

Sharing and Connecting Research Information with Brocade-CRIS software

Alain Descamps & Rudi Baccarne



euroCRIS Strategic Membership Meeting 2023, Nov 21 – 23,
Pamplona, Spain



Overview

- Introduction Brocade-CRIS
- Some context
 - University of Antwerp
 - Royal Museum of Fine Arts
 - Digital Open Science Platform University Colleges (DOSP)
 - Flemish Research Portal (FRIS)
- Generic Namespace Object Identifier (GNOI)
- OAI-PMH for CERIF
- Version Control for metadata
- SQLITE

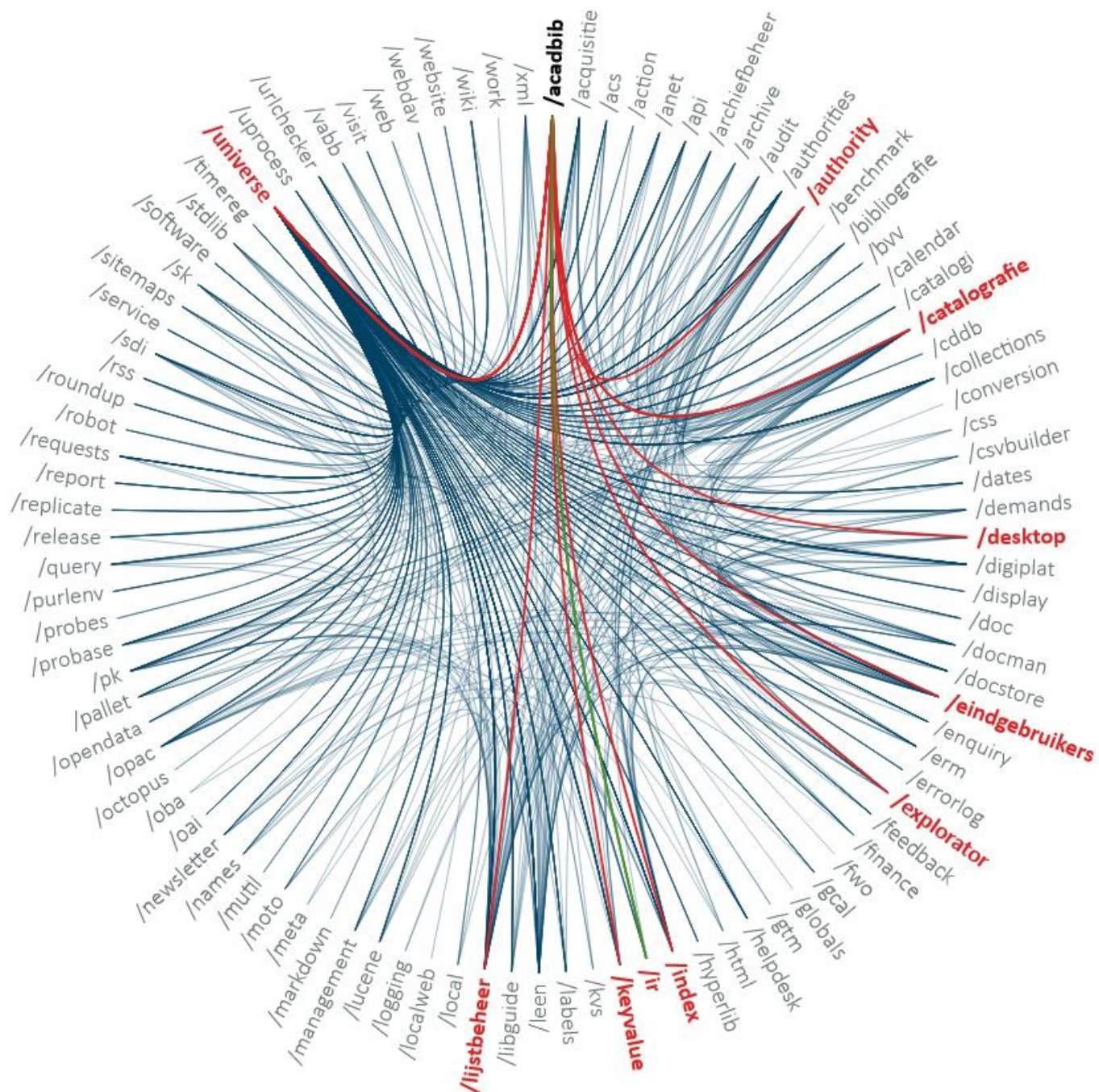
Brocade-CRIS

- Brocade = Library Management Software since 1998
- 2012 : Dspace replaced by Brocade-IR
- 2017 : first CRIS additions (projects, research groups)
- 2023 : full CRIS functionality

