

Leverage DSpace

for an enterprise, mission critical platform



Andrea Bollini

Head of Open Source and Open Standards Strategy

Michele Mennielli International Business Development

Talking about

Who we are...

Can an IR be part of a CRIS/RIMS?

What the users need

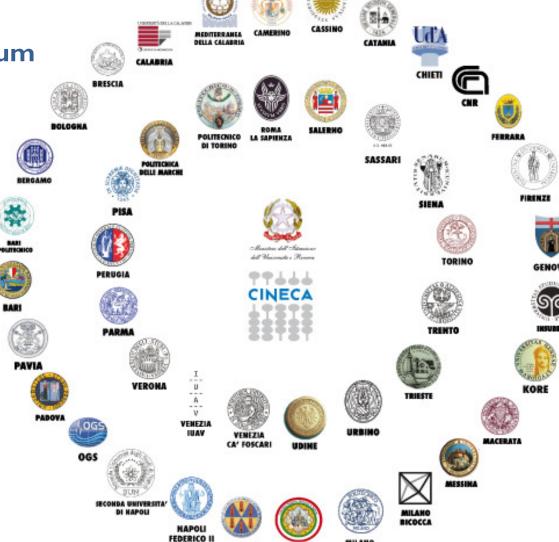
Limit and solution to use DSpace at large

/ Interuniversity Consortium

- / Not for Profit
- / Founded in 1969
- / Headquarter in Bologna

/ 75 Members

- / 70 Universities
- / 4 Research Institutes
- / Ministry of Education
- / Employees: > 900
- Offices: Bologna, Milan & Rome
- / Turnover: > 100M

























Institutional



EUNIS

Board Member | Interoperability TF | Business Intelligence TF | BencHEIT TF



euroCRIS

Board Member | DRIS/Best Practice TG | Architecture TG | CERIF TG



CHEITA

Leading Member | Benchmarking IT Group | Research Group



Groningen Declaration

Founder Member

Technological



DSpace

Steering Committee | 2 Committers | Registered Service Provider | DSpace-CRIS



EAIE

Student Mobility Standard: RS3G



OpenAIRE

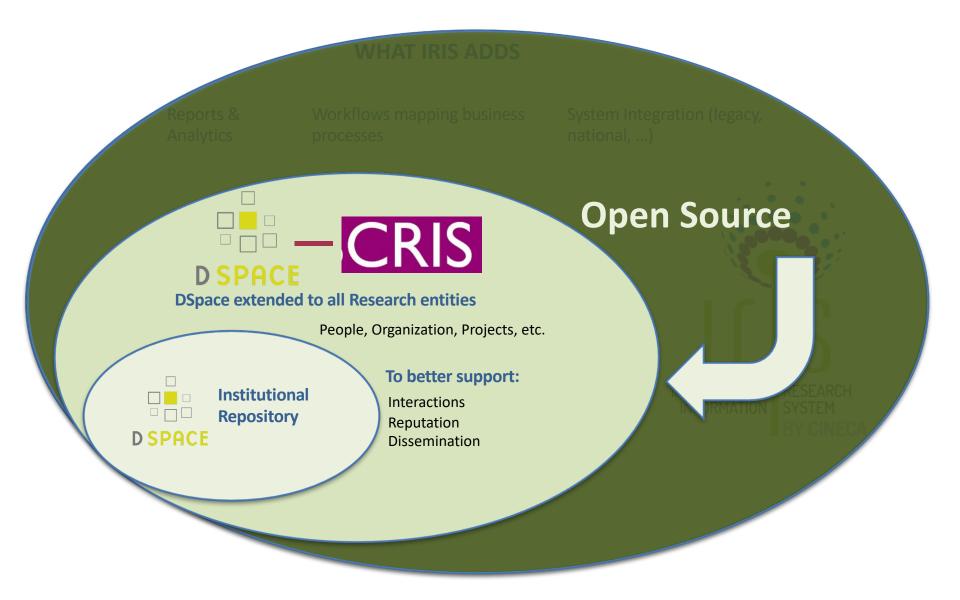
National Open Access Desk



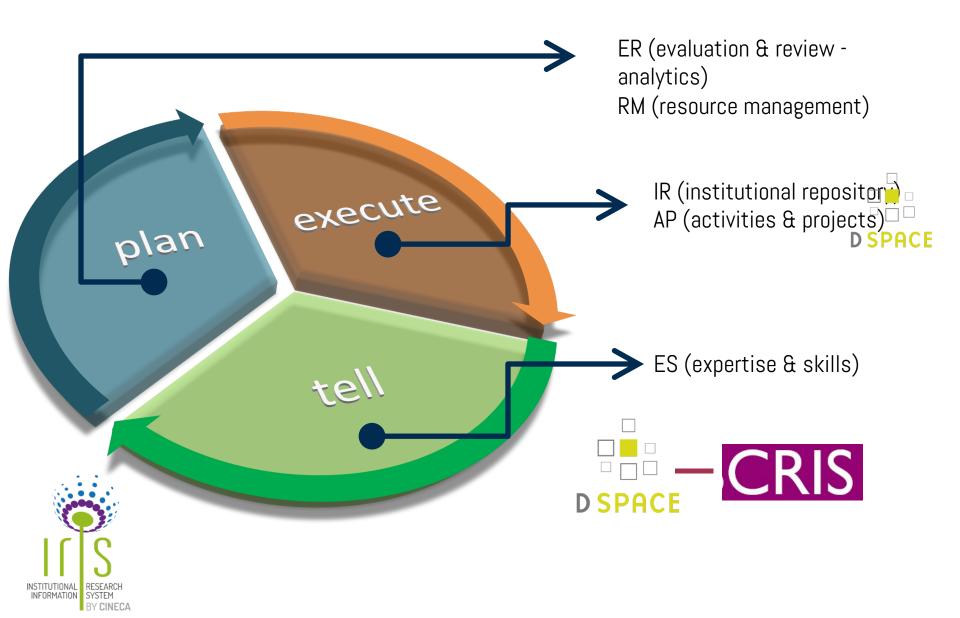
Pentaho

Member of the Advisory Board

The Cineca's perspective



Support the whole Research Life cycle



IRIS Adoption in Italy



45



10



5



Production (39)

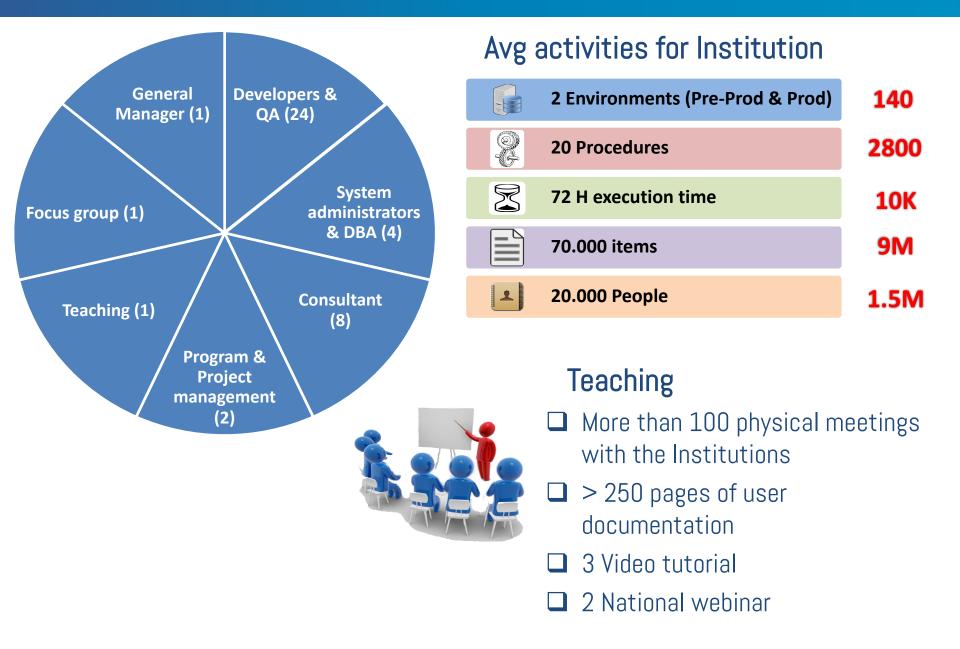
Scheduled (21)

| Time | # Institutions | | |
|---------------|----------------|--|--|
| Sept-Dec 2014 | 7 | | |
| Jan-May 2015 | 27 | | |
| Jun-July 2015 | 24 | | |
| Late 2015 | 2 | | |

