

INFLIBNET

Newsletter



ISSN : 0971-9849

Vol. 21, No. 3 (July to September 2014)

Federated Search & Discovery Services : A Standards and Protocols Perspective

Dinesh R Pradhan and Miteshkumar Pandya, Scientists - B (LS)

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N-LIST (E-resources for College)

<http://nilst.inflibnet.ac.in/>

Open Journal Access System (OJAS)

<http://www.inflibnet.ac.in/ojs/>

Shodhganga

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From Director's Desk



High spur of activities continued during the quarter under report, Training and Awareness Programmes for library and information professionals, one of key mandate of the Centre, continued to get its due attention. In all 14 training programmes, workshops, awareness programmes including two national conventions were organised during the quarter under report. These programmes included three training programmes on SOUL 2.0, three e-resource awareness programmes on UGC INFONET/ N-LIST, three Regional Training Programmes on J-GatePlus@UGC-Infonet and four specialised training programmes including two training programmes on e-content development under e-PG Pathshala and one training programme each on Content Management System using Drupal and Bibliometrics & Research Output Analysis.

The Centre continued its activities in the North-Eastern Regions inspite of severe budget constraints. The 9th PLANNER 2014 was organised in Dibrugarh University during 25th to 27th September 2014 on the theme "Capacity Building in Library and Information Services". The main theme of the convention was divided into three sub-themes, namely i) Capacity Building through Collaboration (ii) Institutional Capacity Building and iii) Role in ICT in Capacity Building. The Convention was attended by more than 185 delegates and invitees from all over the country. 12 publishers participated in the exhibition arranged as part of the convention. Out of 114 papers submissions, 45 papers were selected for presentation and 17 papers were selected for poster presentations. A number of experts in library and information science were invited to attend the convention and share their expertise with participants.

While the physical building of the Centre was occupied in the January, 2013, the Centre is gradually building its computing and networking infrastructure. A walk-in User facility (Cyber Zone) for Researchers was inaugurated by Mrs. Malika Mukharjee, Principal Accountant General (E & R S A), Gujarat on 16th July, 2014. The facility consists of 16 Internet-enabled PC that are made available to students, scholars and faculty from neighbouring institutions for accessing e-resources subscribed under UGC INFONET Digital Consortium Library and N-LIST. It may be noted the licence agreements signed with the publisher of e-resources provide for access to e-resources to walk-in users.

The number of full-text theses available in Shodhganga is growing steadily along with number of universities who signs MoU with INFLIBNET Centre to join this noble initiatives. The landmark achievement was marked with uploading of 21001st theses into Shodhganga by Prof. Ved Prakash, Chairman, UGC on 22nd August, 2014. He also launched 4 papers of Library and Information Science developed under e-PG Pathshala. A brief write on ABCD, an open source library management system, is given in this report as part of our mission to encourage open source software.

This newsletter contains an article on "Federated Search & Discovery Services: A Standards and Protocols Perspective" by Mr. Dinesh Ranjan Pradhan and Mr. Mitesh Pandya, Scientists B (LS), INFLIBNET Centre. The article provides state-of-the-art summary on standards and protocols used in federated search and discovery services. I am sure you will all enjoy reading this article.

We are also pleased to invite you to attend 10th International CALIBER 2015 that is being organised in collaboration with Himachal Pradesh University and Indian Institute of Advanced Study, Shimla during 12th to 14th March 2015. The theme of the Convention is Innovative Librarianship: Adapting to digital Realities. For more details please visit our website www.inflibnet.ac.in/caliber2015.



(Jagdish Arora)

SOUL 2.0 Regional Training Programme

SOUL 2.0 Regional Training Programme, Jawaharlal Nehru Library, University of Mumbai, Mumbai, 7th - 11th July, 2014



Ms. Nabila Shaikh, Project Officer (CS), Mr. Kamlesh Vegad, Project Officer (LS), Ms. Nalini Raja, SOUL Coordinator, INFLIBNET Centre, Mr. B K Ahire, Chief Librarian, Jawaharlal Nehru Library, Mumbai University along with Participants of SOUL 2.0 Regional Training Programme at Jawaharlal Nehru Library, University of Mumbai, Mumbai

The Centre organised five-day SOUL 2.0 Regional Training Programme in collaboration with University of Mumbai, Mumbai from 7th to 11th July 2014 at Jawaharlal Nehru Library of the University. The Programme was inaugurated by Dr. Vivek Patkar, an Independent Researcher and Guest Lecturer, University of Mumbai. In his inaugural speech, he suggested to plan one new activity every year as a modest resolution leading improvement in existing library services and adding new services. He also suggested that while attending any such training programmes, participants must ask at least one or two questions in each session, after that participants should prepare a report on what they have learnt from the training programme and implement at least three things in your library. Ms. Nalini Raja, SOUL Coordinator, Mr. Kamlesh Vegad,

Project Officer (LS) and Ms. Nabila Shaikh, Project Officer (CS), INFLIBNET Centre served as the resource persons. While theoretical lectures were delivered in the morning sessions, afternoon sessions were dedicated to the “hands-on” practical sessions on different modules of the SOUL 2.0 software. 28 participants participated in the programme. Dr. (Ms) Kavita Laghate, I/C Director, Jamanalal Bajaj Institute of Management Studies (JBIMS), University of Mumbai delivered concluding remarks during valedictory function.

Training Programme on SOUL 2.0 at the INFLIBNET Centre

The INFLIBNET Centre regularly conducts SOUL 2.0 Training Programmes to impart training on installation and operation of SOUL software for its users. The following two training programmes were organized at the INFLIBNET Centre, Gandhinagar during this

quarter. The Programmes were coordinated by Mr. H G Hosamani, Scientist C (LS), INFLIBNET Centre. 37 participants attended these two training programmes as per the details given below:

Sl. No.	Name of the Programme	Date of the Programme	No. of Participants
1	114th Training Programme on SOUL 2.0	4th - 8th August, 2014	17
2	115th Training Programme on SOUL 2.0	1st - 6th September, 2014	20



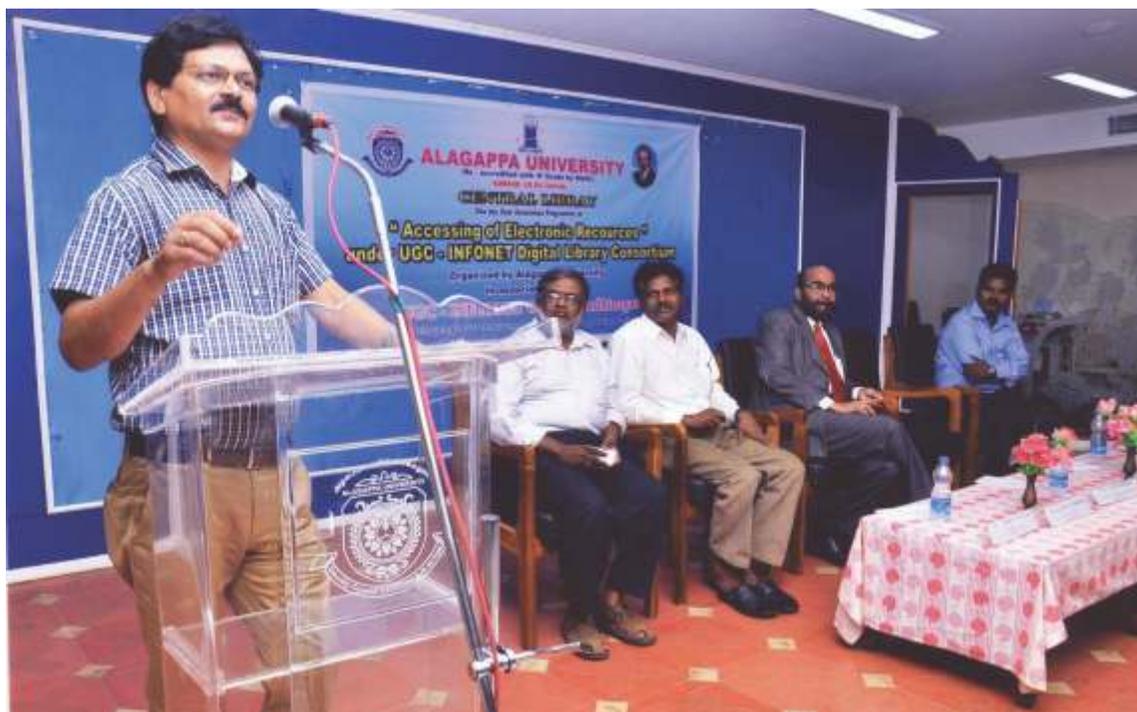
Participants of 114th Training Programme on SOUL 2.0 with the Director and Technical Staff of the INFLIBNET Centre



