

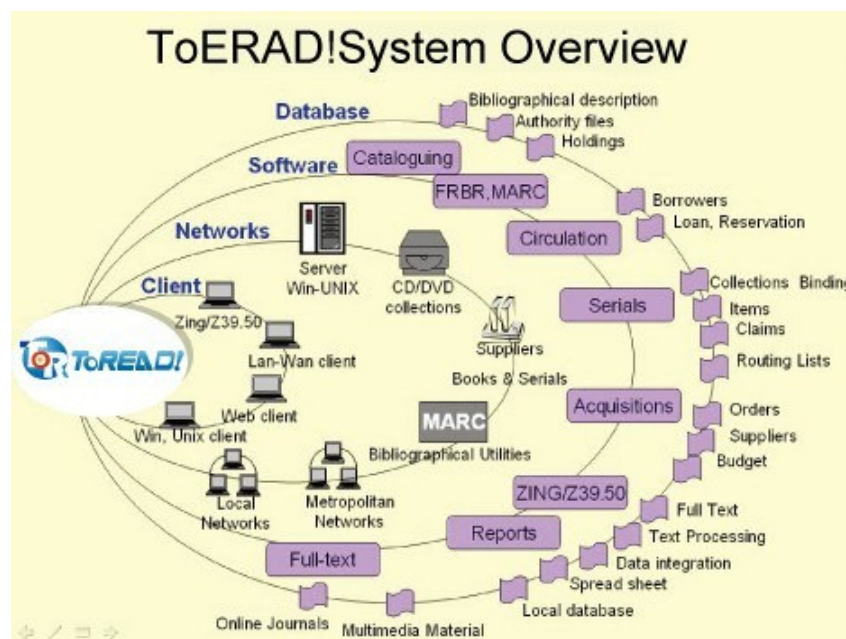
1. About ToREAD!

Starting with 1998, IME developed its own ILS solution initially called TLIB, thus, having at its disposal the technical instruments necessary to get involved in complex projects requiring reliable systems, tested for a long time in complex implementations, and in the same time requiring flexibility and developments adapted to each project to a certain extent.

Since 2002 a huge project started: TOREAD!. This was made possible because of the national policy of the Ministry of Culture. The National Automation Plan is a project going on since 1996 and each year large amounts are invested in library automation development. IME won almost all of these projects and got financial and human resources (librarians involved in these projects) for project development. Some of this projects included large-scale researches funded by governmental resources.

All this knowledge and technical expertise was invested in **TOREAD!** (The Information Navigator for READers). The main goal of the project was to build an ideal library system perfectly fit for any type of library in no matter what country. This approach was made possible by extensive investments in research and by the two international bids won by IME: **National Collective Catalogue of Romania** and **National Shared Catalogue of Moldavia**. Both projects aimed to the same objectives as the one TOREAD! did and a large number of senior librarians from both countries were involved in TOREAD! project. While coding was being done, in parallel for more than 1½ years system analysis was performed by the specialist library teams. This analysis included details about standards and internationalization. The internationalization was an essential component, as was the ability to handle many different national standards.

The result is not just another ILS, but a unique system with capabilities described in the followings.



2. Features

TOREAD! is not another ILS application. This state-of-art system is an ILS **application generator** that allows the System Administrator to completely define the application at runtime with no need to modify the source code. Parameterization concept usually referred by ILS system is extended by ToREAD! to a new approach: application generating. The menus, submenus, lists, forms, fields, relations, validation, access-rights are all customizable by System Administrator and allows the most flexibility ever possible for an ILS.

ToREAD! is designed to be a flexible, customizable, high performance, fast and easy to use, scalable, robust, secure and modular platform for the fast development of applications for modern libraries.

In fact, the functionality included in ToREAD! is more than the one in usual ILS systems and a more accurate term to define ToREAD! is NILS (Neo – Integrated Library System). Traditional ILS supposes a complex integrated environment with standard functionality for users (OPAC, WebOPAC) and staff (Cataloguing, Circulation, Acquisitions, Serials Control). Such systems are doing a great job for an old-style library working by itself. Modern libraries need not only their departments to be integrated, but also the library to be a part to the global flow of information between libraries or other actors holding information. Also, the endless process of improving library services requires new tools, new functionality and obviously a new type of software.

ToREAD! is such a software.

Main powerful features of ToREAD! family of products are mentioned in the followings. The new approach and innovative ideas included in ToREAD! make the difference between this information system and any other ILS. This section joins together most important and special features in order to allow you an overview upon this unique product.

2.1. General

- Best technologies available: Java, SQL, Oracle (general), MARC, ZING, SIP, FRBR (library).
- Platform independent: Windows, Linux, Mac OS X servers.
- N-tier (parallel) processing.

