



REUTERS/Pawel Kopczynski

Using An Enterprise Research Management System to Maintain Accurate and Up-to-date Scholarly Data For Campus Re-use

Katy Börner, Indiana University
Ann Beynon, Thomson Reuters

VIVO Conference 2014



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Network Science Researchers at Indiana University

This VIVO instance provides information on faculty that perform research on networks and complex systems in the social and behavioral sciences, in natural sciences such as biology or physics, but also on Internet technologies.

Browse [faculty](#) and their [departments](#) or check out relevant

- [Publications](#)
- [Grants](#)
- [Courses](#)

to find expertise, collaborators, or mentors.

<http://vivo-netsci.cns.iu.edu>



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Network Science Researchers at Indiana University

The site was created to help

- New faculty to get in contact with relevant researchers.
- Faculty and policy makers to pool teams in response to funding solicitations.
- Faculty to coordinate research efforts collaborations using existing funding/resources.
- Faculty to coordinate teaching.
- Students identify relevant courses, potential advisors, funding.
- Organize the Monday talk series on *Networks and Complex Systems*.
- Arrange research meetings for visitors with relevant faculty/students
- Communicate networks and complex systems research at IU via interlinked web pages to the world.

We welcome all comments and suggestions.

<http://vivo-netsci.cns.iu.edu>



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CONVERIS/VIVO Integration Pilot



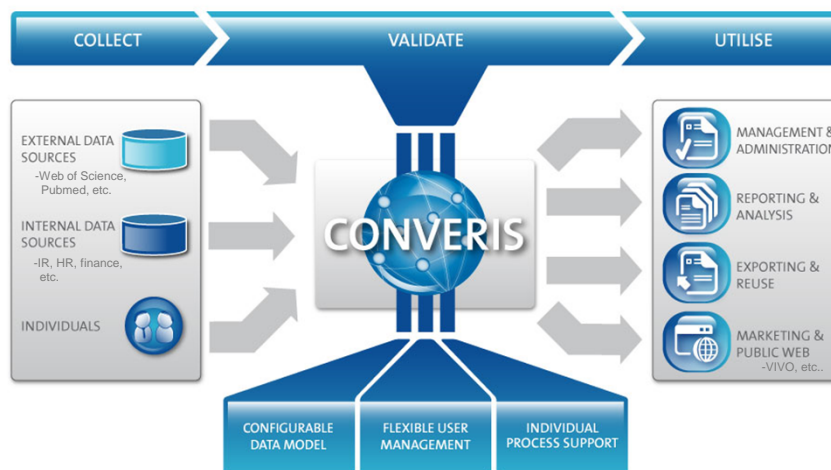
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CONVERIS/VIVO Integration Pilot

- Goals of the pilot:
 - Enable sharing of data in VIVO compliant format
 - Facilitate the creation, augmentation, and maintenance of VIVO profiles
 - Use Web of Science Core Collection data to build publication lists
 - Web of Science is a curated collection of the world's most influential journals (12,500+) in the sciences, social sciences, and arts & humanities, plus tens of thousands of scholarly conferences and books.



What Is CONVERIS?



Minimizing The Administrative Burden On Researchers

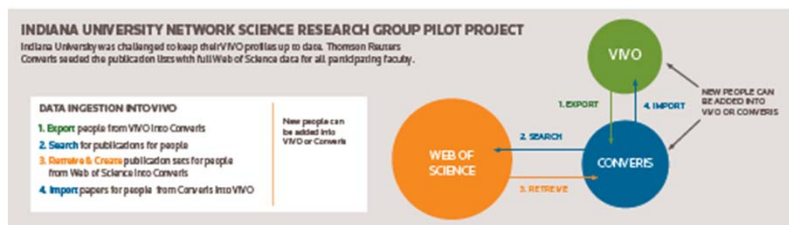
CONVERIS is a research information and faculty activity reporting system that:

- enables you to centralize all faculty activities in one place (publications, grants, teaching, service)
- syncs with your existing data sources: “collect data once, use it many times”
- creates CVs for faculty in standard or custom templates
- can be highly customized to support evaluation workflows at your university
- offers a public portal to showcase your accomplishments to the world
- includes ad hoc reporting on all data in the system