Institutional repositories

- Edit IR record
- Enter/edit project
- Enter/edit funder code
- New/edit post address
- Enter/edit organism/department
- Enter/edit contract

- Infrastructure
- Group processing
- selections
- Documentation
- Management functions



- Brocade repository module
 - For scientific output
 - Integrated with entities from Antigoon Research Database (Organizational Chart, Projects, Persons)
 - Transferred to FRIS
 - CERIF as exchange format for FRIS and University of Antwerp electronic curriculum
 - <https://repository.uantwerpen.be>

Linkable Object Identifier (LOI)

- LOI = prefix:set:number
 - Prefix (c, or, pr, if, ...) = type of record
 - Set = name of database (irua, kmska, ap, ...)
 - Record number

SUMMARY

Making biomedical sciences publications more accessible for machines / *Meenen, Van, Joris ; Leysen, Hanne ; Chen, Hongyu ; Baccarne, Rudi ; Walter, Deborah ; Martin, Bronwen ; Maudsley, Stuart.* - 2022. - 10.1007/S11019-022-10069-0

Entry in: OPAC IRUA | **OAI-PMH (marc21)** | OAI-PMH (catxml) | OAI-PMH (vabmods) | OAI-PMH (oai_dc) | Fris-Cerif XML format

Identifier	c:irua:185223
Creation	26.01.2022 09:52 (e:UA:147497)
Last change	14.02.2023 05:03 - usystem
Membership	Academische bibliografie Universiteit Antwerpen - Institutional repository UA
Language contents	English [Target language]
Relationships with different entries	<ul style="list-style-type: none"> In: [irat] IR - artikel naar tijdschrift in regelwerk issn [issnat]
Abstracts, contents and illustrations	Abstract [abstract]; E-info [full]
Subject data	<ul style="list-style-type: none"> A1 Journal article [a::pt.2:1] Documentation and information [a::02:1] Philosophy [a::10:1] Sociology [a::301:1] Pharmacology. Therapy [a::615:1] ...
Information for cataloguers	<ul style="list-style-type: none"> download from crossrefir at 2022-01-26T08:52:51.297424Z (crossrefir) by:e:UA:147497 form:iruaartikel (irdepform) eupro: uadres:ja (IRFORM) embargo op auteursversie tot eind juli zal wel volstaan (e:UA:147497) C1: [Van Meenen, Joris; Leysen, Hanne; Walter, Deborah; Maudsley, Stuart] Univ Antwerp, Dept Biomed Sci, Receptor Biol Lab, B-2610 Antwerp, Belgium. [Van Meenen, Joris] Univ Antwerp, Dept Translat Neurosci, Antwerp Res Grp Ocular Sci, B-2610 Antwerp, Belgium. [Chen, Hongyu] Weill Cornell Med Coll, New York, NY USA. [Baccarne, Rudi] Univ Antwerp, Anet Lib Automat, B-2610 Antwerp, Belgium. [Martin, Bronwen] Univ Antwerp, Fac Pharmaceut Vet & Biomed Sci, B-2610 Antwerp, Belgium. (WOS) ...
Template	Institutional repository [ir]

- Summary
- Actions
- Information
- Information
- Descriptive
- Relationships
- Content
- Subjects
- Impact
- Project info
- Research Output Sector Type
- Research group

ACTIONS

...

INFORMATION

download from crossrefir at 2022-01-26T08:52:51.297424Z

Bestand Bewerken Beeld Geschiedenis Bladwijzers Extra Help

mtsysteempr:ua x a New/process Proc x e:UA:169131 x Brocade Deskto x Brocade Deskto x Home - Researc x Pamplona Cated x Brocade Deskto x Brocade Deskto x a New/process Proc x

https://dev.anet.be/menu/project

Bladwijzers importere... a a ir deposits a Adbib a opacirua Software Bibliometrics ETD orcid Repositories webmaster Auteursrecht OA VABB Anet UA irqueries ISI >> Andere bladwijzers

anet.be

Brocade applications Institutional repositories Enter/edit project

Submit pr:ua:26874

IDENTIFICATION

pr:ua:26874 [Investigating the structural and molecular determinants of G protein-coupled receptor signaling bias. ua_40967 1198020N](#)

Metadata complete ?

