Bridging Continents

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National Institute of Informatics JAPAN 2015-04-13

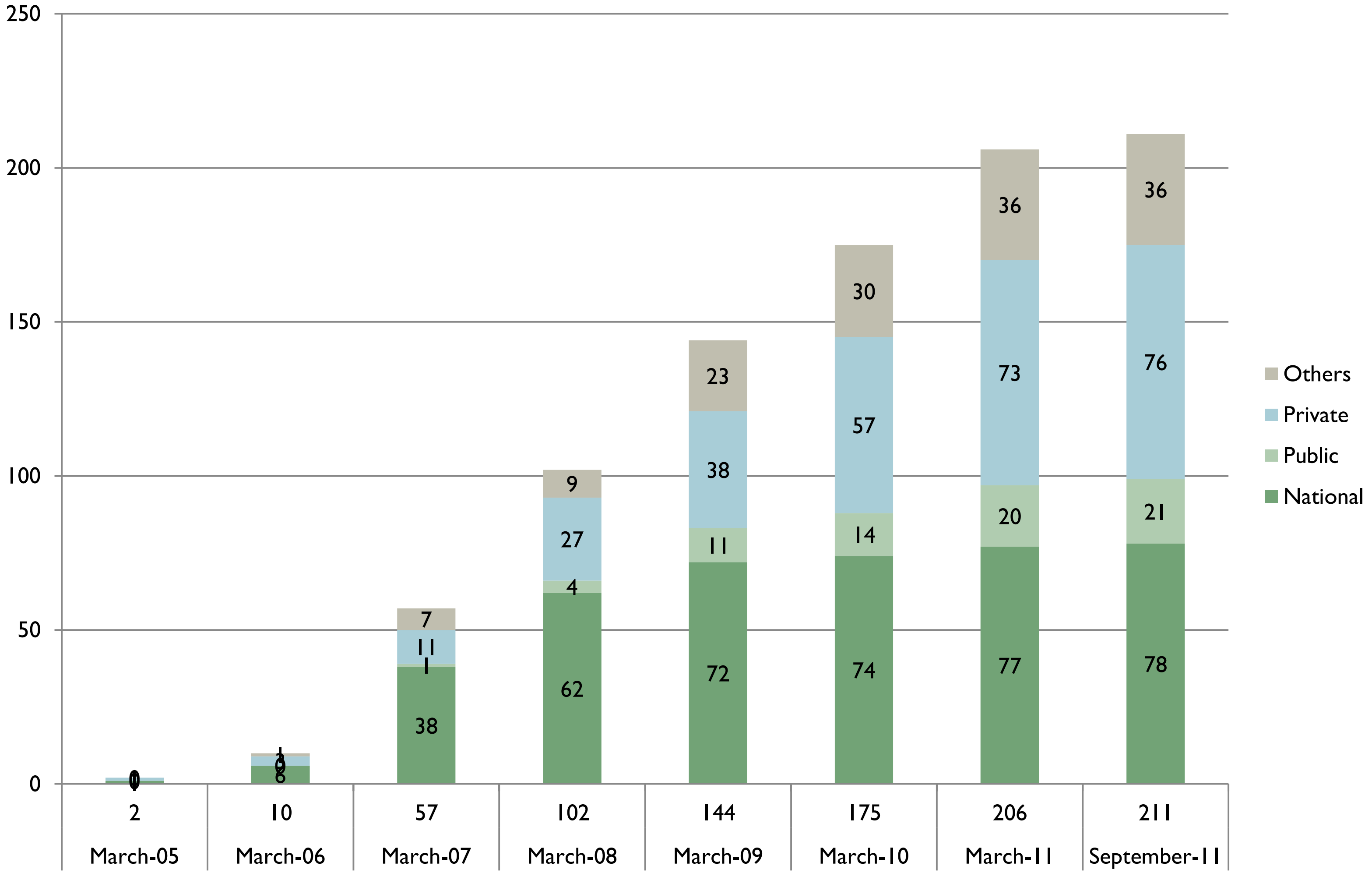
NII-funded Programs

- NII-IRP (Institutional Repositories Program) http://www.nii.ac.jp/irp/en/
  - Phase 1 : FY2005-2007
  - Phase 2 : FY2008-2009
  - Phase 3 : FY2010-2012
  - Three categories of funding
    - Area 1: Support for developing IRs and content creation
    - Area 2: Research and development
    - Area 3: Support for community activities