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CONVERIS/VIVO Integration Pilot



To learn more, please attend our webinar:

Converis and VIVO integration webinar

Wednesday, August 13, 2014

11:00 am, Eastern Daylight Time

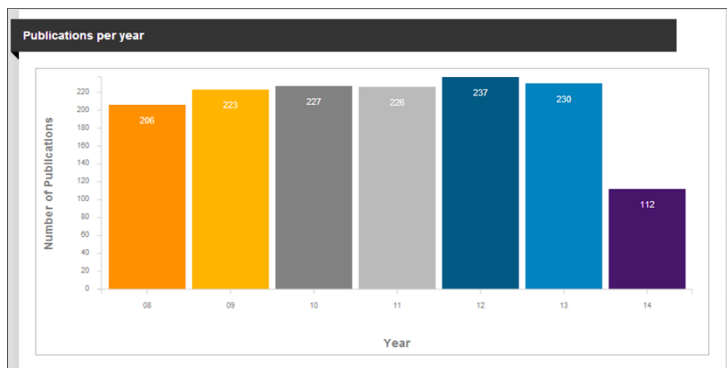
Register at: <http://go.thomsonreuters.com/converis>



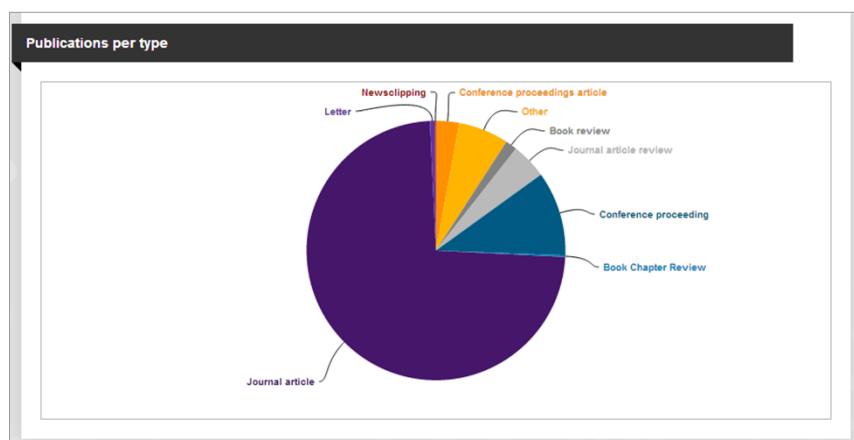
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CONVERIS/VIVO Integration Pilot

- 101 researcher profiles
- 1,461 Web of Science records from 2008-2014



CONVERIS/VIVO Integration Pilot



CONVERIS/VIVO Integration Pilot

Article list by author with times cited

Last name: Ahn ▾

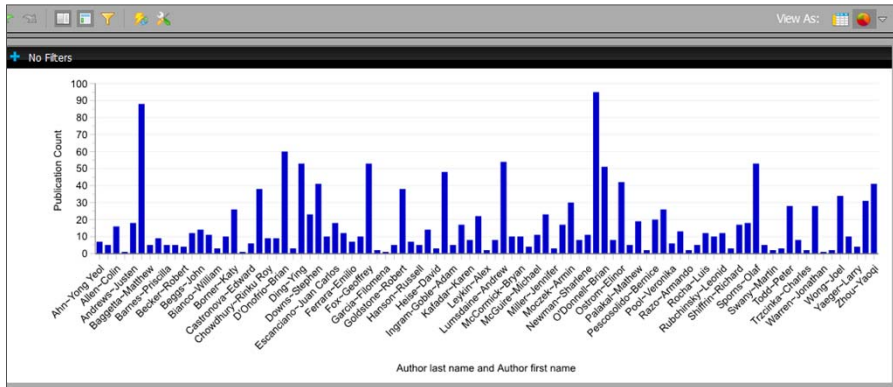
Title	Journal name	Publication year	Number of citations
Delayed information cascades in Flickr: Measurement, analysis, and modeling	COMPUTER NETWORKS	2012	5
Flavor network and the principles of food pairing	Scientific Reports	2011	5
Geography and Similarity of Regional Cuisines in China	PLoS ONE	2013	0
Metabolic Network Analysis-Based Identification of Antimicrobial Drug Targets in Category A Bioterrorism Agents	PLoS ONE	2014	0
Overlapping community detection in complex networks using symmetric binary matrix factorization	Physical Review E	2013	2
THE FLAVOR NETWORK	LEONARDO	2013	1
Virality Prediction and Community Structure in Social Networks	Scientific Reports	2013	2
			15



