Special Features of WEB-IRBIS64+ System Implementation at the Big Library[1]

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Abstract. The problems of transition to the new version of electronic catalogues provision in Internet are discussed in the paper. Differences between Web-IRBIS64+ and previous versions of software are analyzed. Primary tasks to Web-IRBIS64+ modifying and settings changing for system implementation at the big library are defined.

Keywords: electronic catalogue; OPAC; Web-IRBIS; E-Library.

1 Introduction

Software for electronic catalogue providing on the Internet is one of the libraries automation system IRBIS64 components. Until 2018 to solve this problem four IRBIS64 products different by their features and interface were submitted by system developer – ELNIT association:

1) Web-IRBIS64 (provides features to work with electronic catalogues);
2) "IRBIS64 full-text databases";
3) J-IRBIS (based on CMS Joomla! and oriented on library website creation in general);
4) automated workstation (AWS) "Reader" IRBIS128.

In SPSTL SB RAS since 1998 unique self-engineered on the WWW-ISIS platform [1] information retrieval system functioned. Since 2010 in SPSTL SB RAS introduction of electronic catalogue based on Web-IRBIS64 [2] started. Products (2), (3), (4) weren't used for clients. Further development of various Web-IRBIS64 services continued after introduction in SPSTL SB RAS.

2 IRBIS64+ system

In 2018 ELNIT association produced new libraries automation system IRBIS64+ intended for electronic library creation and maintenance. The main differences between IRBIS64+ and library automation system IRBIS64 are described below:

– full-text search;
– search results arranging;
– full texts browsing page-by-page;
– statistics of full texts using;
– adjustment of full texts access rights.

Major part of IRBIS64+ new features is opened for system users in end-user web-interface. According to user IRBIS64+ web-interface rewords web-interface of "IRBIS64 full-text databases" product in many respects. Retrieval interface containing query input box on natural language is suggested to user as a default. Following the query full-text search performs by full text pages and by bibliographical description treated as a text. For exact bibliographical retrieval performance additional interface is suggested. Description of IRBIS64+ web-interface features in detail is presented on the ELNIT association web-site [3].

In SPSTL SB RAS switch from IRBIR64 to IRBIS64+ in relation to library automation system server application and automated workspaces for Library staff was realized in may, 2019 (AWS "Cataloguer", "Circulation", "Acquisitions" etc.).

To realize this switch it was necessary to translate all Library databases (databases export from the previous system and import in the new one) and performing files of automated workspaces replacement.

New IRBIS64+ end-user web-interface wasn't utilized during the switch as it was necessary to conserve previous features for SPSTL SB RAS clients.

In current times in SPSTL SB RAS analysis of situation and planning of switch to new end-user web-interface continues.

3 Switch to Web-IRBIS64+ issues

First of all we need to define form of clients and SPSTL SB RAS users work with web-interface.

In SPSTL SB RAS Web-IRBIS it is possible to start work without authorization, to authorize only if necessary, for example, before document ordering. SPSTL SB RAS clients authorize without entering password, by library card number. Remote users authorize by identifier and password.

"Non authorization" approach is the simplest one for users. At the same time in Web-IRBIS log files sometimes it's impossible to distinguish one non-authorized user's appeal from another client's.

Contrary to Web-IRBIS on new Web-IRBIS64+ interface start page all users are invited to enter login and access password. Alternative type of work is system entry by special guest login.

In case of switch to new web-interface it will be necessary to modify logging interface: to provide possibility of account type choice (client, remote user) or to change "login" and "password" captions on the start page.

Russian Federation State All-Union Standard R 7.0.20-2014 [4] whereby enumeration unit of library electronic resources calls hit count is call (session), influences on choice of interface.

In this case in Web-IRBIS64+ necessity to consider the sessions arises. This requires special accounting mechanism setting up (additional fixation of authorization fact and of database logout). It will also require development of automated logout function in case of user's longstanding inactivity (for example during 10 minutes).

