

# CRIS2018 extended abstract

## Title:

Hello CRIS, can a Library Software solution help you?

## Author:

Rudi Baccarne, *University of Antwerp*

## Abstract:

The aim of this paper is to present how a Library Information Management System is used to set up an institutional repository and how this repository fits into and contributes to the development of a virtual CRIS system for the University of Antwerp.

Brocade, in use since 2000, is the Library Information Management System developed at the University of Antwerp. The software was developed by Anet, the University's library automation team. Since 2008 Brocade has been used to feed the institutional repository of the University of Antwerp which had already been set up with Dspace. Bibliographic references with full texts were registered in Brocade and the whole collection was synchronized daily with Dspace.

Several local needs and technical solutions offered by Brocade made us decide in 2012 to abandon Dspace in favour of setting up a standalone Brocade repository. Today we can look back at this successful operation and present the way we have met different challenges by translating the strengths of traditional library solutions into new developments for repository and CRIS integrations. Apart from the technical aspect allocating the maintenance of repositories to libraries is facing the university library with some organizational challenges. (Bankier, J.-G., 2010)

Examples of traditional library skills are the longstanding experience in describing objects and making them retrievable. Researchers are described by means of author authority records. Publications are described using common bibliographic metadata models and the use of persistent and unique identifiers to match and/or de-duplicate items. (Mazov, N. A., & Gureev, V. N. (2014)). By extending Brocade with new metadata, attributes and relations to other authority-controlled objects such as research projects and research groups, opportunities and challenges were created in accordance with research information management and institutional repository needs. Unique identifiers are used where possible and play an important role with regard to interoperability with other systems.

With respect to setting up an institutional repository with Brocade, one of the major challenges was to get our content indexed by search engines. Although library systems are good at making their content retrievable by means of library catalogues (OPACs), it is known that apart from aggregating initiatives like Worldcat, library items are mostly not retrievable by search engines. (Blandford, A., 2015). By implementing search engine guidelines, creating sitemaps, adding schema.org and other metatags to the repository records we were able to get our repository content indexed while still using the Brocade indexing and OPAC software to provide advanced search functionality in the repository.(Arlitsch, K., & O'Brien, P. S., 2012) and (Hilliker, R. J., Wacker, M., & Nurnberger, A. L.,2013)

Although not initially our intention, during the process of continuously optimizing the repository and fulfilling different needs, we ended up with a Brocade solution that is able to support research information management in various ways. An example of such an optimization was adding the possibility to describe projects in Brocade, an addition that was needed to make the repository OpenAire compliant. Storing more detailed information about affiliations in order to better allocate publications to affiliations is another example of an improvement to the repository.

One way of supporting research information management with Brocade is to use Brocade as a standalone solution for setting up a lightweight CRIS system. This approach is created for partners that use the Brocade repository tool without having other systems or less convenient systems in use to store research-related information. Apart from describing publications, these partners use the Brocade repository to register related metadata about persons, organizations and projects. The stored information about research can be exported to CERIF-xml. The CERIF export can be used for the distribution of data to the Flemish Research Portal FRIS.

Another approach is to setup a virtual CERIF CRIS system by aggregating information from different research-related databases. This is the way research information is managed and exported to CERIF by the University of Antwerp. In this solution Brocade deals with the management of research publications in all of its facets.

The repository of the University of Antwerp captures related metadata about scientific output (publications, non-written output and datasets), researchers, projects and organizations. The repository is fed automatically with metadata from bibliographic, human resources and research databases. The database today gives an overview and/or contains metadata of about 120,000 repository items, 6,500 researchers, 17,000 projects and 400 organizations. Full text documents are archived in the repository for the majority of peer-reviewed bibliographic items and made open access available where possible.

The captured information can be exported to CERIF format. Specific CERIF export profiles can be configured within the Brocade interface. At this moment three profiles are created. An export to standard cerif, a cerif export for the Flemish Research Portal and a cerif export for the University of Antwerp systems.