Participants of 115th Training Programme on SOUL 2.0 with the Senior Scientists and Technical Staff of the INFLIBNET Centre

User Awareness Programmes under UGC-INFONET Digital Library Consortium and N-LIST

One-day User Awareness Programme on Access to E-resources under UGC-INFONET Digital Library Consortium, Alagappa University, Karaikudi, 25th July, 2014



Mr. Ashok Kumar Rai, Scientist D (CS), INFLIBNET Centre, Dr. A. Thirunavukkarasu, Librarian, Prof. S. Kaliyamoorthy, Convener, Vice-Chancellor's Officiating Committee, Dr. C. Bhaskaran, Deputy Librarian, Alagappa University on the dais during User Awareness Programme at Alagappa University, Karaikudi

One-day User Awareness Programme on E-resources under UGC-INFONET Digital Library Consortium was organized by Alagappa University in collaboration with INFLIBNET Centre on 25th July, 2014 at University Convocation Seminar Hall, Alagappa University, Karaikudi. Dr. A. Thirunavukkarasu, Librarian welcomed the guests and participants. Dr. C. Bhaskaran, Deputy Librarian coordinated the programme and presented thematic address. Prof. S. Kaliyamoorthy, Convener, Vice-Chancellor's Officiating Committee inaugurated the programme. In the inaugural speech, he emphasized that such user awareness programme help them to access information

for their academic research and their career. Abundant information is available online. But those who are aware of availability of all relevant resources, their location and usage can succeed in the process of getting to get their right material at the right time that would help them to carry out quality research and disseminate findings immediately to the users. Mr. Ashok Kumar Rai, Scientist D (CS), INFLIBNET Centre presented a complete overview of INFLIBNET activities and UGC-Infonet Digital Library Consortium. The representatives of the publishers including Jgate, GIST, Wiley, Balani Infotech Pvt. Ltd attended the programme and made presentations on their respective information products.

Dr. B. Jeyapragash, Assistant Professor, Dept of library & Information Science, Bhartidasan University, Tiruchirappalli gave invited talk during the programme. Prof. H. Gurumalles Prabhu, Special Officer- Planning & Development delivered the valedictory address and Dr. P. Ganesan, Assistant Librarian extended a warm vote of thanks. 197 users including faculty members, research scholars and student of LIS attended the programme.

One-day User Awareness Programme on Access to E-resources under N-LIST Programme, St. Agnes College, Mangalore, 12th August, 2014



Dr. M. K. Bhandi, University Librarian, Mangalore University, Dr. Sr. Prem D'souza, Principal, Dr. Vishala B K, Selection Grade Librarian, Dr. Saraswathi B S, Convenor, Library committee, Dr. Hitakshi, Associate Professor, Department of Psychology, St. Agnes College, Mr. Manoj Kumar K, Scientist D (CS), INFLIBNET Centre on the dais during User Awareness Programme at St. Agnes College, Mangalore

On the occasion of the Librarian's day, one-day User Awareness Programme on N-LIST e-resources was organised by St. Agnes College in collaboration with INFLIBNET Centre on 12th August, 2014. Dr. Vishala B K, Selection Grade Librarian, St. Agnes College,

welcomed the guests and participants. Mr. Manoj Kumar K, Scientist D (CS), INFLIBNET Centre inaugurated the programme by lighting the lamp along with other dignitaries. In his inaugural address, he shared the spirit behind five Laws of Library Science and said that library is a living and growing organism and brain behind growth and development on institution, he also introduced various new initiatives taken by the INFLIBNET Centre in recent years.

Dr. M. K. Bhandi, University Librarian, Mangalore University delivered keynote address and released

second Agnesian In-house Eco Research: A Multidisciplinary Journal. In his keynote address, he spoke about the significance of celebrating Dr. S. R. Ranganathan's Birthday as Librarian's Day since 2008 and highlighted his contribution to the academic world. Dr. Sr. Prem D'souza, Principal, St. Agnes College delivered presidential address. Dr. Saraswathi B S, Convenor, Library committee extended a warm vote of thanks. Dr. Hitakshi, Associate Professor, Department of Psychology compared the programme.

In the training session, Mr. Manoj Kumar demonstrated various services of INFLIBNET Centre. He also spoke about information pollution through Google and knowledge discovery process. Mrs. Shubharekha,

HOD, Dept of Statistics, St. Agnes College explained the process of data collection, graphical & diagrammatic presentation and application of statistical tests in research in detail. She also illustrated various types of tests for hypothesis testing & types of errors and concluded by saying that statistics is relevant to every field of study from Anthropology to Zoology.

In the valedictory session, Sr. M. Supriya A. C., Vice Principal, St. Agnes College presided over the function and the Chief Guest Dr. Narahari, Registrar, St. Aloysius college (Autonomous) delivered concluding remarks. 54 Librarians and faculty members and 166 students from various Institutions were benefitted from the Awareness Programme.

One-day User Awareness Programme on Access to E-resources under UGC-Infonet Digital Library Consortium, Central University of Himachal Pradesh, Kangra, 12th September, 2014



Mr. Ashok Kumar Rai, Scientist D (CS) INFLIBNET Centre along with the Participants of User Awareness Programme on Access to E-resources under UGC-INFONET Digital Library Consortium at Central University of Himachal Pradesh, Kangra

One-day User Awareness Programme on Access to E-resources under UGC-INFONET Digital Library Consortium was organised by Central University of Himachal Pradesh in collaboration with the INFLIBNET Centre on 12th September, 2014. Mr. N. Karunakar, Assistant Professor, DLIS delivered the welcome address. Prof. Inder Vir Malhan, Head, DLIS & Dean, SoMC&IS spoke about the importance and purpose of this workshop. He highlighted the problems and issues faced by faculty and students of the University in accessing of e-resources. He also discussed the problems faced by libraries due to ever-increasing costs of journals and budget cuts. He said that these problems have been resolved a great extent with formation of UGC-INFONET Consortium Digital Consortium. He emphasized that information leads to insight, helps to articulate ideas and propels innovation. Mr. Ashok Kumar Rai gave an overview of the various activities and services of the INFLIBNET Centre. The representatives

of the publishers including Wiley, Balani Infotech Pvt. Ltd., Oxford University Press, Elsevier, Cambridge University Press and Informatics India Ltd. attended the programme and made presentations on their respective information products. About 50 faculty members and research scholars participated in the programme.

E-Content Development under e-PG Pathshala

Three-days Workshop on e-Content Development for the Paper Information & Communication Technology for Libraries and Information Sources System and Services, Indian Institute of Public Administration (IIPA), New Delhi, 28th-30th August, 2014

The Centre organised three-day Workshop on e-Content Development for the paper Information & Communication Technology for Libraries and Information Sources System and Services during 28th to 30th August, 2014 at Indian Institute of Public Administration (IIPA), New Delhi. The Workshop was the part of e-content development activities of e-PG Pathshala Project funded by MHRD under its National Mission on Education through ICT (NME-ICT). The purpose of the Workshop was to assess the progress of e-content development, review the modules and voice recording of self-learn script by the content writers for the paper on Information & Communication Technology for Libraries and Information Sources, System and Services. The Workshop started with a presentation on overview of e-PG Pathshala project and progress by Mr. Kannan P, Scientist C (LS), INFLIBNET Centre. The Workshop continued with the voice narration of the individual content writer for the respective module to prepare self-learn component. Eighteen participants including content writers and paper coordinators attended the workshop. Mr. Kannan P, Scientist C (LS) coordinated the workshop as representative of the INFLIBNET Centre along with Dr.

Usha M Munshi, Paper Coordinator, e-PG Pathshala and Librarian, IIPA, New Delhi and Dr. Renu Arora, Paper Coordinator, e-PG Pathshala and Former Head, Education and Training, National Institute of Science Communication and Information Resources (NISCAIR), New Delhi.

Workshop on Task of Production of Courseware e-Content for Postgraduate Subjects, UGC, New Delhi, 3rd September 2014

The Workshop was organized by UGC for helping and strengthening the PIs for Production of Courseware e-Content for postgraduate Subjects on 3rd September, 2014 at UGC, New Delhi. Prof R. C. Kuhad, Chairman Sub-committee welcomed all members and briefed on the need to organize the Workshop. Prof. R. C. Kuhad, Professor, Department of Microbiology University of Delhi, South Campus, New Delhi made presentation on overall programme of e-PG Pathshala with emphasis on key aspects of developing quality e-content. Prof. Kushal Sen, IIT Delhi attended the meeting on behalf of Prof. Mangla Sunder Krishnan, IIT Madras and shared his experience on NPTEL.

Samples modules developed in subjects like Architecture, Russian Studies and Linguistics were presented by respective PIs and their demonstration helped the PIs to understand the whole concept about developing e-content in four quadrant approach.

Mr. Nageshwar Nath, Senior Engineer, CEC, New Delhi on behalf of Director CEC made presentation on progress in e-content development at UG level by CEC. Dr. Jayashree Shinde, Head, Department of Educational Technology, SNDT Women's University, Mumbai made her presentation on Effective Instructional Design. Prof. Uma Kanjilal, Professor & Head, Library & Information Science, IGNOU, New Delhi made a comprehensive presentation on software tools for e-content development including open source and freely available software. Mr. Pradeep Kaul, Senior

Consultant, NME-ICT, Dept. of Higher Education, MHRD made detailed presentation on NME-ICT Programme including future programmes of MHRD in digitization. 22 PIs attended the workshop on e-content development. The individual PIs presented the status of e-content development and put problems/queries before committee members. The committee members clarified all the queries to the satisfaction of PIs. The PIs requested that UGC should continue organize such meetings in future as well.

INFLIBNET Centre
Information and Library Network Centre
Infocity Gandhinagar

About Major Activities Conventions Publications Library RTI Join Us

Welcome to INFLIBNET Centre

a gateway to India's academic and research Communities

Information and Library Network (INFLIBNET) Centre, Gandhinagar is an Autonomous Inter-University Centre (IUC) of University Grants Commission (UGC) of India. It is a major National Programme initiated by the UGC in March 1991 with its Head Quarters at Gujarat University Campus, Ahmedabad. Initially started as a project under the IUCAA, it became an independent Inter-University Centre in June 1996. [more details](#)

Shodh is a reservoir of Indian theses
Access to Fulltext Ph.D Theses submitted to universities in India. [Shodhganga](#) | [Shodhganga](#)

UGC INFONET Digital Library Consortium
Extending access to e-journals/ebooks to universities/colleges [details](#) | [NLST](#)

SOUL Software for University Library
State of art Integrated Library Management System Details | [SOUL Updates](#)

indCat Union Database
Online Union Catalogue of Indian Universities [details](#) | [GujCat](#)

Events Calendar

« May 2014 »

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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

more@inflibnet

- e-PGPathshala
- Vidwan Database
- Research Project Database
- INFOPORT
- IR@INFLIBNET
- University Directory
- e-Education
- Honors & Awards

What's New @ INFLIBNET

PLANNER 2014 | ETD 2015

Due to Lok Sabha election Code of conduct the written Test/Personal Interviews for the post of Scientist B(CS) which was scheduled to be held on Friday, 28th March 2014 from 10:00 AM onwards is **POSTPONED TILL FURTHER NOTICE**. Inconvenience is deeply regretted.

Three days training programme on "Bibliometrics and Research Output Analysis" scheduled to be held at INFLIBNET Centre, Gandhinagar, Gujarat from 23rd -25th April, 2014 is **Postponed till further announcement**

Guest House Tender Jobs

National Workshops and Conference

Three-day National Workshop on Content Management System using Drupal, INFLIBNET Centre, Gandhinagar, 16th-18th July, 2014

The INFLIBNET Centre organized three-day National Workshop on Content Management System using Drupal from 16th to 18th July, 2014 at INFLIBNET Centre, Gandhinagar. Mr. Kannan P, Scientist C (LS) and Coordinator of the Workshop, welcomed the participants and gave an overview of the three-day Workshop. Dr. Jagdish Arora, Director inaugurated the Workshop. In his inaugural address, he emphasized on the importance of a dynamic website for an organisation and the role library professionals can play in delivering effective services to the patron through World Wide Web. Mr. H. G. Hosamani, Scientist C (LS) and Coordinator of the Workshop, delivered vote of thanks. The three-day Workshop covered introduction to website design and development, overview of Drupal and its features, installation, theme configuration, module configuration, content development, backup and restore, etc. Mr. Manoj Kumar K. and Mr. Ashok Kumar Rai, Scientists D (CS), Mr. Kannan P, Scientist C



Participants of National Workshop on Content Management System Using Drupal with the Director and Technical Staff of the INFLIBNET Centre

(LS), Mr. Abhishek Kumar, Scientist C (CS), Mr. Miteshkumar Pandya, Scientist B (LS) and Mr. Dharmesh A Shah, Scientific and Technical Assistant (CS) were resource persons for theory and practice sessions. 32 participants including students of library science, LIS & IT professionals from academic and research institutes attended the workshop.

Three-day Training Programme on “Bibliometrics and Research Output Analysis”, INFLIBNET Centre, Gandhinagar, 30th July - 1st August, 2014

The INFLIBNET Centre organized three-day Training Programme on Bibliometrics and Research Output



Participants of Bibliometrics and Research Output Analysis with the Director and Technical Staff of the INFLIBNET Centre

Analysis from 30th July to 1st August, 2014 at INFLIBNET Centre, Gandhinagar. Dr. Jagdish Arora, Director lighted the ceremonial lamp along with Prof. I. K. Ravichandra Rao, Professor, PEC Institute of Technology, Mr. H G Hosamani, Scientist C (LS), Ms. Kruti Trivedi, Scientist B (LS), INFLIBNET Centre during

the inaugural function. The aim of the training programme was to impart an overview of bibliometric methods, performance indicators and tools & techniques related to bibliometric analysis and mapping. Details of lectures delivered by experts during the three-day training programme was as below:

Topics	Name of Expert and Institution
Overview of Bibliometrics and Bibliometrics Elements and Laws	Prof. I. K. Ravichandra Rao, Professor, PEC Inst of Technology
Mathematical Foundation of Bibliometrics / Scientometrics	Prof. I K Ravichandra Rao, Professor, PEC Inst of Technology
Web of Science Database	Mr. Manish Negi, Thomson Reuters
WoS Tools and Techniques	Ms. Kruti Trivedi, Scientist B (LS)
Scopus Database	Ms. Padma Muralidharan, Elsevier Science
Indian Citation Index Database	Dr Prakash Chand, Indian Journals.com
Indicators and Mapping of Research	Dr. P. Dastidar, Director, Ministry of Earth Sciences
Bibliometric Indicators and Rankings of University	Dr. Jagdish Arora, Director, INFLIBNET Centre

Ms. Kruti Trivedi, Scientist B (LS), Mr. Hitesh Solanki, Scientist B (CS), Mr. Saroja Kumar Panda & Mrs. Roma Yogesh Asnani, STA (LS), Ms. Seema Chavda, Project Officer (LS), Mr. Kuldeep Matieda & Ms. Alpa Acharya, Project Associate (LS), Ms. Sonal Vaghela, Project Assistant (LS) were resource persons in practical

sessions of the training programme. The certificates of participation were distributed at the end of programme. 42 participants including LIS professionals and research scholars attended the programme. Mr. H. G. Hosamani, Scientist C (LS) extended a warm vote of thanks to participants, faculty and publishers.