The next issue is related with realization of user's choice of database where bibliographical and/or full-text search will be performed.

In SPSTL SB RAS "with reference to the wealth of accessible databases it was decided to upgrade databases access menu combining databases in certain groups to make orientation in databases easier and to clear space on the screen" [2]. The interface which permits displaying hierarchic databases structure, marking databases and groups of databases for search was developed.

Database choice interface in Web-IRBIS64+ changed against Web-IRBIS. Databases choice now performs in drop-down menu (as Figure 1 shows).

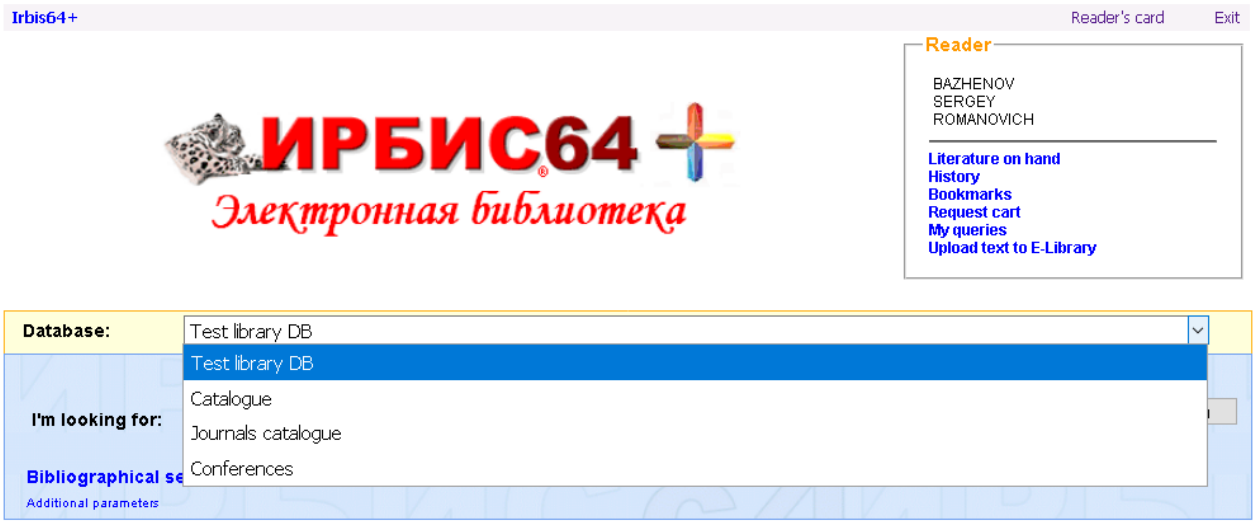


Figure 1. Databases choice menu in Web-IRBIS64+ test installation in SPSTL SB RAS.

Unfortunately this interface gives no possibility of databases groups organization; all databases are presented at the same level. Working with long databases list would be inconvenient for users. Function for determining databases where search will perform is absent. This part of system should be elaborated.

Web-IRBIS64+ search interface requires substantial improvements. In Web-IRBIS64+ full-text search is suggested to users foremost. This search works with words of recognized document full text and with bibliographical description elements considering as words. Bibliographical search is suggested as additional. "Bibliographical search" retrieval form access performs by left clicking. By default the form is hidden and has to be opened.

To our opinion this solution is actual in case if major part of database documents have their full texts attached. In SPSTL SB RAS electronic catalogues documents with full texts ratio doesn't exceed 1% of total database documents number yet. Bibliographical search is mostly preferential in electronic catalogues.

In Web-IRBIS64+ distribution kit main search form includes limited set of bibliographical search types such as: author, title, topics (Russian Federation Code of State Categories for Scientific and Technical Information, CSCSTI, mode of publication (as Figure 2 shows).