Brocade XML format

Fris-Cerif XML format

ACTIONS

...

STATE

...

INTERNAL INFORMATION

...

NAMES

Name

Scope

Name (N)

Scope (N)

Identification
Actions
State
Internal information
Names
General
Related projects
Contract details
Funder data
Organisms involved
Participants
Subjects
Results

Submit or:ua:100

IDENTIFICATION

or:ua:100 [Medical genetics of obesity and skeletal disorders \(MGENOS\) ua_31278](#)
Number of linked records : 180
Metadata complete ?

Identification
Actions
State
Internal information
Names
General
Subjects
Contact details
Participants
Collections

ACTIONS

...

STATE

...

INTERNAL INFORMATION

...

NAMES

Name	Medical genetics of obesity and skeletal disorders (MGENOS) i
Scope	The general aim of the research is to identify genes that are relevant for two multifactorial conditions, osteoporosis and obesity, in order to understand the pathogenesis of these conditions and to reveal novel putative therapeutic targets. In order to obtain this, the specific aims of our work are: - identification of genes for monogenic conditions with an abnormal bone density - identification of genes involved in rat models with an increased bone mineral density i
Name (N)	Medische genetica van obesitas en skeletaandoeningen (MGENOS) i
Scope (N)	Het algemene doel van het onderzoek is om genen die relevant zijn voor twee multifactoriële ziektebeelden, osteoporose en obesitas, te identificeren op nieuwe inzichten te krijgen in de pathogenese van deze aandoeningen en nieuwe mogelijke therapeutische toepassingen te ontwikkelen. Daartoe zijn de specifieke doelstellingen van ons werk: - identificatie van genen voor monogene aandoeningen met een abnormale botdichtheid - identificatie van genen betrokken bij rat modellen met een verhoogde botmassa i

Generic Namespace Object Identifier (GNOI)

- LOI-based concept
 - Completely generic database design
 - Highly configurable and extensible
- In CRIS context used for all entities except research output
- Quality checks
- Version control
- SQLite export
- Cerif added as metadataformat to OAI-PMH server

Royal Museum of Fine Arts

- Brocade – CRIS infrastructure
 - IR
 - Projects
 - Contracts
 - Funders
 - Persons
 - Organisations
- Ingest to FRIS in CERIF xml
- Quality checks

Check procedures for research output

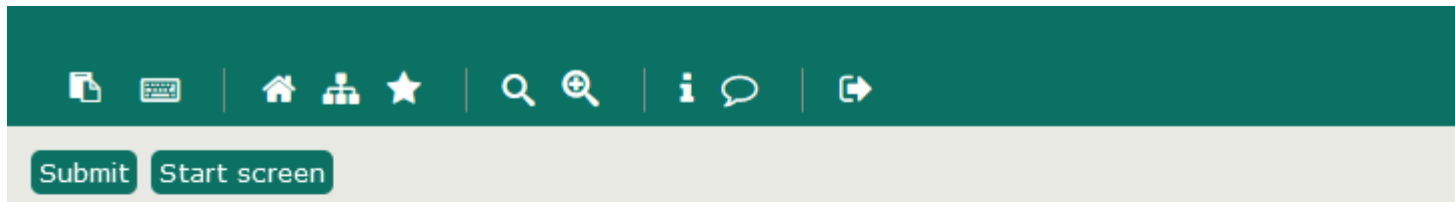
Identification	Title	Information
catchkau	Check the existence/validity of author functions	catchk [= Check procedure for cataloguing records]
catchkca	Check the existence/validity of corporate author functions	catchk [= Check procedure for cataloguing records]
catchkcc	Check het voorkomen van controlekarakters in de titel van catalografische records	catchk [= Check procedure for cataloguing records]
catchkchar	Check the occurrence of problematic characters in cataloguing records	catchk [= Check procedure for cataloguing records]
catchkda	Check possible duplicate author entries	catchk [= Check procedure for cataloguing records]
catchkdafu	Check possible duplicate author entries (with the same function)	catchk [= Check procedure for cataloguing records]
catchkdr	Check the existence of media	catchk [= Check procedure for cataloguing records]
catchkfris	Check records on FRIS compliancy	catchk [= Check procedure for cataloguing records]
catchkhtml	Check the presence of HTML entities	catchk [= Check procedure for cataloguing records]
catchkim	Check the existence of imprint type	catchk [= Check procedure for cataloguing records]
catchkin	Check the existence of content types, MIME types, etc.	catchk [= Check procedure for cataloguing records]
catchkinm	Check content fields for HTML elements, etc.	catchk [= Check procedure for cataloguing records]
catchkirua	Check irua records for miscellaneous	catchk [= Check procedure for cataloguing records]
catchkiruaform	Check irua records for miscellaneous, as part of a registration	catchk [= Check procedure for cataloguing records]
catchklg	Check the existence of the language type of the content	catchk [= Check procedure for cataloguing records]
catchklm	Check the existence of membership(s)	catchk [= Check procedure for cataloguing records]
catchklvd	Check cataloguing records in the lvd rule set	catchk [= Check procedure for cataloguing records]
catchknrs	Check bibliographic numbers	catchk [= Check procedure for cataloguing records]
catchknrty	Check the existence of number types	catchk [= Check procedure for cataloguing records]
catchknt	Check the existence of annotation type	catchk [= Check procedure for cataloguing records]
catchkre	Check the existence of relationships	catchk [= Check procedure for cataloguing records]
catchkti	Check the existence of title type, language of the title and the validity of the alphabetising position	catchk [= Check procedure for cataloguing records]
catchktih	Search for titles, which consist only of capital letters.	catchk [= Check procedure for cataloguing records]
catchktin	Search for titles, which consist only of numbers.	catchk [= Check procedure for cataloguing records]
catchkty	Check the validity of existing bibliographic types and codes (number types, title types, etc.)	catchk [= Check procedure for cataloguing records]
catchkutf	Check for the presence of illegal UTF-8 constructions	catchk [= Check procedure for cataloguing records]

