

## Union Database of Theses at INFLIBNET Centre: An Overview

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### Abstract

*The INFLIBNET Centre, being a nodal agency of the academic sector of the country working in the area of resource sharing among the community, started developing union databases of library resources available in the university sector. In this regard, PhD dissertation being an important vital source of information for the academic research community, the Centre in the initial period of its establishment, started developing the union database of theses with the support of 82 universities having 52000 records. The database has now 2, 20,206 records with support from 238 universities. This article explains about the creation of theses union database at INFLIBNET Centre. It also includes steps involved in creating the database till the making available online for the user community. Further, it gives complete overview about the union database of theses.*

**Key Words :** Union Database, Theses, INFLIBNET Centre, Bibliographic Database

### 1. Introduction

The INFLIBNET was started as a programme during 1991 from the Gujarat University Campus, Ahmedabad and later in June 1996 it was established as an Inter-University Centre of University Grants Commission. The Centre is involved in creating infrastructure for sharing of library and information resources and services among Academic and Research Institutions. INFLIBNET works collaboratively with Indian university libraries to shape the future of the academic libraries in the evolving information environment. The Centre has many major Activates such as UGC-Infonet – a Internet Connectivity Programme, UGC-Infonet Digital Library Consortium, Library Management Software, JCCC, etc. Apart from that the major activity of the centre is to create union databases of library resources such as books, serials, theses, etc. available in the Indian academic libraries. The INFLIBNET union database is a traditional union catalogue, in which records from multiple sources and formats are being converted into a single format. The union catalogue of theses contains bibliographic information of the research dissertation in the metadata format. To evolve as a unique union database of theses, the Centre has adopted various conventional and non-conventional tools for the development of this database. This paper describes about the process involved in developing the union database of theses and tools used for processing the bibliographic records received from the member libraries.

### 2. History of Database Development in the Centre

In the initial stage during second quarter of the 1990s for developing the database, the centre started using the CDS/ISIS software (Bibliographic Database Management Software developed by

UNESCO) at the time it was available on nominal charges (now the software is free and available in windows platform named WINISIS), the development of the software is supported by the BIRMIE. For creating the database of theses, instructions provided into the "Guidelines for Data Capturing : a user manual" for the theses by the Task Force of the INFLIBNET Programme was used. The fields identified in to Guidelines for Data Capturing: a user manual was based on the Common Communication Format (CCF) developed by the UNESCO. Accordingly, the Centre requested the university libraries for creating CCF based bibliographic database of theses by using the CDS/ISIS software. In the large scale, 5 to 15 days training programmes were organized every year at the Centre. For creating the ICT (Information and Communication Technology) infrastructure, universities were funded with the 6.5 lakhs as a non recurring grants. A large number of training programmes of a week was also organized at the campus of the universities on the request for making university library staff familiar the INFLIBNET activities and smooth functioning of the ICT infrastructure in their library.

### 3. Source of the Bibliographic Records

The INFLIBNET Centre is using different sources for developing union database of theses:

- 1) The copy of the notifications issued by the universities to the Centre at the time of research award to the researcher;
- 2) Information published in the University News of the award given to the researcher; and
- 3) Bibliographic records received from the university as a part of the agreement with the universities for contributing the bibliographic records to the Centre.

