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Implementation of Koha in Managing the E-resources of the Library

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Abstract

In the digital era, libraries have been acquiring and subscribing to various types of digital resources. Each e-resource possesses distinct formats and search requirements, offers multiple access and authentication methods, and involves complex licensing agreements. Therefore, effectively managing these diverse e-resources necessitates a system that simplifies the processes of acquisition, access, and organization. An Electronic Resource Management System (ERMS) presents a potential solution for centralizing these operations. Numerous open-source and commercial ERMS solutions are available and utilized in libraries worldwide. Nevertheless, numerous studies have revealed that libraries face financial constraints as well as limitations in terms of ICT infrastructure. An ideal solution should be both cost-effective and require minimal ICT infrastructure. Koha is one such software that has gained popularity in library automation, making it a viable option for managing e-resources. This study explores the implementation of Koha 22.11 for managing a library's e-resources. The study aims to investigate existing features and functionalities of Koha in the context of libraries.

Keywords: E-Resources, Electronic Resource Management System, ERMS, IIT Delhi, Koha, Open Source

1. Introduction

In the 21st century (also known as the digital age), libraries have shifted their focus to provide more digital resources. The different e-resources managed in libraries are eBooks, eJournals, abstracting and bibliographic databases, video journals, streaming content, etc. This transition from print to digital resources has many advantages for users and libraries. It has also brought many challenges to libraries in managing diverse digital content. These issues include accessibility, usage, administration, authentication, handling of distinct types of resources, licenses, preservation, etc. (Sadeh and Ellingsen, 2005; Macan, 2013). Technological advancement has provided the tools for libraries to address these issues with the help of various ERM systems. The ERM systems support library staff in administrating the selection, acquisition, licensing, access, maintenance, usage, evaluation, renewal, and removal of subscribed e-resources. (Wikipedia, 2022; Pesch, 2008; Emery and Stone, 2013)

Many open-source and proprietary solutions are available for managing electronic resources. Some proprietary software are EBSCO ERM Essential, Serial Solutions-360 Resource Manager, ExLibris-Alma, Colorado Alliance-Gold Rush, etc., and open-source software include; CORAL, CUFTS ERM, ERmes, and now Koha also. But, Library administrators are seeking more to implement open-source solutions in the libraries due to limited funds. Also, in terms of functionality and quality, open-source software is on par with or even better than proprietary equivalents (Singh and Sanaman, 2012). The whole open-source ecosystem is based on the support of Open-Source Communities (OSCs). These OSCs voluntarily work for the development of software and deliver it as a public good (Hou *et al.*, 2022). The crucial factor in implementing open-source software is the Support Services (Macan, 2013). The local IT staff or professional companies can provide such services.

CORAL ERM, developed in 2008, is the most stable and mature open-source software for the management

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of e-resources in the library (Fournie, 2020), and Koha has already been used as ILMS in many libraries. Until now, no possible integrations of both solutions or a single platform that provides both services of ILMS and ERMS is available. Also, libraries worldwide have an acute shortage of dedicated IT staff (Macan, 2013). Therefore, it will be difficult for libraries to manage two or more open-source software to manage resources. The inclusion of the Electronic Resource Management (ERM) module within Koha represents a significant advancement towards the Library Services Platform (LSP) rather than solely functioning as a traditional Library Management System (LMS). This study focuses on the implementation of an ERM module in Koha for effectively managing e-resources in libraries.

2. Koha ERMS Module

Koha doesn't require any introduction, as it is a popular Library Management System (LMS) globally. Koha software was developed by Chris Cormack for Horowhenua Library Trust (HLT), New Zealand, and launched in 1999. It supports a setup for multiple libraries or branches of all sizes using a single system. It is the first open-source library management system consisting of all features related to library services. (Breeding, 2008) The software is licensed under GPL 3.0.