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Publications per author



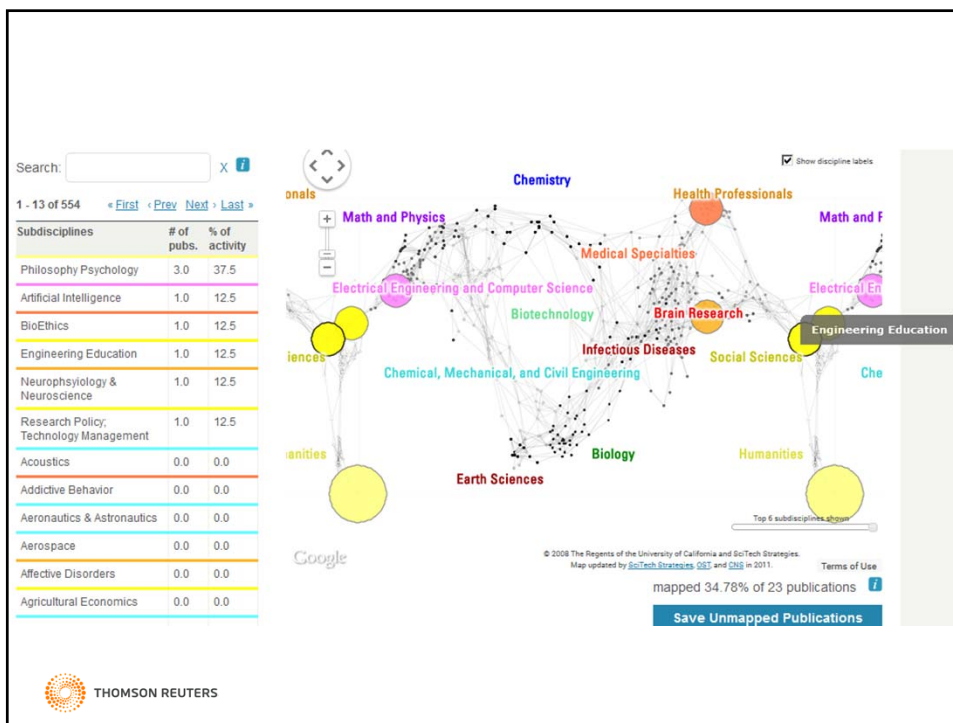
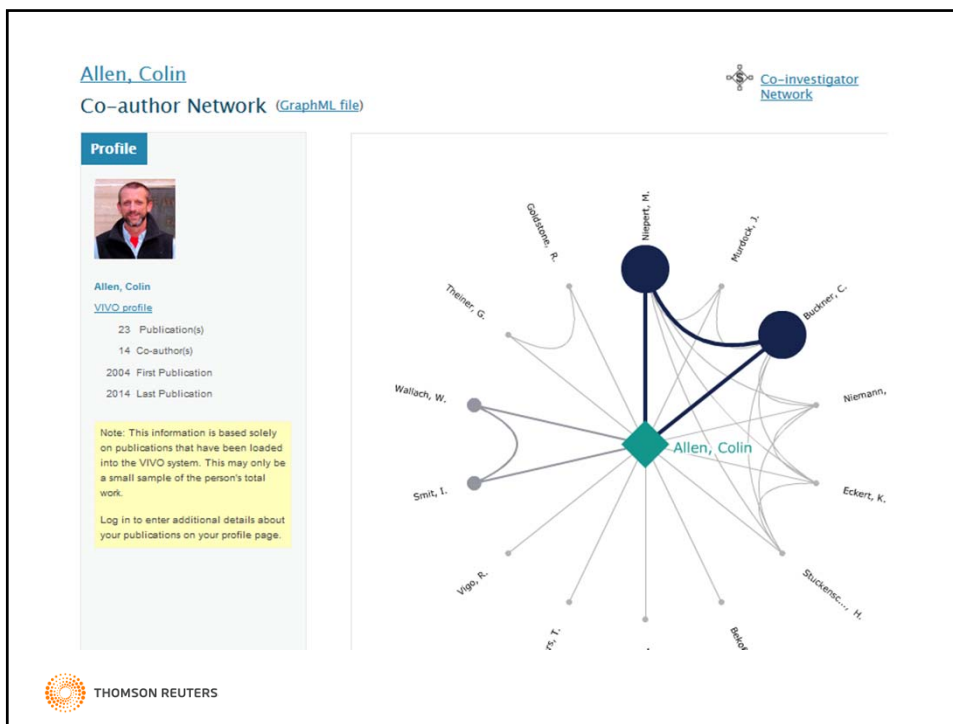
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CONVERIS/VIVO Integration Pilot

