

CSpace – A More Practical and Customizable Repository Platform Serving Local Needs

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CSpace - A Quick Glance

- IR platform used in CAS* IR Grid
- Allowing for easy customization deployment
- Extensively extended and upgraded based on DSpace 1.4.2 since 2008
- Developed & maitained by Lanzhou Branch of National Science Library, CAS
- Open sourced offically since 2012

*CAS -- Chinese Academy of Sciences

CAS IR Grid

nstitute IR

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Federated Institutional

repository

nstitute IR

nstitute IF

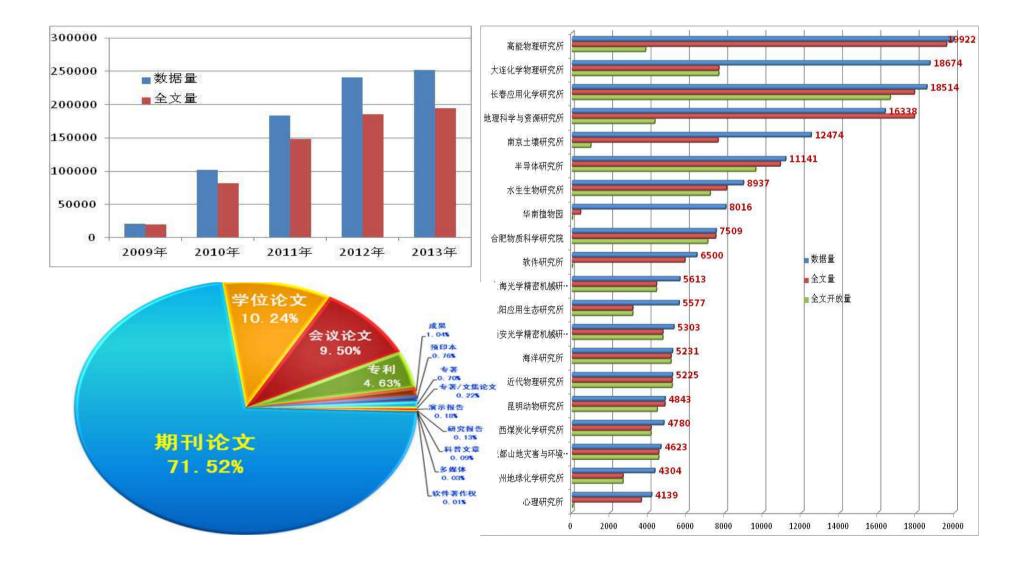
- An overarching repository infrastructure throughout CAS
 - Preservation & dissemination of CAS research
 - Knowledge capacity building mechanism for the institutes across CAS
 - Fostering a culture of OA in CAS and China.
- The IR for CAS as one single research organization
 - Launched in 2008

http://www.irgrid.ac.cn

•Total IRs: 103, across 25 cities **CAS IR Grid** •Total Records: 430,000 •Recs. with FT: 78%

NOW!

• 29,452,000 views • 4,778,000 dlds



Simple Principles of CSpace

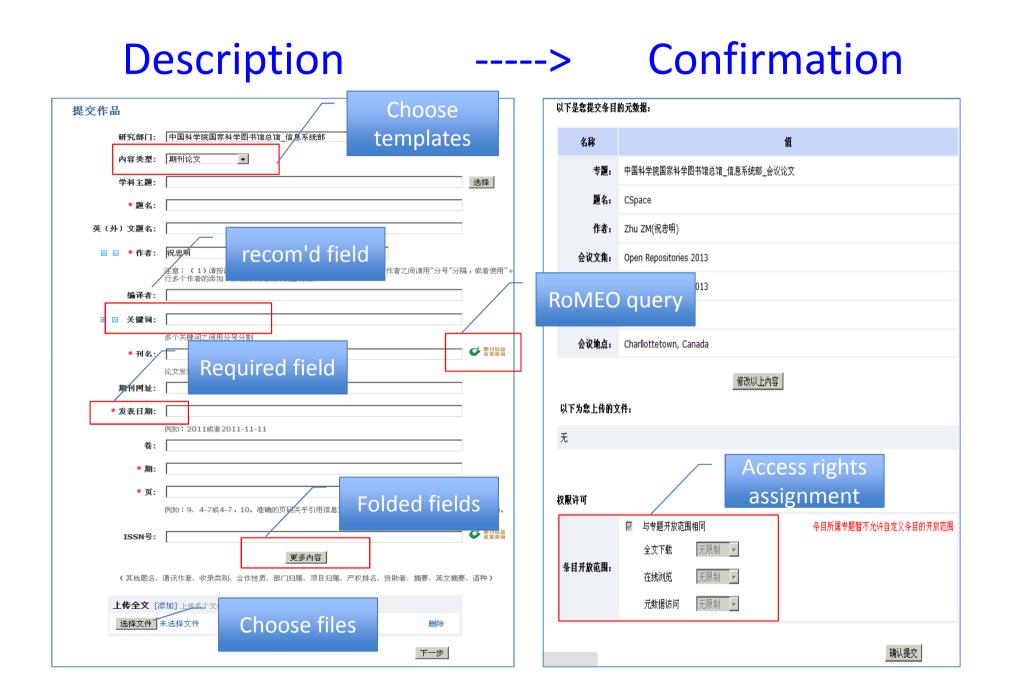
- Be relevant
 - User oriented
 - Service centered
- Continual enrichment of the range of valueadded services
 - Respond proactively to the needs and RQMTS
- Continual imprv't of customizable capability
 - Adapt flexibly to new, different, and/or changing requirements and environments