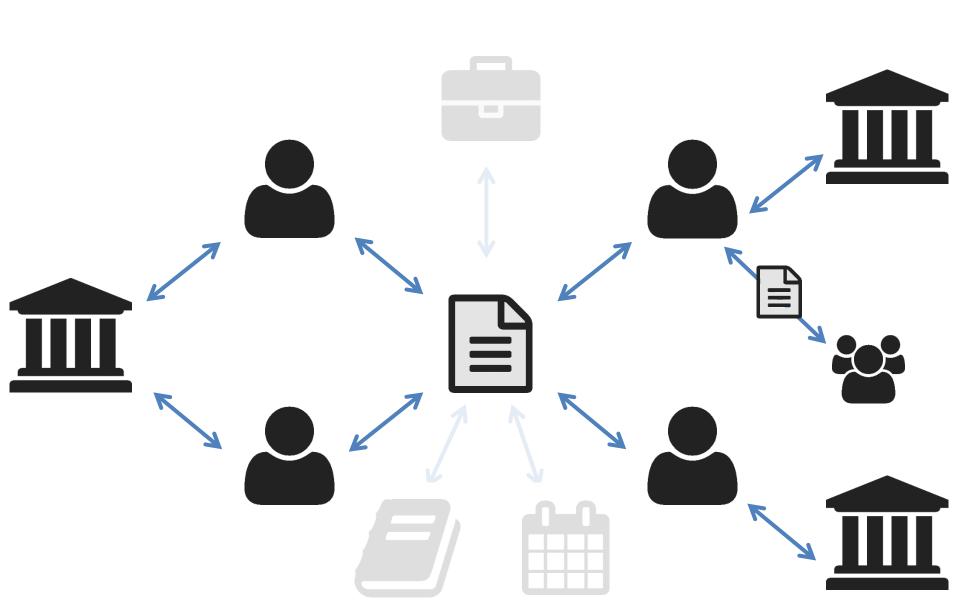
| 8 (Più di 150K*) | |
|---------------------------|-----|
| 9 (100K- 150K*) | |
| 16 (50к- 100К*) | |
| 27 (< 50K*) | * N |

* Number of items

The dimensions



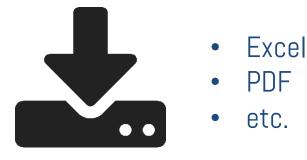
Which is the value proposition?

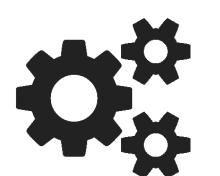




Reporting - list

- Ability to list publications filtered by several criteria:
 - Types: Journal articles, books, etc.
 - Author's affiliation, role, research interest, etc.
 - Subject categories
 - Date
 - Any publication metadata can be used
 - → Including bibliometric information retrieved from external database like PMC, Scopus, Web of Science





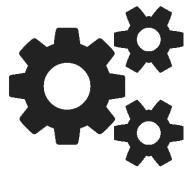
- Metadata
- Filters

Reporting - count

- Ability to count publications, aggregate index by several criteria:
 - Types: Journal articles, books, etc.
 - Author's affiliation, role, research interest, etc.
 - Subject categories
 - Date
 - Any publication metadata can be used
 - →Including bibliometric information retrieved from external database like PMC, Scopus, Web of Science



Excel, PDF, etc.

