Common Science and Technology Resource Identifier

ORCID Connecting Research and Researchers

Crossref

DataCite CONNECTING RESEARCH, IDENTIFYING KNOWLEDGE

Common Science and Technology Resource Identifier

Brief Introduction

CSTR'Mission

Common Science and Technology Resource Identifier

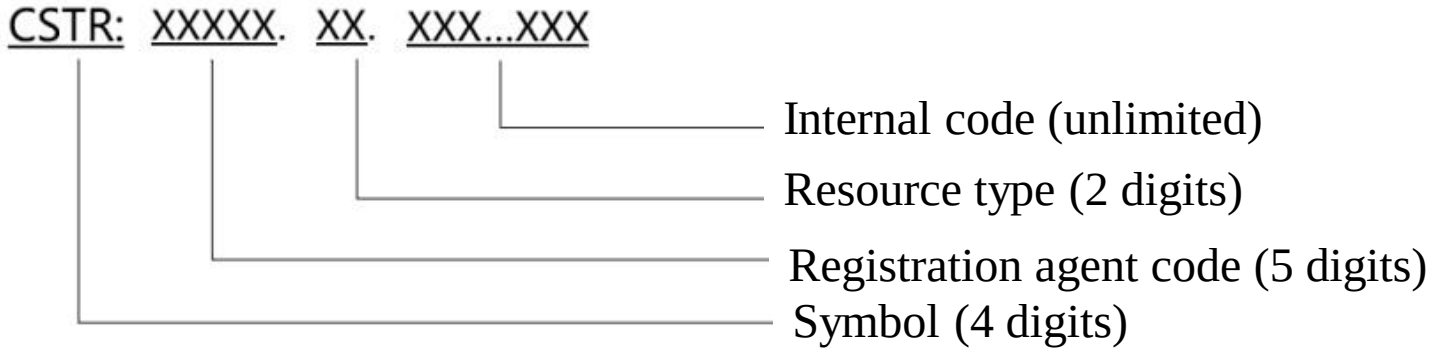
CSTR, Common Science and Technology Resource Identifier , is one of the global PIDs, CSTR aims to promote establishing a global science and technology resource identification architecture, which is able to tracing the global influence, cross-disciplinary, cross-regional and cross-platform, to realize the rapid positioning and acquisition worldwide, and be used as the digital base for open science, contributed to the scientific research innovation.

CSTR National Standard

Common Science and Technology Resource Identifier

CSTR is the on the basis of the China National Standard 《GB/T32843-2016 Science and Technology Identification》, the identifier is composed of four parts.

《GB/T32843-2016 Science and Technology Identification》



◆ **example:**

CSTR: 31253.11.sciencedb.01531:

- *"31253" the RA code for ScienceDB,*
- *"11" the type is scientific data,*
- *"sciencedb.01531" internal code,*
- *"sciencedb" name of the RA,*

CSTR IANA Standard

Common Science and Technology Resource Identifier

IANA（The Internet Assigned Numbers Authority），“Uniform Resource Identifier (URI) Schemes” https://www.iana.org/assignments/uri-schemes/uri-schemes.xhtml

Internet Assigned Numbers Authority

Uniform Resource Identifier (URI) Schemes

Last Updated
2022-07-06

Available Formats
XML HTML Plain text

Registry included below

- Uniform Resource Identifier (URI) Schemes

com-eventbrite-attendee	prov/com-eventbrite-attendee	com-eventbrite-attendee
content	prov/content	content
content-type	prov/content-type	content-type
crid		TV-Anytime Content Reference Identifier
cstr	prov/cstr	cstr
cvs	prov/cvs	cvs
dab	prov/dab	dab
dat	prov/dat	dat
data		data
dav		dav
diaspora	prov/diaspora	diaspora
dict		dictionary service protocol
did	prov/did	did
dis	prov/dis	dis
dlna-playcontainer	prov/dlna-playcontainer	dlna-playcontainer
dlna-playsingle	prov/dlna-playsingle	dlna-playsingle
dns		Domain Name System
dntp	prov/dntp	dntp
doi	prov/doi	doi
dpp	prov/dpp	dpp