IRP
学術機関リポジトリ
構築連携支援事業

	Phase 1			Phase 2		Phase 3		
	2005	2006	2007	2008	2009	2010	2011	2012
Area 1 (Institutions)	19	57	70	68	74	24	31	34
Area 2 (Projects)	-	22	14	21	21	8	8	7
Area 3 (Projects)	-	-	-	-	-	5	4	4

Expansion of IRs until 2011



国立情報学研究所では、ソフトウェアWEKOをベースに
機関リポジトリのシステム環境を構築・提供しています。

Implementation Rate of IRs in JAPAN

Almost all national universities have their own IRs, while the implementation rate of other public/private universities hovers at

20-30%

in 2012

Matters Surrounding IRs in Japan

- Ministry of education and research in Japan mandated the digitalization of doctoral dissertations and their dissemination over the network.
  - In 2013 when the above was stated, there still were about 200 universities which does not have IRs.
- There are more than 700 HEs in Japan

+

- The universities which have already owned their IRs were also struggling with how to update and maintain the system in the sustainable manner.

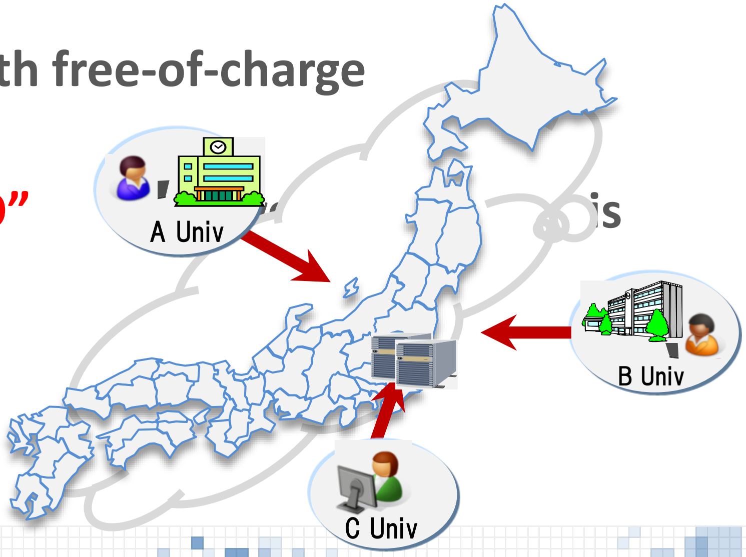
What is about JAIRO Cloud?

Outline

- Limited resources and less technical knowledge hamper implementation of IR especially in small universities.
- JAIRO Cloud provides a shared instance of IR system on the virtual server hosted by NII **since April 2012**.

Service Architecture

- NII offers easy-to-navigate IR platform with free-of-charge in initial stage.
- An easy-to-use **repository module “WEKO”** is used in the service.



Target

How is it?