9th PLANNER 2014, Dibrugarh University, Dibrugarh, 25th – 27th September, 2014

The 9th PLANNER 2014 (Promotion of Library Automation and Networking in North Eastern Region) was organised by the INFLIBNET Centre in collaboration with Dibrugarh University, Dibrugarh on the theme “Capacity Building in Library and Information Services” from 25th to 27th September 2014. The main theme of the convention was divided into three sub-themes, namely i) Capacity building

through Collaboration; ii) Institutional Capacity Building; and iii) Role of ICT in Capacity Building. The Convention was attended by more than 185 delegates and invitees from all over the country. 12 publishers participated in the exhibition arranged as part of the Convention. Out of 114 submissions, 45 papers were selected for presentation and 17 papers were selected for poster presentations.



Dr. Utpal Das, Deputy Librarian & Librarian I/C, Dibrugarh University, Dr. R K Chadha, Additional Secretary, Parliament of India, Smt. Kalpana Dasgupta, Former Chairperson, National Knowledge Commission, Dr. Jagdish Arora, Director and Mr. Abhishek Kumar, Scientist C (CS), INFLIBNET Centre released the Printed Proceeding of the Convention during the Inaugural Session

Inaugural Session

Dr. Utpal Das, Deputy Librarian & Librarian I/C, Dibrugarh University and Organizing Secretary for the 9th PLANNER 2014, welcomed the dignitaries on the dais as well as guests and the participants. Dr. Jagdish Arora, Director, INFLIBNET Centre deliberated on the activities and services of the INFLIBNET Centre with special reference to NE India. He also informed that INFLIBNET Centre has organized PLANNER Convention in almost every state in North East region except in Arunachal Pradesh. Dr. Arora highlighted that the information seeking behaviour of the user in ICT environment has changed dramatically. He urged all professionals to understand and assess the requirement of the users and offer effective services. The Convention was inaugurated by Prof. Alak Kumar Buragohain, Hon'ble Vice Chancellor, Dibrugarh University. In his inaugural address, he recalled his love for books and libraries from his school days. He emphasized that ICT should be used to connect the traditional and modern

library. He further informed that libraries should take initiatives to preserve enormous content that have been ignored by the traditional libraries because of lack of technological tools. He suggested that e-resources and ICT should be used to restructure teaching and learning. Dr. R. K. Chadha, Additional Secretary, Parliament of India, in his address, emphasized that the libraries should use community radio and social media to promote library services to reach out to the users in this digital age.

Smt. Kalpana Dasgupta, Former Librarian, National Library, Former Director, Centre Secretarial Library and Chairperson, Library Committee, National Knowledge Commission, in her keynote speech, expressed concern about the current status of LIS education and LIS profession in the country and emphasized on improving the quality of library services. She also emphasized that the professionals should develop leadership qualities and reiterated that the librarian should be good administrator. She gave mantra of three 'F' to become

good administrator in libraries, i.e. Fear, Firm and Friendly. She urged the professionals to strive hard to change the image of the library profession. She spoke on range of other issues such as the need to frame the Digital Library Policy, revamping the LIS education, content analysis, etc.



Conference Director and Rapporteur General of the Convention

Dr. Khomdon Singh, Librarian, Manipur University, Imphal was Conference Director. Mr. Premchand, Librarian, Indian institute of Advance Study, Shimla was the Rapporteur General of the Convention. Mr. Abhishek Kumar, Scientist C (CS), INFLIBNET Centre, as Convener of the Convention, presented a warm vote of thanks to invitees, participants, authorities of university and experts on behalf of INFLIBNET Centre.

Dr. Jagdish Arora, Director, INFLIBNET Centre released the printed Proceedings of the Convention and Dr. R K Chadha, Additional Secretary, Parliament of India, released Conference CD. On this occasion a book written by Prof. Subarat Borgohain entitled “Enhancing Oil Recovery Techniques” published by OUP was also released.

Tutorials

Pre-convention tutorials were delivered on “SOUL 2.0” and “Digital Library using Dspace” on 25th September 2014 for the benefit of participants of the Convention. The tutorials on “SOUL 2.0” was delivered by Mr. Yatrik Patel, Scientist D (CS) and Mr. Divyakant Vaghela, Scientist B (CS), INFLIBNET Centre and



Tutorials on SOUL 2.0 and Digital Library using Dspace

“Digital Library using Dspace” was delivered by Mr. Manoj Kumar K, Scientist D (CS), INFLIBNET Centre. Mr. Sanjay Grover, Informatics gave commercial presentation on “JGate Plus” during the tutorials.

Technical Sessions

The following theme papers were presented by invited theme speakers during the Technical Session:

Sl. No.	Theme	Topic	Theme Speaker
1	Capacity Building through Collaboration	Capacity building in digital libraries	Dr. Dinesh Kumar Gupta Vardhman Mahavir Open University, Kota
2	Capacity Building through Collaboration	Emerging trends in libraries in new ecosystem : A librarians view	Dr. H. Anil Kumar, Librarian, IIM, Ahmedabad
3	Institutional Capacity Building	The future of academic librarians	Dr. B. Sutradhar, Librarian, IIT, Khargpur
4	Role of ICT in Capacity Building	Role of ICT in capacity building	Dr. Bhibuti Bhusan Sahoo, Deputy Librarian, IIT Bhubaneswar, Odisha



Theme Speakers of the Convention

There were 5 technical sessions held during three days wherein 22 papers were presented on various themes as per the details given below:

Sessions	Theme	Chairperson	Co-chairman/Rapporteur	No. of Papers Presented
Session 1	Capacity Building through Collaboration	Dr. Mukesh Saikia, Librarian, Tezpur University	Sh. Sadananda Nath, Librarian, Teensukhia Commerce College	5
Session 2	Capacity Building through Collaboration	Dr. Sanjay Kumar Singh, Associate Professor, DLIS, Gauhati University	Mr. Lal Chatuana, Librarian, Govt. Hrangbana College, Aizwal	3
Session 3	Institutional Capacity Building	Prof. Bikikia Laloo, Head DLIS, NEHU Shillong	Dr. Anil Kumar Gupta, Deputy Librarian, University of Rajasthan	4
Session 4	Institutional Capacity Building	Mr. Ashok Kumar Rai, Scientist D (CS), INFLIBNET Centre	Mr. J. Shivarama, Assistant Prof, TISS, Mumbai	3
Session 5	Role of ICT in Capacity Building	Dr. Pawan Kumar Gupta, Adjunct Professor, DLISc, University of Rajasthan	Dr. Zomuana Joute, Librarian, Aizwal North College, Aizwal	7



Participants of the Convention

Panel Discussion

A panel discussion on the theme of the Convention “Capacity Building in Library and Information Services” was organized prior to the concluding session of Convention. Dr. R. K. Chadha, Additional Secretary, Parliament of India chaired the panel discussion with Dr. Jagdish Arora, Director, INFLIBNET Centre, Prof. N. N. Sharma, Gauhati University, Assam, Prof. Bikika Lallo, HOD, NEHU, Shillong and Dr. Pawan Kumar Gupta, Adjunct Prof. DLIS, University of Rajasthan, Jaipur were panelist for the session. Dr. R. K. Chadha welcomed the panelists and raised issue of connectivity in the north east region. Thereafter the panelists

upon the changing roles of librarians in the ICT era. Dr. Khondom Singh, Librarian, Manipur University, Imphal and Conference Director of the convention expressed his views on the conference theme and shared his ideas with the delegates. Dr. Utpal Das, Organizing Secretary presented the vote of thanks on behalf of Dibrugarh University.

The following major recommendations were made during the deliberations of the convention:

1. There is growing impetus on the availability of OSS and open access resources like Institution repository and open source software like Dspace,



Panelists of the Convention

deliberated and discussed on emerging issues on the themes of the conference. Dr. Bikika Lallo thanked the INFLIBNET Centre for organising PLANNER and she expressed proudly that NE region’s professionals are adopting the new technology in the libraries.

Valedictory Session

The Valedictory Session was chaired by Dr. Jagdish Arora, Director, INFLIBNET Centre. Dr. Deepak Chatia, Chairman, Library Committee, Dibrugarh University was the Chief Guest of the Valedictory Session. Mr. Prem Chand, Rapporteur General of the Convention presented a detailed report on the proceedings of the convention. Dr. Deepak Chatia, in his address, delved

Moodle etc. The deliberation in the conference reveals that pace of implementation of such software is very slow in colleges in North Eastern region. In order to intensify and create local content, it is imperative that all the colleges in the region should create and explore the creation of IR in their respective colleges.

2. A training programme in this direction is need of the hours. It was therefore, proposed that INFLIBNET Centre should design special training programme on digitisation and open source software exclusively for the library professionals working in North East India.

UGC-INFONET University Forum, Elsevier, New Delhi, 5th August, 2014



Participants of UGC-INFONET University Forum along with Dr. Jagdish Arora, Director, Mr. Ashok Kumar Rai, Scientist D (CS), Mr. Dinesh Ranjan Pradhan and Ms. Kruti Trivedi, Scientists B (LS), INFLIBNET Centre

UGC-INFONET University Forum was organized by the INFLIBNET Centre in collaboration with the Elsevier Science in New Delhi on 8th August 2014. The agenda of 5th University Forum was around different metrics used to evaluate research. Dr. Jagdish Arora, Director delivered a detailed presentation on the different rankings and the methodology involved in evaluating performance of universities.

Dr. Peter Haddawy, Faculty ICT Mahidol University Thailand, shared findings of the report entitled "Higher Education in Asia –Expanding out, Expanding up". He also presented the status of Indian Universities as

compared to other Asian Universities. Mr. Peter Sidorko, Library Director, University of Hong Kong delivered presentation on "How does library successfully support research workflow in a University". Prof. Ajit Kembhavi, Director IUCAA, Pune and Mr. Kok Keng Lim, Managing Director, Asia Pacific, Academic & Government, Elsevier (SG) were also present at the forum. The forum was attended by around 40 participants from member universities. The forum gave them an ideal platform to university representatives to discuss challenges and opportunities beyond library.

Regional Training and Awareness Programmes on J-GatePlus@UGC-Infonet

One-day Regional Training and Awareness Programmes on J-GatePlus@UGC-Infonet were organised by Informatics India Ltd, Bangalore in the

collaboration with INFLIBNET Centre, Gandhinagar and different universities in the following regions of the country.

Sr. No.	University Name	Representatives	Date	No. of Participants
1	Western Region: Tata Institute of Social Science, Mumbai	Mr. Sanjay Grover, CEO & Ms. Jothy Informatics India Ltd, Ms. Kruti Trivedi, Scientist B (LS) & Mr. Saroja Kumar Panda, STA (LS), INFLIBNET Centre	30th June, 2014	57
2	Eastern Region: Jadavpur University, Kolkatta	Mr. Sanjay Grover, CEO & Mr. Swapnil Srivastava Informatics India Ltd, Mr. Dinesh Ranjan Pradan, Scientist B (LS), INFLIBNET Centre	16th July, 2014	20
3	Northern Region: University of Delhi, New Delhi	Mr. Sathyanarayana, , Informatics India Ltd., Mr. Ashok Kumar Rai, Scientist D (CS), INFLIBNET Centre.	11th Aug, 2014	26
4	Southern Region: Anna University, Chennai	Mr. Sathyanarayana, Mr. Sanjay Grover and Mr. Swapnil Srivastava Informatics India Ltd, Dr. Jagdish Arora, Director, INFLIBNET Centre	4th Sept, 2014	94

The sessions during all the four Regional Training and Awareness Programmes started with presentations by representatives of Informatics India Ltd. They highlighted need for universal access to recorded human knowledge by means of universal bibliographic control such as J-Gate. They also highlighted advantages of having J-Gate in addition to J-GatePlus@Consortia. They also presented the changing trends in information retrieval and digital library experience. During these presentations, they impressed upon the need for an integrated single search experience for information seekers.

Representatives of Informatics India Ltd also demonstrated use of admin module (Rights and Access Management system) and updating of organisational information like IP details, emails, address etc. They demonstrated Configuration of library subscribed journals in JGatePlus to enable "My Library tab" and export assignment details and reports and their analytics and procedure for fulfilling document delivery request & generation of various reports. Participants including librarians, information professional, network administrators, students and faculty from various colleges and various universities attended the programme.

Inauguration of Walk-in User's Facility (Cyber Zone) for Researchers, INFLIBNET Centre, Gandhinagar, 16th July, 2014



Mrs. Mallika Mukherjee, Auditor, Principal Accountant General (E & R S A) Gujarat, Ahmedabad Inaugurated Walk-in User's Facility (Cyber Zone) for Researchers at INFLIBNET Centre

Mrs. Mallika Mukherjee, Auditor, Principal Accountant General (E & R S A) Gujarat, Ahmedabad inaugurated Walk-in User's Facility (Cyber Zone) for Researchers in presence of participants of National Workshop on Content Management System Using Drupal and Director & Technical Staff of the INFLIBNET Centre on 16th July, 2014 at INFLIBNET Centre, Gandhinagar.

The facility has 16 Internet-enabled PCs dedicated to students, scholars and faculty from neighbouring institutions for accessing e-resources subscribed under the UGC-INFONET Digital Library Consortium and N-LIST. The license agreements signed with the publishers of e-resources provides for access to e-resources to "walk-in" users.

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- Terms
- Subject
- Services

15th Meeting of the Governing Council, 28th Meeting of the Governing Board and 21st Meeting of the Finance Committee, INFLIBNET Centre, Gandhinagar, 22nd August, 2014



President, Chairman & Members of the Committees planted Saplings of Plants and Prof. Ved Prakash, Chairman, UGC Launched e-Modules for Four Papers in LIS Developed under e-PG Pathshala and uploaded 21,001st Thesis into Shodhganga

15th Meeting of the Governing Council, 28th Meeting of Governing Board and 21st Meeting of the Finance Committee were held at INFLIBNET Centre, Gandhinagar on 22nd August, 2014. This was the second time that the meetings of GC / GB and FC were organized at the new Campus of the INFLIBNET Centre. Prof. Ved Prakash, Chairman, UGC chaired the 15th Meeting of the Governing Council as ex-officio Chairman of the INFLIBNET Society.

The Meetings of the Governing Board and Finance

Committee were held under the Chairmanship of Prof. N Mukunda, Chairman, Governing Board, INFLIBNET Centre. All the members took a tour of the building and its infrastructure. All members planted saplings of trees on the Campus. Besides, Prof. Ved Prakash, Chairman, UGC launched e-modules for four papers in Library & Information Science i.e. Digital Library, Public Library, Social Science Information System and Infometrics & Scientometrics developed under e-PG Pathshala and uploaded 21,001st thesis into Shodhganga.

ABCD Open Source Library Management System

ABCD is web-based integrated library management software comprising of sub-modules that are necessary for day-to-day library functions. ABCD stands for 'Automation of Libraries and Documentation Centres'. Its development is promoted and coordinated by BIREME, with the support of VLIR. It is a fully integrated library automation system based on UNESCO's CDS-ISIS technology as the underlying database and encompasses all major functions of integrated library management systems i.e. acquisition, cataloguing, circulation, serials management, OPAC, and reports. All types of bibliographic structures and different types of digital resources as well as administrative data can be managed by ABCD software. The software is language-independent and it is available in Spanish, English, French and Portuguese. ABCD is compatible with programming languages accepted by the GNU licences, i.e. PHP, Java, Javascript, Python, etc. It is built with different technologies such as ISIS database, ISIS formatting language, CISIS, ISIS Script, ISIS NBP, Java Script, Groovy and Jetty, PHP, MySQL, Apache, and YAZ.

The software provides facility to create and manage multiple database from a single server for different collections and allows cross database searching facility. The software is browser independent which enables users to perform in-house operations as well as search and retrieval. The software facilitates creating new database, print formats, data entry worksheets directly through web or from the existing WINISIS database available on a local hard drive.

Pre-requisites

Following software are required as pre-requisites before installation ABCD software:

- Windows or Linux Apache 2.2.x
- PHP 5.2.x
- YAZ
- Mysql 5.1 or newer (Only for EmpWeb)
- Java 1.5 (Only for EmpWeb and Linux)

Technical Features

- Uses PHP as scripting language, MySQL as database and Apache as web server;
- Uses MARC21 standard for bibliographic records;
- Supports Z 39.50 protocol for information retrieval;
- Compatible with ISIS database technology for bibliographic databases i.e. ISIS indexing technique, ISIS formatting language for producing outputs;
- Export import of bibliographic records in ISO 2709 format;
- Web based interface for in-house operations as well as OPAC;
- Supports copy cataloguing of records from different catalogues;
- Facilitates automation of day-to-day tasks such as acquisition of books, cataloguing, circulation, serials management, management reporting, OPAC, etc.;
- Enables users to provide SDI and CAS services;
- Supports Unicode standard for multi-lingual contents;

- Enables users to generate barcode labels and spine labels;
- Uses ISIS database technology and follows MARC21 standards for creation of bibliographic records;
- Facilitates attachment of table of content with specific records which provides digital library functionalities to the software;
- Facilitates as library portal as well as OPAC;
- Provides facility to extract various reports in textual format;
- Facilitates simple search as well as advanced search for end users;
- Statistical report generation with graphical representation of any defined set of variables in the databases; and
- Flexibility of database structure.

register themselves and raise their questions to get possible solution of the query. One can register his email ID at <http://lists.iccis.org/listinfo/isis-users> to get email alerts from the active users.

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User Forum and Support

The software is based on ISIS technology and it offers solution to various problems occurred while using through list forum developed for ISIS fraternity. User can



Announcement: 10th International CALIBER 2015

CALIBER (Convention on Automation of Libraries in Education and Research Institutions), an international convention organized by the INFLIBNET Centre in different parts of the country in collaboration with universities. The 10th International CALIBER is being organized on the theme "Innovative Librarianship: Adapting to Digital Realities" in collaboration with Himachal Pradesh University and Indian Institute of Advanced Study (IIAS), Shimla during 12-14 March, 2015. High quality papers on research and technical works, case studies, technology updates, etc. related to the themes and sub-themes of the convention are being invited. The convention would provide a unique forum to the library and information professionals, teachers, IT professionals, consultants and users involved in automation and networking of libraries as well as information providers to come together and interact on the subjects of mutual interest.

Call for Papers

Programme Committee solicits high quality technical papers related to the theme and sub-themes but are not limited to the areas listed below:

Theme: Innovative Librarianship: Adapting to Digital Realities

Subtheme 1: Scientometrics, Bibliometrics, Webometrics and Altmetrics

Contact Information

Organising Secretary	Jt. Organising Secretary	Convener
Prof Pradeep Ahluwalia Library, Himachal Pradesh University Summer Hill Shimla, 171005 HP Email: pk_ahluwalia7@yahoo.com	Mr Prem Chand Librarian, Indian Institute of Advanced Study, Shimla, 171005 HP Email: chanprem@gmail.com calibershimla@gmail.com	Mr. Ashok Kumar Rai Scientist D (CS), INFLIBNET Centre Infocity, Gandhinagar-382007 Gujarat Email: ashok@inflibnet.ac.in

- Building World-class Universities : Role of Libraries
- Measuring Research Productivity and ROI
- Quantitative and Qualitative Parameters for Research outcome
- Tools and Technique
- Citation Analysis
- Research Evaluation

Subtheme 2 : e-Learning and Open Online Courses

- MOOCs
- Open Courseware
- Standards and Best Practices
- Learning Management System (LMS)
- Content Delivery Models
- IPR Issues
- Facilitating MOOCs

Subtheme 3 : Library 3.0

- Collaborative Content creation
- Semantic Web, Ontology
- Library and Big Data
- Open standards and protocols
- Search and Discovery Services

Important Dates

Receipt of full papers : January 31, 2015

Intimation to Authors : February 15, 2015

Last date for Registration : February 25, 2015

For more details, please visit: <http://www.inflibnet.ac.in/caliber2015/>

Other Notable Activities and Events

Independence Day



Independence Day celebration with staff members and their families at INFLIBNET Centre, Gandhinagar

The INFLIBNET Centre celebrated 68th Independence Day on Friday, 15th August 2014. The National Flag was hoisted by Mr. Manoj Kumar K., Scientist D (CS), INFLIBNET Centre. Mr. Manoj Kumar addressed the staff members and their families regarding the activities of the Centre. A number of games were organized for staff and their children during the event and prizes were distributed to the winners of the games.

Navratri

The INFLIBNET Centre celebrated Garba festival with great enthusiasm. The Garba night was organized for the employees and their families on 30th September 2014. The function started with the Durga Puja and everyone from the campus, staff member and their families participated. The employees and their families turned out in their best traditional attire. Dr Jagdish Arora, Director, INFLIBNET Centre distributed the prizes for the best dance performers, best-dressed persons and children. The function concluded with the ceremonial dinner.



INFLIBNET Centre's Staff with their Family Members during the Garba Celebration at the INFLIBNET Centre

INFLIBNET Virtual Classroom

During under this quarter, details of lectures delivered through INFLIBNET Virtual Classroom are as follows:

Date	Topic	Delivered by	No. of Participants
22nd July, 2014	SOUL 2.0 Features & Troubleshooting	Mr. Divyakant Vaghela, Scientist B (CS)	11
28th August, 2014	Open Access Initiatives (IR/OJAS/INFOPORT)	Mr. Divyakant Vaghela, Scientist B (CS)	9
30th September, 2014	DSpace & Linux Introduction with Basic Commands	Mr. Swapnil Patel, Scientist B (CS)	6

Here is the tentative schedule for forthcoming training programmes:

Date	Topic	Timings
31st October 2014	DSpace Installation	11:00 am to 1:00 pm
25th November 2014	DSpace Operation and Customization	11:00 am to 1:00 pm
27th December 2014	DSpace Operation and Customization	11:00 am to 1:00 pm

Federated Search & Discovery Services : A Standards and Protocols Perspective

Dinesh Ranjan Pradhan and Miteshkumar Pandya, Scientists - B (LS)

Abstract

With advent of information and communication technology, drastic changes can be seen in the services offered by the libraries. One of the primary objective of the library is to serve their users in a time brand manner. In this age of information explosion there are lots of printed as well as digital documents that are stored in a library are available online either in open access or on subscription and it is very difficult to find relevant one in time. Federated search and discovery tools facilitate integrated searching for all types of materials from a single search box. The article describes some of the standards and protocols that can be used to streamline the operation of developing federated search engine and discovery tools.

1. Introduction

Today's libraries have evolved and expanded from repository of books, journals and other non-print materials in physical format to the hybrid libraries having access to vast collection of electronic content ranging from subscribed full-text e-journal and e-journal databases, bibliographic databases, e-books, e-theses, digitized manuscripts, images and photographs, artifacts of cultural heritage, e-learning materials, scientific datasets, etc, in addition to printed documents. One of the major challenges that the modern libraries faces is to find ways and means to select and offer seamless and coherent access to growing collections of heterogeneous resources to the users in a fashion that enriches learning and research experience, provides timely and convenient access to relevant and appropriate resources, exposes potentially valuable resources that otherwise might have been overlooked and enables users and the library to focus on a fruitful use of collections rather than dealing with different aspects of access, navigation and manipulation of the result sets. To resolve this issues tools like federated search / meta search tools and discovery services have come up.

The primary expertise of libraries is in the management of content as well as in creation of content. As such, most libraries depend on the expertise of third party for providing the unified search solutions. Adoption of standards and protocols are essential for a library for providing such services. If support for the search protocol is built into the library's tools, then the library can use it with a small code or convert the library's existing tools to support the new protocols. Librarians need to understand these standards and protocols to provide better interoperability among various services of the library and help in providing unified service to its users. Similarly the the developers of the library's tools will find it easier to provide services if common protocols were used.

2. Standards & Protocols related to Federated Search and Discovery Services

2.1. Z39.50 : Z39.50 is an ANSI/NISO standard for information search and retrieval. It is a protocol which specifies

data structure and interchange rules that allow a client machine to search from databases on a server machine and retrieve records that are identified as a result of such a search. Z39.50 protocol allows to communicate multiple computer systems on a network for the purpose of information retrieval. Z39.50 protocol enables users to search various databases located on different servers over networks or Internet through single search interface. It is used for search and retrieval of bibliographic records from multiple databases of the library. This protocol is not used by the Internet search engines. It is more complex, comprehensive and powerful than searching through http. Z39.50 has been extended to allow system feedback and inter-system dialogue. Z39.50 works in a client-server environment and acts as a common language that enables all the networked systems to understand the command. The name Z39 came from the ANSI Committee on Libraries, Publishing and Information Services which was named Z39. NISO standards are numbered sequentially and Z39 is the 50th standard developed by the NISO. The current version of Z39.50 was adopted in 1995 superseding earlier versions adopted in 1992 and 1988. Z39.50 provides rich vocabulary of search terms for search queries from the multiple databases with single search box. Z39.50 protocol facilitates the following features:

- v Sort : It allows users to sort and refine the searched results as per the requirement of the user.
- v Delete : It allows to delete unwanted results from the searched records, either entirely or for specified records.
- v Browse : It provides search and browsing facility through index lists of items such as subject terms, titles, author names, etc. It also provides flexibility to browse single database at a time or multiple databases.
- v Access Control : Z39.50 protocol allows administrator to access control through user ID and password.

This protocol is commonly used by many library catalogues and also some publishers provide the federates search services using this protocol.

2.2. SRU/SRW : SRU (SRU: Search/Retrieve via URL) is a web service protocol supported over both SOAP and REST for client-server based search. It was originally developed as a replacement for the NISO Z39.50 protocol. The first version 1.1 was released in 2004 and the latest version of SRU is SRU 2.0. The SRU protocol defines a request message (sent from an SRU client to an SRU server) and a response message (sent from the server to the client). This transmission of an SRU request followed by an SRU response is called a SearchRetrieve operation. Other than the SearchRetrieve Operation the SRU protocol defines two other operations namely, Scan and Explain. The Scan, operation supports index browsing, to help a user formulate a query. The Explain specification describes a server's Explain file, which provides information for a client to access, query and process results from that server.

The Abstract Protocol Definition of SearchRetrieve operation describes the data model, processing model and the result set model. The protocol defines the request parameters and the response parameters. The request parameters defined in the earlier version of SRU are query, startRecord, maximumRecords, recordXMLEscaping, recordSchema, resultSetTTL, Stylesheet and Extension parameters. The SRU2.0 added additional parameters, i.e.: queryType, sortKeys, Facet Parameters, RenderedBy, httpAccept, responseType and recordPacking.

The response parameters defined in SRU are numberOfRecords, resultSetId, record, nextRecordPosition, diagnostics, echoedSearch and RetrieveRequest. The default query language for SRU is the Common Query Language (CQL). The 'recordSchema' parameter in request defines the format of the record returned in the 'record' parameter of SRU.

SRW is a variation of the SRU. In case of SRU the request and response are conveyed via a URL over HTTP where as in SRW the request and response are made via an XML over the HTTP (webservice) as per the SOAP protocol.

The SRU/SRW services are commonly used by journal publishers for search services for their content. It can also be applied to subject gateways, library portals for exposing the content to federated search services.

2.3. NISO Metasearch XML Gateway (MXG) : MXG is proposed as an alternate to Z39.50 protocol and is based on the SRU protocol. The NISO MXG is a low-barrier-to-entry method for content providers to expose their content to metasearch application.

The MXG protocol is a simple message / response based on the NISO-registered Search and Retrieve URL (SRU) protocol. The metasearch provider send a query to MXG URLs via HTTP (Hypertext Transport Protocol) and in return gets a MXG compliant XML formatted response.

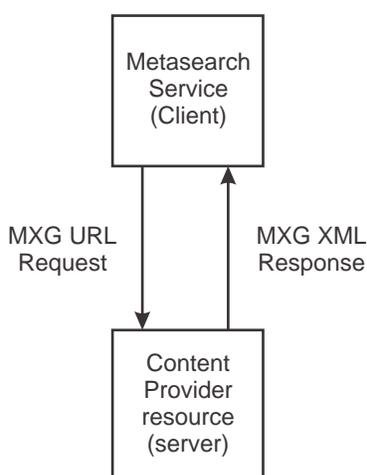


Figure : MXG Protocol Model (source : NISO Metasearch Initiative <http://www.niso.org/publications/rp/RP-2006-02.pdf>)

The MXG works in 3 steps as given in above model:

1. The Metasearch Service (MS) transmits an MXG URL request that incorporates the user's search query to a Content Provider's (CP) resource, usually a database.
2. The CP server receives and interprets the MXG URL and conducts the specified search query on its database.
3. The search query results are packaged into an MXG XML response, which is transmitted back to the MS.

The MXG implementation is recommended in 3 levels and the implementation at 3rd level is compliant with the SRU protocol. In level 1, the Meta-search service has to convert the user input into content providers search language. In level 2, the content provider gives an XML-formatted record that includes information about the resource, such as its host name and port and the database name. Optionaly, it may include human-readable information about the database(s) on the server such as its name, a database description, information about the indexes available for searching the database, and the schema that can be used to display returned records. The level 2 is extended by level 3 with additional feature to support a standard query grammar: CQL (Common Query Language).

The MXG recommends to have atleast on XML schema, although multiple schema for different Metasearch

Providers or different communities of users. It recommends the Dublin Core as one possible choice and suggests for adoption of additional schema for specific type of content like highly bibliographic content may find the MODS (Metadata Object Description Standard) schema useful or an e-learning community may use the LOM (Learning Object Metadata) schema.

The MXG protocol takes input of version and query as the request parameter with optional parameter of number of maximum records and starting record number. The response provides the version and number of records found along with record data which contains the schema and the record data for each record.

2.4. OpenSearch : It is a way for websites and search engines to publish search results in a standard and accessible format suitable for syndication and aggregation. It was created by A9.com, an Amazon.com company and made available under the Creative Commons License for open participation. The OpenSearch is built on XML and helps search engines and search clients to communicate by introducing a common set of formats to perform search requests and syndicate search results. So the search results are easy to process and display by a federated search service.

The OpenSearch consist of components mentioned below:

1. The Description elements which provides the details to identify and describe a search engine. It also describes the language, example query, encoding for the input and output content.
2. The OpenSearch URL template format describes how to query a search engine through the URL. It lists the parameters that can be used for making query.
3. The OpenSearch parameters for making a search query. It allows to query for the search term including count for number of results to display, starting page, startindex, language of output, input encoding and output encoding.
4. The query element used for defining the specific search request.
5. The response element that can be used by search engines to augment existing XML formats with search-related metadata. The most commonly used format are RSS 2.0, Atom 1.0 which provide list based results.

OpenSearch is commonly used by many libraries to provide search box facility in browsers for library catalogues or similar services of library. This facility is also provided by some publishers.

2.5. NISO Open Discovery Initiative : With the latest trend in information discovery, libraries are adapting to the new technology of index-based search in place of the traditional federated search for better search and discovery functionality.

Since the discovery services were widely accepted by libraries, NISO made an attempt to create "best practice" guidelines for discovery services named as 'Open Discovery Initiatives(ODI)' for creating transparency in discovery service. The ODI Group was established with a goal to:

- v Create ways for libraries to assess the level of content providers' participation in discovery services;
- v Help streamline the process by which content providers work with discovery service vendors;

- v Define models for fair or unbiased linking from discovery services to publishers' content; and
- v Determine what usage statistics should be collected.

The NISO ODI group made a survey of all the stakeholders of discovery service in 2012 which made the following findings:

- v Libraries are more interested in finding specific journals that are included in the discovery index than the publisher's packages or databases;
- v Libraries prefer the result lists to be resolved directly to a publication's original interface when the record comes from a primary, full-text content provider (where they have access);
- v Prefer link resolver as playing a pivotal role in linking and prefer libraries should have primary control of link resolution settings in discovery services, in order to manage access and prioritization of primary vs. secondary resources;
- v Prefer receiving usage metrics on total number of searches, list of search query terms, and URLs referring end users into the discovery service to better understand the user needs; and
- v Content providers to the discovery interfaces lack in providing open access indicators which will allow more free content available to users.

Based on the findings of the survey, NISO released the Recommended practice in June 2014. The recommendations are made for content providers as well as for discovery service providers are as follows:

- a) Content providers were advised to provide the content to the discovery service providers based on the KBART format with additional metadata for subject, abstract/description, content type and content format. Content providers are also advised to disclose their level of participation in discovery services to the library subscribers. It was also recommend that the transfer of data from content providers to discovery service providers should make use of existing standards where applicable. Most applicable standards are the OAI-PMH and the KBART. Also ResourceSync is being established by the NISO which strong potential to provide mechanism for the data transfer from the content providers to the service providers.
- b) It recommends the Discovery Service Providers to provide sufficient information about the content of their repositories to ensure an adequate evaluation of the content against the users needs. It recommends to provide the metadata of the content covered with publication title, date of coverage in case of journal or date of publication in case of monographs, standard identifiers (ISSN, ISBN), content type and format, and the depth of the coverage in the index. It recommend to use the KBART format in providing the metadata information. Discovery service providers are recommended to use fair linking policy in linking to the contents. The discovery service providers should ensure proper mechanism to handle primary metadata encoding formats, e.g., MARC, MODS, METS, VRA, DC, KBART, EAD, ONIX.

It also recommends the service providers to provide usage statistics to content providers as well as libraries. The library should be provided with the usage metrics for total number of searches per month, unique visitors per month, click-through per month, top 500 search queries, top referring URLs, etc. It is recommended to incorporate these metrics in future COUNTER code of practice.

It also provides two checklists (one for the content providers and one for the discovery service providers) which can be used by libraries for evaluation purpose.

3. Conclusion

Providing unified search and discovery of the resources to the users is one of the major goals of a library. It helps the library to maximize the usage of the library. To help achieve this goal, libraries need to make the most possible ways to create inter-operability among its services and resources. Various search standards and protocols like Z39.50, SRU/SRW, NISO MXG, OpenSearch help libraries in achieving the goal. The NISO ODI is a step towards standardization of the new index-based search landscape in the library community. The new ResourceSync Framework of NISO will also help libraries to create an automation in this new discovery environment. The libraries and librarians need to come forward to adopt these standards and protocols/guidelines and also ask the service providers to adopt these standards to create an easy to use inter-operable environment for the libraries.

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Visitors

Prof. Ved Prakash, President, Governing Council & Chairman, UGC, New Delhi

Prof. N. Mukunda, Chairman, Governing Board, INFLIBNET Centre

Dr. (Mrs.) Manju Singh, Joint Secretary, University Grants Commission, New Delhi

Prof. E V Ramakrishnan, Vice-Chancellor (In-charge), CUG, Gandhinagar

Prof. Shivaji Rao S Kadam, Vice-Chancellor, Bharati Vidyapeeth, Pune

Prof. Karmeshu, Dean, Computer System & Sciences, JNU, New Delhi

Mrs. Indra Kaul, Deputy Director, Indian Council of Social Science Research, New Delhi

Dr. R K Chadha, Additional Secretary, Lok Sabha, New Delhi

Dr. Jagmal Singh, Library & Information Officer at National Library of India, Kolkata

Prof. I. K. Ravichandra Rao, Professor, PEC Inst of Technology

Dr. P. Dastidar, Director, Ministry of Earth Sciences

Mr. Manish Negi, Thomson Reuters

Ms. Padma Muralidharan, Elsevier Science

Dr. Prakash Chand, Indian Journals.com

Staff News

Dr. Jagdish Arora, *Director*

Dr. Jagdish Arora was invited to make a presentation on activities of INFLIBNET Centre and National Virtual Library to the members of National Library Mission during their meeting held on 4th July, 2014 in the Central Secretariat Library, New Delhi. As a member of Finance Committee of the Central University of Gujarat, he attended its Meeting organised on 12th July 2014. As Chairman of the ICSSR-NASSDOC Committee on Documentation Services and Research Information (CDS&RI), Dr. Arora attended its meeting held on 16th July 2014. Dr. Arora is a member of the Committee constituted for setting up a Social Science Data Repository constituted by ICSSR. He was keynote speaker for the National Seminar on "Integrating ICT in Academic Libraries: Making a Difference in Knowledge Age" organized by the Central University of Karnataka, Gulbarga during August 12 – 13, 2014 in Gulbarga.

Mr. Yatrik Patel, *Scientist D (CS)*

Mr. Yatrik Patel was invited as Guest of Honour during Library Users Orientation programme at Gujarat University, Ahmedabad on 8th August, 2014. He delivered a lecture on Institutional Repository during the programme. He was also invited to delivered lecture on INFLIBNET Services for Engineering Colleges with special reference to SOUL & N-LIST Programme on 14th October 2014 at IIT Gandhinagar during two-day Workshop on Modernization of Library Services in Engineering Colleges organised by IIT Gandhinagar under TEQUIP Initiative of MHRD & Govt. of Gujarat during 13th to 14th October, 2014.

Mr. Abhishek Kumar, *Scientist C (CS)*

Mr. Abhishek Kumar was invited as an expert for delivering a detailed technical presentation on e-PG Pathshala during one-day Workshop under e-PG Pathshala Project at Centre for Women's Studies, Allahabad University on 12th September 2014.

Ms. Kruti Trivedi, *Scientist B (LS)*

Ms. Kruti Trivedi was invited to deliver a lecture on e-consortia based subscription during Library Users Orientation programme at Gujarat University, Ahmedabad on 8th August, 2014.



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Convention Highlights

The National electronic thesis and dissertation (ETD):

The National (ETD) is a special conference and have been part of academia becoming a global phenomenon, and The National Conference on ETD 2015 is second in the series. The first national conference was organized in JNU, New Delhi on March 22-23, 2012. The conference, planned at INFLIBNET Centre, Gandhinagar from 22nd - 23th January, 2015, would serve as an excellent educational opportunity to librarians, research scholars, supervisors and other ETD professionals from universities to build and maintain their digital repositories by interacting each other. [read more](#)



Important Dates and Venue

Important Dates:

Full paper(Only invited): 31st December 2014
Last Date of Registration: 10th Jan 2015
Infimation to Authors: 20th January 2015
The Event: January 22-23, 2015

Convention Venue:

INFLIBNET Centre (an IUC of UGC),
Infocity Area, Gandhinagar-382007
Gujarat, India



Participant Zone

Accommodation help number:

09428187272 (Mr. Ramiz Malek)
09913002231 (Mr. Kuldeep Malbada)

[Speakers](#)

[Full paper \(Only invited\)](#)

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Convener

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