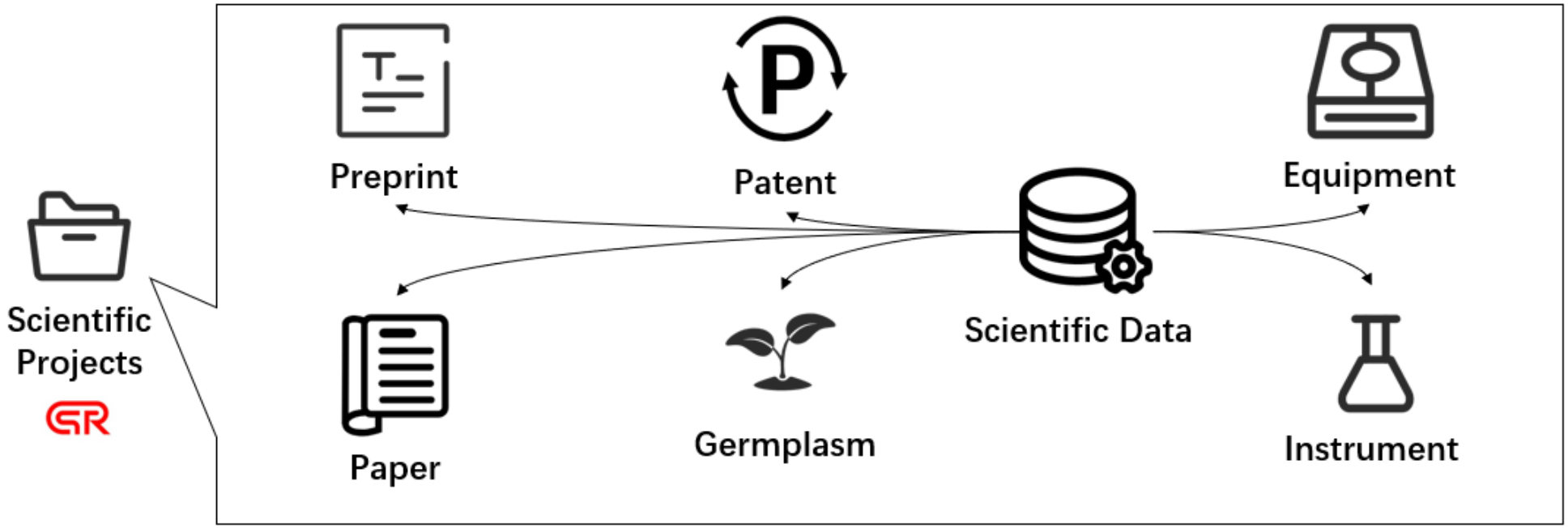
CSTR National Standard

Common Science and Technology Resource Identifier

CSTR is for various scientific and technology resources

type code

CSTR: XXXXX. XX. XXX...XXX



Common Science and Technology Resource Identifier

CSTR is one of the Global PIDs
The basic information infrastructure for Open Science

Registration Service

More discoverable and accessible

Resolution Service

Distributed and more Convenient

Associated Services

Linking all kinds of resources

The Value

Members

Common Science and Technology Resource Identifier

Members 184

国家干细胞资源库 NATIONAL STEM CELL RESOURCE CENTER

国家基础学科公共科学数据中心

国家生态科学数据中心 National Ecosystem Science Data Center

中国科学院生态环境研究中心

NMDC 国家海洋科学数据中心 National Marine Data Center

国家微生物科学数据中心 National Microbiology Data Center

National Wild Seed Resource Center 国家重要野生植物种质资源库

国家地球系统科学数据中心 National Earth System Science Data Center

国家高能物理科学数据中心 National HEP Data Center

CSData 中国科学数据

Science Data Bank 科学数据银行

植物科学数据中心 Plant Science Data Center

TPDC国家青藏高原科学数据中心

中国科学技术大学 University of Science and Technology of China

NADC National Astronomical Data Center 国家天文科学数据中心

中国科学院动物研究所 INSTITUTE OF ZOOLOGY,CHINESE ACADEMY OF SCIENCES

国家地球系统科学数据中心 National Earth System Science Data Center

中国科学院南京地理与湖泊研 NANJING INSTITUTE OF GEOGRAPHY & LIMNOLOGY CHINESE ACADEMY OF

科学数据中心 Scientific Data Center of CAS

国家动物标本资源库 National Animal Collection Resource Center

数据与计算发展前沿 Frontiers of Data & Computing

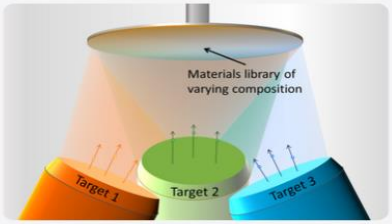
Resource type 8

Use Cases1

CSTR Provide identification service for Scientific Data Center of CAS.

- Published dataset
- Linked with projects
- Evaluating indicator

Scientific Data Center of CAS



非晶合金数据库

CSTR：32321.11.BB11E530A4C64CCA8D197E2CEFEC1B52

发布数据中心：中国科学院凝聚态物质科学数据中心

提交机构：

简介：高通量实验技术研发、非晶合金新材料的高通量探索、非晶合金得非晶合金形成成分范围的效率大大提高。以三元合金体系为例，通过

晶体材料拓扑性质数据库

CSTR：32321.11.82DDCE986DCF487BA31ACD32F5331DF9

发布数据中心：中国科学院凝聚态物质科学数据中心

提交机构：

简介：世界上首个拓扑材料数据库，设计了一套计算具有时间反演对称类信息。建立了拓扑材料数据库网站，提供了友好的界面交互功能，只

电池材料离子输运数据库

CSTR：32321.11.23C93BD21951438F980C18038DEE458

发布数据中心：中国科学院凝聚态物质科学数据中心

提交机构：

简介：电池材料离子输运数据库包含了采用键价方法计算得到的2120
4535种、含Na的化合物4344种、含K的化合物2808种、含Mg的化合

Use Cases2

Common Science and Technology Resource Identifier

CSTR Provide identification service for Patent Center of CAS.

