FY-2023 AND Material Type Indicator is equal to / is in IR_M1 - Total Item Reques	ts: TR_B1 - Unique Title Requests					

Figure 11. Criteria tab for an ACRL 60 Column B report in Alma Analytics

ACRL 60 Column B Electror	ic circulation of Usage				
Criteria Results Prompts Advanced	d				
∡ Subject Are	⊟ • 12 • 18 • 18 • 18 •		e, eji 🗹		
Usage Data (COUNTER)	Compound Layout				
🕨 🛅 Usage Data Details - Relea:	Title				A
Usage Data Details - Release	ACRL 60 Column B Electronic C	Circulation or Usage			
JR5 Usage (Release 4)	Namative				A
Usage Date			9/11/2023 8:05:00 PM •2023		
Title Identifier International Internatinternational Internatinternational International International In	Table			[A]	23522
Publisher	102204-0				and a
Subscriber	Vendor Name	Platform	TR_B1 - Unique Title Requests	IB M1 - Total Item Requests	Ac
Load File	ACM (Association for Computing Machinery)		11		CO
Uploading Vendor	Accessible Archives	Accessible Archives	8	0	CC
Institution	Alexander Street Press	search.alexanderstreet.com	0	7,240	
		video.alexanderstreet.com	0	988	
	American Chemical Society	ACS	150	0	CC
∡ Catalog → 🐘 🖉 ≫	American Psychological Association	APA PsycNET	23		CC
List All	American Society Of Civil Engineers	American Society of Civil Engineers	45		CC
	Bloomsbury	DramaOnline	0		
My Folders	Cambridge University Press	Cambridge Core	193		CC
Shared Folders	Credo Digital Theatre	Credo Search Digital Theatre+	550		CC
	EBSCO Subscription Service	EBSCOhost	59,391		CC
	Emerald	Emerald	4		CC
		Emerald Insight	10		CC
- Views → ₀ ▼ // ₫₫ ≫	Gale Group	Gale	2,791	0	CC
Title	IGI Global	IGI Global e-Resources Platform	5	0	CC
Table	IOP Publishing	IOPscience	3	0	CC

Figure 12. Results tab for an ACRL 60 Column B Electronic Circulation or Usage report

As mentioned above, the table columns can be moved in the results view to obtain the desired order. I also added a Narrative section, which is added in the results view from Views > Other Views > Narrative (Figure 13). There I included the fiscal year and the Data Updates As Of field to show when the data was automatically copied from Alma to Alma Analytics (Figure 14). The information is updated automatically in the Narrative from the criteria by referencing the placement of the field, counted from left to right, after an @ [at sign]. A preview of the text shows up below the input boxes. After saving, drag the narrative from the Views pane on the left-hand side and drop it above or below the table while in the results view.

	Gauge	Pander Street Press
Catalog	▶ Funnel	+
List All 🔻	() Мар	Press rican Chemical Society
My Folders	Filters	rican Institute of Physics
⊿ Views	Other Views Other Views	Views Ame 📅 View Selector
Title		Ame Legend neers
Narrative		Ame 🛄 Ticker logy
		Sele A. Static Text

Figure 13. Creating/Finding the narrative view on the results screen

Criteria Resul	ts Prompts .	Advanced	
🗛 付 🛤 ▾	u di	H A (Å)	
	Bí	<u>u</u> Line Break	Contains HTML/JavaScript/CSS Markup
Prefix			
Narrative	Data updated as [b]@7[/b]	of @6[br/]	
Row separator			Rows to display 1



I [MD] add the column totals for the final number that I report to our libraries' assessment librarian. In this case, only the total is needed and it does not need to be broken down by subcategories. I set the aggregation rule to SUM.

ACRL 63

The process is similar for creating a report for ACRL 63, electronic serial usage.

The 2022 Survey Instructions (2022 Survey Instructions

https://acrl.libguides.com/stats/surveyhelp or

https://acrl.libguides.com/ld.php?content_id=70233803) for ACRL 63 E-Serials Usage specify:

Report usage of e-serial titles whether viewed, downloaded, or streamed. Include usage for e-serial titles only, even if the title was purchased as part of a database. Viewing a document is defined as having the full text of a digital document or electronic resource downloaded. [NISO Z39.7-2013, section 7.7] If available, include the count for open access e-journal usage if the title is accessible through the library's catalog or discovery system. ...