Extended Functionalities and Services Portfolio

Collection Building Services -1

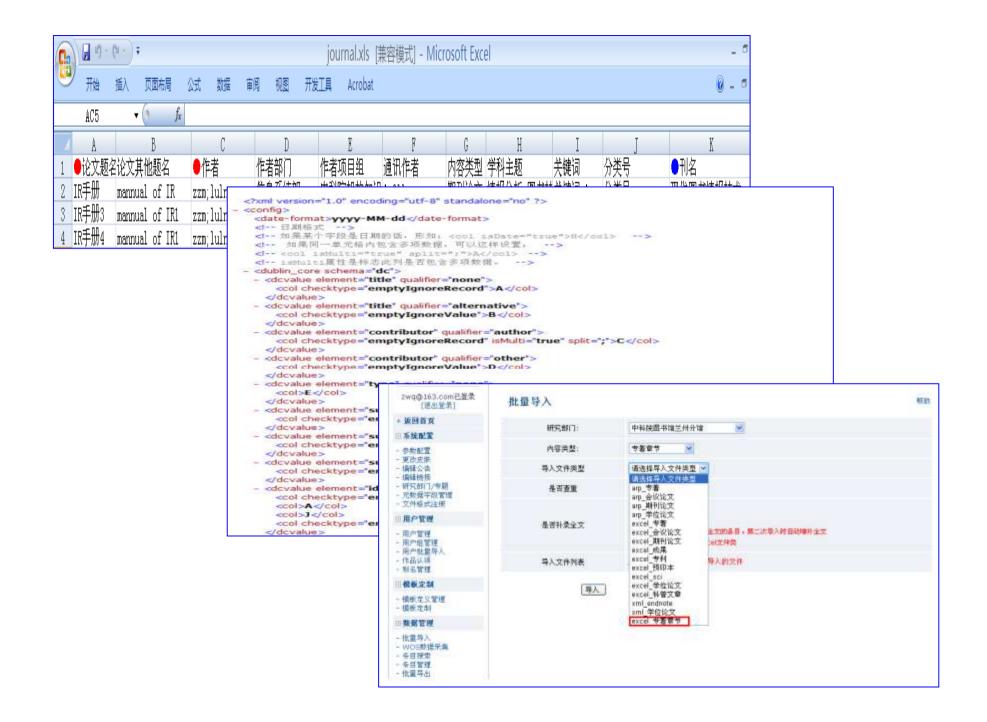
Optimized self-submission

- Two-step quick submission workflow
- Document-type aware description form
 - display minimal required description fields
 - Folded/unfolded optional fields
 - Automatic duplication check
 - Integration of SHERPA/RoMEO query
 - Fine-grained rights control options
- Automatic BKGD processing following submission
 - subject headings assignments based on OpenKOS
 - Pdf conversion(non-pdf docs) for online browsing
- Remote submission via SWORD



Collection Building Services -2

- Easily used web-based bulk import
 - Content type based modifiable/self-defined
 XML/EXCEL templates for ingesting various types of content.
 - Predefined templates for importing formatted data from Endnote, SCI, CNKI, and other sources.



Collection Building Services -3

Automated ingestion and integation

- Pre-existing ETD database
- ARP (Academia Resource Planning) systems, i.e. research management systems, deployed in every institute of CAS
- Web of Science record (via web service interface)
- BMC publications of CAS (via SWORD)
- OAI-Harvesting (with extension of harvesting content objects), if applicable

Ingest metadata from Web of Science

WOS数据采集	帮助
	f使用WOS Web Service服务的权限,可登陆WOS网站进行注册 注册网址 e服务分为Lite版本(免费注册)和Premium版本(需要付费),请选择本单位适用的版本
Web Service版本	● Lite O Premium
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单位名称:	Department name
研究部门:	• Author
作者:	• Pub year
发表年度:	
采集控制:	
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入库日期:	从 到 Choose source p1
导入控制:	databases
是否查重	○ 是 ◎ 否
	获取检索结果

