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Open-Source Software for Institutional Repository or Digital Library to manage the Open Access E-Resources.

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Key Words : Open Access Software ; Institutional; Repository ; Digital Library ; E-Resources-Open Access ; Open Access Definition;

1. What is E-RESOURCES: An Introduction.

Electronic Resource means the material stored in the digital form. Traditionally, digital means the use of numbers and the term comes from a digit or manipulate. Today, digital is synonymous with computers. Digital means, the 0s and 1s in a computer language known as binary digit to represent just on and off. The information is stored in binary digit form, can be electronically controlled and stored and regenerated perfectly at high speed.

In another way, the resources of information, which are available in the form of digital and electronic format, are called Electronic Resources. Through this format, the knowledge of the Universe can be easily transferred to end users in the original format without losing its quality and contents via off-line and online.

2. DEFINITION OF E-RESOURCES :

E-Resources can be simply defined as "a resource which is available to the user in electronic format and its contents can be read using computer programme". (1)

According to Pathak, Kumar and Das (2), E-Resource is defined as: "Information stored in a medium which requires an electronic device to read its contents and information available through the Internet".

According to the ODLIS — Online Dictionary for Library and Information Science Electronic resources can be defined as the material consisting of data and/ or computer program encoded for reading and manipulation by a computer by the use of a peripheral device directly connected to the computer, such as CD-Rom device or remotely via a network, such as the Internet. The category includes software applications, electronic texts, bibliographic database etc. (3)

3. TYPES OF DIGITAL RESOURCES :

- a) Collection in which complete contents of documents are created or converted into a machine-readable form for online access.
- b) text etc Scanned image, images of photographic or printed.
- c) Scientific data sets such as protein sequences
- d) An online database and CD-ROM information products particularly those, with Multimedia and Interactive video components.
- e) Computer storage devices such as optical disk, jukeboxes, CDROM / DVD-ROM.
- f) Database accessible through the Internet and other networks.
- g) Digital audio, video clips, or full-length movies. (4)

4. Open Access: An Introduction

Today Most of the information is published in digital form. The most materials published in digital form by developed countries due to research and development. The few publishers of these countries are dominating the scientific and scholarly materials, they are making a huge profit from it, although they are not directly involved in R&D of the material. They have not written a single article in their publication. They are collecting the articles, materials etc. from the scholars, and scientist for publication, but most of the authors do not get money from them. The Publishers are also interested to get copyright from the authors. The Publicly funded research Projects conducted in University, Colleges, Government and NGO's etc. also published their R&D report of the project either by Organization itself or mostly from private publishers, which are not available freely to the community.

The libraries are not able to purchase all the publications published in the world due to financial constraint, the budget, and

the high price of the publications. Moreover, on the other side, the scientist and scholar community demand to know the recent developments in their field, make tremendous pressure on the libraries. The development and progress of any country depend upon the information and as the information is not available freely is the most hurdles into the way of countries progress.

Open Access facilitates the availability and distribution of scholarly communication freely. Through Open access, underdeveloped countries or developing countries which are not able to purchase the scholarly contents due to financial crunch can get access the peer-reviewed journals/magazines and other materials on the internet with help of information and communication Technology i.e. Mobile, Laptop, Tablets etc.

Various definitions of the Open Access is given below :

Budapest Open Access Initiative (5) defines Open Access "By " Open Access " to this literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited."

Bethesda Statement (6) on Open Access Publishing drafted during a one-day meeting held on April 11, 2003. clarifies as "An Open Access Publication [1] is one that meets the following two conditions: 1. The author(s) and copyright holder(s) grant(s) to all users a free, irrevocable, worldwide, perpetual right of access to, and a license to copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for purpose, any responsible subject to proper attribution of authorship[2], as well as the right to make small numbers of printed copies for their personal use. 2. A complete version of the work and all supplemental materials, including a copy of the permission as stated above, in a suitable standard electronic format is deposited immediately upon initial publication in at least one online repository that is supported by an academic institution, scholarly society, government agency, or other well-established organization that seeks to enable open access, unrestricted distribution, interoperability, and long-term archiving (for the biomedical sciences, PubMed Central is such a repository)"

Berlin Declaration (7) on Open Access to Knowledge in the Sciences and Humanities conference on 20 - 22 Oct 2003, defines it "as a comprehensive source of human knowledge and cultural heritage that has been approved by the scientific community".