- Published patent
- Linked with the patent identifier
- Tracing the Citation
- Original text access

Use Cases3

Common Science and Technology Resource Identifier

CSTR Provide identification service for different resources, different institutions, and different projects.

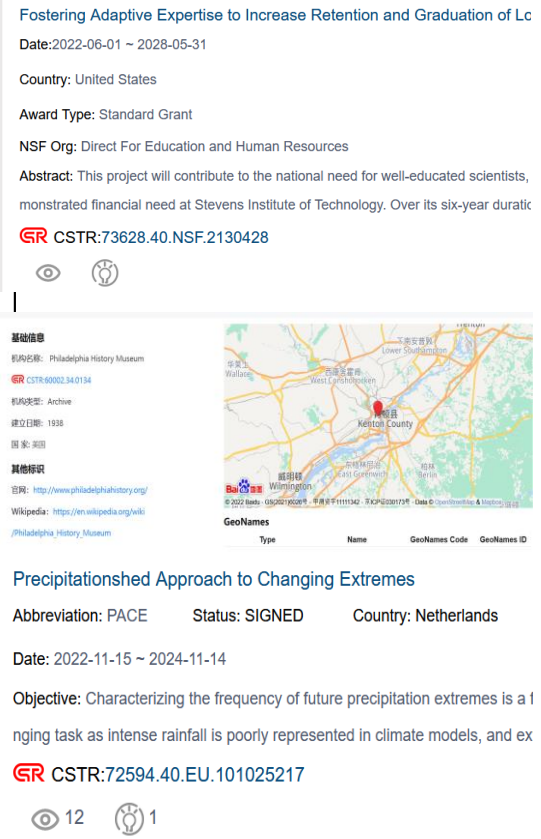
- Tracing citations and data analysis
- Linked resource

Papers

Preprint

Scientific data

Institutions



Use Cases5

Common Science and Technology Resource Identifier

CSTR help the smart agriculture

The CSTR is used as the unique identifier by this smart farmland,:

- Agriculture instruments
- plants
- Farmland
- people
- Linking the published meteorological information