Dissemination and Rights Management

- Multi-level & fine-grained access control
 - Item embargo: 3-6-12 months, or any time span
 - Access level: metadata, full content
 - Access scope: public, institute, community
 - Access types: online browse, watemarking, dwnld
 - Assignment of content types related distribution policies
 - IP based full content access control
- Malicious download monitoring and blocking
- Complaints management

Author Identification & Authorship Claim

• Alias control

- Unique author identifier
- Names variants
- Authorship claim
 - Match/email possbile authors
 - Confirmation of authorship and authorship order
- Establishing defining relationships BTW authors and atricles
- Forming a reliable base for clustering related articles by authors

Multi-faceted content use and reuse

- Faceted browse/search
- Online pdf viewing
- Auto-suggest/-completion
- KOS/DDC based clustering
- Integrated connecting services
 - Recommendation
 - Recommended citation
 - Forwarding search
 - Social bookmarking
 - Export(EndNote/Word/CSV)
 - SCI citation counts
 - Usage statistics
 - Rights policies
 - comment, complaint



Researcher knowledge profile

- CV mgmt & export
 - Work/edu background
 - Research interests
 - Projects
 -
- Research inventories
 - Categories
 - SCI/CSCD citation counts
- Personal web site
 - Chinese version
 - English version

	D									
辑个人	信息					更多帮助信	氯			
基本信息	背景(言息	照片信息	1	修改密码	个人信息浏览				
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	联系地址:	北京北四环西路1	5号中国科学院力]学研究所						
	个人简介									
	1967.7 北京大学流体力学考社,学士 1992.7 中国科学校力学科政务所。植士 1996.8 中国科学校力学研究所。植士 1996.12 - 1998.6 中国科学校力学研究所属相对员,气动物理实验室主任、高温气体开放实验室副主任 1996.7 - 1996.3 中国科学校力学研究所是不是 1996.7 - 1996.3 中国科学校力学研究所是 1996.7 - 1996.3 中国科学校力学研究所是 2001.1至今 中国科学院力学研究所研究员。 图 芭蕉和任中国科学院力学研究所研究员会副主任、学位委员会副主任、中国力学学会较书长、流体力学专业委员会副主任、中国 气动力学会气动物理专业委员会副主任、《力学进展》常务编数、《力学学报》编数等。									
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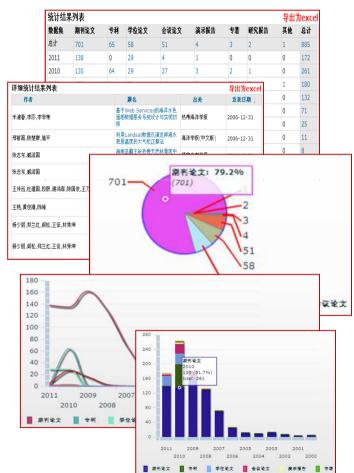
Usage statistics

- Combination of:
 - different content object levels
 - site, community, collection, item
 - different time interval levels
 - year, month, day, custom time period)
 - different access styles
 - robot access, intranet access, repeated clicks
 - different countries or regions, etc.
- Display results in a variety of forms
 - histograms, ranking lists, Excel spreadsheets, etc.

统计条件							
统计对象:	网站 💌						
内容类型:	不限						
统计时间:	不限						
详细统计:	按年统计 🔽 默认显示最近5年的统计结果						
Ln ad)수 / t	Country	Visits					
机器访问:	China	360291					
	United States	50349					
内部访问:	UnKnown Country	37240					
	Russian Federation	18916					
	France	8967					
	Taiwan						
	Hong Kong	3486					
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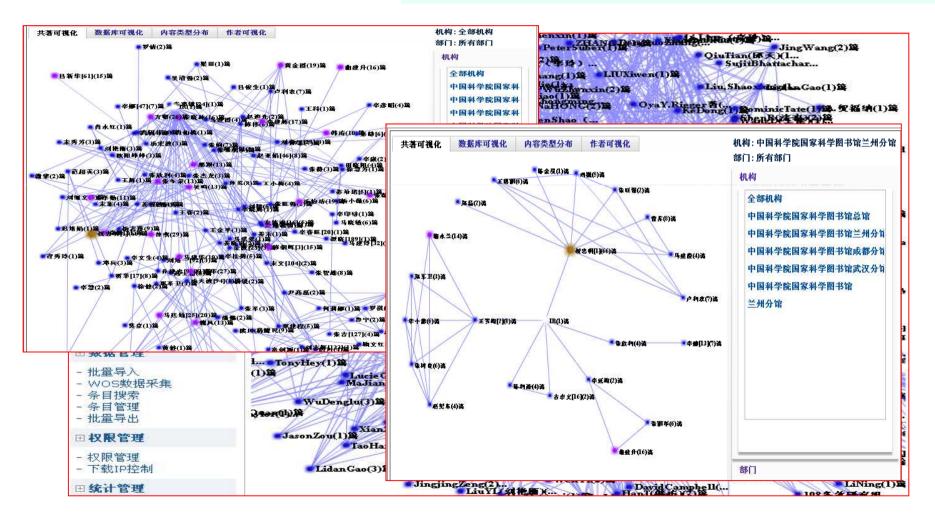
Knowledge asset audit