The screenshot shows the VIVO profile for Colin Allen. The header includes the VIVO logo with the tagline "enabling national networking of scientists" and navigation links for Log in, About, Support, and Index. A search bar is present. The main navigation bar includes Home, People, Organizations, Research, and Events. The profile for Colin Allen includes a photo, a bio, and a list of positions: Graduate School (2006-), Philosophy (2006-), Cognitive Sciences (2005-), History & Philosophy Of Science (2005-), and History & Philosophy Of Science (2004-). A statistics box shows 14 publications in the last 10 years (16 total). Contact information includes an email address and a phone number. The Thomson Reuters logo is at the bottom left. A callout box on the right says "Example profile: before pilot".

CONVERIS/VIVO Integration Pilot

The screenshot shows the updated VIVO profile for Colin Allen. The header now includes the tagline "connect • share • discover" and an Index link. The main navigation bar is the same. The profile for Colin Allen now includes a "Faculty Member" title. The positions list is updated to include "Professor Tenured/Tenure-Track, HISTORY & PHILOSOPHY OF SCIENC, Arts & Sciences" (2004-), "Graduate Studies., HISTORY & PHILOSOPHY OF SCIENC, Arts & Sciences" (2005-), "Professor Tenured/Tenure-Track, COGNITIVE SCIENCES, Arts & Sciences" (2005-), "Adjunct Professor, PHILOSOPHY, Arts & Sciences" (2006-), and "Graduate Faculty Member w/Endorsement, GRADUATE SCHOOL, EXECUTIVE MANAGEMENT/ACADEMIC SUPPORT" (2006-). The statistics box now shows 22 publications in the last 10 full years. Contact information is the same. The Thomson Reuters logo is at the bottom left. A callout box on the right says "Example profile: after pilot".



Minimizing The Administrative Burden On Researchers

A system is only as good as the data in it

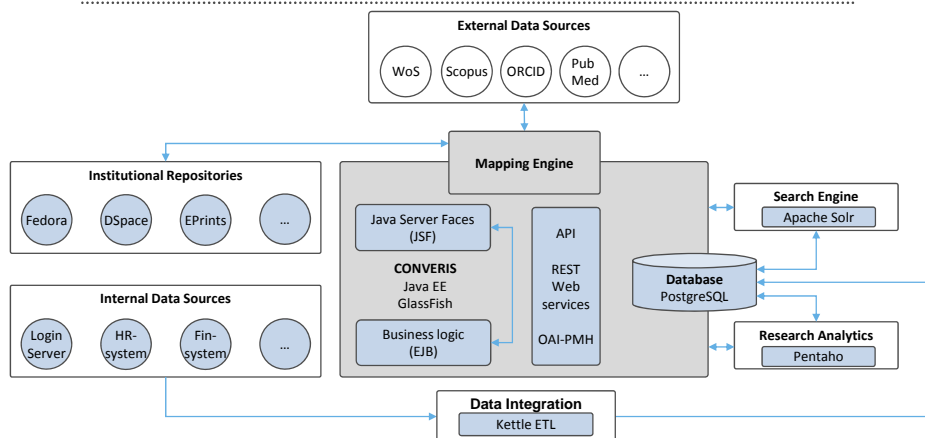
Populating publications into **CONVERIS** is simple:

- Thomson Reuters can pre-populate journal article metadata from Web of Science Core Collection into your faculty members' profiles
- Web of Science Core Collection, as well as other sources such as PubMed, can be searched through CONVERIS to further manage publication lists
- “Search profiles” alert faculty when there are new publications to add to their profiles, making maintenance easy
- Web of Science Core Collection also adds “times cited” counts to profiles to track research impact



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System architecture



CONVERIS is a JavaEE application following the typical JavaEE 3-tier-architecture with a modular design of user interface, business logic (i.e. functionality) and data management (i.e. data model)



Data Integration

1. Create Dataflow via Drag & Drop

2. CONVERIS Plugin allows CONVERIS operations

3. Integrate Dataflows in CONVERIS

4. Create Timer for Integrations based on Dataflows

Which database do we need to connect to?

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CONVERIS in International Researcher Network

<http://nrn.cns.iu.edu>

International Researcher Network Visualization 1.0

CNS Cyberinfrastructure for Network Science Center cns.iu.edu

Data Types

Check in the boxes next to the data types you'd like to see displayed on the map.

- People
- Publications
- Patents
- Funding
- Courses

System Types

- Conveits
- Elsevier SciVal Experts
- Harvard Catalyst Profiles
- Stanford GAP
- VIVO

Timeline

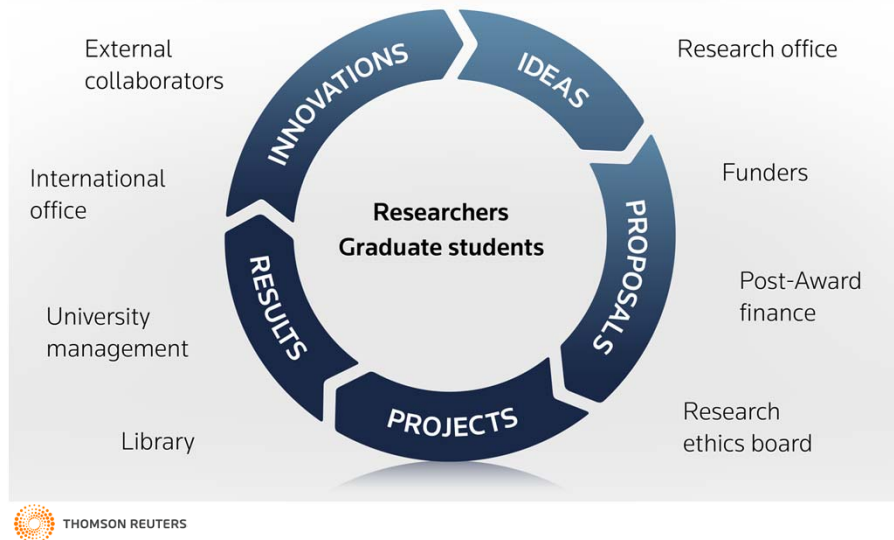
Jul, 2014

Aug, 2014 Aug, 2014

Play Pause Stop

Hide Map Data Register About

Converis: Supporting the Full Research Workflow

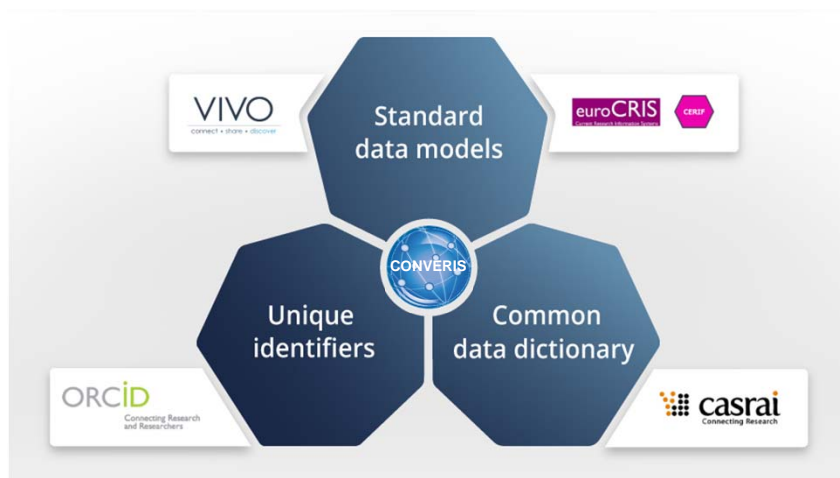


Connectors

Currently, CONVERIS offers connectors to around 50 different systems. A brief overview of the most common ones:

- Login servers (e.g. Shibboleth, Kerberos, LDAP, CAS, often with Single Sign On (SSO))
- HR systems (PeopleSoft, Resource Link, SAP-HR)
- Finance systems (e.g. SAP, PeopleSoft, Agresso, Oracle, Raindance, MACH)
- Student record systems (e.g. Banner, PeopleSoft, SITS, Ladok, AIS)
- Institutional repositories (DSpace, EPrints, Fedora, Digital Commons)
- Content Management Systems (through CONVERIS web services in order to integrate existing information from CONVERIS into existing web pages)
- External publication databases (e.g. WoS, Scopus, PubMed, ORCID)
- VIVO- build and maintain researchers profiles for networking sites like VIVO

Engagement in Industry Standardizations



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Unify use of upper/lower case in titles?

Standard activities built into Converis


Publication type	Type of activity	Type of Teaching Activity	Type of award
Annotation	Award	Advising	Clinical trial
Anthology	Editorship	Continuing Education	Fellowship
▶ Book related publication types	Education	Extension	Internally funded project
Commentary	Lecture	Graduate	Knowledge Transfer Partnership (KTP)
▶ Conference related publication types	Practical course	Mentoring	▼ Research projects
▼ Journal related publication types	Professional membership	Professional	Charity funded
Journal article	Professional qualification	Undergraduate	Contract research
Journal article abstract	Public engagement		▼ EC-funded projects
Journal article review	Seminar		FP7
Letter	Speech	Type of Service	Marie Curie
Letter to editor	Teaching	Clinical Service	▼ Standard projects
Manual	Other merits	Clinical Trials	DFG
Newsclipping		Consultant Services	RCUK
Other	Type of Creative Work	Editor/Reviewer	Studentship
Report	Artwork	Professional Societies	Travel/Conference support
Short communication	Audiovisual Work	Strategic Initiatives	
▶ Thesis	Equation/Figure	Student Group Advising	
	Musical Work/Performance	University Committee Service	
	Software/Online Multimedia		
	Other Creative Work		

You can also add your own activity types to the data model.

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Configuration

System Resources Languages (3) ChoiceGroups (105) Constants (238) Timers (14) Configuration Freeze (243)	Data Model Entities (48) Entity Attributes (647) Link Entities (185) Attributes of Link Entities (91) Auto Link Entities (25) Chains of Link Entities (12) Data Integration Processes (1)	Template management Entities (518 + 166) XSL Reports (18) CVs (3) Dynamic templates per user role (0)	Rights Management User Roles (11) Basic Roles (149) Special Rights (107) Create Rights (78) Module Permissions (30) Workflow Matrix (346)
Module Settings Statistics (10) Save As (5) Copy Relation Rules (3) Geo-Maps OSM (0) Filter Settings (79) Cloning (1)	Test Environment Entities Link Entities Auto Link Entities	Quality and Data management Update Search Indices (All Entities) Inconsistent Data Resolve Link Entities Rule Files For Publication Import Autoselected data for CERIF export Autoselected data for BibTeX export Check Basic right definitions Configuration Change Log	Messaging Deadline Reminder (1) Attribute / Status change (5) Link Entity Change (2) Things To Do (36)

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Thank you

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