Several studies have assessed the features of Koha software and concluded that it offers excellent usability for libraries. These evaluations have highlighted various advantages, such as comprehensive community support

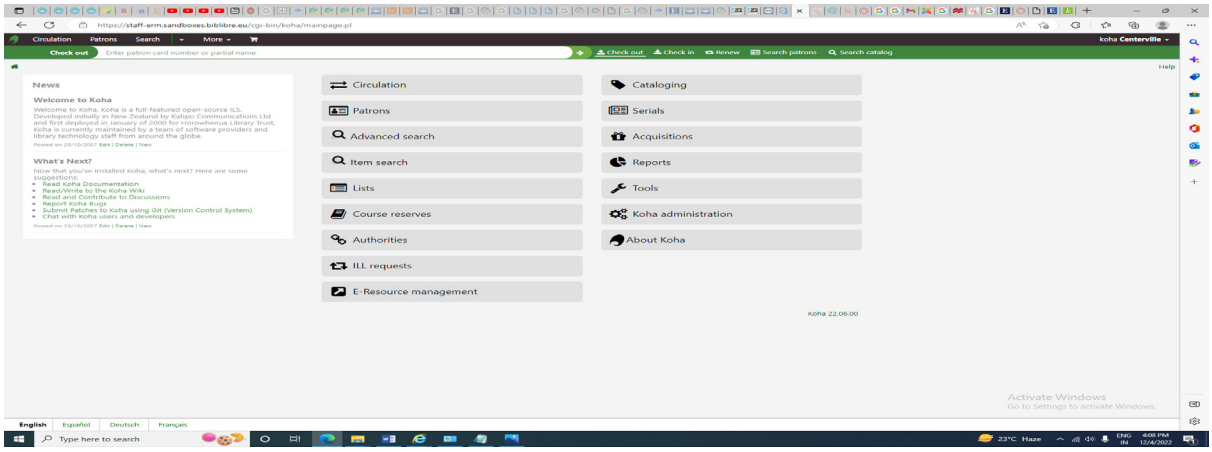

Figure 1. Koha version 22.11.

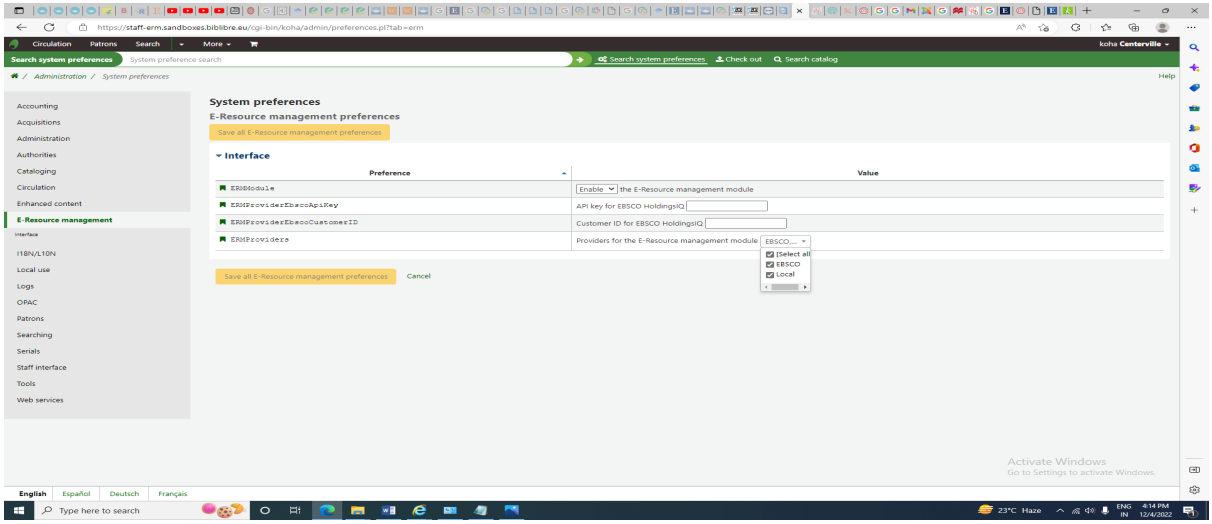

Figure 2. System preference of ERM module in Koha.