- Reviewing and reporting knowledge asset status in various levels and dimensions
 - institute, community, individual
 - asset types
 - time spans
 - Subject.....
- Presenting results in forms:
 - lists, histograms, line graphs, pie charts...
- Flexible personalization



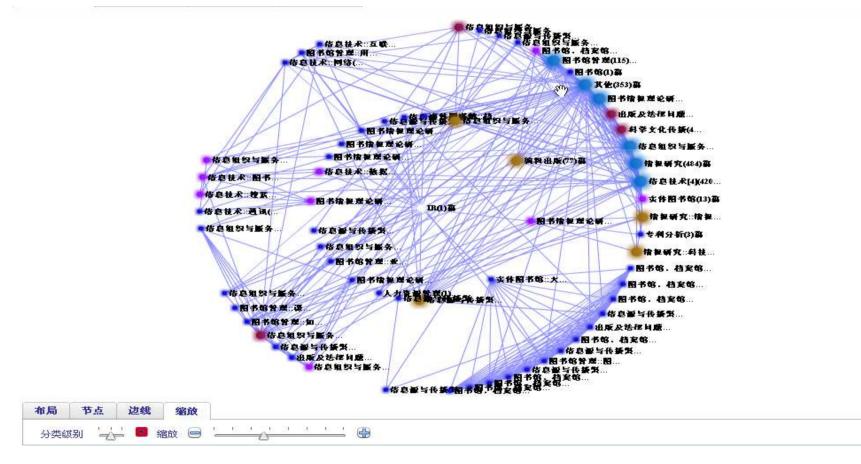
Knowledge mapping

- Co-authorship network
 - Communities
 - research output types
 - year



Knowledge Mapping

Co-subject/SKOS categories



Open Interfaces and interoperability

- OAI-PMH DP/SP
- SRU
- SWORD
- OpenSearch
- RSS
- XML Sitemaps for SEO

Customization Capabilities

Extensible Metadata Framework

- Extend metadata schema on demand via Web UI
 - Modifying/Reusing existing elements
 - Introducing new elements if needed
 - element
 - qualifier
 - lable_zh
 - Lable_en

- display_on_submission
- display_on_browse
- display_on_stat
- edit_allowed

.....

- scope_note
- Key to support new content types

Content Type Templates

- Create/customize content type templates via Web UI
 - Specify a list of allowable metadata terms (fields)
 - Determine fields order in submission/browse forms
 - Tailor fields behavior: display name, input style (e.g. textbox, dropdown list), default value, requiredness, repeatability, hidden....
 - Define citation format
 - create or assign distribution and rights policies
- Support content type aware submission/display



Content Type Based Import/Export

- Create configurable XML import templates to import text data in any format
- Create configurable content type based EXCEL import templates to import data in EXCEL format
- Similarly, data in repository can be exported via creating content type based XML/EXCEL templates
- Import & export operations are managed via Web
 UI

Flexible Customization of Asset Auditing

- Overall set of audit conditions can be dynamically defined and configured
- Each time of audit process can be customized, based on prescribed audit conditions set
- Audit results manifestations can be customized to display as inventory lists, histograms, line graphs, pie charts.
- Columns of items appeared in an inventory list also can be adjusted as desired.
- Of course, all above customizations are Web-based

Web-based System Configuration

- Most of parameters or options are collected together to be adjusted or customized via Web UI
- Support simple skin change
- One-key installation package in Windows plat.
 - All neccessary resources in one executable pkg
 - Installation location can be customized
- Actually, automatic update mechnism is now in place

Future Development

- Continual enrichment /improvement of the range of, and customization capablities of, value-added services
 - Non-textual content management
 - Automatic metadata extraction and text mining
 - Micro-services based repository infrastructure
 - Semantic enhancement services
- Contribute more and better to repo community
 - esp. DSpace community

Get CSpace

- CSpace Github Repository
 - <u>https://github.com/cspace</u>
 - <u>http://sourceforge.net/projects/cspace-ir/</u>

(Note: the latest version has not yet been uploaded)

Thank you for Listening & any questions?