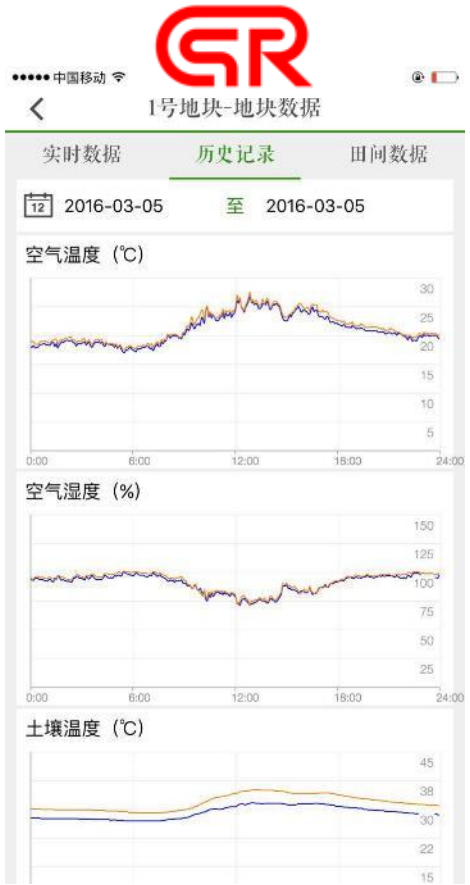
Use Cases5

Common Science and Technology Resource Identifier

CSTR help the smart agriculture

Real-time data

Instruments -control

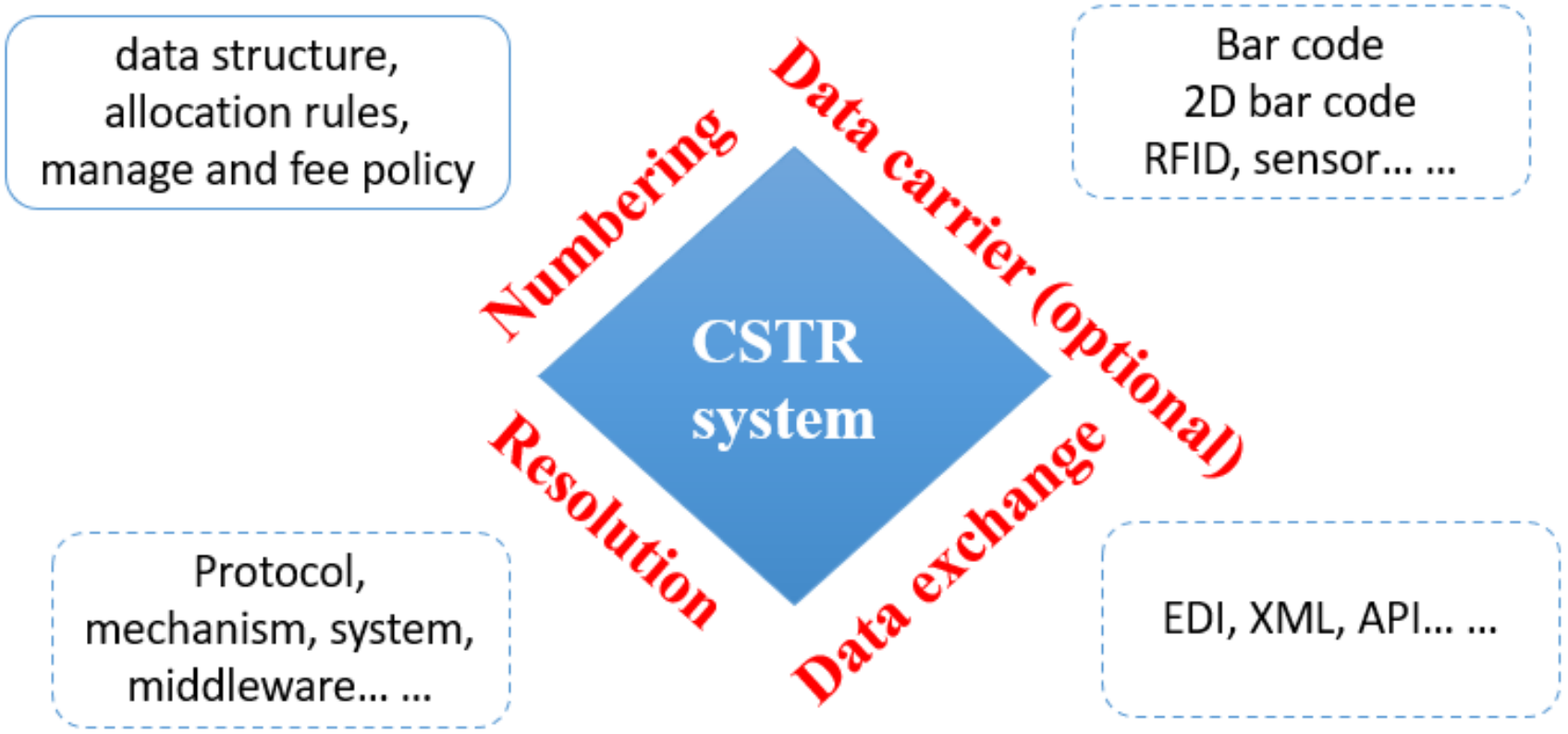


data record

Field data

CSTR Standards Architecture

Common Science and Technology Resource Identifier



CSTR is not only for the digital things but also for physical items.

The CSTR system consist four parts which work together to support the whole CSTR service

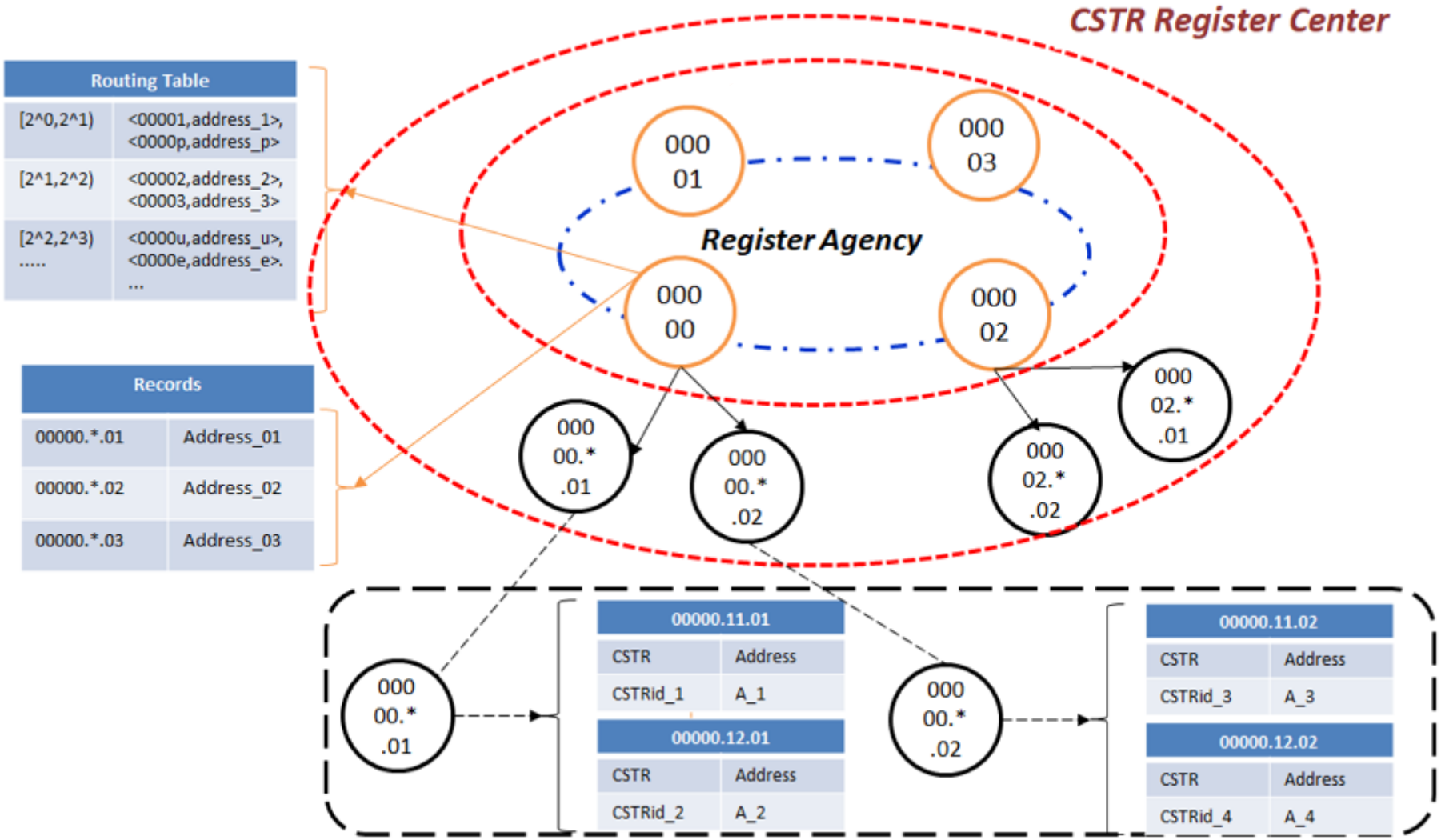
- Numbering
- Data carrier
- Resolution
- Data exchange

