

## E-book Workflow from Inquiry to Access: Facing the Challenges to Implementing E-book Access at the University of Nevada, Reno

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### Abstract

As e-book holdings in academic libraries increase, libraries must face the challenge of how to manage the acquisition and access of both individual and package e-book titles. While libraries have developed workflows to effectively handle electronic journal holdings and packages, e-books do not fit neatly into those models. An e-book workflow shares facets of both monographic and electronic resource acquisition and access, with both title-level and package acquisition and management issues. This article will explore how a cross-departmental team in the University of Nevada, Reno Libraries collaborated to analyze and refine the workflow for the e-book lifecycle, from the point of inquiry through acquisition, access management, and end of life.

Keywords: Electronic books; workflow; University of Nevada, Reno; technical services; Sharepoint

### Introduction

E-books have been both a boon and bane for academic libraries. They offer the ability to deliver content to users immediately, but they present a management challenge due to inconsistency within the e-book publishing industry. The multitude of different e-book readers, formats, access platforms, and licenses makes it difficult for libraries to establish set procedures for acquiring and managing e-books. Until quite recently, other electronic resources, chiefly journal content, have taken precedence in use, availability, and attention in academic libraries. But the recent proliferation of e-book readers, mobile devices, and tablets available to users and the ensuing rush on the part of publishers to provide content for all of these devices has led to a sudden increase in demand for e-books in both academic and public libraries. This has left libraries struggling with how to manage and provide access to all of these new resources that do not fit neatly into any pre-existing workflows.

At the University of Nevada, Reno (UNR), the need to respond to user demand spurred a dramatic increase in e-book acquisition from 2009 onwards. This increase in purchase and use

prompted an examination of the e-book landscape to figure out the best way to handle the new content and give users the access they wanted in the formats they wanted. The variety of e-book pricing and access models poses considerable challenges for libraries unaccustomed to dealing with these issues for monographic content.

At the UNR Libraries, a small, cross-departmental task force of librarians and staff examined the e-book process and built a workflow from the point of inquiry through acquisition, access, management and end of life. The task force brought together staff from across departments who handled e-books on a daily basis to figure out the optimal workflow. Since e-book acquisition and processing were not working well within traditional departmental divisions, the task force built the workflow from the ground up: they approached the problem by stepping back and looking at the information staff needed to track and the actions they needed to take. The goal was to create an efficient and effective workflow that would provide users with seamless service.



From the user perspective, the task force focused on how to acquire the right materials, process those materials quickly, and provide reliable access as rapidly as possible in the places where users could best discover and use e-books. From the management perspective, the task force approached its work with the awareness that technical services could not maintain departmental divisions and staff responsibilities that were originally designed for linear, print-only workflows. Staff skills and the tasks that departments managed needed to evolve in order for the library to keep up with what users expect and need. As task force members developed the workflow, they were encouraged to look at and experiment with tools and software the library already had to see if existing tools could help manage e-books more effectively. Both Microsoft SharePoint and the library's electronic resource management ILS module (Innovative Interfaces Inc.'s ERM module) emerged as tools that could be used.

This article will present the core purchasing and access models encountered and the tools and workflows the library developed to handle them. While many libraries face the same challenges in e-book management, relatively little has been published specifically about e-book workflows and what strategies have proven to be successful. The authors offer the process outlined in this article as an example of how one library examined its information-management needs for e-books and developed a model that, through cross-department collaboration and creative use of tools on hand, allowed the library to manage e-books much more effectively and efficiently than it had done before.

### Literature Review

At the time a workflow was developing at UNR, it was a challenge to find sources of specific information on e-book workflows and documented best practices at other institutions. Taskforce members searched listservs and literature and contacted colleagues at other institutions. It was obvious early on that UNR was not alone in its struggle to manage and provide e-books for users. There were many complexities to designing a workflow that delivered a variety of e-books to users in a timely manner while also striving for

efficiency in a time of stretched budgets. Because the models and landscape change so rapidly, the literature is also a moving target, with some resources on e-books going out of date fairly quickly.

There have been a number of reports and overviews of the e-book landscape published in recent years that cover topics related to e-books in libraries. In 2009, the Association of Research Libraries (ARL) published SPEC Kit 313, *E-book Collections*, which reports the results of a survey of library e-book collections, covering a range of relevant topics such as collection development policies, marketing e-books, and e-book usage statistics. Three of the more valuable areas the SPEC kit covers are the benefits and challenges of providing e-books, e-book acquisition criteria, and budgeting for e-book purchases. Each section provides a number of important considerations for institutions to carefully examine prior to massive purchases of e-books.

The supplementary details provided from the survey for these sections give insight into additional considerations not covered in the standard choices offered in the survey. The section on benefits and challenges asked survey respondents to "list up to three benefits of including e-books in the library's collections"<sup>1</sup> and asked the same regarding challenges, as well as listing additional comments. 24/7 access, from anywhere, by multiple users are all benefits listed multiple times in the table of results, but the responses cover many other attributes that make e-books an appealing addition to library collections. The challenges listed are more varied and they identify some rather complex problems, the bulk of which appear to be in the hands of publishers and vendors to resolve. In response to the reported challenges, respondents recommend changes in areas such as pricing, licensing, Digital Rights Management (DRM), platform design, e-book format, etc., all areas controlled by the publishing industry. The feedback and details provided in this study are valuable as libraries acquire e-books and seek to establish effective workflows.

The JISC National E-books Observatory Project (<http://observatory.jiscebooks.org/>) provides a number of reports based on various studies and



surveys related to e-books in libraries. Covering a range of topics including collection management, workflows, and licensing, these reports give an excellent overview of the many challenges that academic libraries face in providing e-books to users. An area of focus within these reports is e-textbooks, which present a unique set of issues and considerations. Among these reports, Armstrong and Lonsdale's *E-book Collection Management in UK University Libraries: Focus Groups Report* is very useful in understanding the current state of e-books in libraries. This report highlights some issues that emerged as key problems with e-book management:

... librarians feel unconsulted and believe that it is necessary for publishers and aggregators to work more closely with them. Pricing models and licenses are too complicated. [...] Librarians emphasized that continuity of access is important for a number of reasons, and there are significant logistical and workflow issues if e-textbooks are added to, and subsequently removed from, catalogues, etc.<sup>2</sup>

Another overview of the e-book environment is the *HighWire Press 2009 Librarian eBook Survey*.<sup>3</sup> The report reflects an environmental scan of e-books in libraries in 2009. Although the survey included many different types of libraries, the responses were overwhelmingly from academic institutions. The report covers aspects of e-books from patron use to Digital Rights Management issues. There are many details relevant to e-book acquisition, such as which vendors libraries purchase e-books from and the e-book platform features that influence e-book purchasing decisions. In addition, there are a number of sections within the report with freeform responses gathered from librarians. Overall, this report is useful in understanding the e-book landscape, which can then inform the workflow and collection management at a given institution.