Peter Suber states (8) "Open-access (OA) literature is digital, online, free of charge, and free of most copyright and licensing restrictions. What makes it possible are the internet and the consent of the author or copyright-holder."

As per the (ODLIS Online Dictionary for Library and Information Science the meaning of Open Access is as "Information content made freely and universally available via the Internet in easy to read format, usually because the publisher maintains online archives to which access is free or has deposited the information in a widely known Open Access repository. Open Access is a new model of scholarly publishing developed to free researchers and libraries from the limitations imposed by excessive subscription price increases for peer-reviewed journals, particularly in the sciences and medicine. By breaking the monopoly of publishers over the distribution of scientific research, Open Access makes access to scientific information more equitable and has the added advantage of allowing the author to retain copyright".(9)

To Manage Open Access resources there are many Open Source Institutional Repository or Digital Library Software are available on the net, among few of them are mentioned below :

1. **Archivematica -**

A web and standards-based, open-source application which allows your institution to preserve long-term access to trustworthy, authentic and reliable digital content. (10)

Archivematica software Source - <https://www.archivematica.org/en/>

2. **Archimede :**

Developed by Laval University Library in Quebec City, Canada, the Archimede project was designed to accommodate electronic preprints and post-prints from the institution's faculty and research staff. The Archimede institutional repository system complements two system components previously released by Laval. The first manages the university's electronic theses and dissertations; the second provides a production platform for electronic journals and monographs.(11)

Archimede software Source -

<https://www.bibl.ulaval.ca/archimede/pages.en/telecharger.en.html>

3. **ARNO:**

The ARNO project—Academic Research in the Netherlands Online has developed software to support the implementation of institutional repositories and link them to distributed repositories worldwide (as well as to the Dutch national information infrastructure). The project is funded by IWI (Dutch acronym for “Innovation in Scientific Information Supply”). Project participants include the University of Amsterdam, Tilburg University, and the University of Twente. Released for public use in December 2003, the ARNO system has been in use at the universities of Amsterdam, Maastricht, Rotterdam, Tilburg, and Twente. (12)

ARON software Source - <http://arno.uvt.nl/arno/arnodist/>
4. **CERN Document Server Software (CDSware):**

The CERN Document Server Software (CDSware) was developed to support the CERN Document Server. The software is maintained and made publicly available by CERN (the European Organization for Nuclear Research) and supports electronic reprint servers, online library catalogs, and other web based document depository systems. (13)

CDSware software Source - <http://cdsware.cern.ch/download/>
5. **DSpace:**

MIT's DSpace was expressly created as a digital repository to capture the intellectual output of multidisciplinary research organizations. MIT 92 designed the system in collaboration with the Hewlett Packard Company between March 2000 and November 2002. Version 1.2 of the software was released in April 2004. The system is running as a production service at MIT, and a federation comprising large research institutions is in development for adopters worldwide. This design supports the participation of the schools, departments, research centers, and other units typical of a large research institution. DSpace is also focused on the problem of long term preservation of deposited research material. (14)

DSpace software Source - <http://www.dspace.org/>
6. **E-Prints:**

The E-Prints software has the largest and most broadly distributed installed base of any of the repository software systems described here. Developed at the University of Southampton the first version of the system was publicly released in late 2000. The project was originally sponsored by CogPrints, but is now supported by JISC, as part of the Open Citation Project, and by NSF. E-Prints' worldwide installed base affords an extensive support network for new implementations. The size of the installed base for E-Prints suggests that an institution can get it up and running relatively quickly and with a minimum of technical expertise. The number of E-Prints installations that have augmented the system's baseline capabilities for example, by integrating advanced search, extended metadata, and other features indicates that the system can be readily modified to meet local requirements. (15)

E-Print software Source - <http://www.eprints.org/software/>
7. **Fedora:**

The Fedora digital object repository management system is based on the Flexible Extensible Digital Object and Repository Architecture (Fedora). The system is designed to be a foundation upon which full featured institutional repositories and other interoperable web based digital libraries can be built. Jointly developed by the University of Virginia and Cornell University, the system implements the Fedora architecture, adding utilities 93 that facilitate repository management. The current version of the software provides a repository that can handle one million objects efficiently. Subsequent versions of the software will add functionality important for institutional repository implementations, such as policy enforcement, versioning of objects, and performance enhancement to support very large repositories. (16)

Fedora software Source - <http://www.fedora.info/>
8. **Greenstone Digital Library Software(GSDL):**

“The Greenstone Digital Library Software (GSDL) is a top of the line and internationally renowned Open Source Software system for developing digital libraries, promoted by the New Zealand Digital Library project research group at the University of Waikato, led by Dr. Ian H. Witten, and is sponsored by the UNESCO. Greenstone software uses three more additional associated softwares namely, Java Run Time Environment (JRE), ImageMagick and Ghostscript. The software suite is available at the open source directory 'Sourceforge.Net'. Greenstone is a suite of software for building and distributing digital library collections. It is not a digital library but a tool for building digital libraries. It provides a new way of organizing information and publishing it on the Internet in the form of a fully searchable, metadata-driven digital library. It has been developed and distributed in cooperation with UNESCO and the Human Info NGO in Belgium. It is

open-source, multilingual software, issued under the terms of the GNU General Public License. Greenstone software runs on a wide variety of platforms such as Windows, Unix / Linux, Apple Mac etc. and provides full-text mirroring, indexing, searching, browsing and metadata extraction. It incorporates an interface that makes it easy for institutions to create their own library collections. Collections could be built and served locally from the user's own web server, or (given appropriate permissions) remotely on a shared digital library host. The other set of features include OAI plug-in (introduced since the 2.40 version) and DCMI compliance, UNICODE based multi-lingual capabilities and a user-friendly multimedia interfacing".(17)

Greenstone software Source - <http://www.greenstone.org>

9. **Hyrax** –

Offers a repository solution that can meet the needs of institutional/data repositories and digital object repositories.(18)

Hyrax software Source - <https://hyrax.samvera.org/>

10. **IR+ (IRPLUS) INSTITUTIONAL REPOSITORY¹⁹**

IR+ is an institutional repository software project. It is a fully featured digital repository management solution that is easy for users to understand and manage. Its goals are to meet the needs of any organization that needs to author, publish and preserve digital information.(19)

IR+ software Source - <https://code.google.com/archive/p/irplus/>

11. **iTor :**

iTor Tools and technologies for Open Repositories—was developed by the Innovative Technology Applied (ITA) section of Netherlands Institute for Scientific Information Services (Dutch acronym: NIWI). 4 iTor development concentrates on four areas: E-publishing; repositories; the content management system; and "collaboratories.(20)

iTor software Source - <http://www.iTor.org/en/>

12. **MyCoRe :**

MyCoRe grew out of the MILESS Project of the University of Essen. The MyCoRe system is now being developed by a consortium of universities to provide a core bundle of software tools to support digital libraries and archiving solutions (or Content Repositories, hence "CoRe").(21)

MyCore software Source - <http://www.mycore.de/engl/index.html>

13. **OPUS :**

OPUS Online Publications of the University of Stuttgart was developed in 1998 by the University Library and the Computing Center of the University of Stuttgart. The goal of the original project was to provide a system by which faculty, students, and staff at the university could manage their electronic publications, including published and unpublished articles and theses and dissertations. The initial development project, funded by the German Research Net and the German Federal Department of Higher Education, ended in October 1998. Ongoing development of OPUS is now funded by the University of Stuttgart. Main features for future development include digital signatures and multimedia documents.(22)

OPUS software Source - <http://elib.unistuttgart.de/opus/doku/english/index-english.php>

14. **SobekCM :**

SobekCM is the software engine which powers both the University of Florida Digital Collections (UFDC) and the Digital Library of the Caribbean (dLOC) digital repositories.

SobekCM allows users to discover online resources via semantic and full-text searches, as well as a variety of different browse mechanisms.(23)

SobekCM software Source - <http://sobekrepository.org/>

Conclusion :

To Manage the Open access E-resources there are lots open source software available on online which are very useful to establishment of the Institutional Repository in the organization. Through this IR any Institute or organization's Library can reach to the user community and give access of various materials like News letter, Question Papers, Articles; Researchers papers of teaching staff as well student, Event Photographs, various report etc.. The Joomla and Drupal Content management Software also using to develop the IR or Digital library in various organizations, but mostly they are using to build a website. In India Most used or popular IR software are D-space, Greenstone and E-print. The Most of the

Institutional repositories are established in the subject of Science and Technology, Management, Commerce, Various National Important Research Institutions in India. In near future almost all the institute / organization will established IR with help of "National Digital Library" scheme of IIT, Khargapure in the Nation.

References :

1. DESHPANDE, SATISH R. E-Resources and User Education : A New Challenge to Library and Information Centers. Ahmedabad : Adinet, Inffibnet & AMA, 28th August, 2004, p. 31.
2. PATHAK, P.J, KUMAR, SHRAVAN KUMAR, S and DAS, SAROJ. E-Product Collection Development : Selection, Acquisition and Processing. Ahmedabad : Adinet, Inffibnet & AMA, 28th August, 2004, p. 31.
3. Online Dictionary for Library and Information Science. edited by JOHN M REITZ.
<http://lu.com/odlis/odlis_o.cfm> access on 09/04/2019
4. NAIK, BHAVAN J. Digital Information Resources in Social Sciences. In Electronic Information Environment and Library Services : A contemporary Paradigm Seminar Papers. In: 48th All India Library Conference at NIMHANS, Bangalore, 22-25, January, 2003 edited by Parvez, Akhtar, Shokeen, Ashoo and Singh, D. V. Delhi : All India Library Association, 2003. p. 10.
5. BUDAPEST OPEN ACCESS INITIATIVE. 2002. <<http://www.soros.org/openaccess/read.shtml>> access on 08/05/2019.
6. BETHESDA STATEMENT on Open Access Publishing drafted during a one-day meeting held on April 11, 2003 at the headquarters of the Howard Hughes Medical Institute in Chevy Chase, Maryland. <<http://www.earlham.edu/~peters/fos/bethesda.htm#note1>> access on 08/05/2019.
7. BERLIN DECLARATION on Open Access to Knowledge in the Sciences and Humanities - conference on 20-22 Oct, 2003, Berlin. <http://www.zim.mpg.de/openaccess-berlin/berlin_declaration.pdf> access on 08/04/2019.
8. SUBER, PETER. A very Brief Introduction to Open Access. <<http://www.earlham.edu/~peters/fos/brief.htm>> access on 08/07/2008.
9. Online Dictionary for Library and Information Science. edited by JOHN M REITZ. <http://lu.com/odlis/odlis_o.cfm> access on 09/04/2019
10. OPEN SOCIETY INSTITUTE. A Guide to Institutional Repository Software. 3rd ed., 2003. pp. 5- 14.
<http://www.soros.org/openaccess/pdf/OSI_Guide_to_IR_Software_v3.pdf>access on 01/05/2019.
11. <https://www.bibl.ulaval.ca/archimede/pages.en/telecharger.en.html>
12. <http://arno.uvt.nl/arno/arnodist/>
13. <http://cdsware.cern.ch/download/>
14. <http://www.dspace.org/>
15. <http://www.eprints.org/software/>
16. <http://www.fedora.info/>
17. <http://www.greenstone.org>
18. <https://hyrax.samvera.org/>
19. <https://code.google.com/archive/p/irplus>
20. <http://www.iTor.org/en/>
21. OPEN SOCIETY INSTITUTE. A Guide to Institutional Repository Software. Op. Cit. (10). pp. 5- 14.
<http://www.soros.org/openaccess/pdf/OSI_Guide_to_IR_Software_v3.pdf>access on 01/05/2019.
22. <http://elib.unistuttgart.de/opus/doku/english/index-english.php>
23. <http://sobekrepository.org/>