Service and Cooperation

CSTR is an distributed community

Common Science and Technology Resource Identifier

The CSTR architecture is decentralized, each RA is one node of the CSTR data network, each RA manage their own CSTR system, the data is localized in RA.



Service-CSTR citation tracing box

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CSTR citation tracing box is based on the CSTR identifier, integrated with Crossref, Google Scholar services, aims to promote the CSTR citation tracing ability.

Service-CSTR resolution monitor

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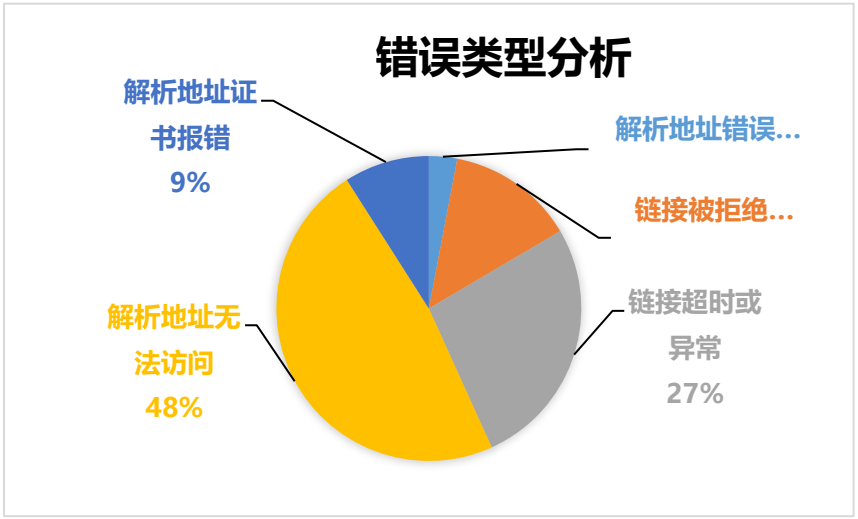
CSTR resolution service provide the monthly data report, help the data centers to promote the information service.