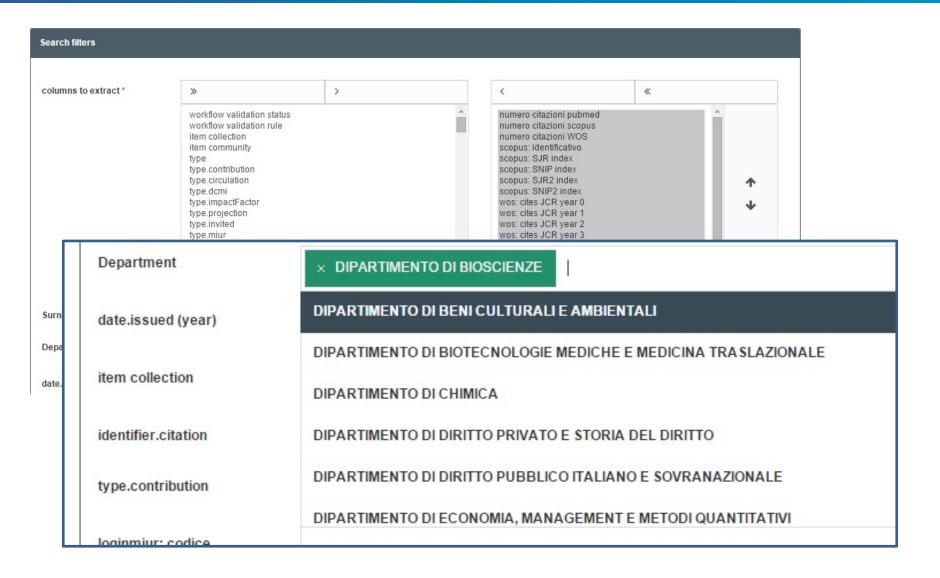


Metadata, Filters



Visualize

Configure the report



IRIS: matching indicators

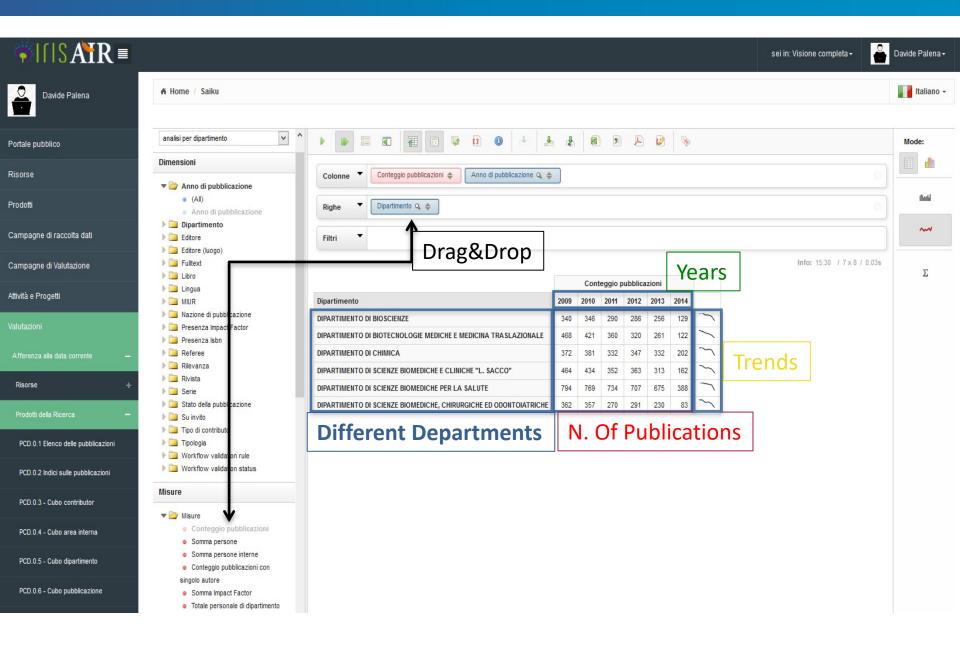
| enco alla data corrente - pubblicaz | ioni, contrib | outi, workf | low | Cit | ations | | | Index | | I.F. |
|--|---|----------------------------------|-------------------------------|-----|------------------------------|----------------------|-----------------------|-----------------------|------------------------------|--------------------------|
| tte | numero citazioni ⇔ google scholar | numero citazioni \$ pubmed | numero citazioni scopus | 0 | numero citazioni ≎ WOS | scopus: SJR index | scopus: SNIP index | scopus: SJR2 index | scopus: SNIP2 \$ index | wos: impact factor |
| earch for magnetic monopoles in $\sqrt{\text{s=7 TeV}}$ pp collisions with the TLAS detector | $\overline{}$ | | | 2 | 3 | 0,633 | 3,219 | 4,537 | 2,417 | 7,943 |
| earch for Production of Resonant States in the Photon-Jet Mass istribution Using pp Collisions at sqrt[s]=7 TeV Collected by the ATLAS etector | | | | 3 | 3 | 0,633 | 3,219 | 4,537 | 2,417 | 7,94 |
| he threshold region for Higgs production in gluon fusion | | | | 4 | 2 | 0,633 | 3,219 | 4,537 | 2,417 | 7,943 |
| olloidal aggregation in microgravity by critical Casimir forces | | | | 5 | 6 | 0,633 | 3,219 | 4,537 | 2,417 | 7,943 |
| earch for low-mass dark-sector Higgs bosons | | | | 5 | 12 | 0,633 | 3,219 | 4,537 | 2,417 | 7,94 |
| earch for Pair Production of a New b' Quark that Decays into a Z Boson nd a Bottom Quark with the ATLAS Detector | | | | 7 | 5 | 0,633 | 3,219 | 4,537 | 2,417 | 7,94 |
| lew isomers in the full seniority scheme of neutron-rich lead isotopes : ne role of effective three-body forces | Du | blicatior | | 7 | 7 | 0,633 | 3,219 | 4,537 | 2,417 | 7,94 |
| search for to Resonances in Proton-Proton Collisions at √s=7 TeV with the ATLAS Detector | | Diffeation | 13 | 8 | 8 | 0,633 | 3,219 | 4,537 | 2,417 | 7,94 |
| earch for a Light Higgs Boson Decaying to Long-Lived Weakly nteracting Particles in Proton-Proton Collisions at √s = 7 TeV with the TLAS Detector | | | | 10 | 4 | 0,633 | 3,219 | 4,537 | 2,417 | 7,94 |
| ncilla-assisted calibration of a measuring apparatus | | | | 10 | 8 | 0,633 | 3,219 | 4,537 | 2,417 | 7,94 |
| digh-order-harmonic generation and superradiance in a seeded ee-electron laser | | | | 12 | 8 | 0,633 | 3,219 | 4,537 | 2,417 | 7,94 |
| leasurement of the ZZ Production Cross Section and Limits on nomalous Neutral Triple Gauge Couplings in Proton-Proton Collisions t sqrt[s]=7 TeV with the ATLAS Detector | | | | 12 | 8 | 0,633 | 3,219 | 4,537 | 2,417 | 7,94 |
| Controlled Dicke subradiance from a large cloud of two-Level systems | | | | 13 | 16 | 0,633 | 3,219 | 4,537 | 2,417 | 7,943 |

Prima

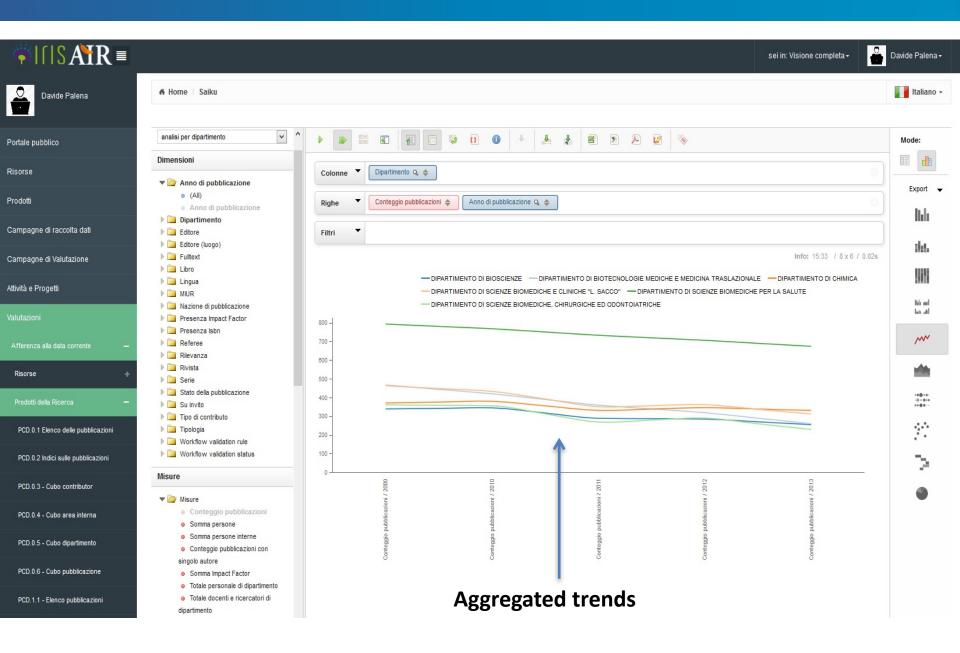
Opzioni di esportazione: CSV XEXCEL XML PDF WRTF TAB

