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Import Metadata through EPrints for Institutional Digital Repository

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Abstract - **Digital library is a collection of electronic objects. Information retrieval is a part of digital library system. Digital library can be developed through open source software and tools. Institutional digital repository is also an important field in present and next generation automated and digital library system. Now, this paper is present how to import metadata formats from different database by EPrints for the development of institutional digital repository. There are different types of metadata formats available in open source environment but this paper is shows some high and matured level software for development and designing this integrated framework. However, in this section has a show how to data import from Koha, Emerald, D-Space, and Vu-Find for the better management of digital information services among the users as well as library professionals.**
Keywords: **Metadata Formats, EPrints, Institutional Digital Repository, Emerald, Koha, DSpace, and VuFind**

I. INTRODUCTION

Online archive and digital resource management is one of the important tasks in managing of an institutional repository and it's including different facets like identification, collection, organization, and dissemination. It can easily manage the electronic theses, dissertations, and academic full text journals. It is also support or maintains other digital documents including datasets, administrative documents, course notes, and learning objects. Metadata is a data about data. The main purposes of metadata are information retrieval and dissemination, resource description, preservation and retention, managing users, and ownerships and rights management. It is used for videos, images, web pages, and spreadsheets in linked data environment. There are lots of matadata formats available in an open source environment. Metadata is plays a great role in institutional digital repository. It cannot be developed or design without metadata in making a good digital repository. Data and database is also an important aspect in digital library system. Data import from some well-known databases such as Emerald, Koha, DSpace, and VuFind by using the EPrints for the better management of information as well as online information. Discovery services have been represents in different ways such as tag cloud, federated searching, faceted navigation, really simple syndication, information sharing among the users, community communication and interactions, comments, thesaurus, controlled vocabulary, and visual vocabulary. These concepts are also known as web 2.0 features and application programming interface. Apart from these parameters it also crafted one step i.e. data import from multiple databases and software into the EPrints and finally access all the data available in different databases. Searching is also possible by using this EPrints digital repository software. This concept and procedure is very much useful of each and every library for designing and developing the integrated institutional digital repository. Research scholars can easily be download the full text as well as metadata of particular facets because it's fully support the open access or copyright standards. It enhances the reputation or goodwill of a particular institution for the better retrieving of multilingual resources to the different community and sub-community for global visibility.

II. REVIEW OF LITERATURE

Generally there are various types of metadata formats available in XML schema which based on tree of hierarchical structure. They have only discussed the traditional programming languages on the basis of object oriented for sharing of information among the heterogeneous system for easy retrieval of information (Yu, Lu & Chen, 2003). MARC standards is also considered as metadata for building electronic collections for managing metadata which converted from traditional metadata to library metadata management in integrated library system. The authors provide a model for easy MARC data management and its helps to design the metadata both in bibliographic as well as authority data (Kurth, Ruddy & Rupp, 2004). This paper provides a suitable model for provenance information maintenance of different metadata through DSP-PROV for changes the schemas of metadata which helps by comparison between formal and semi-formal change log in English description part (Li & Sugimoto, 2018). In 2001 Graham has discussed the metadata harvesting is possible through online public access catalogue and OAI-PMH tool. This technique is made on the basis Dublin Core metadata standards for domain specific schemas (Graham, 2001). In 2011 Sun is explained in his paper how to loading batch in metadata creation and workflow from existing text to a database at Rutgers University Libraries in a collaborative digital project with the Hoboken Public Library in New Jersey. He found that metadata is essential for data organization and transfer among the different peoples. Bell & Lewis in 2006 explain the using of OAI-PMH and METS for exporting metadata and digital objects between repositories for making the

archival because it's very easy and user-friendly for import and export of metadata.

This paper provides the implication of OAI-PMH tool in the National Science Digital Library as service providers for export the metadata. This is a practical study and it also applicable in semantic web facilities for single window based search facilities (Arms & *...et.al*, 2003). The objective of this research is to customization of metadata for education library resources in institutional digital repository which creation of data model in a particular domain. This model is dynamic because it's made on the basis of open source tool and open standards (Alhaag & *...et.al*, 2018). This research paper explores the integration of heterogeneous metadata for the creation of ontology on the basis of open source standard FRBRoo. It is original approach applicable in semantic web management for multilingual library resources (Ya-Ning & Hao-Ren, 2013). This paper explains the development of metadata in Taiwan for digital Museum Initiative sponsored by the National Science Council (Chen & *...et.al*, 2002). The goal of this paper to describe the metadata based federated search repositories. They have represent the integration process and to prove how to integrate this system with THREDDS and iRODS to achieve the data discovery at the remote locations (Adeleke & Otoo, 2014). Preserving the vast amount of digitally published data is of paramount importance to maintaining the intellectual heritage. In order that resources can be deposited, managed and retrieved, it will be necessary to accurately describe what has been preserved and how it has been preserved.

This paper focuses the problems of building precise as well as potent metadata which explains the preserved library materials. It explores the preservation process of ONIX metadata (Brindley, Muir & Probets, 2004). This paper explains the enhanced services of OAI-PMH for sharing of metadata between heterogeneous system for the management of electronic collections and its achieved by the aggregators such as Europeana (Houssos & *...et.al*, 2014). In 2011 Park & Richard have discussed the assessment of metadata in electronic theses and dissertations for Canadian institutional digital repositories by the Dublin Core metadata standards. This paper explains the application qualified Dublin Core metadata for online journal articles by the RDF/XML format and here published more than fifty academic journals especially in engineering and physics (Cole, 2002). In 2015, Xu & Giunchiglia describes a metadata schemas such as structural and administrative which based on entity for Scientific Knowledge Object and this schema developed by variety of disciplines. This can be used in many digital libraries and institutiona repositories also. Metadata and video games is also an important idea in digital libraries and it is possible to clear the debate on emultion to explore the digital objects and online resources (Carta, 2017). This paper describes the review of metadata formats awareness among the users as well as information community for easy searching and facet counting by the Internet. It can save the time of the users for access the digital resources available in online (Heery, 1996).