### 4. Growth of Theses Database

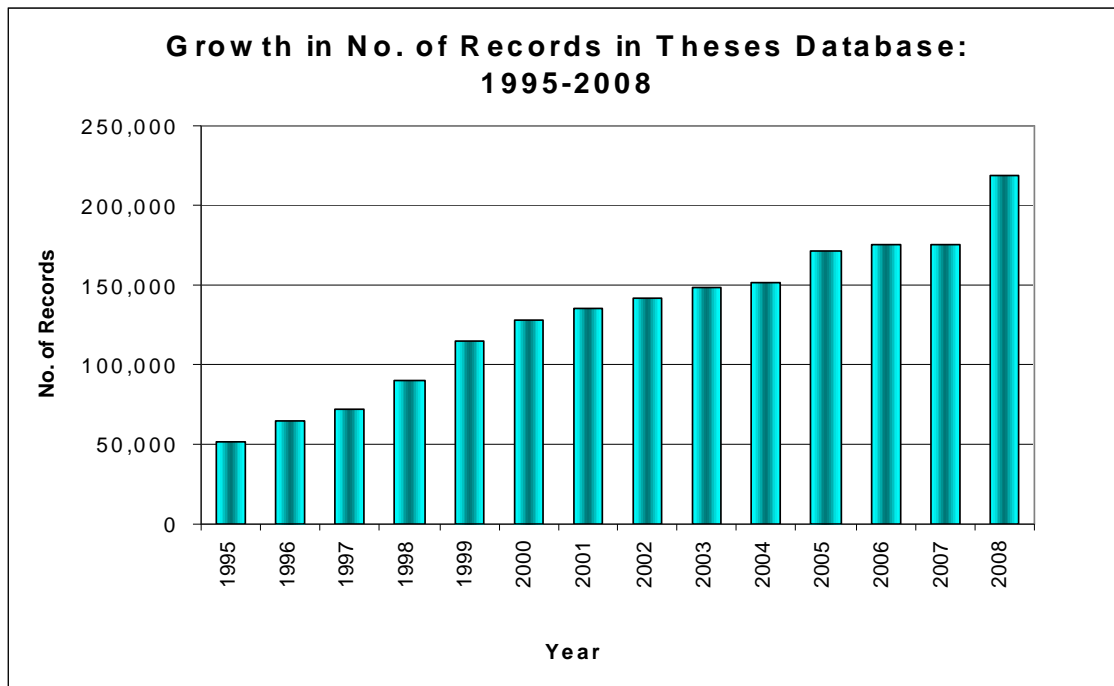
Project on Union Catalogue of Theses was taken-up in 1995 with 52,000 records from 82 universities. The database has grown to 2,20,206 records in March 2008 from 238 universities over a period of 13 years. The Table 1 and Fig. 1 given below depict growth of theses databases from 1995 to March 2008.

Year	No of Universities/Institutions	No of Records	% of Increase
1995	82	52,000	----
1996	95	65,000	25%
1997	110	72,000	11%
1998	134	90,000	25%
1999	149	1,15,000	28%
2000	160	1,28,000	11%

2001	172	1,35,000	5%
2002	189	1,42,000	5%
2003	198	1,48,000	4%
2004	209	1,52,000	3%
2005	211	1,71,176	13%
2006	213	1,75,206	2%
2007	213	1,75,206	0%
2008	241	2,20,206	26%

**Table 1: Growth in No. of Records in Theses Database: 1995 – 2008**

The union database of theses holds bibliographic details of doctoral theses submitted to 238 universities / institutions in India. The union database has around 2,20,206 unique records in all disciplines from 1906 onwards. The bibliographic records of theses are contributed by participating universities and have also been collected from other reliable sources such as university announcements, University News, etc. as mentioned above in the source of bibliographic records column.



**Figure 1: Growth in No. of Records in Theses Database from 1995 to 2008**

Following figure 2 displays the state-wise records received from various universities as of now. As per the figure clearly depicts that the Uttar Pradesh has contributed maximum bibliographic records of 44,648 to the theses database and Sikkim state is the less contributor with 4 bibliographic records to the Centre.