Total monitor：472,426

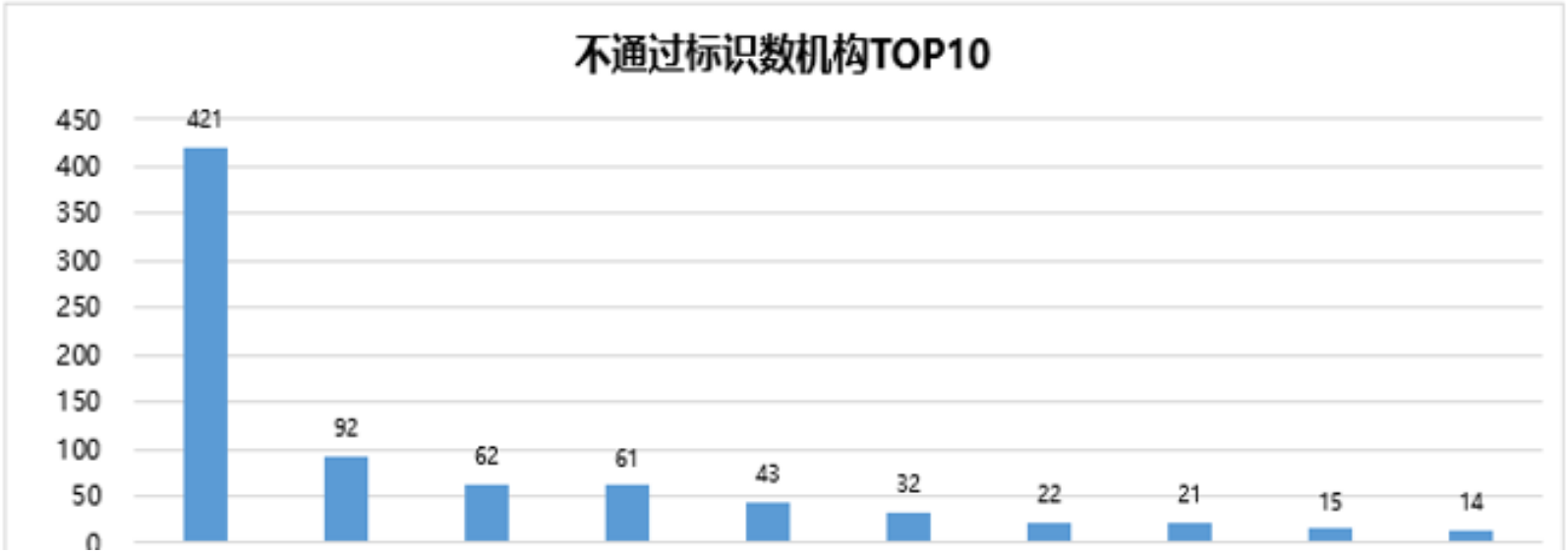
qualified：469,317

Non-qualified：3109



数据中心数量	注册总量	不合格标识数	占比
40	434,086	840	0.19%

本次共计检查40个数据中心，434,706条标识数据，其中不通过量为841，占比0.19%。



Cooperations

Common Science and Technology Resource Identifier

Common Science and Technology Resource Identifier

ORCID

GRID

ROR

ISTC

GS1 EPCglobal

OID Center

Ecode

OID Repository

Handle.Net

ISLI

GS1

arXiv identifier

doi

Isid Life Science Identifier resolution project

ISBN

IGSN URI

Cooperations

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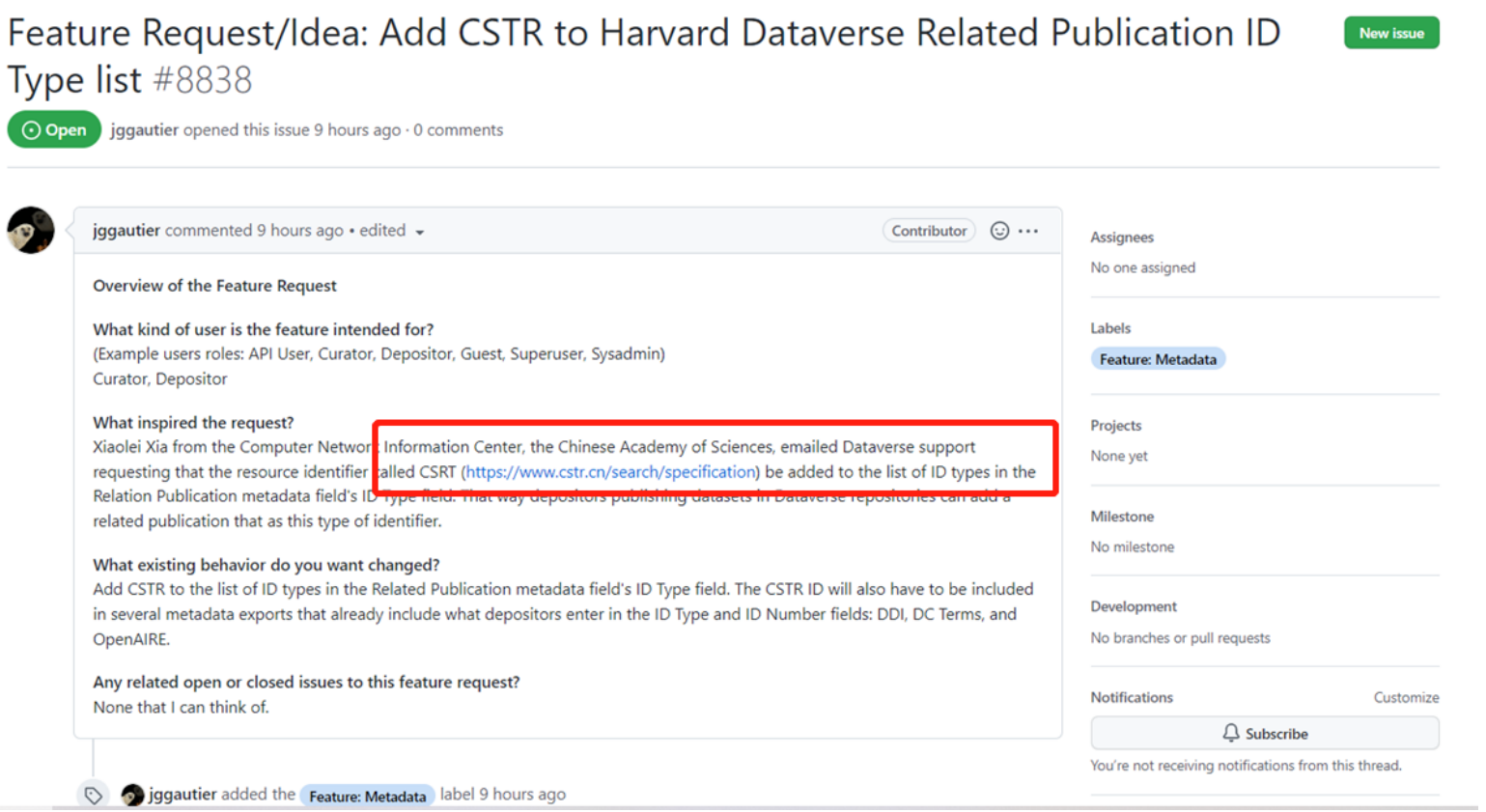
CSTR is adopted by Harvard data center