Most vendors will provide usage statistics in COUNTER Release 5 reports. Start with TR J1 (COUNTER 5) and add OA if discoverable/available. Also, please add a note if the OA counts were manually added. For the metric type, report "unique item requests."

The options for TR J1 in Alma Analytics are TR J1 - Total Item Requests, The total number of item requests or "TR J1 - Unique Item Requests, The number of unique item requests."

(https://knowledge.exlibrisgroup.com/Alma/Product Documentation/010Alma Online Help (English)/080Analytics/Alma Analytics Subject Areas/Usage Data) The option to include or exclude open access articles is through the Access Type field. Whereas the 2021 definition excluded Open Access Gold, the 2022 definition includes open access

Page 24 of 37

journals if they are discoverable through the library's catalog. As of this writing, running the report shown below without an Access Type filter returns a slightly larger number than running it with the Access Type limited to *contains any* or *is equal to / is in* NULL; CONTROLLED; Controlled; OA_GOLD; OTHER_FREE_TO_READ (i.e., all the options) in our instance of Alma Analytics (by 435 out of 535,347—or less than 1%—for fiscal year 2021). This discrepancy highlights the difficulty of pulling an accurate result in Analytics. Because there are so many parameters, an operation can be affected by parameters that are not at first apparent. When I first started working with Analytics reports, I would have thought that the report would pull the same number when all access types were chosen as when no access types were chosen; however, that is not the case. This example shows why I have adjusted my thinking to dealing with fuzzy rather than crisp subsets of items in the catalog.

The few items reported by our vendors that are not controlled access have no access type assigned to them in Alma Analytics. Open access websites do not report COUNTER usage to libraries; in addition, because no authentication is required to access those websites, there are minimal statistics regarding their use in the current library ecosystem. In arguing for the benefits of a freemium model, Green (2017) states, "One of the problems inherent with most open access models is that no-one can identify who has accessed the work and to what depth. This is because there is no requirement for user identification or registration for open access works – the work is free to access by anyone with an internet connection and there is no prior requirement to register or sign on for access rights. Whilst web analytics tools like Google Analytics can provide high-level reports on usage, including some basic geo-level data such as accesses by city or region, an open access publisher has no ability to report detailed usage by institution name. . . ."

Criteria for 63 come from the Usage Data (COUNTER) subject area and the folders Usage Data Details – Release 5, Uploading Vendor, Institution, and Usage Data. Filters are Usage Date Fiscal Year and Material Type Indicator (Figure 15).

View or change the columns and filters i	n this request					
	I pr und					
Usage Data (COUNTER)	Selected Columns					
Usage Data Details - Release 5						
Usage Data Details - Release 4	Usage Data Details - Release 5		Uploading Vendor	Institution	Usage Date	
JR5 Usage (Release 4)	📒 TR_J1 - Unique Item Requests 🔅	🚦 Material Type Indicator 🏠	🚯 Vendor Name 🔅	Data Updated As Of 🔅	🚦 Usage Date Fiscal Year 🔅	
Usage Date						
Title Identifier						
Platform						
Publisher	∡ Filters					
Subscriber						
Load File	Usage Date Fiscal Year is equal to ANDY Material Type Indicator is equal to					
Uploading Vendor	AND Material Type Indicator is equal to	/ is in TR_J1 - Unique item Reqi	Jests			
Institution						

Figure 15. Suggested criteria for ACRL 63 using Alma Analytics

The results table includes Title (which can be customized or left as the

report/analysis name), Narrative, and Table Views (Figure 16).

URL: http://mc.manuscriptcentral.com/wirs Email: chen@bradley.edu

∡ Subject Areas 🔍 †↓ 🔻 ≫	⊒▼ ♂▼ ‰▼ ぬ ∽ Ib▼		5 U R 🖬 🛛
🔺 🚼 Usage Data (COUNTER)	Compound Layout		
 Usage Data Details - Release Usage Data Details - Release 		(A) 🗡 🗙	
JR5 Usage (Release 4)	ACRL 63 E-SERIAL USAGE		
Usage Date Title Identifier	Narrative Data updated as of 9/11/20 FY-2023	🔺 💉 🗙 023 8:05:00 PM	
Platform	Table	(A) 🔤 🖋 🗙	
Publisher Subscriber	Vendor Name	TR_J1 - Unique Item Requests	
	ACM (Association for Computing Machinery)	3,597	
🖌 Catalog 🛛 🔿 🐘 🗡 🥱	Accessible Archives	146	
List All	Allen Press	12	
My Folders	American Chemical Society	11,438	
Shared Folders	American Institute of Physics	157	
Shared Folders	American Medical Association	334	
✓ Views → IIo ▼ / III ≫	American Psychological Association	291	
	American Society Of Civil Engineers	203	
- Title	American Society for Microbiology	21	
Table	American Society for Testing and Materials	4	
Narrative	Annual Reviews	389	
	Cambridge University Press	687	
	EBSCO Subscription Service	305,411	

Figure 16. Results tab for ACRL 63 E-Serial Usage

Out-of-the-Box Dashboard for ACRL/IPEDS

In the June 2023 Release, Ex Libris released a dashboard to assist in pulling data needed for submission to ACRL and IPEDS. It is located at Alma > Shared Folders > Industry Standard Reports. To use the dashboard effectively, you may wish to copy it to your institution zone or network zone. The Archive/Unarchive function is ideal for this purpose (Jääskeläinen, 2023). Once copied over, a designer can hard code specifics for the institution on the criteria screen or prompts of each analysis and add instructions to the dashboard. Because it is based in large part on the work of Nauenburg & Day (S. de la Fuente, personal communication, January 3, 2023), the same report preparation methodology applies (Nauenburg & Day, 2022). By starting with material type and then

limiting to resource type and excluding locations, the complex definitions can be met for a particular institution's library collection.

Conclusion

The way librarians access, manage, and display usage reports changes with the evolution of standards and software. The SUSHI protocol to automatically harvest COUNTER usage reports from publishers is a labor-saving feature of Alma, a SaaS library services platform that is used worldwide. While putting the process in place is relatively straightforward, there is a need for ongoing upkeep and maintenance afterwards. In this article we have shared our experience maintaining SUSHI vendor accounts. We have drawn attention to common sources of difficulty, vendor documentation, and online resources for becoming aware of widespread problems. We also provided examples of using the harvested usage data in analyses for national reporting requirements.

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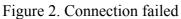
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Service_Active:	true
Description.	"COUNTER Usage Reports for Alexander Street Press"

Figure 1. Connection Status "true"

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Figure 3. View Table Properties

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Subscriber	Vendor Name	Platform		
Load File	ACM (Association for Computing Machinery)	acm	Paging Controls Bottom	
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Institution		video.alexanderst	Display Folder & Column Headings Only column headings	
	American Chemical Society	ACS	Null Values V Include rows with only Null values	
	American Psychological Association	APA PsycNET	Row styling Enable alternate styling Aa	~
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	American Society for Testing and Materials	ASTM Digital Libr	Master-Detail Listen to Master-Detail Events	
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Figure 4. Null Values under Table Properties

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Figure 5. Manually uploading usage data

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Figure 6. Choosing the aggregation rule from the results pane

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	‡ File Name	Vendor	\$USHI ↓ Account	Upload Date	↓ Uploading ↓ User	\$ Subsc	\$\$ \$tatus	Status Description	Report Type	Data Start Date	Data End Date	Vendor URL	Report Success Rate (Global)
1	SUSHI_American Society for Microbiology_tr_j2	American Society for Microbiology	American Society for Microbiology	14 Oct 2023 08:57:44	SUSHI Scheduler	Kenne State	Fully processed	No valid report items found in the file	tr_j2:R5	Jan 2023	Sep 2023	https:	View Report
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Figure 7. Usage Data Loader

< Vendor Details Cancel Uploaded Files 1 - 20 of 626 Load File ID -Q Upload File 🔻 C+ 5 ▼ Status : All Files ▼ Subscriber : All ▼ Upload Date : All Uploaded ▼ Report Type : All ▼ SUSHI Account : All 🔻 Clear all Status SUSHI Data Start Report Success Rate Upload Upload Report ♣ File Name ± Subscr ± Status Descripti Data End Date dor Date Туре Date (Global) URL on Scitation - AIP 100.0% Ye SUSHI_Scitation - AIP (American (American 14 Oct 2023 SUSHI Kenne Fully pr_p1:R5 Institute of Sep 2023 Sep 2023 ht... ear: 100.0% Ha Institute of Sched.. 08:28:21 State processed Physics) pr p1 202309 107091370... Physics) ter View Report Scitation - AIP Download SUSHI_Scitation - AIP (American 14 Oct 2023 Fully SUSHI (American Kenne.. 2 Institute of ir a1:R5 Sep 2023 Sep 2023 ht... На State Institute of 08:28:17 processed Sched. Delete Physics)_ir_a1_202309_107091354... 0 Physics) Figure 8. Vendor Details

Usage Data Loader Uploaded Files Monthly Usage Data 1 - 50 of 40,159 Load File ID Q Upload File 🔻 G \$ * Load File ID T Status : All F All - Upload Date : All Uploaded - Report Type : All - Vendor : All - SUSHI Account : All -Clear all Uploading User Status Data SUSH Vendo Report Success Upload Method ling File Name € User \$ Subs \$ Status Descriptio Start Date Туре Date r URL Rate (Global) Account Date File Name No valid SUSHI_American 14 Oct American American report SUSHI Kenn... Fully Jan Sep 2023 Society for Society for Society for 2023 items tr_j2:R5 http... •••• 2023 Scheduler State processed Microbiology_tr_j... Microbiolo... Microbiolo... 08:57:... found in the file

Figure 9. Usage Data Loader search options in Alma

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Figure 10. Monthly Usage Data dashboard

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Figure 11. Criteria tab for an ACRL 60 Column B report in Alma Analytics

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Subscriber	Vendor Name	Platform	TR_B1 - Unique Title Requests	IR_M1 - Total Item Requests	Access T	ype
Load File	ACM (Association for Computing Machinery)	acm	11	0	CONTROL	LLED
Uploading Vendor	Accessible Archives	Accessible Archives	8	0	CONTROL	LLED
Institution	Alexander Street Press	search.alexanderstreet.com	0	7,240		
		video.alexanderstreet.com	0	988		
	American Chemical Society	ACS	150	0	CONTROL	LLED
Catalog	American Psychological Association	APA PsycNET	23	0	CONTROL	LLED
	American Society Of Civil Engineers	American Society of Civil Engineers	45	0	CONTROL	LLED
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My Folders	Cambridge University Press	Cambridge Core	193	0	CONTROL	LLED
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Title	IGI Global	IGI Global e-Resources Platform	5	0	CONTROL	LLED
Table	IOP Publishing	IOPscience	3	0	CONTROL	LLED

Figure 12. Results tab for an ACRL 60 Column B Electronic Circulation or Usage report

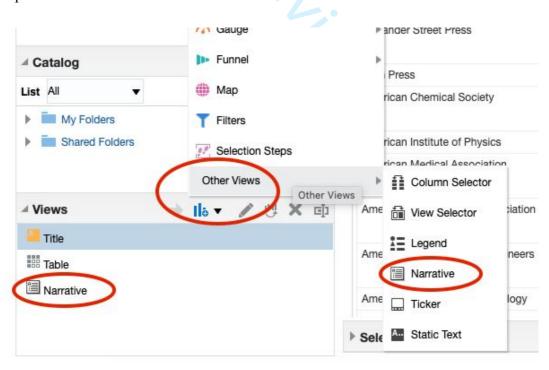


Figure 13. Creating/Finding the narrative view on the results screen

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Figure 14. Constructing a narrative view with date and fiscal year displayed

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