Ultima

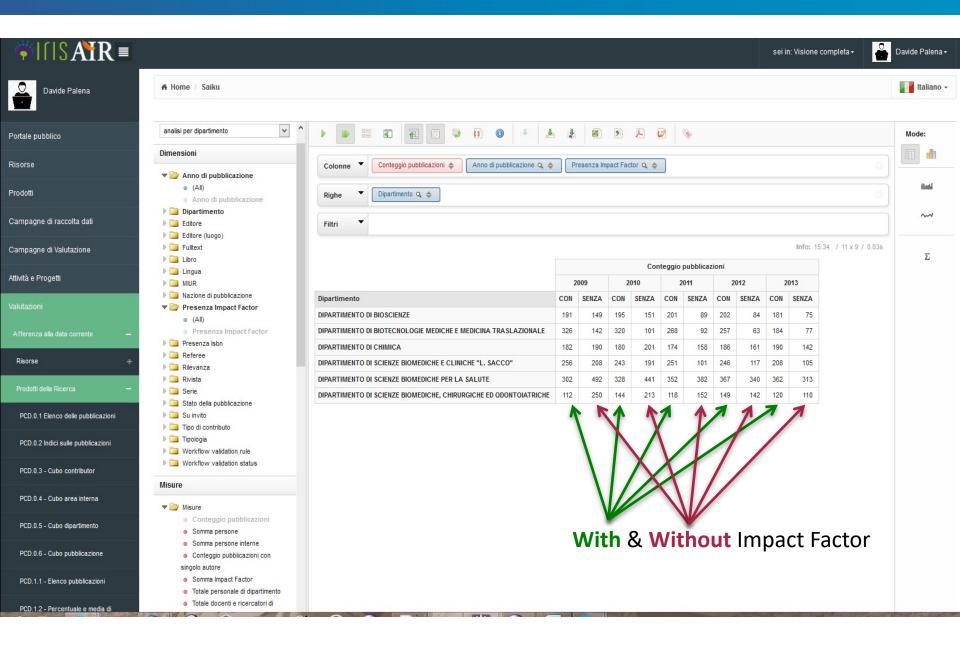
IRIS: Publications & Departments_1



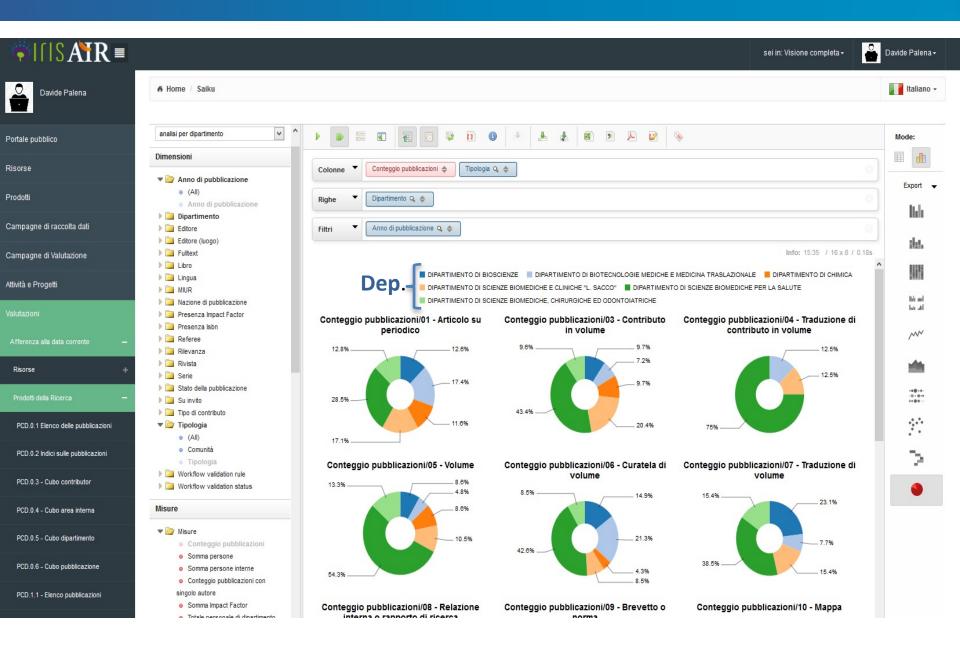
IRIS: Publications & Departments_2



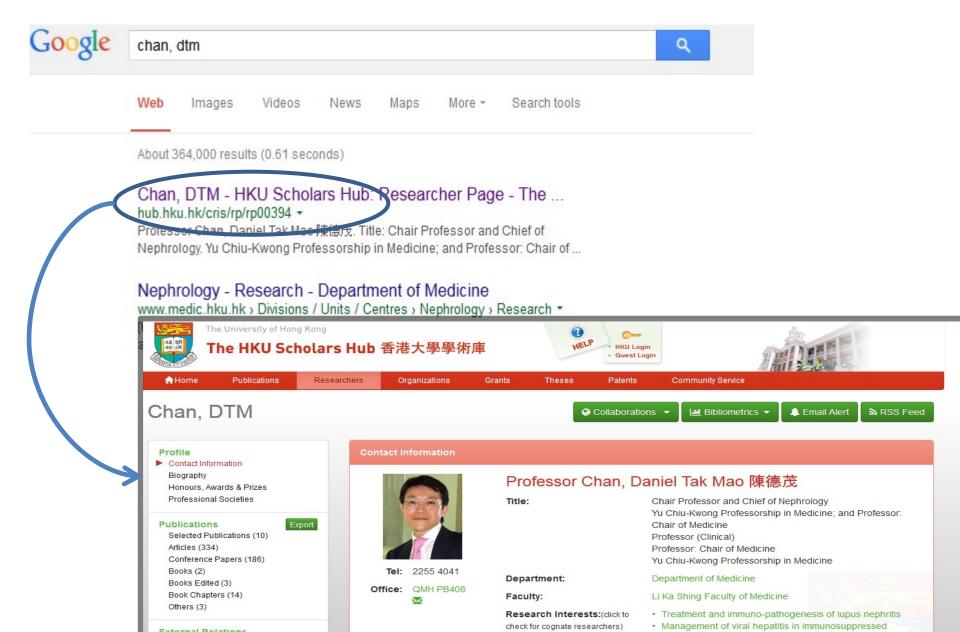
IRIS: Impact Factor



IRIS: analysis of publications



Maximize exposure on the web



Researchers

Home

The HKU Scholars Hub 香港大學學術

Organizations

HKU ResearcherPage: Tam, PKH

Tel:

Publications

Cheng,

Article: Genome-wi La File Download content.pdf **Basic View** Metadat Contact the author(s)? Title athors D Links for fulltext Tang, C

2857 8213

Faculty

2819 9296

Office: KB 1040

Professor Tam, Paul Kwong Hang 譚廣亨

Title Honorary Professor

Professor: Chair of Paediatric Surgery Director, Knowledge Exchange Office

Professor (Clinical)

Li Shu-Pui Professorship in Surgery Vice-President and Pro-Vice-Chancellor

Dept: Department of Biochemistry

President's Office

Knowledge Exchange Office

Department of Surgery

Li Ka Shing Faculty of Medicin

Li Ka Shing Faculty of Medicine

General Information

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Publisher Website:

Li Ka Shing Faculty of Medicine > Name:

Tel: 2819-9175 Fax: 2855-9742

Address: **FMA**

Webpage: http://www.med.hku.hk

Key People

| • | Dean | Professor Leung, GM 👤 | 2819 9210 🔤 |
|---|----------------|-----------------------|---------------------------------------|
| | Associate Dean | Professor Lau, WCS | 2255 3603 2 2255 4763 2 |
| • | Associate Dean | Professor Law, WL 👤 | |
| • | Associate Dean | Professor Leung, SY 👤 | 2255 4401 |
| • | Associate Dean | Professor Wong, DSH 👤 | 3962 1413 🔤 |