HARVARD Dataverse Support



Feature Request/Idea: Add CSTR to Harvard Dataverse Related Publication ID Type list #8838

New issue

Open jggautier opened this issue 9 hours ago · 0 comments

jggautier commented 9 hours ago • edited Contributor

Overview of the Feature Request

What kind of user is the feature intended for?
(Example users roles: API User, Curator, Depositor, Guest, Superuser, Sysadmin)
Curator, Depositor

What inspired the request?
Xiaolei Xia from the Computer Network Information Center, the Chinese Academy of Sciences, emailed Dataverse support requesting that the resource identifier called CSRT (https://www.cstr.cn/search/specification) be added to the list of ID types in the Relation Publication metadata field's ID Type field. That way depositors publishing datasets in Dataverse repositories can add a related publication that as this type of identifier.

What existing behavior do you want changed?
Add CSTR to the list of ID types in the Related Publication metadata field's ID Type field. The CSTR ID will also have to be included in several metadata exports that already include what depositors enter in the ID Type and ID Number fields: DDI, DC Terms, and OpenAIRE.

Any related open or closed issues to this feature request?
None that I can think of.

jggautier added the Feature: Metadata label 9 hours ago

Assignees
No one assigned

Labels
Feature: Metadata

Projects
None yet

Milestone
No milestone

Development
No branches or pull requests

Notifications Customize
Subscribe
You're not receiving notifications from this thread.

Cooperations

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CSTR is adopted by FAO

Food and Agriculture Organization of the United Nations，FAO，The Global Information System for PGRFA datacenter
https://glistest.planttreaty.org/glis/entity/view?eid=21737

Cooperations

Common Science and Technology Resource Identifier

CSTR is adopted by ORCID

ORCID（Open Researcher and Contributor ID） https://pub.orcid.org/v3.0/identifiers

国际组织采纳

ORCID

ORCID identifier types

Name	Description	Resolution Prefix	Case sensitive	Primary use
agr	agr: Agricola		false	work
ark	ark: Archival Resource Key Identifier		true	work
arxiv	arxiv: ArXiv	https://arxiv.org/abs/	false	work
asin	asin: Amazon Standard Identification Number	http://www.amazon.com/dp/	false	work
asin-tld	asin-tld: ASIN top-level domain		false	work
authenticusid	authenticusid: AuthenticusID	https://www.authenticus.pt/	false	work
bibcode	Bibcode	http://adsabs.harvard.edu/abs/	true	work
cba	cba: Chinese Biological Abstracts		false	work
cienciaiul	cienciaiul: Ciência-IUL Identifier	https://ciencia.iscte-iul.pt/id/	false	work
cit	cit: CiteSeer		false	work
cstr	cstr: Science and technology resource identification	https://www.cstr.cn/	false	work
ctx	ctx: CiteExplore submission		false	work
dnb	dnb: German National Library identifier	https://d-nb.info/	false	work
doi	doi: Digital object identifier	https://doi.org/	false	work
eid	Scopus Identifier		false	work

Cooperations

Common Science and Technology Resource Identifier

ePIC(Persistent identifier for eResearch)

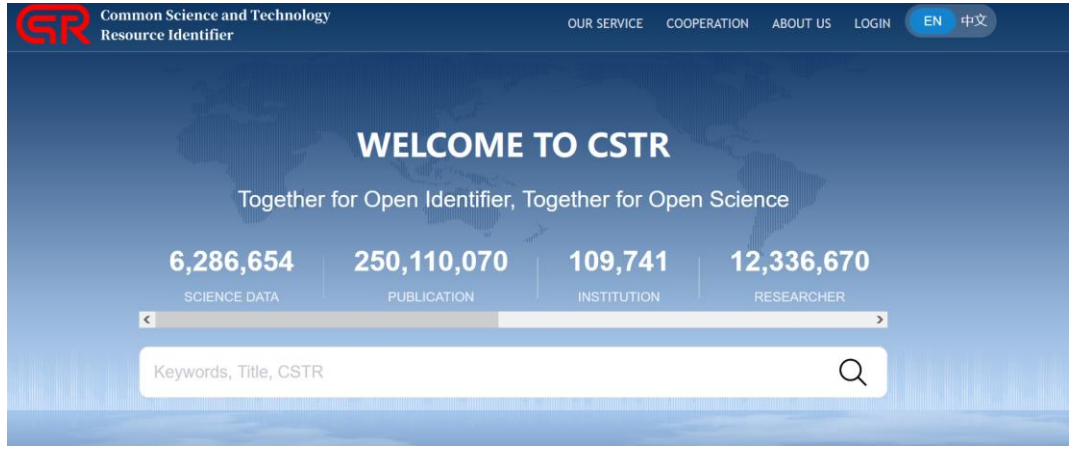
The consortium signed a Memorandum of Understanding aiming to provide long term reliability for the PID services. Meanwhile ePIC is an international consortium and open to partners from the research community worldwide.