III. OBJECTIVES OF THE STUDY

The main objectives of this study is to import the metadata from the Emerald, Koha, DSpace, and VuFind by the E Prints open source software for easy information retrieval in designing and developing the institutional digital repository. It is also explore the metadata search facilities from the E-Prints user interface. But data import from Koha, Emerald, and VuFind gives the BibTex format and it will easily import into the EPrints software. On the other hand Dublin Core metadata is also import by using this software. Apart from this it also import the metadata from other databases such as DOI, EPrints XML, Microsoft docx, PubMed ID, PubMed XML, and YouTube.

IV. METHODOLOGY

Development of institutional digital repository is an essential task for information services. There are many software available in online environment but this paper has select the EPrints open source software because it's very user-friendly and installation process has been successfully done in Ubuntu operating system on LAMP architecture.

A. Import Process

Metadata import is not a difficult task for any institutional digital repository because EPrints gives the lot of parameters for import the Bib Tex from the Emerald, Koha, and VuFind and Dublin core metadata import from the D Space. Finally download all the Bib Tex files and create a single batch file for easy import the EPrints. The Fig.1 is represents the BibTex format in a single file.

Fig. 1 BibTex format in a single file

The Fig. 2 is represents the import interface of E print and here data import is possible from different metadata format and databases for easy import of metadata into EPrints to generation of single metadata window. Just click on the Bib Tex option and select the files from the computer directory and in this way import the other metadata and databases also for the better management of library and information services by using this interface.

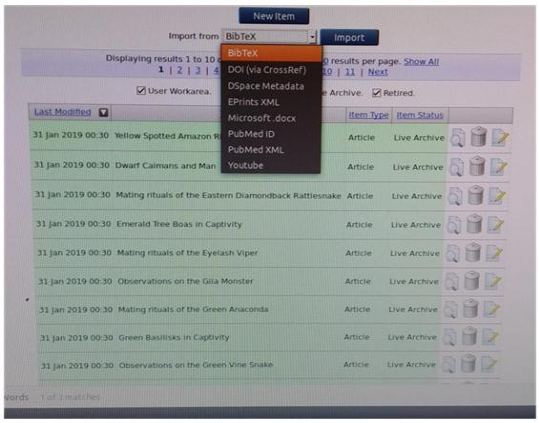

Fig. 2 Import interface in EPrints

After click on the submit button or option it will successfully import the metadata as well as import the item into EPrints just click on the Green button in Fig.3 for import the items one by one respectively.

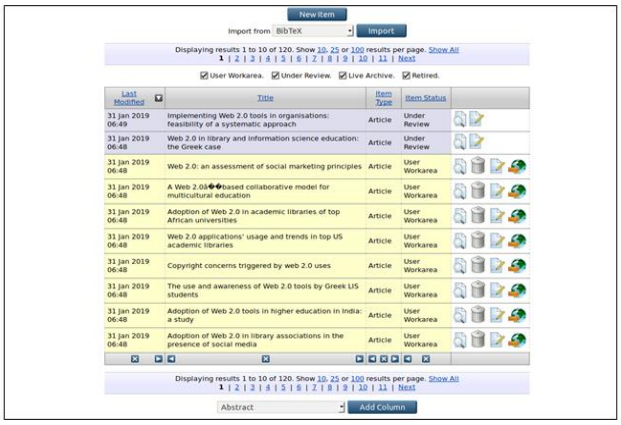

Fig. 3 Items interface in EPrints

Metadata import is possible by using this software for information services. Full metadata preview has been represents in the Fig.4 against in different parameters such as preview, details, actions, history, and issues for institutional digital repository. This is the full results of metadata and click on the URL for open the full text as well as metadata available in a specific database.

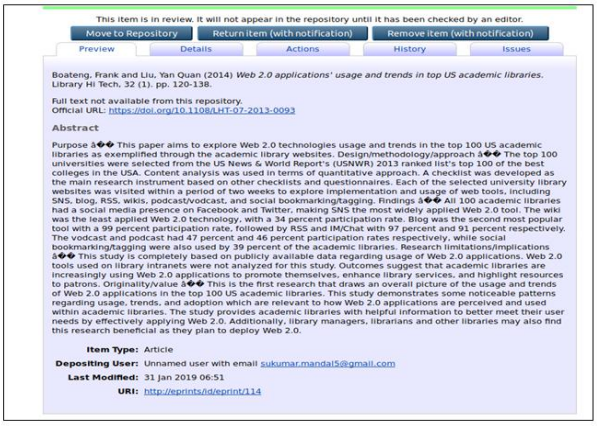

Fig. 4 Full preview of metadata in EPrints

V. CONCLUSION

Metadata is an indispensible and inevitable for institutional digital repository. Lots of metadata are available in Internet environment but this paper has successfully shows the import metadata from different databases and different software for increasing the discovery services as well as web-enabled services towards present and next level automated and digital library system. It is possible to import the Bib Tex metadata into the EPrints software by using the batch file in Fig.1 and also the process how to import it to EPrints. Obviously, it can save the time of the library professionals and readers also. It can be increases the recall and precision value for the researchers as well as advanced users for easy access of digital resources from this single window based interface.

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