2.2. Application generation

- Customization (dynamically generating the application) at runtime done by the System Administrator (no source code modification needed).
- Control over the entire system for the System Administrator at runtime; user classes, users and the corresponding access rights are defined in order to access menus/submenus, lists, filters (logical databases), forms, fields; translation; full control over the interface objects.
- Also standard parameterization capabilities as defined by traditional ILS.

2.3. Internationalization

- Full UNICODE application (input / sort / store / search / retrieve).
- Custom sort rules and Custom sort strings (defined in respect with non-sorting words – stop words).
- Easy to translate (on the screen using a special tool); everything the System Administrator sees on the screen can be translated online seeing the effect at once. Current Chinese version showed at this conference is the proof of this.
- Multilingual thesaurus; advanced implementation schema allowing linkage between terms in different languages; ex. data described (catalogued) using a list of subject in one language (say Chinese) can be searched by users against English terms, for instance; The appropriate correspondence is done automatically by ToREAD!.
- Links between bibliographical records in different languages describing the same unit.

2.4. MARC

- Multiple MARC formats are allowed in the same database; records are stored and retrieved in the original format; ex. the bibliographical database can contain MARC21, UNIMARC and CMARC at a time each catalogued with the mentioned standard; records are searched all together and retrieved from the unified catalogue.
- Full MARC implementation (/B, /A, /H) and even more!
- Full MARC editor; forms available in short (condensed) format or extended (complete) format; System Administrator setup which field is available in each version of the form. Display also catalogued data in labeled or FRBR format.
- Extensions are possible for the System Administrator at runtime (no source code needs to be modified): adding new fields, place them into forms, runtime-indexes can be generated, fields can be included in the search list (OPAC) etc.
- Translation into easy-to-use labeled format for small libraries allowing them to handle records with complex descriptions operated by large libraries.
- FRBR style navigation in OPAC.

2.5. Federal/Collective/Union Catalogue

- Information (bibliographical descriptions or else) can be taken online from other Z39.50 sources.
- Multicasting; parallel searching for multiple databases no matter of their type (Library, web page, electronic resources database); the result page is updated intelligently to minimize the traffic and to present the user the updated responses from each source.
- Information regarding items availability is extracted from systems allowing this (ex. other ToREAD! systems or SIP2 servers).
- Online algorithms for data deduplication (ISBN, title, author, publisher, year, edition etc).

2.6. Shared Cataloguing

- Bibliographical authority mechanism for users and user classes.
- Three levels for data validation:
 - formal – data must comply to a certain rule – a regular expression;
 - authority lists – data is check against a validation table;
 - bibliographical authority level – data must be approved by a user with enough rights in order to give access to it for the public (visible in OPAC).

2.7. Multimedia

- ToREAD! allows the full set of multimedia descriptions; forms for each material type are already defined in the system; any of these can be customized at runtime by the System Administrator or new ones can be defined.
- Attaching multimedia files to multimedia descriptions operated with the above mentioned capabilities.

2.8. Reports

- Interactive reports generator with drap&drop capabilities.
- Free-text or tabular reports.
- On screen reports or export to PDF, RTF, HTML, XLS etc.
- Scheduled reports.
- Distributed reports (running on a different server).

2.9. Other

- Multiple editing windows at the same time, even in different modules.
- Customizable keyboard input. Ex. for Chinese five strokes or four corners method can be used to generate Unicode values.
- Barcode and RFID integration.
- Email, SMS, WAP integration.
- Z39.50, ZING protocols supported.
- Advanced conversion programs from/to ISO 2709, XML, XLS etc.
- Transactions log.
- Transactions validation.
- Transactions recovery.
- Advanced security options: x.509 v3 certificate used for data encryption.

3. Final word

IME and TRANSTECH Information Co., LTD. are Technology partners and this conference is the official announcement moment. This means a lot! A lot for IME working with such a high-level company and I can ensure you all, attendants to this

conference or TRANSTECH staff that IME understands the scale of such a partnership and is 100% committed to it.

This Technology partnership means also a lot for our Partner, TRANSTECH. We, the partners – each best in what it's doing – we, are not involved into another “big guy” (Producer) – “small guy” (Distributor) relationship. To often such policy of great ILS companies neglect local demands and consider only US demands to be top-priority. It's their choice, but not ours! We, IME and TRANSTECH, are both in the same team. Our Partner has access to the source code and to our knowledge and skills thus being able to include all local demands into the system without waiting for them to become important elsewhere.

Nobody outside Taiwan knows better how a system is supposed to work here. This expertise shouldn't be lost or neglected, but used as precious information for customer satisfaction. This is what we planned to do. To do for libraries in Taiwan!

ToREAD! is state-of-art software built with the best technology available.

Feel free to make use of it!