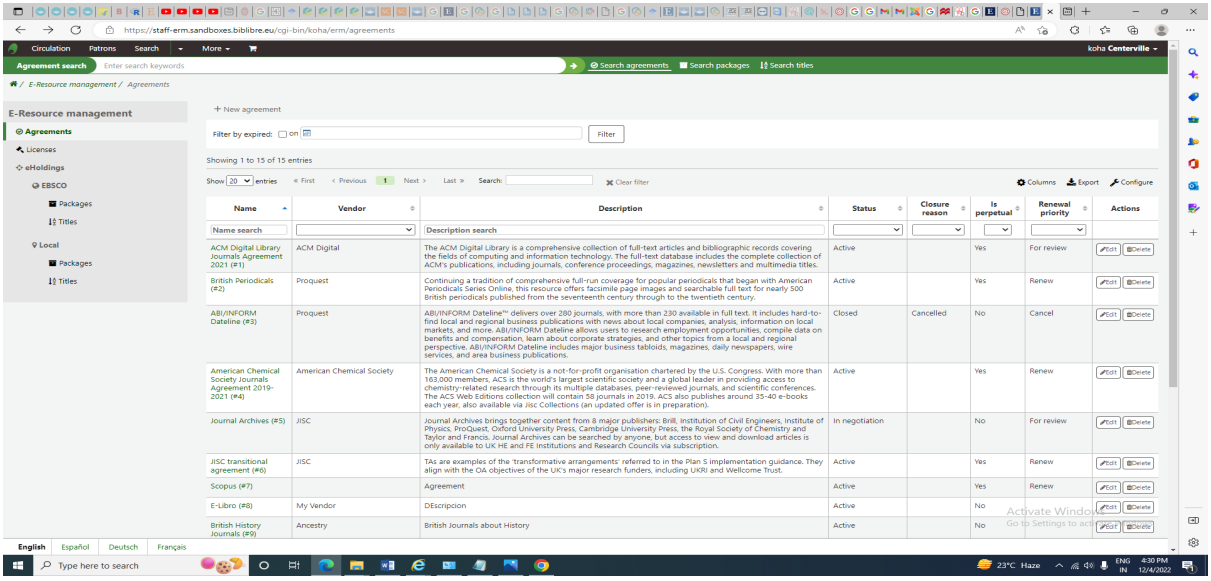

Figure 3. Agreements of the subscribed e-resources.

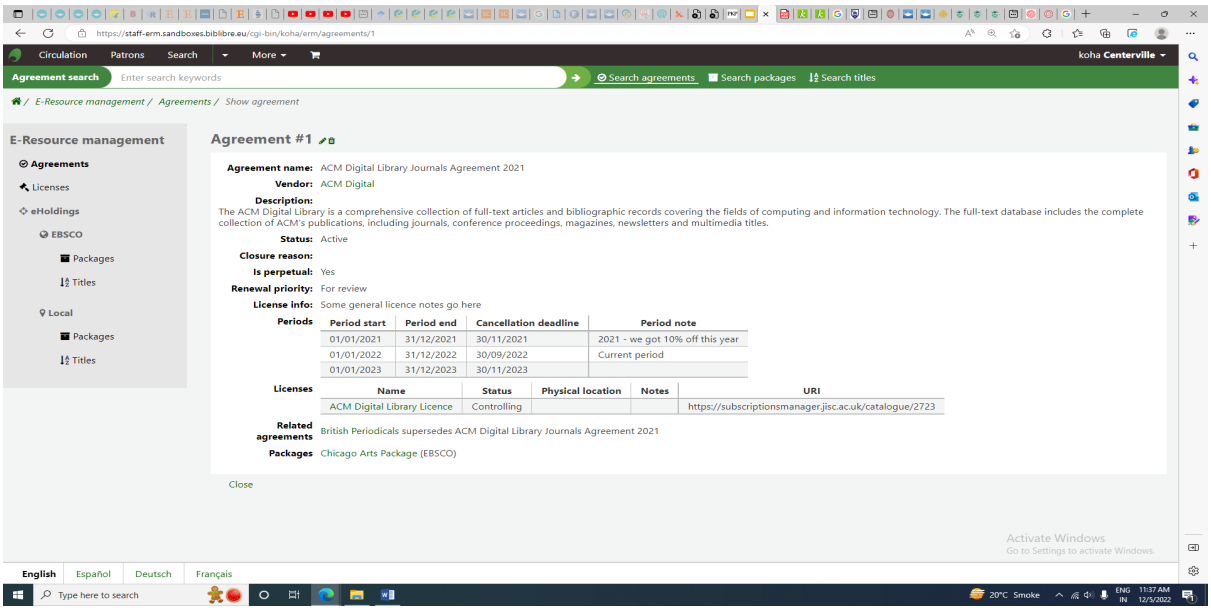

Figure 4. Details of agreement 1.

(Macan, 2013), minimal hardware requirements, and ease of installation (Singh and Sanaman, 2012). Additionally, Koha has been praised for its user-friendly interface and the ability for users to log in from different times and locations (Egunjobi and Awoyemi, 2012). Furthermore, compared to other systems like NewGenLib, LibSys, and Virtua, Koha offers greater flexibility (Madhusudhan and Singh, 2016). Lastly, the software benefits from strong support from a global community (Mohideen *et al.*, 2019).