- **More 200 IRs** by the 2017 fiscal year

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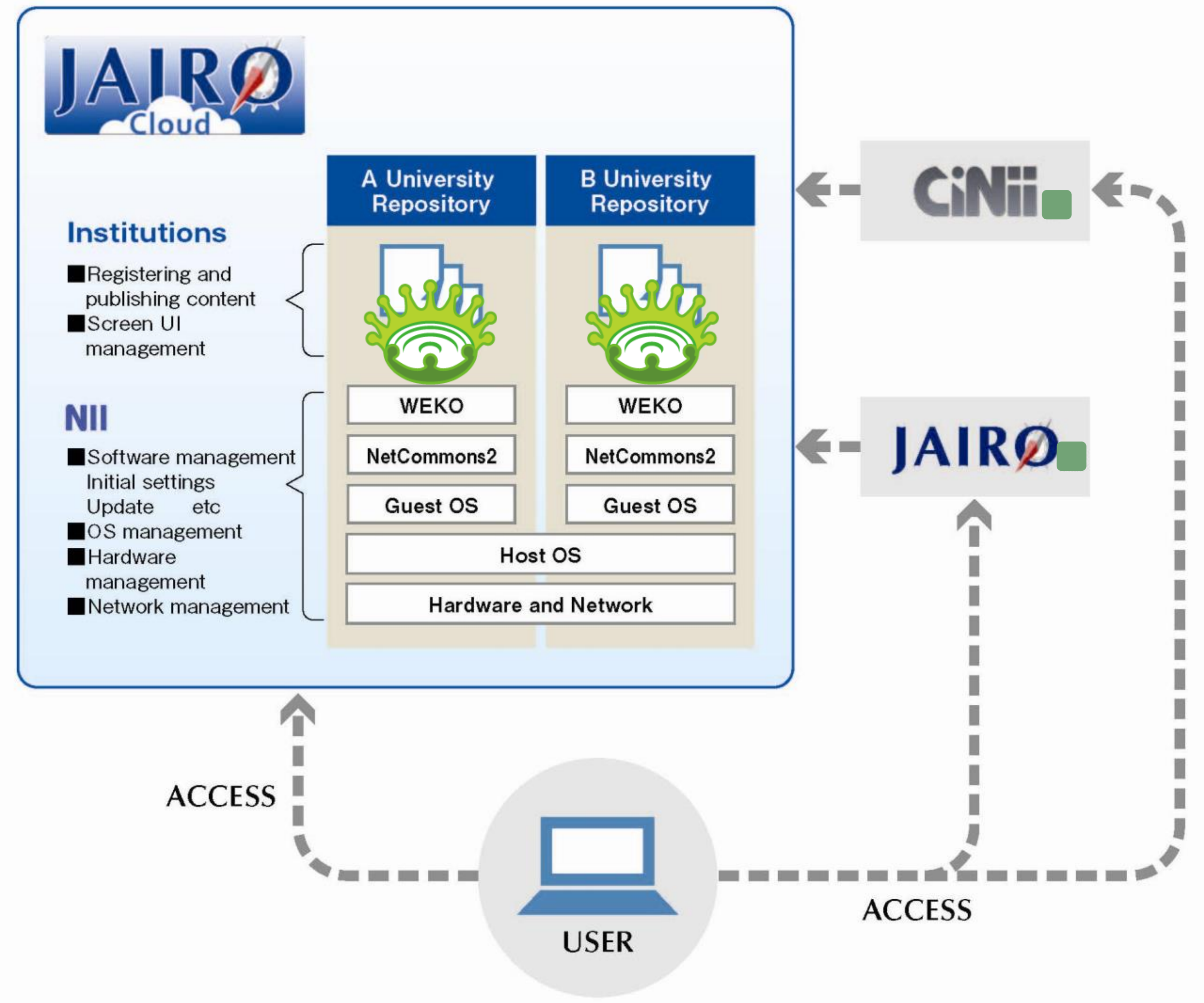
Service Architecture


JAIRO Cloud
Institutions
■Registering and publishing content
■Screen UI management
NII
■Software management
Initial settings
Update etc
■OS management
■Hardware management
■Network management
A University Repository
B University Repository
WEKO
NetCommons2
Guest OS
WEKO
NetCommons2
Guest OS
Host OS
Hardware and Network
CiNii
JAIRO
ACCESS
ACCESS
USER