Schools

Faculty Secretary

Grant Number

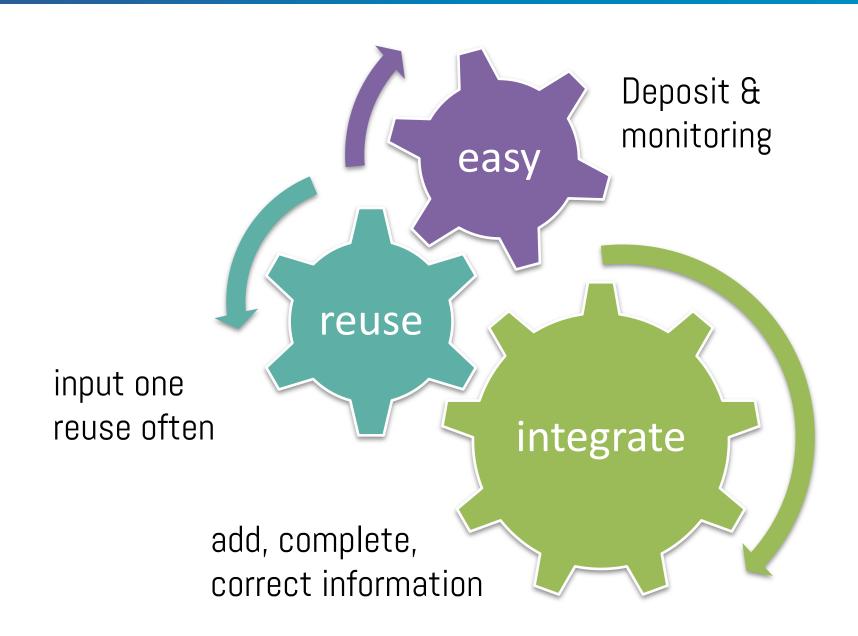
HKU 775907 M HKU 765601 M 200910159040 200811159 006 200911159190 AoE/M-04/04 AOSBR C-07-02

il (HKV 775907M to PK-HT and HKU Search (200910159040 and also received from the University Grants 02 to DC). The funders had no role in study in of the manuscript.