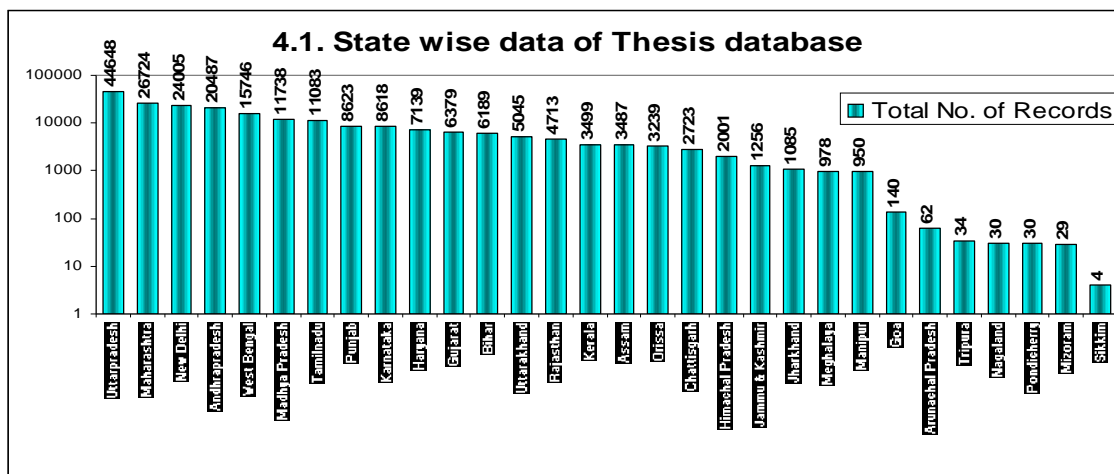


Figure 2: State-wise data of Theses Database

Following figure 3 depicts that the University of Delhi is the highest contributor to the union database of theses with 17,100 bibliographic records.

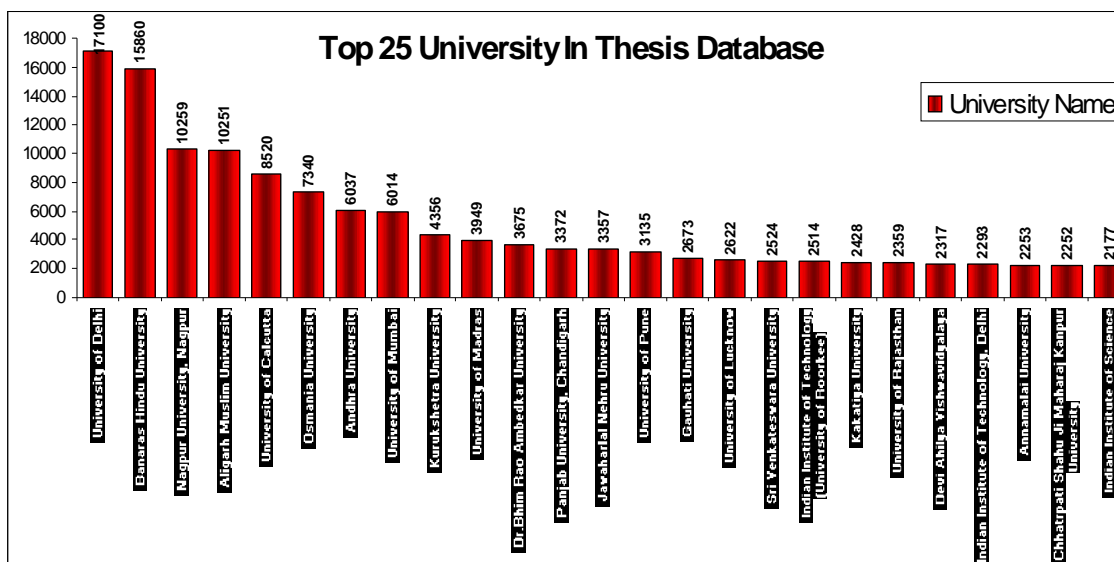


Figure 3: Top 25 University in Theses Database

## 5. Steps for Processing the Theses Records

The information received through the notification issued by the universities and the information published in the university news is being processed directly by the INFLIBNET Centre by using the software as per the required format for processing in to the union database. As mentioned, the Centre also receives bibliographic records from the universities as per the agreements and the mandate provided by the UGC to the INFLIBNET Centre. The bibliographic records being received from the universities are mostly in the different formats such as ISO-2709, MS Excell, MS Access, Dbase format, MS Word format, etc.

The problem starts in processing these different format files in to one common format and in spite of the common standards for all the libraries, catalogue records submitted to the Centre do not conform to one specific cataloguing standard. Interestingly, these records exhibit a variety of cataloguing practices. Lack of consistency, typographical errors and uniformity which are part of the local variation are a major concern for INFLIBNET Centre while processing the records in a single format. In the following figure, the places have been rendered in different ways:

Dictionary List	Database Name:
- AIZAWAL	- PRASANTHI NILAYAM ANANTAPUR
- AIZAWL	- RAHURI
- AIZWAL	- RAHURI AHMEDNAGAR
- ANANATAPUR	- S A S NAGAR MOHALI
- ANANTAPUR	- SAS NAGAR DIST ROPAR
- NAGARJUNANAGAR	- SAS NAGAR MOHALI
- NAGARJUNANGAR	- SHANKARAGAHITTA
- PRASANTHI NILAYAM	- SHANKARAGHATTA
- PRASANTHINILAYAM	

Figure 4: Dictionary List of Place Field

Apart from that, the another concerned to the Centre is that as mentioned three sources of information are considered for collecting the records for database. Most of the time the records which are already created at the centre by using the source of university news and the university notification, the same records are also being submitted to the Centre by the universities. Thus, the checking of the duplication is must at the time of merging the university records into the union database, where the consistency and typographical errors are more cause of concerned for the Centre.