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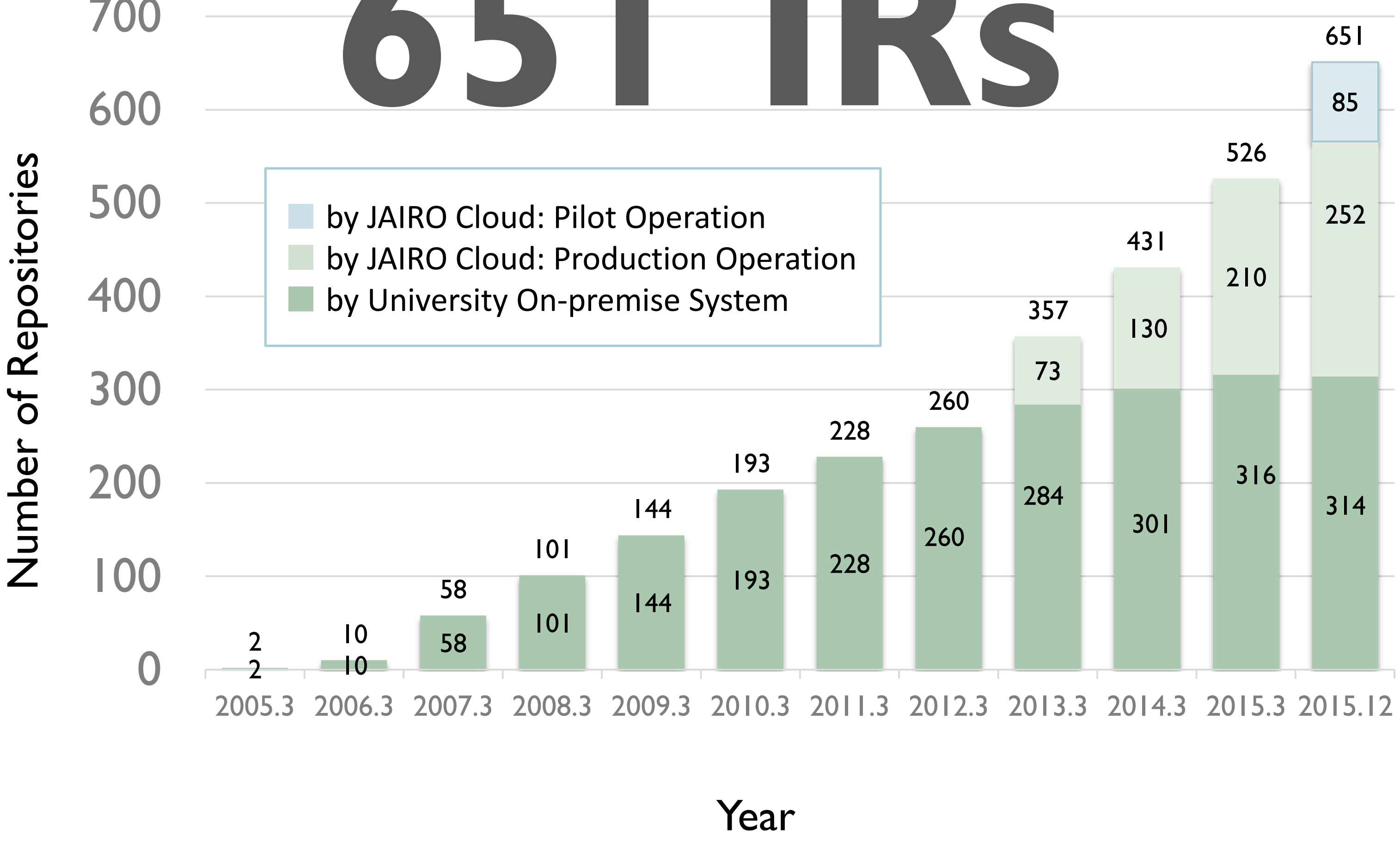
Current Number of IRs in Japan

651 IRs



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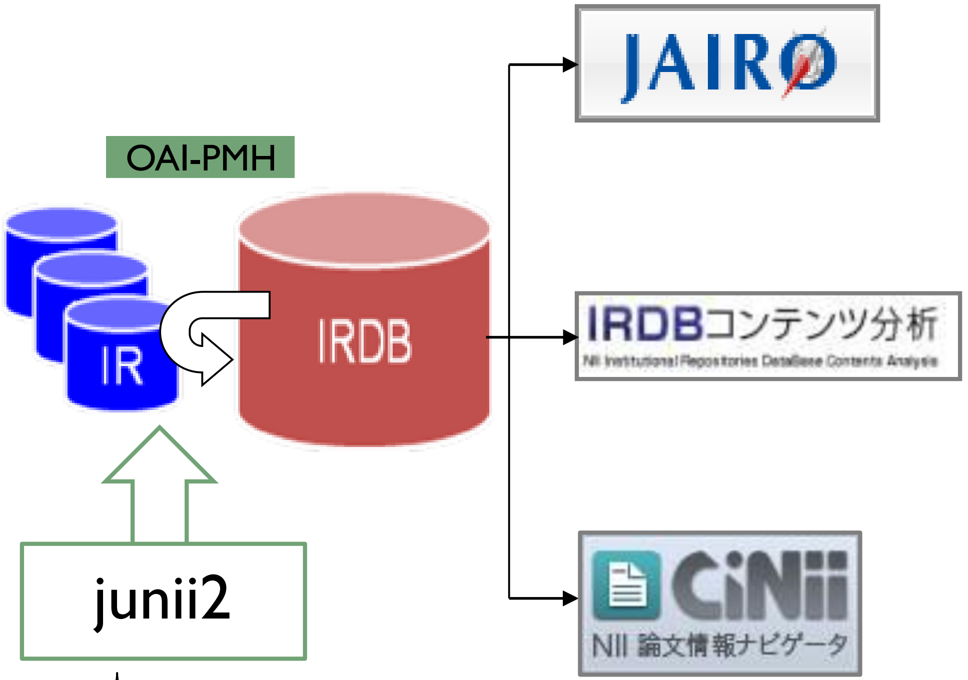
Portal services of Japanese IRs

- NII harvests almost all Japanese IRs


OAI-PMH
IR
IRDB
junii2
JAIRO
IRDBコンテンツ分析
NII Institutional Repositories DataBase Contents Analysis
CiNii
NII 論文情報ナビゲータ

- JAIRO is a "gyroscope" of IR content
- Use it to search all IRs in Japan at once!