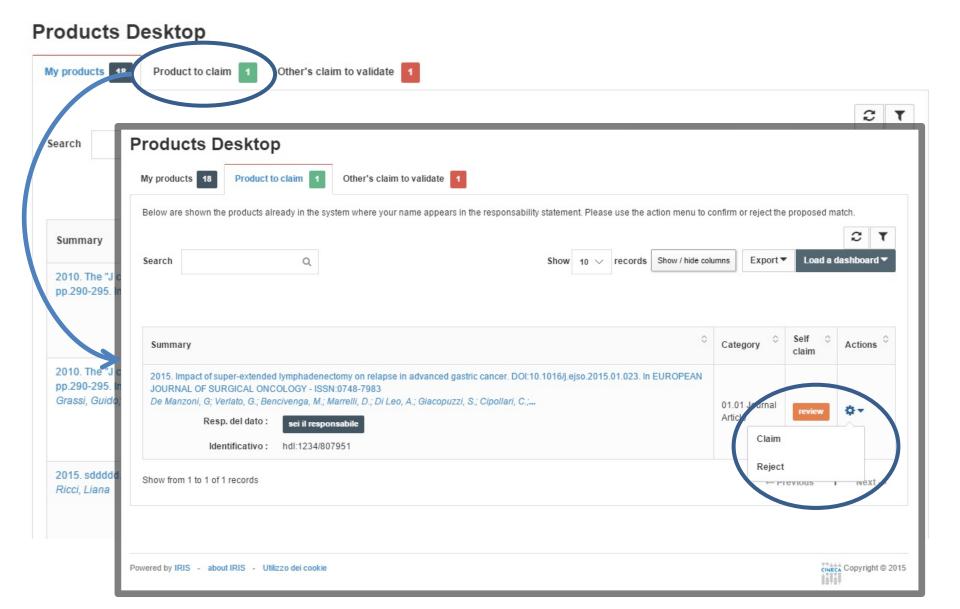
newly discovered Hirschsprungs

Ms Tsang, JWS

What is needed to involve researcher

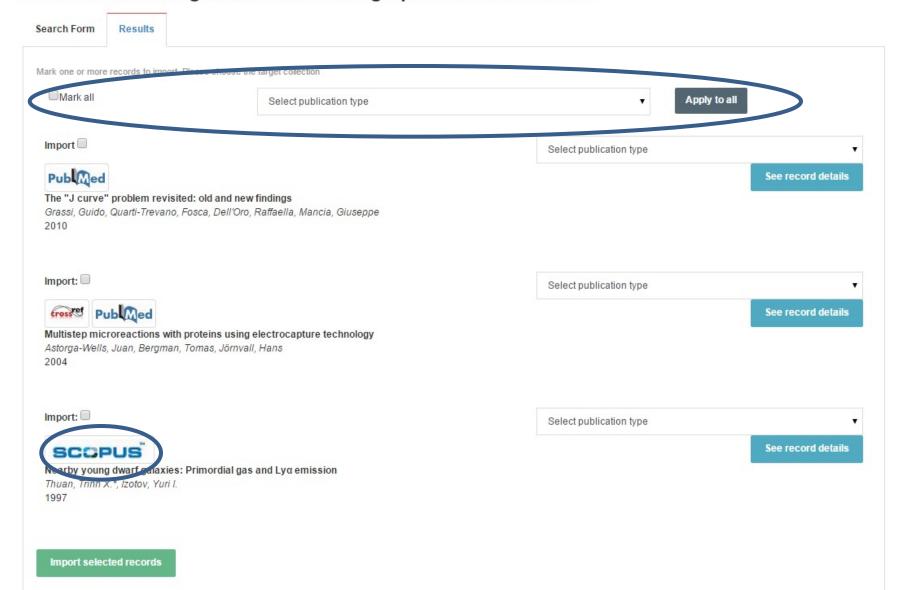


A modern and efficient MyDSpace

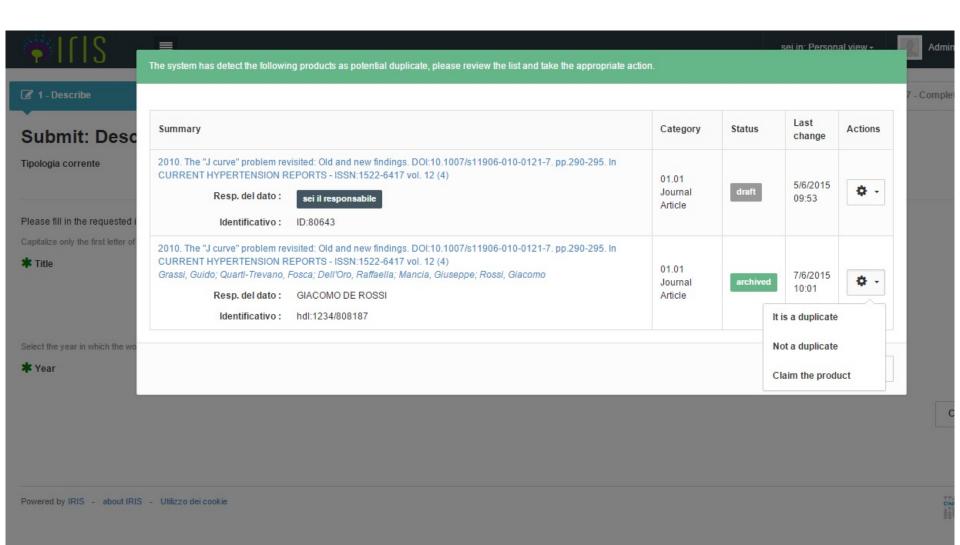


Enhanced import capability

New submission: get data from bibliographic external service

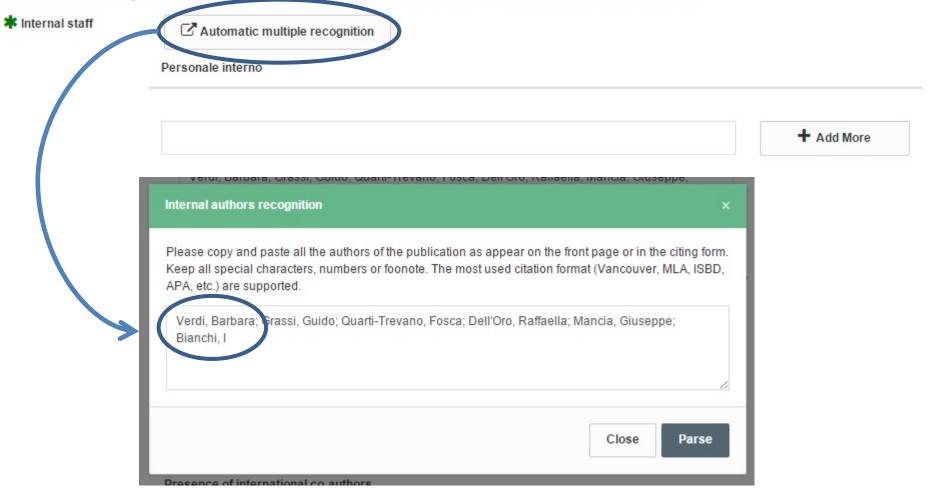


Duplicate detection



Wizard to map the authors to staff directory

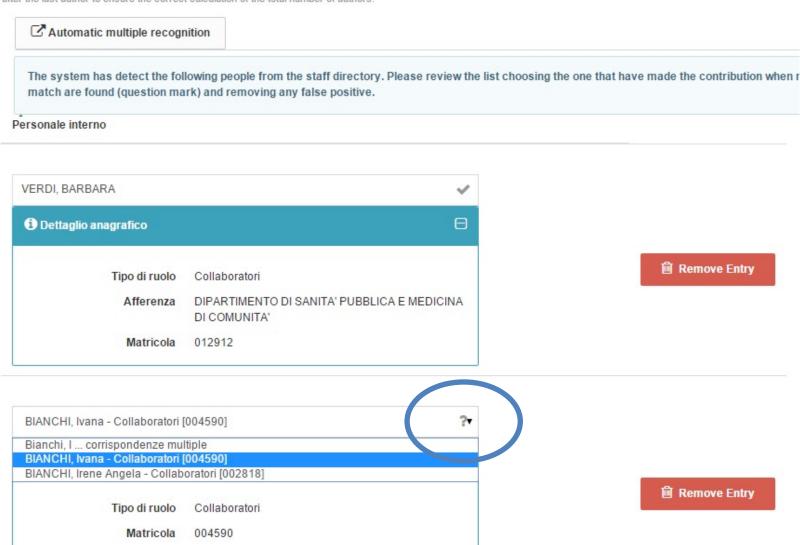
We recommend the use of the feature "Multiple automatic recognition". You will see a box where you can type or paste the names of the authors in the original format. Subsequently, the field "Author / s" will be automatically filled in by the system, reformatted as provided by the platform (LastName, FirstName, LastName2, FirstName2,; LastNameN, FirstNameN). The number of authors will be automatically calculated too. Do not insert a "·" after the last author to ensure the correct calculation of the total number of authors.



Wizard to map the authors to staff directory

automatically filled in by the system, reformatted as provided by the platform (LastName, FirstName2,; LastNameN, FirstNameN). The number of authors will be automatically calculated too. Do not insert a ";" after the last author to ensure the correct calculation of the total number of authors.



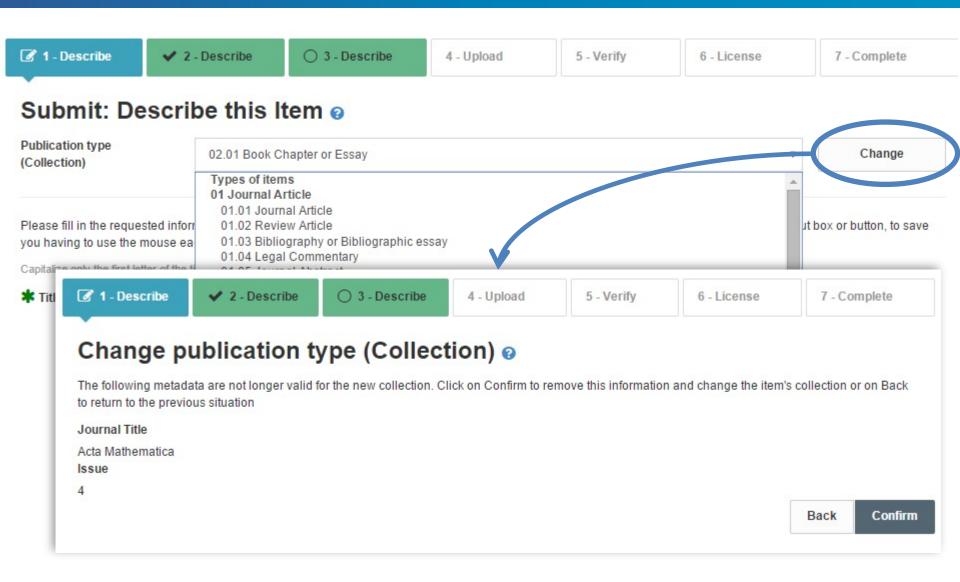


Journal linkage

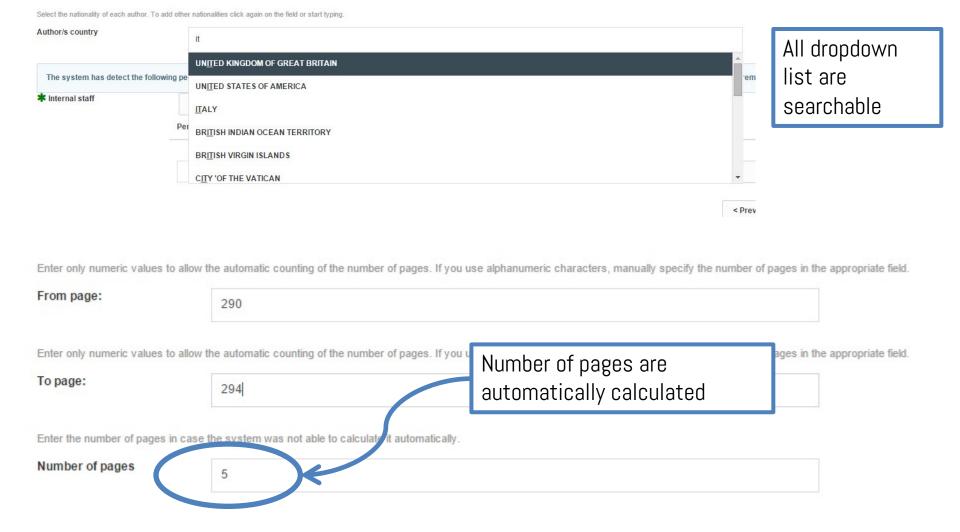
ACTA MATH, HUNG.