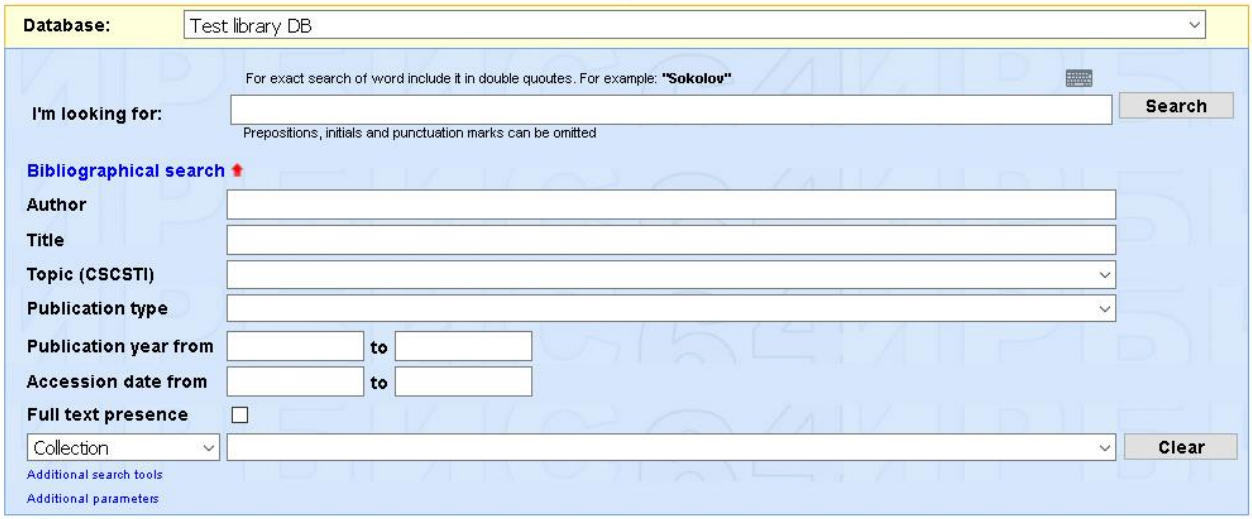


Figure 2. Web-IRBIS64+ full-text and bibliographical search form.

From our point of view, in the process of ordinary bibliographical search users ought to have access to all search types calibrated in library automation system for database (electronic catalogue). This function was developed by SPSTL SB RAS specialists earlier for Web-IRBIS. Search types list for each database stores on the server in file containing database name. Web-IRBIS loads search types from this file or presents default search types if the file is absent.

Instead of Web-IRBIS64+ main search form elements of "Extended search" developed in SPSTL SB RAS in 2011-2012 are suggested (Figure 3).