- [c:irkmska:101](#) **Het realisme van Xavier de Cocks Overtocht van het veer op de Leie te Latem (1860), doel of middel?** / **error1** Research group missing in output meta data
- [c:irkmska:102](#) **James Ensor, Signora con ventaglio & Donna con scialle blu / Todts, Herwig ** Crocetta del Montello,** / **error1** Research group missing in output meta data
- [c:irkmska:103](#) **Beeldende kunst : beeldhouwkunst, schilderkunst, grafiek / Todts, Herwig ** Brasschaat, 2008** / **error1** Research group missing in output meta data
- [c:irkmska:104](#) **Een persoonlijk traject doorheen diverse artistieke voedingsbodems / Todts, Herwig ** Oostkamp, 20** / **error1** Research group missing in output meta data
- [c:irkmska:105](#) **The Solomonic column and the double spiral / Vandebroeck, Paul ** Antwerpen, 2016** / **error1** Research group missing in output meta data **error2** Internal author is not linked to A VODS type code with minimal 8 digits.(a::920.77
- [c:irkmska:106](#) **Tapestry as a brand for the Belgian State / Janssen, Elsje ** Antwerpen, 2016** / **error1** Author does not belong to research group of reasearch output.(a::920.236314:1.1)
- [c:irkmska:107](#) **Peter Paul Rubens and the decoration of the Jesuit church in Antwerp / Herremans, Valérie ** Antwer** / **error1** Research group missing in output meta data **error2** The internal author hasn't a vabb id, nor a Orcid.(a::920.98157:1) **error3** Interr (a::920.98157:1)
- [c:irkmska:108](#) **A Suspect Paradise: Studies on the Left Panel and Detail Symbolism of Hieronymus Bosch's So-Called `** / **error1** Research group missing in output meta data **error2** Internal author is not linked to A VODS type code with minimal 8 digits.(a::920.77
- [c:irkmska:11](#) **The 'Nameless Motif' : On the Cross-Cultural Iconography of an Energetic Form / Vandebroeck, Paul [** / **error1** Research group missing in output meta data
- [c:irkmska:110](#) **"Rubens" und die Passion Christi : entwerfen mittels einer Brainstroming -Sitzung? / "Rubens" and th** / **error1** Research group missing in output meta data
- [c:irkmska:114](#) **The Bigger Picture: Rubens and his Workshop during the Twelve Years' Truce (1609-1621) / Bulckens** / **error1** Research group missing in output meta data
- [c:irkmska:115](#) **Chronology / Bulckens, Koen ** Munchen-New York, 2019** / **error1** Research group missing in output meta data
- [c:irkmska:118](#) **Metal soaps on paintings by James Ensor (1860-1949) / Bonne, Karen [local] ** 2016** / **error1** Research group missing in output meta data
- [c:irkmska:12](#) **Chemical analysis of 16th to 19th century limoges school 'painted enamel' objects in three museums o** / **error1** Research group missing in output meta data
- [c:irkmska:120](#) **"Ein so schönes Bild ist nie in der Natur gesehen worden" : Peter Paul Rubens und die Landschaft / Ho** / **error1** Research group missing in output meta data
- [c:irkmska:121](#) **"Der grossen Verschiedenheit sowohl in Farbe als auch Aussehen sollen wir weise und rücksichtsvoll f** / **Sellink, Manfred ** Dresden, 2016**

Check for FRIS compliancy

Check procedures for GNOI entities

- Different levels (warning – error)
- Real-time error reporting



IDENTIFICATION

pr:kmska:39643 [Tentoonstellingsproject] Jan Cox : profiel van een kunstenaarschap kmska_61

Number of linked records : 1

Metadata complete ?

-1/10

ACTIONS

...

Error!

Caution! An error has occurred. Nothing will be recorded until all errors have been resolved!



Mandatory input.

Error messages...

A project must have a VODS type subject, with VODS id of minimal length 8, that does not starts with 07.

A project must have at least one participant as promotor.

Mandatory input.

OK

Identification	Title	Information
adrunique	Test for the uniqueness of an address	Postal address [adr]
ctrunique	Test whether internal number is unique	Contract [ct]
funrunique	Test whether internal number from funder is unique	Funder [fu]
ifcontainerrelationsvalid	Test of de content "Relaties" geldige data bevat.	[E?say:metaGnoi.cgi] [if]
ifcontainervalid	Test of de content "Verpakking" geldige data bevat.	[E?say:metaGnoi.cgi] [if]
ifgeneralvalid	Test of de content "Algemeen" geldige data bevat.	[E?say:metaGnoi.cgi] [if]
ifmagplacelocationvalid	Test of de content "Plaatsgegevens" geldige data bevat.	[E?say:metaGnoi.cgi] [if]
ifmagplacelrelationsvalid	Test of de content "Relaties" geldige data bevat.	[E?say:metaGnoi.cgi] [if]
ifnrint	Test of intern nummer is ingebracht.	[E?say:metaGnoi.cgi] [if]
ifnrunique	Test of intern nummer uniek is over GNOI systeem heen.	[E?say:metaGnoi.cgi] [if]
orcodes	Test whether all entered codes exist	Organism [or]
orfris	Check if data complies to FRIS	Organism [or]
omrint	Test whether internal number has been registered.	Organism [or]
omrunique	Test whether internal number is unique	Organism [or]
prcodes	Test whether all entered codes exist	Project [pr]
pfris	Check if data of a project complies to FRIS	Project [pr]
pmrint	Test whether internal number has been registered.	Project [pr]
pnrunique	Test whether internal number is unique	Project [pr]
prstartend	Test whether a project has a start and end date.	Project [pr]
tgcodeszhridentity	Test of de codes bestaan in content identity	Asset [tg]
unnrint	Test of intern nummer is ingebracht.	Archival unit [un]
unnrunique	Test of intern nummer uniek is over GNOI systeem heen.	Archival unit [un]
unxloi	Test of velden bestaande LOI's bevatten.	Archival unit [un]
unxmeta	Test of velden geldige metainformatie bevatten.	Archival unit [un]
xmultidfdut	Mandatory input on names (default, dutch)	[E?say:metaGnoi.cg*] [*]
xmultidfduteng	Mandatory input on names (default, dutch, english)	[E?say:metaGnoi.cg*] [*]
xmultidfeng	Mandatory input on names (default, english)	[E?say:metaGnoi.cg*] [*]

Digital Open Science Platform (DOSP)

- Connection Brocade IR with DOSP platform of Flemish University colleges
- Data transferred to DOSP in CERIF xml and according to OAI-PMH protocol
- Data transferred from DOSP via SOAP API and stored in GNOI framework

OAI-PMH for GNOI entities

<https://dev.anet.be/oai/orua/?verb=ListRecords&metadataPrefix=cerif&set=search:biology>

<https://dev.anet.be/oai/prkmska/?verb=ListRecords&metadataPrefix=cerif&set=search:ensor>

<https://dev.anet.be/oai/prkmska/?verb=ListRecords&metadataPrefix=cerif&set=search:rubens>

rudi.baccarne@uantwerpen.be
alain.descamps@uantwerpen.be