To locate a journal press the "Search" and follow the directions. * Journal ACTA MATHEMATICA 0001-5962 E001878 [1982 - .] Change Attuale: Springer Netherlands precedente: Institut Mittag-Leffler: Aurayagan 17, S-182 60 Djursholm **W** Delete Sweden:011 46 8 6220560, EMAIL: hallberg@ml.kva.se, leffler@ml.kva.se, Fax: 011 46 8 6220589 Search for the journal Journal title Acta mathematica ISSN Internal reference Exact search Search Ask to insert ACTA MATHEMATICA 0001-5962 E001878 [1982 - .] Select Attuale: Springer Netherlands precedente: Institut Mittag-Leffler: Auravagen 17, S-182 60 Djursholm Sweden: 011 46 8 6220560, EMAIL: hallberg@ml.kva.se, leffler@ml.kva.se, Fax: 011 46 8 6220589 ACTA MATHEMATICA ACADEMIAE PAEDAGOGICAE NYÍREGYHÁZIENSIS 1786-0091 Select [1998 - .] Nyíregyháza: Coll. Nyháza. Inst. Math. Comput. Sci.; Karlsruhe: FIZ; [S.I.]: ELibM ACTA MATH, ACAD, PAEDAGOG, NYHÁZI. ACTA MATHEMATICA ACADEMIAE PAEDAGOGICAE NYIREGYHAZIENSIS ACTA MATHEMATICA HUNGARICA 0236-5294 E001879 [1983 - .] Select Kluwer Academic Publishers: Journals Department, PO Box 322, 3300 AH Dordrecht Netherlands: 011 31 78 6576050, EMAIL: frontoffice@wkap.nl, kluweronline@wkap.nl, INTERNET: http://www.kluwerlaw.com, Fax: 011 31 78 6576254

Change the target collection at any time



Enhanced data input



Input date properly

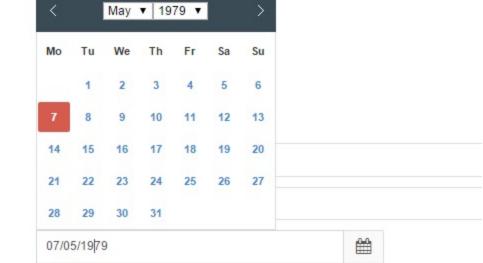
Select the year in which the work was published. Select "in press" if the item has been accepted bu



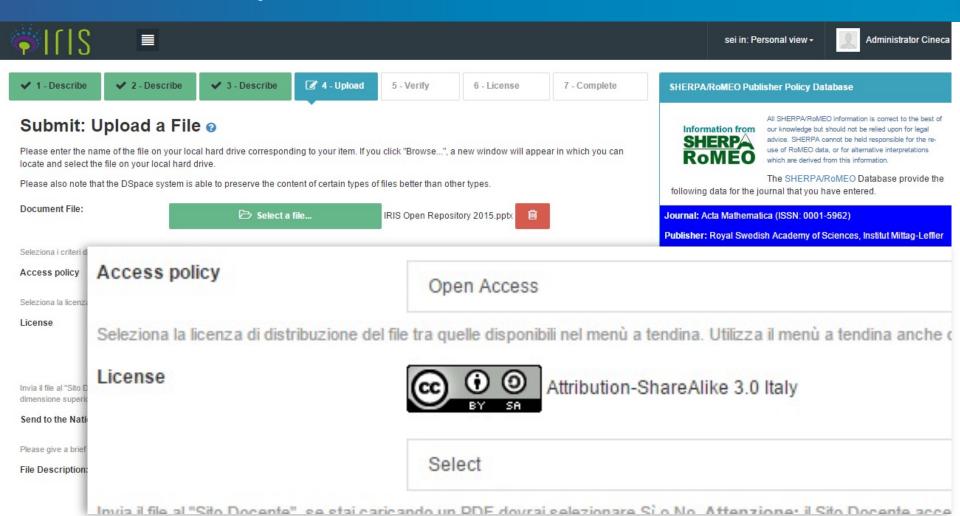
Title *

Keywords

Date issued



Enhanced file upload

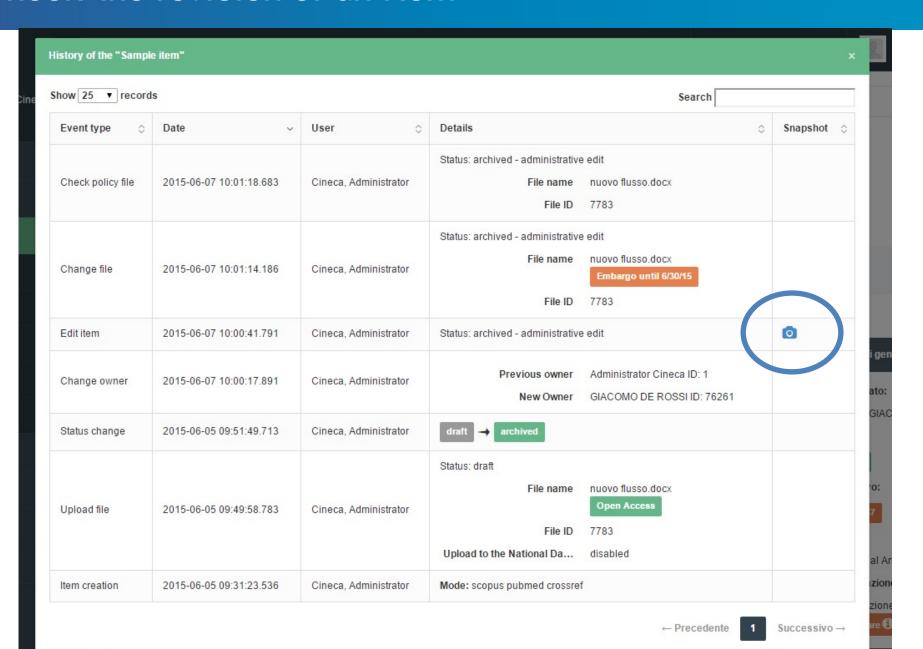


Versioning & Audit

- Who has done what, when?
 - Store a summary of limited changes
 - take a snapshot of the item when changes are not easy to detect and may be «extensive» (difficult to revert)

→ Not a *new version* but a *snapshot*

Check the revision of an item



Authorization & Workflow

- ACL based authorization and a static rappresentation of the institution (communities & collections) are difficult to mantains on large dynamic organization
- People have a role in the organization, they should be able to perform actions based on that role
- Responsabilities are typically related to a specific context: academics area / departments / type of items, etc.
- ACL are useful only at the bitstream level

A new approach to security

- Two default contexts:
 - Personal → researcher
 - Global → administrator
- Three additional contexts can be used to map the organization
 - Department
 - Faculty
 - Custom (used for item's type, libraries, etc.)

A new approach to the security - 2

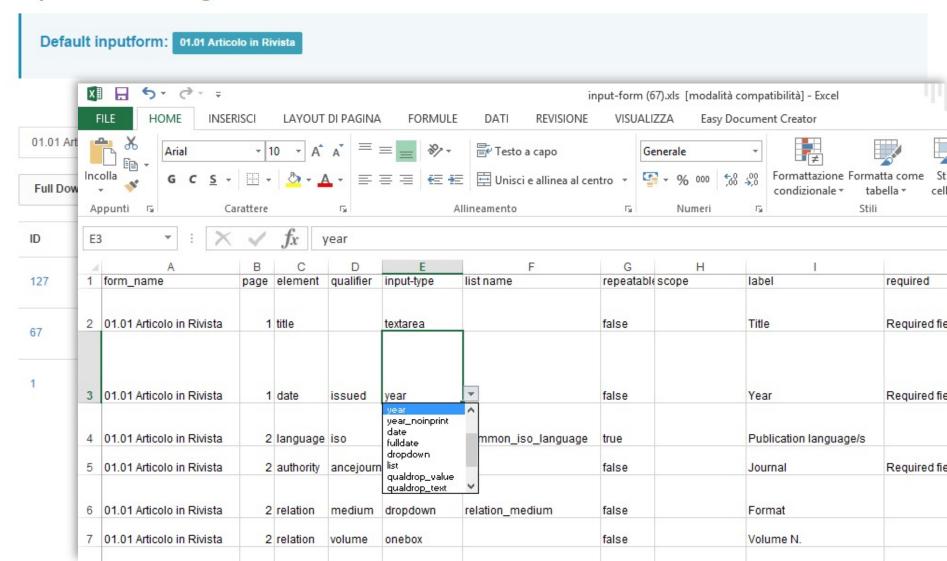
- Some definitions:
 - security resource: is a fine grain functionality like Perform a submission, Edit an item,
 Perform a workflow, Make an item public, Delete an item, Claim an item, etc.
 - An application role (profile): is a collection of functionality
 - An authorization is a triple association between an user (or a group of users), a profile and a specific context
- → Authorization can be load in memory when user login, this BOOST PERFORMANCE
- → You can disable a security resource to make the functionality unavailable in the system

Administration & configuration

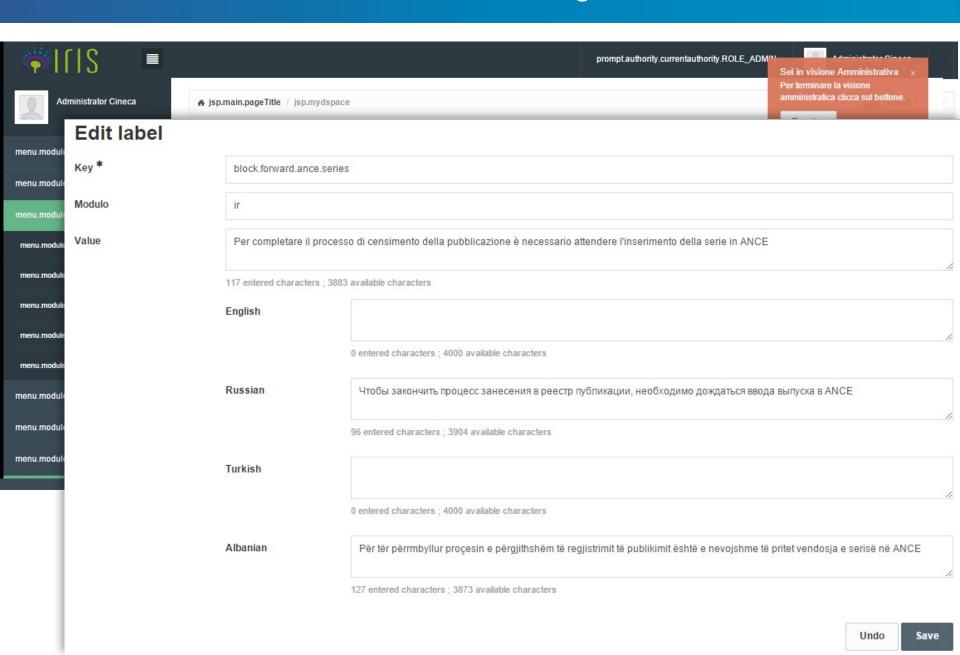
Administration tools

Administrative UI: Input-form

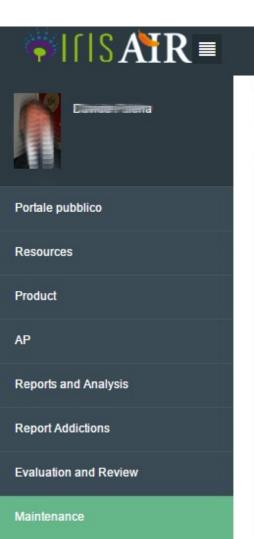
Input-Form Management

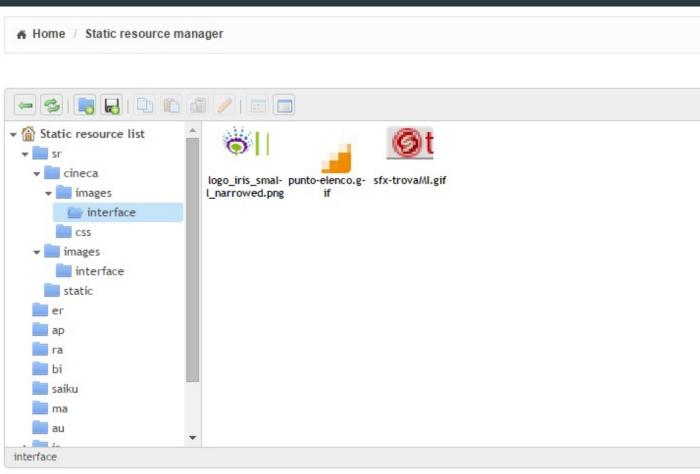


Administrative UI: Label i18n management



Administrative UI: Replace static resources

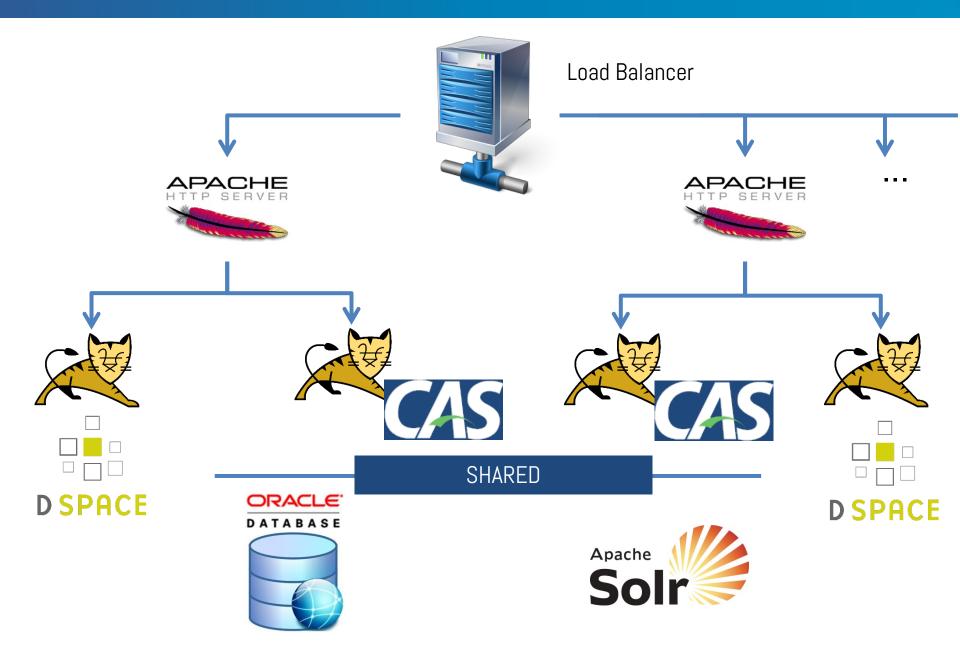




Delivery & upgrade

- Jenkins jobs to release and deploy
- DBFIX to update data structure and fix data issues
- Continuous Integration and QA:
 - 4 environments available
 - possibility to move data from any production environments to CI environment with-in 2 hours
- 1 maintenance release every week, 2-3 major release for year

Infrastructure



The Cineca's perspective - 2016

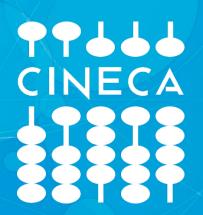
- Voluntary activities for DSpace 6.0-7.0
 - Overcome the limit of flat metadata for publications (items)
 - Allow the inclusion of additional entities to better support the complexity of any domain where DSpace is used (digital libraries, CRIS, data repository, etc.)
 - Modernize the authorization system
 - Converge on a single UI
 - → We offer the experience gained with DSpace-CRIS and the code



- → The rich data model support is the value, the CRIS specificity can become a configuration and/or an application profile
- IRIS will become itself an open source project still rely on DSpace for the publication management.

The IRIS Team





Thanks for your attention!



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