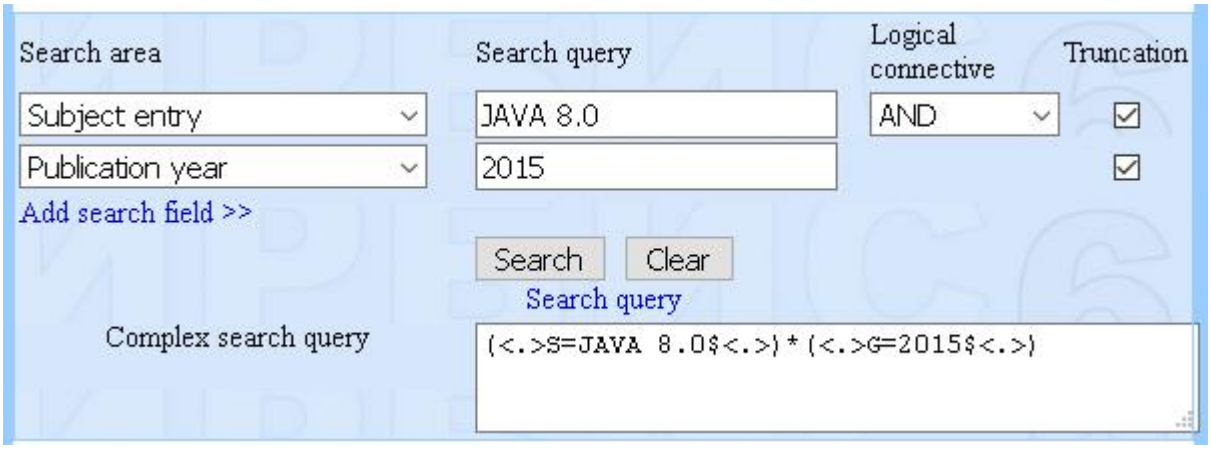


Figure 3. Extended search form in SPSTL SB RAS Web-IRBIS64.

As Figure 3 shows, user can make a query by various search types (areas). Herewith query elements may be combined by using logical operators (AND, OR and NOT).

Analysis of other search type situation in Web-IRBIS64+ showed that number of search modes lacks in new interface.

In Web-IRBIS64 convenient for users search query adjustment function (search by found) is available. In Web-IRBIS64+ search by facets is suggested instead. Facets, by developers definition, is "found documents distribution by certain elements of bibliographical description values, particularly author, publication year, theme" [3].

In Web-IRBIS64+ distribution kit search by vocabulary mode also isn't presented. This mode is especially useful in case if it's necessary to browse on the screen all vocabulary terms related with given term.

Topic search (CSCSTI) in Web-IRBIS64+ is presented in ordinary mode: only first level CSCSTI rubric may be chosen from catalog. Herewith rubric code isn't marked in catalog. This search mode ought to be modified to make all levels CSCSTI rubrics available for search, inter alia levels related with agriculture and forestry rubrics.

Since 2010 in SPSTL SB RAS electronic order features are essentially improved:

– existent forms of electronic order settings are modified;

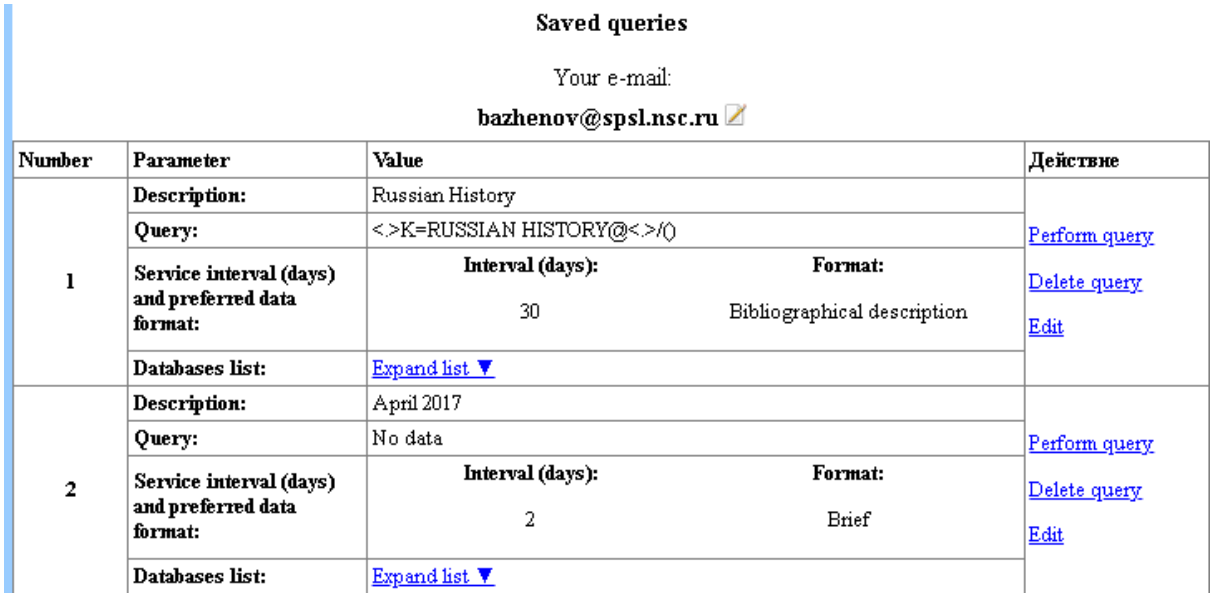
– development of special order forms by interlibrary circulation (manuscript, copy or electronic copy order) and revision of order status mode;

– order by SPSTL SB RAS image-catalogues is made available.

In SPSTL SB RAS image-catalogues order form feature depends on bibliographical description (BD) occurrence in the record. If it is missing, clients are suggested to enter requested publication BD elements by information given on

card picture, to verify document availability in electronic catalogue by key number and to dispatch the order. In certain cases navigation links from additional card to the main one and from image-catalogue record to electronic catalogue record are given.

In 2017 in SPSTL SB RAS "My saved queries" service was developed in Web-IRBIS64 (Figure 4).



Saved queries

Your e-mail:

bazhenov@spsl.nsc.ru

Number	Parameter	Value		Действие
1	**Description:**	Russian History		
	Query:	<.>K=RUSSIAN HISTORY@<.>/()		Perform query
	Service interval (days) and preferred data format:	**Interval (days):** 30	**Format:** Bibliographical description	Delete query Edit
	Databases list:	Expand list ▼		
2	**Description:**	April 2017		
	Query:	No data		Perform query
	Service interval (days) and preferred data format:	**Interval (days):** 2	**Format:** Brief	Delete query Edit
	Databases list:	Expand list ▼		

Figure 4. Saved queries browsing page in SPSTL SB RAS Web-IRBIS64. Fragment.

Within the service users have possibilities to save performed query as permanent; query list browsing, edition of service interval and databases list of databases where the query performs etc.

In Web-IRBIS64+ corresponding features are realized in simplified form (Figure 5).

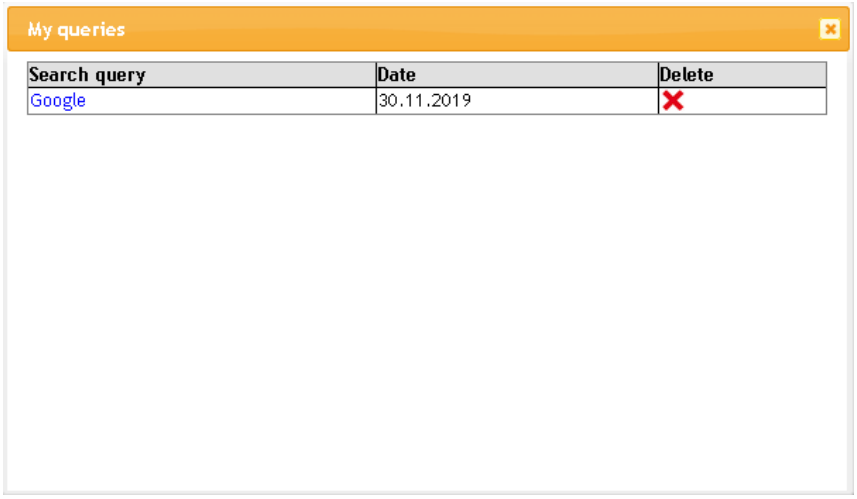


Figure 5. "My queries" window in Web-IRBIS64+.

In SPSTL SB RAS other essential modes also were realized earlier:
– database description output;
– information about number of records and last updating of electronic catalogue (database) date;
– application form for registration in remote user system;
– online library subscription form;
– pop-up tips containing information about document storage area (storage area sigla decryption);
– live support.
All these modifications would be carried in Web-IRBIS64+.

4 Conclusion

We assume that after all mentioned modification realizing Web-IRBIS64+ all necessary features for working in library electronic catalogues and full-text databases will be provided to clients and remote users.

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