In addition to the environmental surveys and reports, there are a number of well-written articles that give a strong explanation and overview of e-books and the ever-changing landscape. There were few articles, however, that described workflows in detail. UNR sought a roadmap and there was not one available in the literature

at the time. This in part is what led the authors to write this article, as a way to share the paths UNR has created and encourage others to adopt, modify, or share their institutions' workflows.

Among the resources that do address the issue of workflows for e-book management, the 2011 edition of *No Shelf Required* stands out.<sup>4</sup> It is one of the most comprehensive and detailed resources available on e-books in libraries. This volume delves into a variety of timely and useful topics regarding e-books in libraries, including workflow. While it does not provide a very detailed or specific workflow that could be adjusted for institutions to follow, it does go in depth as to what to consider as workflows are being built. The various authors in the volume cover e-books in both public and academic libraries, a distinction that is important as there are similarities in both types of institutions but there are also notable differences.

One particularly useful chapter of *No Shelf Required*, "Acquiring E-Books," discusses preparations libraries can make prior to acquiring e-books in a comprehensive way that will make for smoother processes and accountability into the future. The authors, Carolyn Morris and Lisa Sibert, delve into acquisition considerations as well as cataloging e-books. They arrive at the same conclusion UNR Libraries did at the start of the e-book workflow taskforce initiative—the establishing a separate workflow was the best way to proceed. Morris and Sibert state:

As new formats emerge, libraries must be able to adjust their workflows, policies, and procedures to reflect the change. E-books workflows can be built on print book models to a point, but libraries must recognize that the difference in format requires a new stream for processing, and this requires the library to create new procedures for handling e-books, from evaluation to activation and most stops in between.<sup>5</sup>

Although *No Shelf Required* does not go into the depth and detail about workflow that this article does, it does provide a deeper understanding of the e-book landscape and what is required to manage e-books in libraries than most other resources currently available.

The journal *Against the Grain*, a resource for "publishers, vendors, and librarians" (<http://www.against-the-grain.com>), offers some useful articles that discuss aspects of e-book workflows. An article from Antje Mays in the "Biz of Acq" section, "Workflows in Paradise: eBooks, Acquisitions, and Cataloging"<sup>6</sup> raises common questions in regards to the management of e-books as well as providing access to users. Mays goes into workflow considerations, including a summary of the stakeholders involved in developing an e-book workflow. Mays also provides a brief case study from the Ida Jane Dacus Library at Winthrop University, which conducted a pilot project circulating e-book readers loaded with e-books. Much of the workflow discussed with relation to providing this service could be translated into a general e-book workflow, regardless of whether or not libraries intend to store their e-books on circulating e-readers or simply make the books available online. One piece of advice Mays mentions, which was also done at UNR, is to prepare fund codes the fiscal year prior to the large-scale acquisition of e-books. Mays states,

There are many advantages for creating an eBook fund category in the early stages of collecting eBooks, in order to populate those fund-data categories from the beginning. This will make expenditure analysis for accreditations, university offices, higher education commissions and similar bodies, and internal monitoring of shifts in materials-category distribution much easier than trying to shift fund accounting mid-stream.<sup>7</sup>

UNR found that preparing dedicated fund codes took a lot of time up front, but it was time well spent, as it led to savings in staff time and other efficiencies later on and allowed for more accurate reporting.

Another valuable article from *Against the Grain* is a two-part article by Carolyn Morris, "Buying eBooks: Does Workflow Work?"<sup>8</sup> The article provides a broad summary of considerations involved in acquiring e-books and particularly focuses on library-vendor relations. Morris also stresses the importance of prioritizing e-book management and acknowledging the differences from their print counterparts. She states, "The

stakes are higher, the issues are more complex, and the differences among suppliers are immense. It would be unwise to minimize these differences merely to preserve workflows."<sup>9</sup>

### UNR's History with E-books

E-book acquisition at UNR began in the late 1990s, starting out slowly with the purchase of single e-book titles. By 2001, UNR began participating in consortial purchases of individual e-book titles and made its first purchase of an e-book subscription package. These initial purchases were made through both the Acquisitions and Serials departments and then manually added to the library catalog by staff in the Cataloging department. Some records were created from data in Excel spreadsheets provided by the vendor. Purchases were infrequent enough to be handled on a case-by-case basis with no formal procedure in place.

Over the next several years, through 2005, e-book acquisitions continued at this pace, with some additions through consortia and some individually purchased additions. For certain vendors, records became available in batches from OCLC that could be batch-loaded into the catalog. In 2006 the library began purchasing more e-book packages and adding them to the catalog, but the workload was still modest enough that one person could manage the loading and editing of the records. These package purchases were also fairly easy to handle and track. Most resources were easy to integrate into the already established database workflow. The annual renewal was straightforward and updates, though at times cumbersome, were on a scale that departments could handle.

The workload continued to be manageable with the existing processes until 2009-2010, when the library saw a large increase in both the number of e-book packages acquired and the number of individual titles available. The surge in popularity of e-book readers and the growing availability of e-book titles powered this increase. As e-book acquisitions rose, the challenges and problems in processing them also increased. Staff realized that many questions and issues were emerging regarding the current e-book proce-