A large number of researchers investigated the perceptions and use of LMS in different academic and special libraries and found that library professionals have a high level of acceptance and satisfaction with the use of Koha Software (Keast, 2011; Chauhan, 2018; Mohideen *et al.*, 2019; Chaputula and Kanyundo, 2019; Asim and Mairaj, 2019).

The latest Koha 22.11, which included the ERM module, was released on 25th November 2022. Presently,

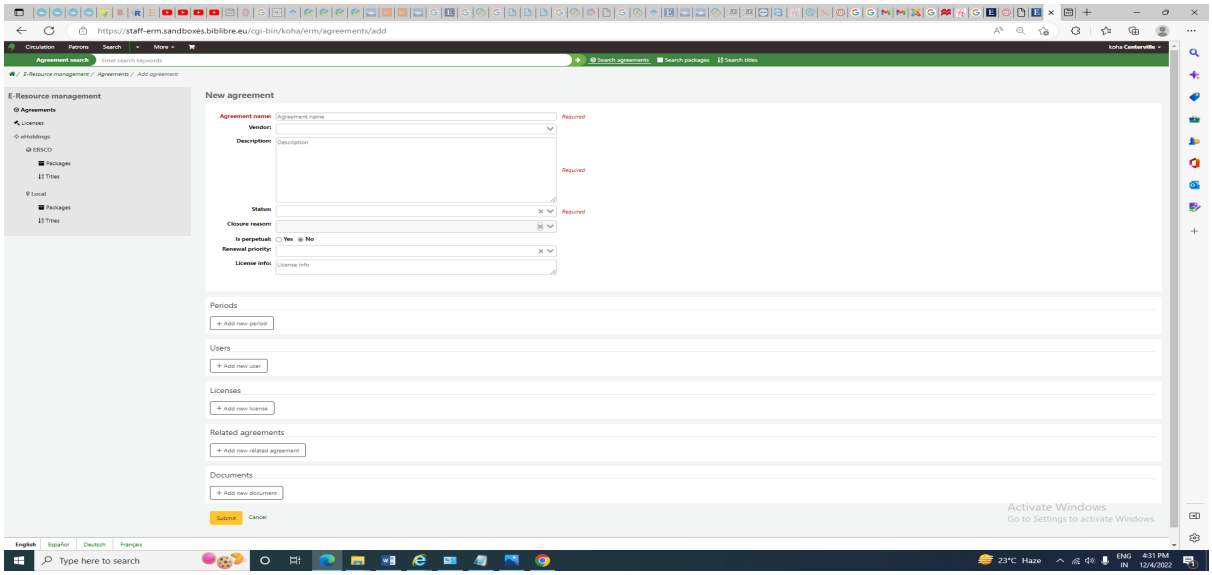

Figure 5. Form to submit new agreements.

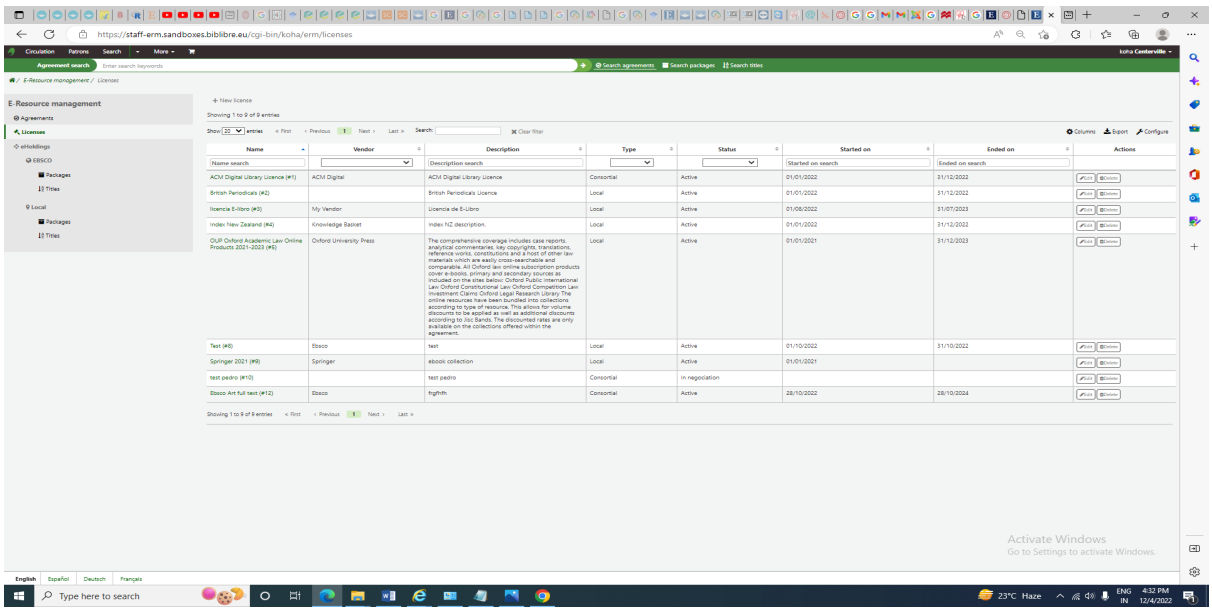

Figure 6. License of the subscribed e-resource.

the ERM module in Koha consists of Agreements, Licenses, Holdings, and integration with EDS. The interface of the newest version, where the menu of "E-Resource management" is listed at the end of the first column is shown in Figure 1. The module can be disabled/enabled by the Koha administration, as shown in Figure 2. It currently has three sub-processes, viz., Agreement, License, and eHoldings IQ.

All the agreements of the subscribed e-resources are listed in tabular format under the "Agreements" tab, as shown in Figure 3. The table consists of eight columns (Name, Vendor, Description, Status, Closure Reason, Is perpetual, Renewal Priority, and Actions), out of which seven are searchable, which eases the filtering of a large number of agreements. All the agreements can be exported in Excel or CSV format. The detailed agreement of "ACM Digital Library Journals Agreement 2021" is shown in Figure 4.

The "New agreement" can be added by clicking the "New agreement" tab at the top of the table, as shown

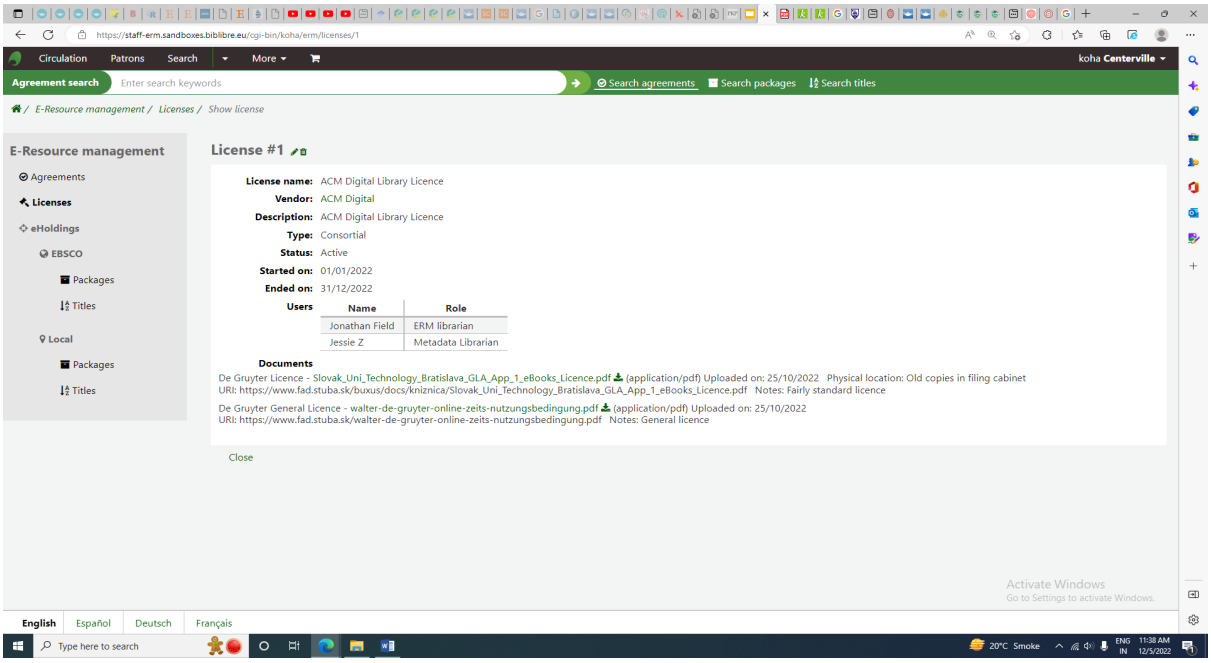

Figure 7. Details of license 1.