## 6. Web Interface

After the process of the data, it is uploaded to the web server. Uploaded data to the server can be searched through the web interface developed by the centre using JSP as a front end and MS SQL as a back end. The bibliographic records of the theses can be searched by different access points

such as Title, Subject, Creator, Contributor, Date, Degree Discipline, Name of the University, Place of University, Keywords, etc. The search interface provides simple and advanced search, both to the users. The interface also provides searching of bibliographic records within the particular university. Following figure 5 is the screenshot of the search interface:

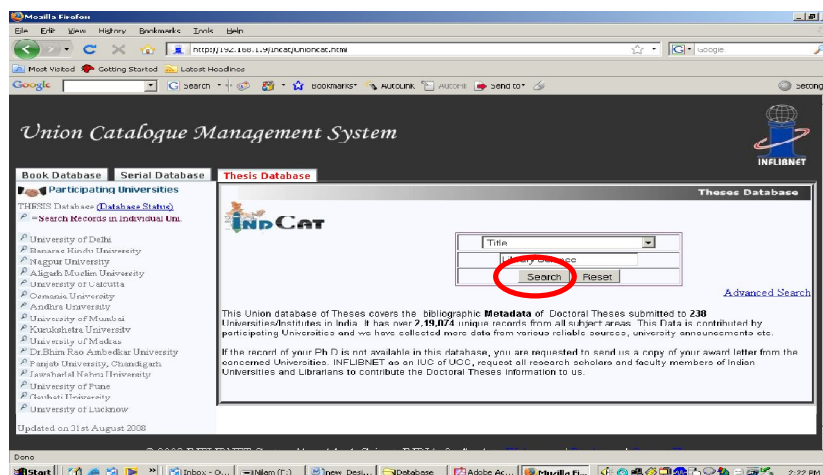


Figure 5: Union Catalogue of Theses

Following screenshot in figure 6 shows the details of the bibliographic records after making search when one clicks on the particular title of the theses.

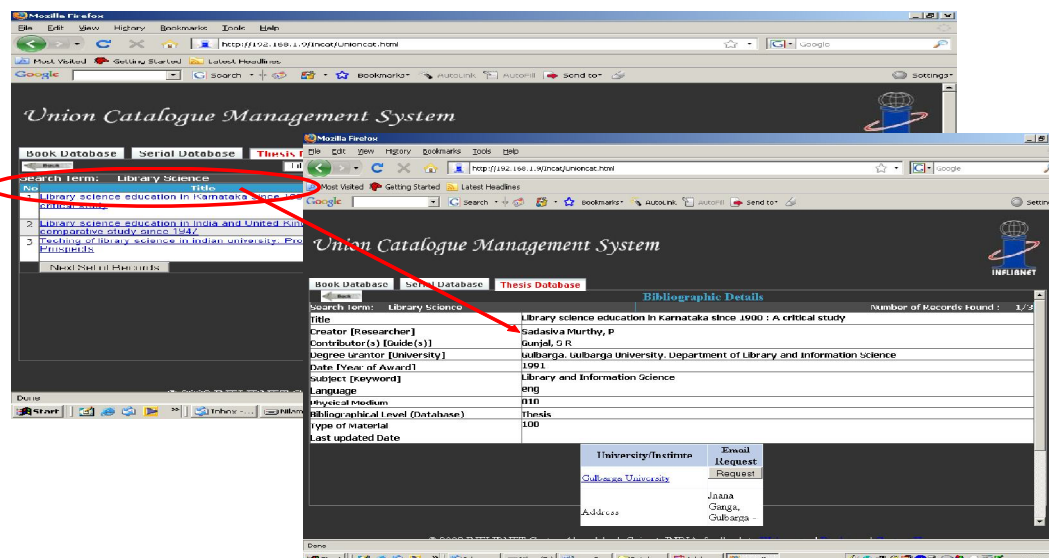


Figure 6: Search Result and Bibliographic Information of the record

The search interface also provides ILL (Inter Library Loan) facility. One can make a ILL request to the holding library of the require document through e-mail. Even the user can contact to the library through either phone or post as the contact details of the university are included in the database and integrated with the bibliographic records. Following screenshot in figure 7 shows the steps of the ILL request:

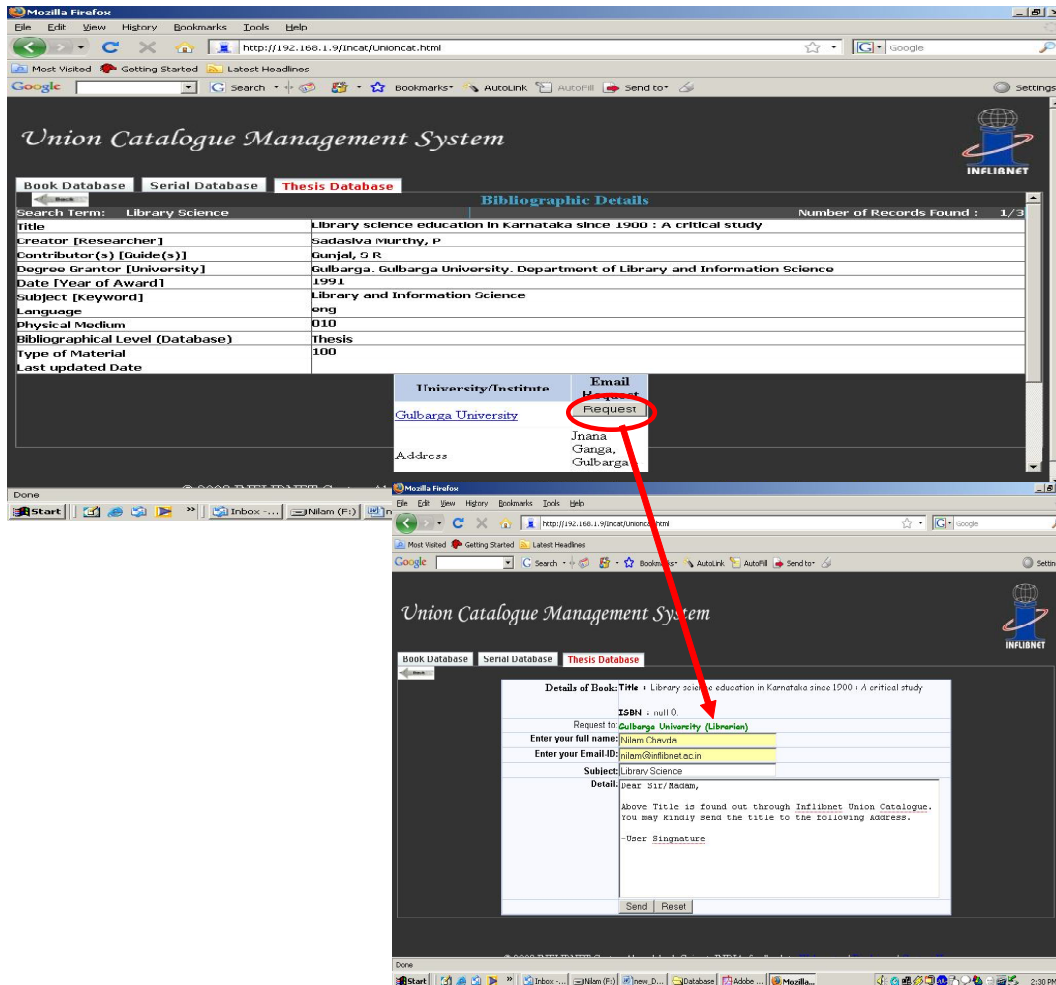


Figure 7: ILL Request

## 7. Conclusion

Union database of theses at the Centre is a vital source of information for the research scholar of the country. Keeping in view the importance of the database for the user community, INFLIBNET

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Centre has always done the level best to maintain the quality with high consistency. Apart from that the Centre's eye is on ZERO percent duplicate with maximum bibliographic information about the theses.

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