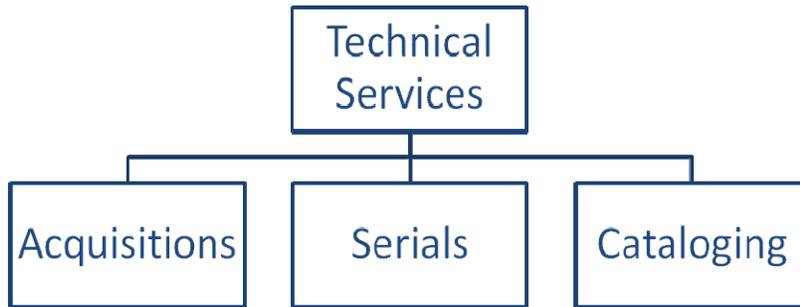


Figure 1. Original structure of Technical Services department at UNR Libraries

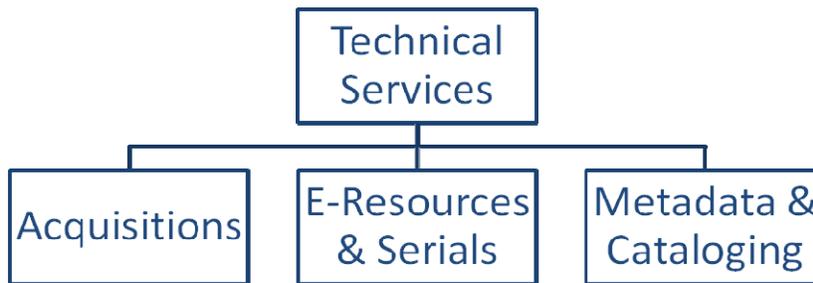


Figure 2. Restructured Technical Services department at UNR Libraries (2007)

dures and handling e-books on a case-by-case basis was not enough. It became clear that the library needed to have better procedures and workflows in place to manage the acquisition and processing of e-books to make them available.

### Organizational Structure and Workflow

The central problem that emerged at this point was that e-books did not fall neatly into the traditional Technical Services department organization, nor did e-books behave like the other materials being acquired for the collection. As department responsibilities overlapped, no one was quite sure who was and should be responsible for different parts of the workflow, but it was clear that collaboration and communication needed to increase and improve.

At the time e-book acquisition began, the Technical Services division had a very traditional library structure, as shown in figure 1.

Initial e-book purchases were handled within this traditional structure, with Acquisitions making the one-time purchases, Serials handling ongoing purchases, and both departments notifying Cataloging upon purchase. Cataloging staff cataloged the e-books or loaded received records into the catalog.

The library underwent restructuring in 2007 to prepare for a move to a new facility and at this point Technical Services departments were renamed to reflect more accurately their responsibilities, as shown in figure 2.

While these new department names better described the responsibilities of each department, it was still a fairly traditional structure. Acquisitions handled discrete purchases (primarily monographs) with no ongoing expenses, but the E-Resources and Serials Department (ERS) handled anything that required ongoing payments or annual fees. ERS batch-loaded serial records for the databases they managed, but both Acquisitions and ERS passed e-books on to the Metadata and Cataloging Department (MCD) for entry into the catalog, either through local cataloging or batch loading. E-books received individual monographic records (and sometimes records for the complete database). Materials were handled as they were for several reasons:

- With the initial e-book packages that were purchased, no MARC records were available, so titles in packages had to be individually cataloged. This made providing access to the titles an MCD responsibility.
- E-books have links in the MARC 856 field of the bibliographic record and only cataloging staff edited the full bibliographic record. Once UNR purchased III's ERM product, online serial links were managed through the ERM system, which was a completely different setup.
- The evolution of responsibilities followed the long-established split in materials handling between ERS and MCD: ERS handled serial material (both acquisition of it and record management for any packages of online titles) and MCD handled monographic materials, all of which were ordered and received by Acquisitions.
- While ERS batch-loaded serial records, most of these were brief records with little more than title, subjects, and attached holdings information. Serial titles in subscription packages rarely received full cataloging.

As the library started getting more and more e-content, however, the split between departments began to be problematic. E-resources are notoriously messy and disorderly to manage, and e-

books are no exception. The departmental structure and staff designations were not as flexible as needed in order to handle the expanded content and increasing complexity. As time went on, more people became involved and were trained as the workload grew to be too much for those who were initially managing e-book acquisition.

### The Challenge

In 2009-2010, the library reached a critical juncture where the issue of workflow had to be addressed; the challenges and issues were increasing and efficiency was being lost. Purchases were made without informing or consulting the various departments in Technical Services. A couple of packages were acquired that caused numerous problems in processing due to a lack of clear procedures or a shared understanding of who was responsible for which parts of the process. Communication was the biggest problem in every area of acquisition and access. Some of these communication issues were:

- E-book purchases were occurring without adequate research or follow-through and there was no mechanism in place to assist with notifications. A subject librarian might make a purchase without discussing it with Technical Services staff, or Acquisitions staff might purchase at the request of a subject specialist without consulting other staff about license issues or cataloging. Without necessary notifications, access was not initiated when needed or available.
- Purchases were being made without full understanding of terms. In some cases these purchases triggered adjustment of licenses without the initiator understanding the full implications or communicating with the staff managing the licenses.
- Once larger e-book packages began to be acquired, it rapidly became clear that there were questions that needed to be asked and information that needed to be evaluated *prior* to acquisition. Details such as MARC record availability, platform stability, DRM limitations, and the quality of the user interface needed to

be a part of the initial evaluation of whether or not to purchase a package, and that information needed be recorded and passed on as part of the workflow.

- Some publishers and vendors were not notifying the library about new titles or about changes to titles, packages, URLs, and platforms, and there was not always a clear way to get up-to-date information.
- Communication throughout the process of initiating a purchase, signing a license, and then managing access to e-books was not happening efficiently. The license issues related to e-book packages were new to everyone involved and the communication lines had not been established.

An additional complication was that, as e-book publishing and distribution evolved and publishers and vendors began packaging e-books differently, the lines between different departments' responsibilities began to blur. Many new questions arose:

- If ERS handled licensed material and Acquisitions handled one-time purchases, how would staff handle a one-time purchase with an annual platform access fee?
- How should orders through a library vendor's online ordering system be handled? The vendor interface was locally managed by Acquisitions, but all publishers sold by the vendor required separate license agreements, with annual fees associated with each e-book publisher.
- When large e-book packages come with MARC records, how could MCD be involved in evaluating the records as part of the purchasing decision, since the quality and usability of vendor-supplied MARC records needed to be a factor in whether or not to purchase? MCD was traditionally never involved in providing access until after purchases were made.

- With subscription e-book packages, the package was acquired by ERS, but then there were full MARC records to load, edit, and maintain. MCD managed the records but ERS managed the subscription and received notifications. How would updates be handled, and who would be notified? Who would handle the troubleshooting?
- How would monographic e-book materials be "received" (to encumber funds)?
- What would the workflow be without any tangible materials to route from one department to the next for processing? For example, how would singly purchased monographic e-books be sent to cataloging, when the traditional cataloging workflow involved putting books on a shelf or cart that was passed to MCD from Acquisitions? With e-resources, as part of setup, ERS gave the provider the university's IP ranges for authentication, including the range for the proxy server. How would this work if Acquisitions handled the purchase?
- Communication with those outside of these three Technical Services departments also raised questions. Where in the workflow would staff notify the IT Specialist to add resources to the tables that allowed authentication through the ILS? When would staff notify the Web Development Librarian to add e-books to a webpage? How would the librarian determine whether to add new resources to the ever-growing list of reference e-books?
- The ERS Department had been activating e-books in the link resolver, yet this was becoming burdensome. How would this be handled as more and more e-books from different sources had to be activated?

### Solving the Problem

Once Technical Services staff realized that they needed to work together and figure out how e-books should be handled, they began with a meeting with the heads of the Acquisitions, ERS, and MCD departments. Everyone thought that they would be able to iron out the workflow

issues relatively quickly. The initial vision was that there would be one path for single-item purchases and one for package purchases. This new procedure would be recorded in a SharePoint-based wiki and the workflow problems would be resolved.

But it rapidly became clear that there were quite a few variants on the single-item and subscription package workflows. Upon realizing the breadth of the issues that needed resolution, as delineated in the lists of questions mentioned above, an e-book workgroup was established, led by the head of ERS. This workgroup was soon split into three smaller taskforces, looking at workflow, discovery, and the potential for managing e-books through Innovative Interface's ERM module. This article focuses on the method and results of the workflow taskforce.

Throughout this process, the greatest challenge was how to foster collaboration and get all departments to buy into the necessity of a new workflow and take a more active and engaged approach. There was also a need to promote understanding of the user experience among non-public services staff and keep end users in mind when evaluating workflows and access decisions. Challenging legacy systems and procedures is not an easy task, but was necessary in order for the UNR Libraries to move forward and to efficiently provide access to e-books for users. For example, it would have been much easier to manage e-book packages if MCD had simply decided not to load individual monographic records into the catalog and rely instead on the vendor interfaces. However, both Public and Technical Services staff felt that UNR users expected to find books in the catalog and would benefit from the full title, keyword and subject access that an individual catalog record provides. The catalog records also allowed the e-book titles to be incorporated into subject coverage analysis to support collection development decisions. With these main points it was deemed best to move ahead with a more complicated workflow to ensure that users would have optimal access.

### **Goal of taskforce**

The goal of the taskforce was to examine the how e-books were handled, from license negotiation through providing access, and recommend an optimal workflow. Traditional department responsibilities were not to be considered in the design of the workflow. (The final workflow is outlined in figure 3.)

### **What was needed?**

Four processes emerged through examination of the workflow:

- 1) Assessment/ Acquisition
- 2) Access
- 3) Maintenance/Troubleshooting
- 4) End of Life

The focus was primarily on parts 1 and 2, as those were the most pressing problems. Once those procedures were in place, the maintenance and end-of-life procedures would follow.

Work began with an assessment all of the different paths e-books could take from ordering to providing access, and then proceeded with an examination of which departments and individuals needed to be involved. Task force members identified patterns, overlap, and similarities in tasks and began to organize and streamline the pieces in what at first was a very scattered environment. Next they looked at what pieces of information needed to be transmitted and when that information needed to be passed on, and examined the tools that could be used to manage this information. Since UNR already had Microsoft's SharePoint software in place as the institution's intranet, this tool was chosen to track and disseminate this information as needed. There are a number of choices for collaboration software that could also be used, provided an institution's security requirements could be met. SharePoint was selected for both practical and creative reasons. It was a practical choice since it provided a secure, central online location, already in place, where all of the Technical Services staff looked for current documentation and tools. Because staff had used SharePoint as an easily accessible online tool for managing complex projects and workflows in the past, this

was a fairly easy choice that made sense. In addition, staff were already encouraged to use and experiment with Microsoft SharePoint as a way to learn new things and to promote creativity and exploration in hope that unique innovations or developments might emerge. This was successful on both counts.

### Assessment/Acquisition

Due to their complexity, it was determined that all e-books that were acquired in a group or package (either as a one-time purchase or as a subscription) needed to go through a central point. The task force created an experimental E-books Workform on SharePoint to track potential purchases. Two contacts for notification were established. Subject specialists could enter information into the form, which would notify the contacts, or the specialists could notify the contacts who would then enter the information into the form. This form would serve to track the copious amounts of information gathered about the purchase request in a way that allowed for multiple authors. At various points the form could be triggered to send notifications to appropriate staff when certain pieces of information were entered. This was helpful as both a tracker and a trigger for staff to act on a piece of the workflow that was their responsibility as well as record the process in case there was any kind of delay or complication. It assisted in tracking accountability while freeing staff from having to guess when it was time to perform their duties or create manual reminders in their own calendars. For example, if a staff person completed a task, they could select a check box, which would then alert the next staff person that the book was ready for his/her part of the process. Additionally, it provided the final disposition of the request, which could be looked back on for future decision making such as materials budget planning as well as workflow assessment. (Form is attached as appendix A.)

The Director for Library Information Resources would present the requested resource, along with the gathered details, to the committee responsible for approving purchases once key pieces of information were gathered. This committee would evaluate the request and either approve or deny the purchase. Beyond basics

like content and cost, important factors influencing the purchasing decision were:

- Were MARC records available, and what were the content and the quality of those records?
- How stable were the platform, publisher, and model?
- What was the authentication method for user access? Was IP authentication available? Would users have to create a unique login/password?
- Would there be ongoing platform fees for purchased titles?
- For subscription packages, were there notifications of added and deleted titles? How did the notification happen?
- Was it possible to allow resource sharing, such as ILL or e-reserves?
- Was it possible to allow for simultaneous users?
- What were the details of perpetual access?
- Was there high quality customer support and service from the vendor?

Once the decision was made to purchase, this information was recorded on the SharePoint form and staff were notified by the form of that decision, letting them know to expect a license and proceed with the acquisition process. The Director for Library Information Resources completed a license worksheet based on the license agreement and supplemental materials and then sent a digital copy of the license plus the worksheet to ERS Access staff who stored the documents on a secure server. This secure server space was a specific recommendation of the committee for this project.

Once the license was signed, the e-book acquisition followed one of three paths, which varied depending on whether the purchase was a database subscription package or a one-time purchase with perpetual access, and whether the purchase would have recurring annual fees. (The funds and associated ILS management procedures are handled differently for one-time purchases versus purchases with recurring fees.)



### The Three E-book Paths

There were three different paths that e-books could take through purchase and acquisition:

Path One: Database subscription/standing order

Materials in this path were handled exclusively by the ERS department, from ordering through activation and testing access.

Path Two: One-time purchase without annual fees

Materials in this path were handled by Acquisitions, with ERS only involved in activating and testing access. Titles purchased through YBP, with licenses on file, were handled via this path after initial setup with YBP.

Path Three: One-time purchase with annual fees

Materials in this path were handled by Acquisitions for the initial purchase and ERS for activating and testing access and processing the recurring fees. Annual fees could be either at the title level or at the collection/platform level.

### Access

Once the materials were acquired, all paths merged back into one for activation and then providing access. The ERS Access staff person handled all of the materials once ordered. Using the information recorded on the license worksheet and the SharePoint E-book Initial Workform, the Access staff person:

- Registered and activated the product, updating the order records with the date of receipt upon activation.
- Created a resource record and a license record within the ILS/ERM.
- Notified MCD about how to get MARC records (if they were to be batch loaded) or to catalog the title (if a single title purchase) or database portal (if catalog access would be only at the database level).

- Notified ERM staff to activate titles or database in link resolver and create a check-in record for tracking and linking purposes.
- Notified Web Development Librarian if product was a database that needed to be added to the libraries' list of databases.
- Notified ERS staff gathering usage statistics.

Upon notification, other staff and departments fulfilled their responsibilities to provide access through the catalog, the link resolver and/or the library's database page, depending on how access was agreed upon in the initial review process. For records to be batch-loaded, MCD went through the appropriate process to set up delivery or acquisition of MARC records and added data to local fields to track specific packages.

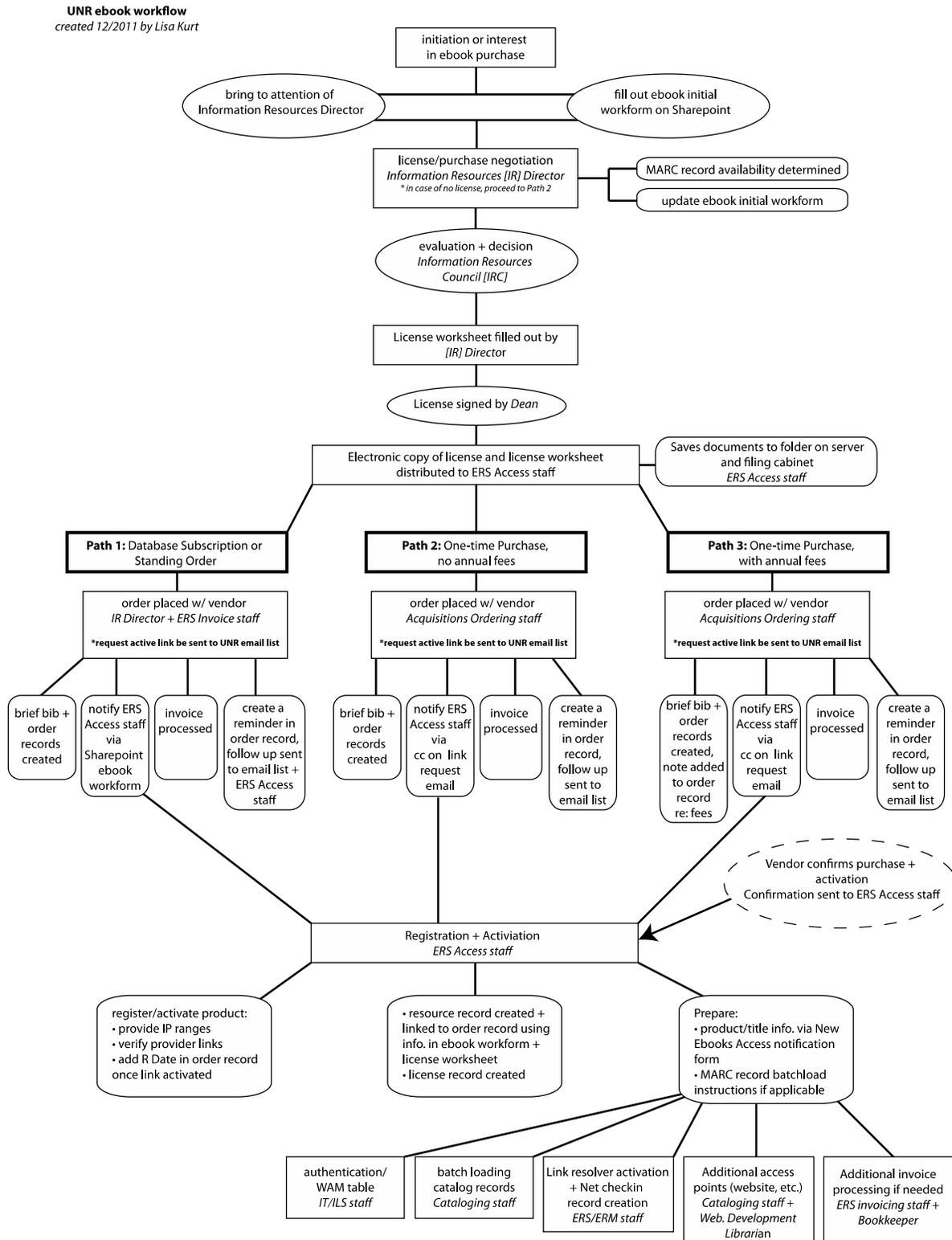
### Maintenance and Troubleshooting

The task force decided that maintenance and troubleshooting procedures needed little modification. Instead, the taskforce emphasized the need for communication among all parties involved in maintaining e-book records in the ILS. ERS staff needed to be aware that there were monographic records in place for content in e-book packages and subscriptions, and notify appropriate MCD staff if there were any changes or if there was discussion about cancellation. MCD staff had to report any issues with access to e-books to ERS staff in order for them to troubleshoot the issue, potentially contact providers, and resolve problems.

Since the ERS department was already handling e-resources troubleshooting, the troubleshooting of e-books was a natural fit for ERS staff. There were a number of significant issues that came up specific to e-book troubleshooting, such as:

- Unstable platforms and unsupported browsers, preventing users from accessing content.

Figure 3. UNR E-Book Workflow



- "Expiration" of e-books, often resulting in user-reported dead links. Staff would discover a particular edition or volume of an e-book had been superseded by a newer one, and the provider no longer supported the older one. In most cases, the provider suggested a purchase of the latest edition.
- E-book removal from vendor platforms by publishers, resulting in dead links and abrupt loss of content.

Library staff, in discovering such problems, would report them to ERS, who worked to identify and resolve the problems, notifying MCD if the catalog records needed updating or deletion. To facilitate troubleshooting and familiarize Technical Services staff with the issues users were facing, the library purchased a number of different e-book readers (the three top-selling readers at the time of purchase) that staff could check out and use as they wished. They were encouraged to use them for both work and personal use to see what the library users saw. The e-readers also served to troubleshoot access issues that came up. The library also purchased two Mac computers for troubleshooting access to e-resources on Mac operating systems, and set up two computers in Technical Services to simulate off-campus access.

After the work of the task force was completed, the enhanced collaboration between the two departments led to a new trial project using parts of the Millennium ERM module to link monographic e-book records to e-resource and license records to facilitate troubleshooting of access problems and easy access to license details, such as whether interlibrary loan is allowed.

### End of Life

Perpetual access for an e-book seems to be difficult for providers to define for libraries. In many cases, because e-books have an indefinite life at the time of purchase, it becomes impossible to track when they might expire (and even titles with supposed "perpetual" access do expire). Many times a user will report to staff that they are unable to gain access to an e-book, only for staff to investigate and find that the provider claims the e-book is no longer supported or

available. The solution given is usually to purchase the newest edition. In addition, if e-book content continues to be pulled from platforms, it undermines the stability and trust of the vendor and platform, giving the user a negative experience.

Documenting procedures for the end of life of e-book packages is a work in progress. Procedures are more or less the same for planned end of life (such as the cancellation of a package) as for titles that abruptly disappear (such as when publishers pull titles from a platform or package). What is key is the ongoing communication that the task force's work has put in place. With the improved awareness of how access is established and maintained, all are aware that others in the division need to be notified and that the various means of access all need to be undone – essentially the reverse of the procedures for providing access:

- Remove any MARC records at either database or title level from the catalog.
- Remove/deactivate titles from link resolver or ERM.
- Remove any database links from database list on library web page.
- Close (but preserve) order record.

### Products and Results of the E-book Workflow Taskforce

1. A SharePoint form with notifications (appendix A)

The creative use of SharePoint was key to implementing the notifications that the task force determined were needed, ensuring interdepartmental communication at necessary points in the process. SharePoint allowed Technical Service staff, in a secure environment, to track initial evaluation data and the process of acquisition for e-books/e-book packages. Everyone involved could see the form, edit it as needed, and consult it about the status of e-book acquisitions. Built-in tools enabled notification of necessary parties when certain fields were completed or checked off, so staff did not need to remember who needed

to be notified and when. In addition to its purpose of facilitating workflow, the form was also available for subject selectors to view and check on the status of pending requests.

There was some debate about whether separate tracking forms were needed for requesting/evaluating and then acquiring/processing/access, but the conclusion was that it was better to have all information consolidated in one location.

2. An initiative to get all UNR license agreements scanned and stored on a secure server, as more people than before needed to be able to see license information.
3. A complex processing document that laid out workflows and departmental responsibilities (appendix B). The document covered the following steps:

Part One: Selection/Negotiation/Licensing

Part Two: Purchase

Path One: Database subscription/standing order

Path Two: One-time purchase without annual fees

Path Three: One-time purchase with annual fees

Part Three: Registration/Activation

Part Four: Providing Access/Payment

4. An additional document delineating the separate (but much simpler) process for ordering e-books from YBP through GOBI.
5. An end-of-life procedure for e-book subscriptions that are cancelled.

### **Merging of Acquisitions and ERS into ERAS**

In the months after the completion of this document and the establishment of the workflow, the Division of Technical Services was restructured. The task force discussions about overlap in Acquisitions and ERS contributed to the decision to merge the two departments into the E-resources and Acquisition Services department. The traditional dividing lines between serials and monographic workflows no longer made

sense. In this new configuration, there are no longer separate departments and separate staff handling the acquisition of electronic resources, although there are still distinct procedures to follow.

In addition to the merger, the UNR Libraries committed to a higher focus on discovery and user experience. A small number of existing staff have been shifted over to a new department called Design and Discovery. This department came from a need to make discovery of resources and the online user experience a priority at the UNR Libraries.

### **Conclusion**

The landscape of e-books is ever changing and libraries must adapt to it in order to be able to serve users well. Libraries have come far in the management of databases and e-journals; one hopes that libraries will figure out an equally effective way to manage e-books. Libraries have a wealth of experience and knowledge to utilize in managing collections and providing users with access to resources. Each institution will need to examine its own current practices and workflows to determine where e-books can fit in and if there is a need for e-books to be handled separately from other acquisitions.

Because publishers own the content and create the models for e-book management and use, it is important for libraries to give feedback and perhaps be cautious about what they purchase if the model does not provide users with a good experience due to issues such as DRM restrictions, special software, clunky interface, unstable platform, etc. Workflows should not drive the decision-making but they can help to inform libraries about what models are the most desirable and user-centric.

By finding effective ways to manage and deliver resources that users want and need, libraries provide a valuable service. Users benefit, and encouraging library staff to try new tools or perhaps rework old tools to perform unexpected tasks can have meaningful rewards, including gaining buy-in, feeling empowered and generating creative solutions. Academic libraries should embrace the opportunity presented by e-books

to give users positive academic experiences while encouraging library staff to take risks and experiment. At the University of Nevada, Reno, the e-book effort has been the start of a larger process of striving to give users a richer academic experience. At UNR, e-books provided the library with the opportunity to connect to users not only through providing resources in new formats that users wanted, but also in offering users (both library users and employees) the chance to experiment with and try out different e-book readers. Shortly after UNR established this e-book workflow, a small cross-departmental team designed an “E-reader Bar” where users could try various devices loaded with a small number of e-books. Staff had benefited from having the chance to try different e-book readers and it made sense to give users the same opportunity.

Communication between departments was the largest obstacle to an effective e-book workflow, and developing the workflow became an opportunity for departments and individuals to work closely together toward a common and worthy goal. Within Technical Services, the communication between departments has increased and improved. The next step is to communicate better with staff and departments outside of Technical Services, such as subject selectors and document delivery. The foundation laid with this project in terms of communication, clear workflows and procedures, and understanding users will allow Technical Services to work with external departments more easily than before.

As new access models (such as patron driven acquisition and print on demand books) emerge and become more widely adopted, resource acquisition and management in academic libraries will continue to evolve. Injecting processes with flexibility empowers staff, creates efficiencies, and allows for change and further development. E-books are an opportunity for libraries to give users what they need, enrich their learning, and provide quality services.

## Endnotes

<sup>1</sup> Catherine Anson and Ruth R. Connell, *E-book Collections*, SPEC Kit 313 (Washington, D.C.: Association of Research Libraries, 2009), pp. 62-74.

<sup>2</sup> Chris Armstrong and Ray Lonsdale, *E-book Collection Management in UK University Libraries: Focus Groups Report*, Information Automation Limited, Final Report, November 2009), v, accessed March 14, 2012, <http://observatory.jiscebooks.org/reports/e-book-collection-management-in-uk-university-libraries-focus-groups-report/>.

<sup>3</sup> Michael Newman, *HighWire Press 2009 Librarian eBook Survey* (Stanford: HighWire Press, Stanford University, 2009), accessed March 14, 2012, <http://highwire.stanford.edu/PR/HighWireEBookSurvey2010.pdf>.

<sup>4</sup> Sue Polanka, ed., *No Shelf Required: E-Books in Libraries*, (Chicago: American Library Association, 2011).

<sup>5</sup> Carolyn Morris and Lisa Sibert, “Acquiring E-books,” in *No Shelf Required*, ed. Sue Polanka (Chicago: American Library Association, 2011), p. 110.

<sup>6</sup> Antje Mays, “Workflows in Paradise: eBooks, Acquisitions, and Cataloging,” *Against the Grain* 22, no.4 (September 2010): 56-59.

<sup>7</sup> *Ibid.*, 58.

<sup>8</sup> Carolyn Morris, “Buying eBooks: Does Workflow Work? Part I,” *Against the Grain* 20, no.4 (September 2008): 85 and “Buying eBooks: Does Workflow Work? Part II,” *Against the Grain* 20, no.6 (December 2008): 77.

<sup>9</sup> Carolyn Morris, “Issues in Vendor/Library Relations – Buying eBooks: Does Workflow Work? Part I,” *Against the Grain* 20, no.4 (September 2008): 85.

**Appendix A: SharePoint form for tracking e-books**

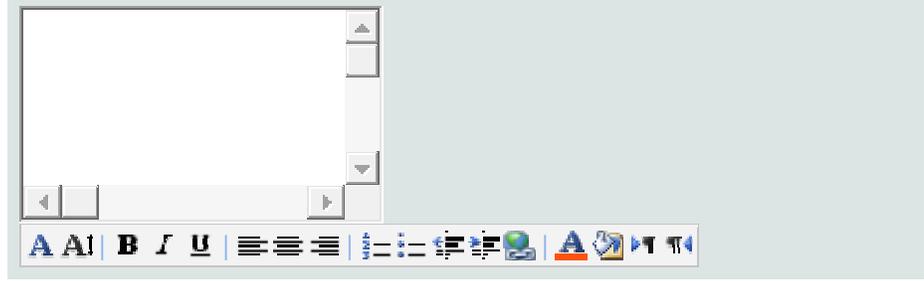
<b>Subject Specialist Name *</b>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>  <input type="button" value="←"/> <input type="button" value="→"/>
	Hint: Use your NetId and click the check-mark.
<b>Date Entered *</b>	<input type="text" value="2/7/2012"/> 
<b>Ebook/Ebook Package Title *</b>	<input type="text"/>
<b>Ebook Type</b>	<input type="text" value=""/>
<b>Order Type</b>	<input type="text" value="One-time Purchase (Acq)"/>
<b>Price</b>	<input type="text"/>
<b>Annual access fee</b>	<input type="text"/> <p>If there is an annual access fee associated with a one-time purchase, please enter that amount here.</p>
<b>Access Fee waived for first year of contract?</b>	<input type="checkbox"/>
<b>Fund Code</b>	<input type="text"/>
<b>Publisher Name/URL</b>	<p>Type the Web address: (<a href="#">Click here to test</a>)</p> <input type="text" value="http://"/> <p>Type the description:</p> <input type="text"/> <p>Enter Publisher Name</p>
<b>Vendor Contact Name</b>	<input type="text"/>
<b>Vendor Contact Email</b>	<input type="text"/>
<b>Vendor Contact Phone</b>	<input type="text"/>
<b>Reviewed by</b>	<input type="checkbox"/> Head of ERAS <input type="checkbox"/> Director for Library Information Resources
<b>IRC Approval</b>	<input type="checkbox"/>
<b>Order Status</b>	<input checked="" type="checkbox"/> Director for Library Information Resources has placed order



	<input checked="" type="checkbox"/> Okay to order direct <input checked="" type="checkbox"/> Okay to order via vendor <input checked="" type="checkbox"/> Will not proceed with order at this time NOTE: For Director for Library Information Resources' use only
<b>Order instructions</b>	<input type="text"/> Instructions for ERAS staff
<b>Order Record Number</b>	<input type="checkbox"/> Done <input type="checkbox"/> Specify your own value: <input type="text"/> Fill in Order Record Number
<b>Invoice received</b>	<input type="checkbox"/>
<b>Resource requires a license?</b>	<input type="text"/>
<b>Licensing Type</b>	<input type="text"/>
<b>License Details</b>	<input type="checkbox"/> Perpetual Access <input type="checkbox"/> ILL <input type="checkbox"/> Reserves/Course Packs <input type="checkbox"/> Specify your own value: <input type="text"/> Select all that apply.
<b>License signed</b>	<input type="text"/>
<b>When will access begin?</b>	will access begin? Date <input type="text"/>
<b>User Access/Authentication</b>	<input type="text"/>
<b>Site License/Concurrent users</b>	<input checked="" type="checkbox"/> Unlimited <input checked="" type="checkbox"/> Specify your own value: <input type="text"/> If license limits access to concurrent users, please enter number of users here.
<b>Title List Attached</b>	<input type="checkbox"/>

<b>Mobile Capable?</b>	<input type="text"/>
<b>Mobile added information</b>	<div style="border: 1px solid gray; height: 60px; width: 100%;"></div>
<b>Trial start date</b>	<input type="text"/> 
<b>Trial End Date</b>	<input type="text"/> 
<b>Trial Information</b>	<div style="border: 1px solid gray; height: 150px; width: 100%;"></div> <div style="border: 1px solid gray; padding: 2px;"> <span style="font-size: small;">A A   B I U                        </span> </div> <input type="text"/> Additional Access Information: Include URL, login/password, other details here.
<b>MARC Records</b>	<input type="checkbox"/> Available from publisher as part of purchase <input type="checkbox"/> Updates available from publisher <input type="checkbox"/> Deletions available from publisher <input type="checkbox"/> Available from OCLC <input type="checkbox"/> Specify your own value: <input type="text"/> Select all that apply
<b>MARC Records Information</b>	Type the Web address: (Click here to test) <input type="text" value="http://"/> Type the description: <input type="text"/> URL location for MARC record downloads
<b>Marc Records Reviewed by MCD</b>	<input type="checkbox"/> Click here when done reviewing availability of records

Comments



## Appendix B: Workflow Procedures

### UNR Libraries E-book Processes

**Purpose:** To ensure that the acquisition of e-books is managed efficiently. The goal of these processes is to provide access for UNR users to e-books as quickly as possible following acquisition and to give staff all the necessary information to manage e-books in compliance with vendor license agreements.

**Scope:** Groups of individual e-books or e-book packages, which involve signing license agreements or addendums to license agreements

#### Procedure:

#### Part One: Selection/Negotiation/Licensing – Director for Library Information Resources is the Coordinator.

1. A subject specialist is interested in purchasing a group of individual e-books or an e-book package. Do the following:
  - The subject specialist talks to Director for Library Information Resources (DLIR). Request brought to Information Resources Council (IRC)
  - The subject specialist (or DLIR) fills out the E-books Initial Workform on SharePoint. This is a communication tool for Technical Services staff handling e-books management and processing.
2. Vendor Negotiation
  - DLIR is the negotiator.
  - Access to e-books is for all UNR users.
  - DLIR determines whether or not MARC records are available through the vendor for the e-books under consideration; with packages, determine how vendor notifies libraries of additions and deletions of titles. If records are available to be loaded as a batch, request sample records and forward them to MCD to evaluate. Availability of vendor/publisher MARC records, quality of the rec-

ords, and delivery methods may inform negotiation process.

- DLIR updates the E-books Initial Workform on SharePoint to keep it current.
3. IRC evaluates and approves the request.
  4. DLIR fills out a license worksheet for the e-book product.
  5. DLIR obtains Dean of Library's signature on the license agreement.
  6. DLIR distributes an electronic copy (PDF) of the signed license along with the completed license worksheet to ERAS Access staff. An electronic (scanned) copy of the signed license would be stored on secure server.
  7. Depending on the type of order as specified in the E-books Initial Work form, DLIR informs ERAS to begin the acquisition process:
    - Path One: Database subscription/Standing Order
    - Path Two: One-time purchase without annual fees
    - Path Three: One-time purchase with annual fees

#### Part Two: Purchase of e-books

##### 1. Path One: Database Subscription/Standing Order – ERAS continuing resources staff

**Example 1.0** – Database Subscription  
**Example 1.1** - One-time Purchase, Archive

**Example 1.2** - Electronic Standing Order

**Example 1.3** – Annual Hosting Fee

#### Process:

ERAS Department, Invoicing/Order Desk

- Place order with the vendor/publisher (if not already done by DLIR)
- Create brief bibliographic and order records

- Notify Access staff via the SharePoint e-book workflow tracking form)
- Process invoice for payment upon DLIR's approval and direction.

ERAS Access staff

- Request that vendor/publisher send a direct link to serials email- (if not already done when placing the order).
- Create a tickler in the order record(s) for serials email for follow-up to ensure access is available when it should be

Tickler includes the following information:

(Product name) ordered on (date) for service to begin (expected start date). Check access (URL). If available, send info to E-book Group; if not available by (expected start date), claim with (vendor).

**2. Path Two: One-time purchase without annual fees - ERAS one-time purchase staff, plus licensing staff, if needed)**

**Example 2** - Vendor e-book package, one-time purchase

**Example 2.1** - Vendor e-book back-file, one-time purchase

**Process:**

ERAS One-time purchase staff

- Place order with the vendor/publisher
- Create brief bibliographic and order record(s)
- Request that vendor/publisher send a direct link to serials email and CC serials email as a heads up to expect this product and for ERAS Access staff to initiate access

- Create a tickler in the order record(s) for serials email for follow-up.

**3. Path Three: One-time purchase with annual fees (access, hosting, or content update) - ERAS one-time purchase staff + continuing resources staff**

**Examples:** The annual fees can be at the title level (A) or at the collection/platform level (B)

**Example 3** - (A) Acquisitions Order Record - one-time purchase

**Example 3.1** - (A) ERS Order Record - content update fee

**Example 3.2** - (B) ERS Annual Access Fees

ERAS One-time purchase staff

- Place order with the vendor/publisher
- Create brief bibliographic and order records
- Add a note to the order record that there will be annual access, hosting or consortia fees if the information is provided.
- Request that vendor/publisher send a direct link to serialsonline@unr.edu and CC serialsonline@unr.edu as a heads up to expect this product and for ERAS Access staff to initiate access
- Create a tickler in the order record(s) for serialsonline@unr.edu for follow-up
- Alert ERAS invoicing staff to expect annual fees or access, hosting, or content update (watch for invoices and access continuation). Create workflow spreadsheet on SharePoint to track progress?

**Part Three: Registration/Activation – ERAS  
Access staff**

1. Register and activate the product (providing IP ranges, verifying links, etc.) Put an RDate in the order record(s) after the link is confirmed active.
2. Create a resource record, a license record, and relate the resource record to the order record(s), using information from the license worksheet and the E-book Initial Workform on SharePoint.
3. Prepare the following info:
  - Product/title information via NewEbooksAccessNotification form
  - Instructions on how to get MARC records if catalog records need to be batch loaded by MCD
4. Send completed NewEbooksAccess Notification form to ILS coordinator (WAM), to MCD (for batch loading catalog records), to ERM team (activation in the link resolver; online resource check-in record if it is a package and a database portal will be provided for access), to MCD & Web Development Librarian (if it is a package and a database portal will be provided for access)

- Web Development Librarian – Add to the appropriate page(s) on the library website.

**Part Four: Providing Access/Payment – ERAS,  
MCD**

1. MCD: Retrieve MARC records and load them to the catalog if they are available as a batch.
2. ERAS ERM staff: Activate e-books in link resolver; create an online resource check-in record if it is a package and a database portal will be provided for access.
3. ERAS invoicing staff: – receives and verifies invoices. Prepare invoice(s) for Bookkeeper.
4. ERAS Bookkeeper: Pay invoices
5. If it is a package and a database portal will be provided for access,
  - MCD – Catalog record for the package