CNIC and ePIC sign the MoU

- Exclusive Agency of ePIC under prefix “21” in China.
- research on leading edge technology, such as the data type registry, FAIR DO, etc;
- provide scientific data identification cross-disciplinary

Achievements

Based on the Handle service, CNIC developed the data identification service to support the eResearch in China also open to global research institutions.



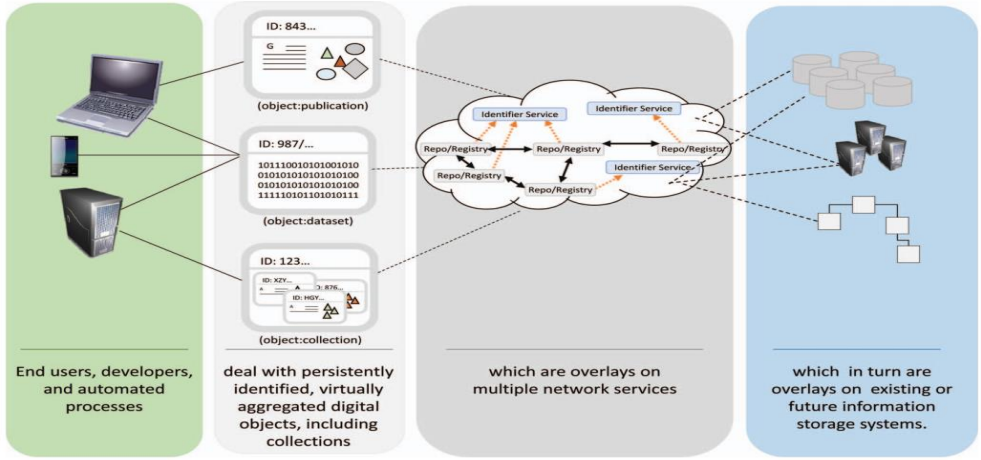
Cooperations

Common Science and Technology Resource Identifier

Cooperation with C2CAMP

(Cross-Continental Collection & Management Pilot)

- the first member from China;
- DO-based Infrastructure Testbed
- participate the development of the **DOAP** (Digital Object Access protocol)



GDOC (Global Digital Object Cloud)

ISLI Registration Authority

Cooperation with ISLI China

(International standard link identifier registration authority)

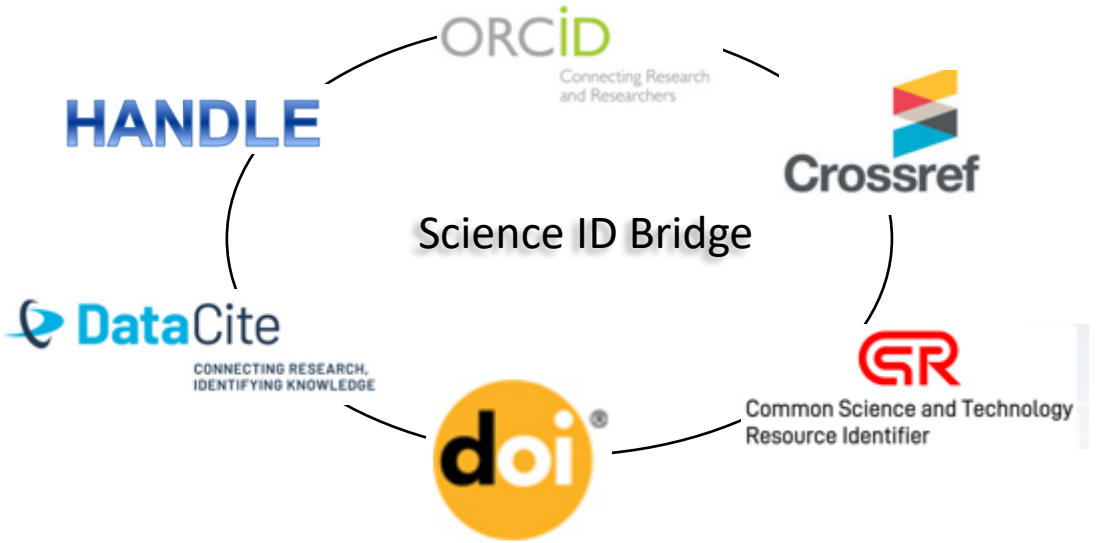
- strategic cooperation agreement
- metadata relevance
- **innovation: Knowledge Service**
- interworking between the CSTR platform and ISLI service platform
- specific use case and promotion of the standards

The Prospect

ID Bridge

Initial the “Global Science ID Bridge Plan”

Let’s build an “ID Bridge ” to range between the heterogeneous identification systems to make better FAIR principle for the Open Science



Thank you

Email: cstr@cnic.cn

WeChat: