

VuFind: A Next Generation Discovery Retrieval System

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ABSTRACT

Generally resource discovery services is available on Web environment. Discovery library service is a part of online searching tool for access the information resources both for local and global library users. The essential features of discovery services including ranking algorithm, facets of different fields (authors, formats, main topics), Google like search box, enhanced search capability (fuzzy searching and concept searching), linking the full text content, customizing facilities for library, single window base interface for sign on the databases, integration with social sites, sharing the bibliographic information among the user. This paper aims to provide an overview of the emergence of resource discovery systems and services along with their advantages and best practices including current landscapes. It reports the development of a resource discovery system by using the "VuFind" software and describes other technological tools, software, and standards required for the development of the prototype. The present paper also discuss the performs like other existing commercial and open source Web-scale resource discovery systems and is capable of harvesting resources from different subscribed or external sources replacing a library's OPAC.

Keywords: Vufind, Next Generation Catalogue, Discovery Tool, Web 2.0, Open Source Software

INTRODUCTION

Information technology has the potential to improve the quality and efficiency of library services and resources. Information Technology can be termed as a backbone to all the libraries. Now a day storing, retrieving, transmitting and manipulating of data or information is much easier. A discovery tool helps us to find out all the information in a single platform. Discovery tools, import metadata in a unified index and shows the search results in a single platform. The information is scattered in the web so it is bit difficult search all these sources one by one to overcome this situation and got appropriate information discovery tools such a great invention. To overcome all these

difficulties and make the experience of the user more relevant and hassle free we have a new tool called Vufind. It gives automatic classified and accurate information to the users according to their need. It is designed and developed by Villanova University and it is highly customizable open source product that allows information repositories and integrates multiple services into a unified interface. It has powerful Apache Solr as search platform, faceted results as users search query, author bibliographies for more about author details, support Zotero tools for reference management system in order to showcase any digital content and also supports 25 languages in global implementation. This is the significance of

the web discovery services as urgently invited by the libraries and information centres throughout the World.

LITERATURE REVIEW:

(Katz & Nagy, 2013) has defined that, the popular VuFind discovery tool was built to provide a library-friendly front-end for Solr's powerful searching capabilities, and its development provides an informative case study on the use of Solr in a library setting. VuFind is just one of many library packages using Solr, and examples like Blacklight, Summon, and the eXtensibleCatalog project show other possible approaches to its use. Mandal observed the role of search indexing tools in the automation of libraries and gave a comparative study on different popular search indexing tools (Mandal, 2016).

In a study by Mandal, it is found that MultiTees a tool may be used for the construction of Thesaurus and in this paper he also showed how a thesaurus can be constructed through the use of online tool effectively (Mandal, 2015).

(Parabhoi and Srivastava 2016) has given the overview of Vufind Open source discovery tool. The authors described various features of Vufind software.

Thompson and others in a paper studied on Web-Scale Discovery in the Health Libraries as a special library and he also opined that Google is the best search engine and highly used by academic community to meet the demand of their needs (Thompson, Obrig & Abate, 2013).

Objectives:

The objectives of this paper are as follows:

To identify the features of VuFind

To highlight the benefits and Limitations of VuFind

To explore the advanced search facilities in VuFind discovery services.

To search the multidisciplinary database by VuFind single window based interface.

Features of VuFind Web Discovery Service:

The study evidently shows that the Web scale discovery services have these generic features namely, (i) information content (ii) discovery process to access the content (iii) efficient delivery procedure from multiple repositories, and (iv) the flexibility of all searching as well as managing procedure. And also some unique features of VuFind as below:

1. Vufind give single point access to the all the resources available in the library as like google

2. It has key faceted search feature that allow user Search result and narrow down the result by filtering.

3. Vufind can translate the result in many international languages like English, Portuguese, Deutsch and etc.

4. It is compatible with Zotero reference management software so that user can save search result and tag them in to Zotero

5. It supports 25 languages in global implementation

6. VuFind is open source software with General public License. It is free of cost and any one can modified the software and share it with other.: It has a strong and active user community in worldwide.

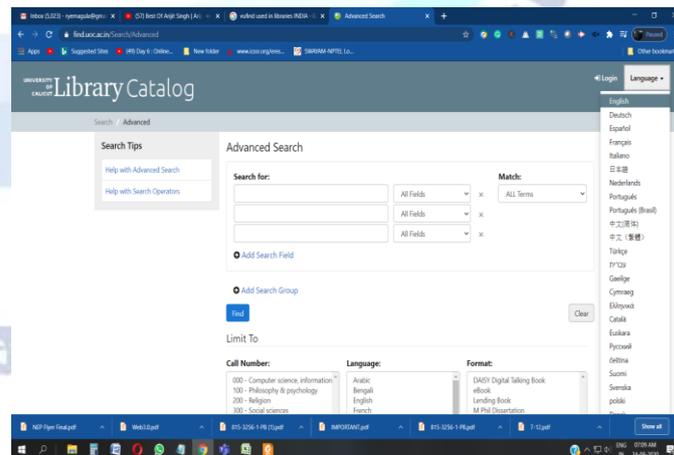
7. Finally, it has the strong user community to help and guide in worldwide for product development.

Components and requirements of Vufind software: Software tools and Hardware

1. Apache webserver 2. Solar search engine 3. PHP programming language 4. Mysqldb database and the minimum requirement of Vufind is 2GB of RAM and a few GBs of disk storage for a small library

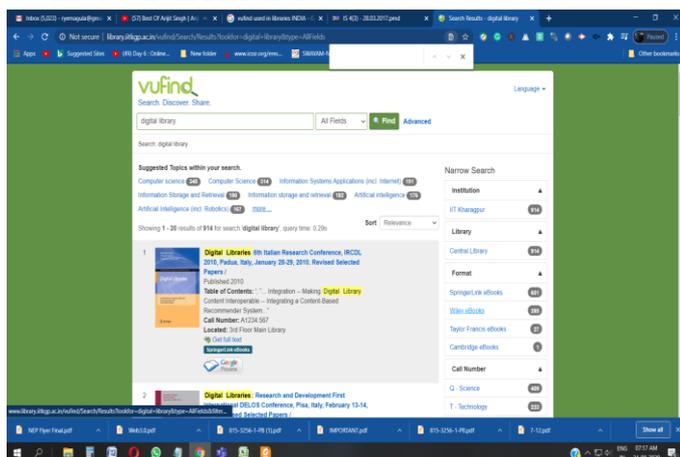
Major Benefits & Limitations: It is save the time of the user through single access point for all the library resources. Easy to export the bibliographic data in Zotero software and tag them easily. Its support the inter library loan services facility and User can create his/her own profile and manage. Limitation: it was originally designed with Linux in mind. So while installing VuFind under Windows takes a bit more work.

1. Advanced Search:

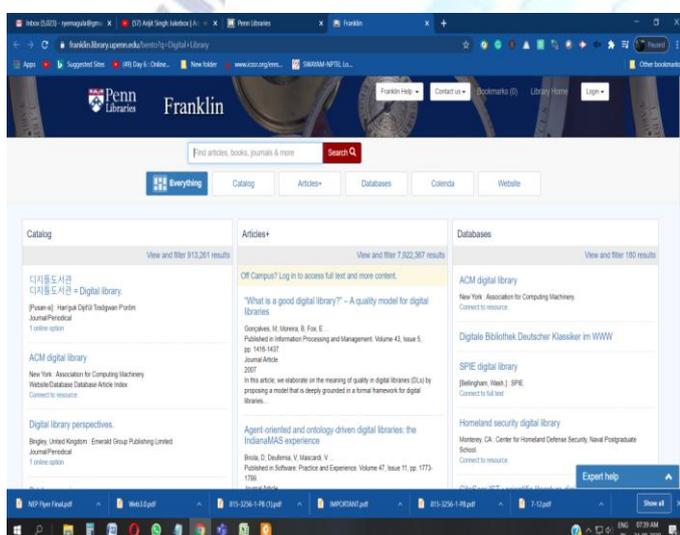


(Fig.1)

2. Search Results:



3. Search By Multidisciplinary database



(Fig.3)

Conclusion:

In the changing world every library needs a single access tool where the user can search and retrieve his/her require document at desired time. VuFind is open source, completely modular and having strong features with single search box to all the resources available in the library including external databases. Besides, with the VuFind interface users can save their choice list, post their comments, reserve book list and compatible with reference management software. While looking all these advanced features, VuFind is a next generation discovery retrieval system.

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[10] <http://www.library.iitkgp.ac.in/vufind/Search/Results?lookfor=digital+library&type=AllFields>

[11] <https://franklin.library.upenn.edu/bento?q=Digital+Library>