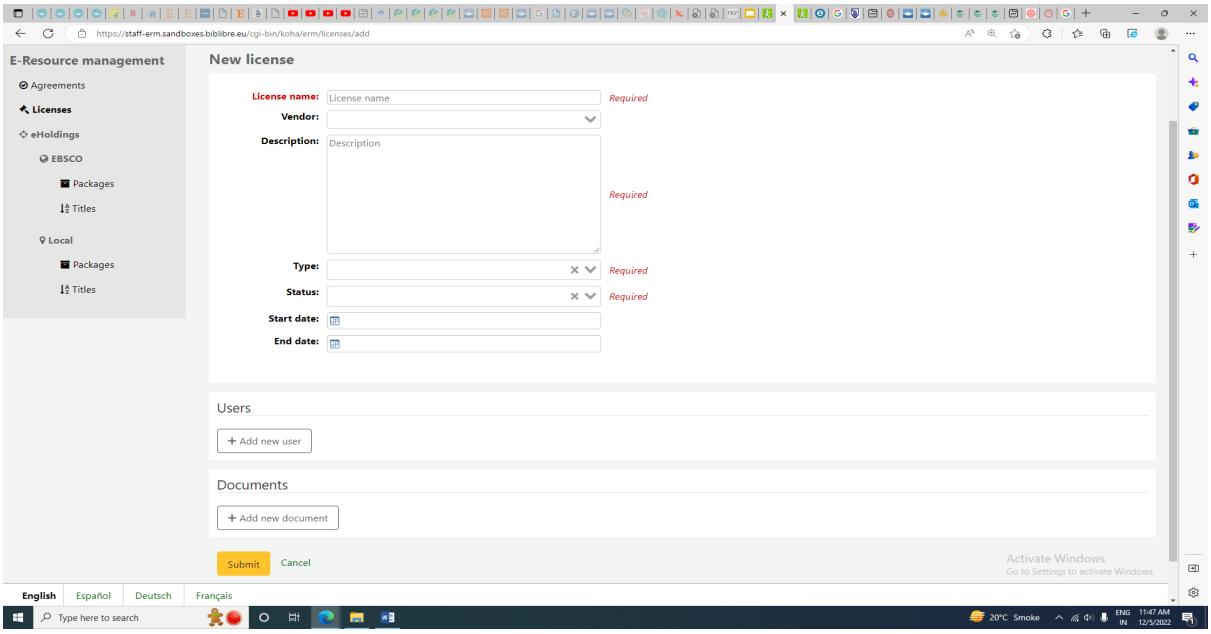

Figure 8. Form to submit a new license.

in Figure 3. Figure 5 shows the form to be submitted to add the new agreement, with the Agreement name, Description, and Status as the mandatory field.

Similar to agreements, the licenses of the subscribed e-resources are listed in tabular format under the "Licenses" tab, as shown in Figure 6. It also consists of eight columns (Name, Vendor, Description, Type, Status, Started on, Ended on, Actions), out of which seven are searchable. Figure 7 shows the complete details and attached "ACM Digital Library License" documents.

A new license of the e-resource can be added by clicking the tab "New license." Figure 8 shows the form to be submitted to add the new license, with License name, Description, Type, and Status as the mandatory field.

The third operation in the existing Koha ERM module is eHoldings, which lists all the e-resources subscribed by the library. The present version has holdings of packages and titles of EBSCO and Local collections. In a local collection, all the packages can be added manually.

3. Conclusion

The implementation of an Electronic Resource Management (ERM) system is crucial for efficiently managing e-resources within a library. With the expansion of digital resources, libraries of all sizes procure various e-resources for their users. The ERM software enables library staff to access licenses, agreements, and contract information conveniently from their respective offices. In contrast, the traditional system relied on scattered documents in emails, paper files, and spreadsheets, posing challenges for accessing essential information. The ERM system facilitates the efficient management of electronic resources by streamlining workflows, generating diverse reports, and providing centralized access to information on all resource types. It encompasses terms of use at both package and title levels, usage statistics, yearly costs, and more.

While Koha software is widely recognized and utilized by libraries of various sizes globally. Its ERM module is still in its early stages of development compared to existing ERM systems like CORAL or Folio. However, given the large community of open-source enthusiasts associated with Koha, it is expected that the powerful functionalities of a comprehensive ERM system will soon be integrated. Consequently, Koha will emerge as a comprehensive open-source solution, serving as a one-stop platform for managing all types of resources in libraries.

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