- IRDB Content Analysis shows how contents are growing and gives detailed information on each IR.

- CiNii is the largest database of academic journal articles in Japan.
- Metadata on journal articles and departmental bulletins goes to CiNii and is linked to the full texts in the IRs.

- junii2 is a "Dublin Core" application profile for institutional repository with an OpenURL compliant schema.
-It has been adopted by almost all IRs in Japan.
http://www.nii.ac.jp/irp/en/archive/pdf/junii2_en_20090213.pdf

Repository Community

- Digital Repository Federation, since 2006
- JAIRO Cloud Community, since 2012
- Institutional Repository Promotion Committee, since 2013

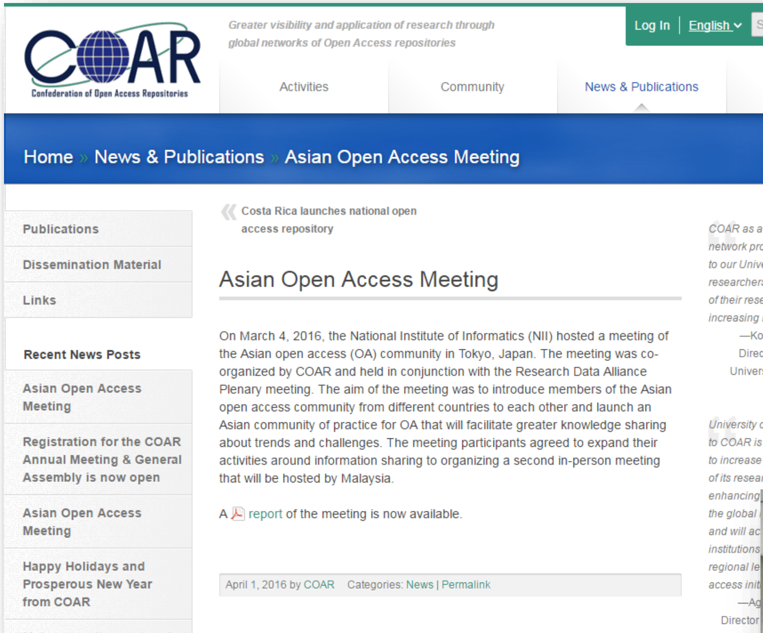
Planning From 2016

- Japan Consortium for Open Access Repository (JPCOAR)

- What can we do for the world wide OA activity?
- What is the actual International collaboration?

Why bridging continents

Work with Asian Friends


COAR
Confederation of Open Access Repositories
Greater visibility and application of research through global networks of Open Access repositories
Log In | English
Search
Activities
Community
News & Publications
About
Home » News & Publications » Asian Open Access Meeting
Publications
Dissemination Material
Links

Recent News Posts

- Asian Open Access Meeting
- Registration for the COAR Annual Meeting & General Assembly is now open
- Asian Open Access Meeting
- Happy Holidays and Prosperous New Year from COAR
- Major repository networks

« Costa Rica launches national open access repository

Asian Open Access Meeting

On March 4, 2016, the National Institute of Informatics (NII) hosted a meeting of the Asian open access (OA) community in Tokyo, Japan. The meeting was co-organized by COAR and held in conjunction with the Research Data Alliance Plenary meeting. The aim of the meeting was to introduce members of the Asian open access community from different countries to each other and launch an Asian community of practice for OA that will facilitate greater knowledge sharing about trends and challenges. The meeting participants agreed to expand their activities around information sharing to organizing a second in-person meeting that will be hosted by Malaysia.

A report of the meeting is now available.

April 1, 2016 by COAR Categories: News | Permalink

COAR as a global repository network provides effective support to our University's research and researchers increasing the impact of their research output, by increasing its visibility.
—Konstanze Söllner. Library Director, Friedrich-Alexander University Erlangen-Nürnberg, October 2014

University of Nairobi's membership to COAR is a milestone in its effort to increase the visibility and impact of its research outputs as well as enhancing

Kick-Off Meeting for Asian OA Community 2016-03-03

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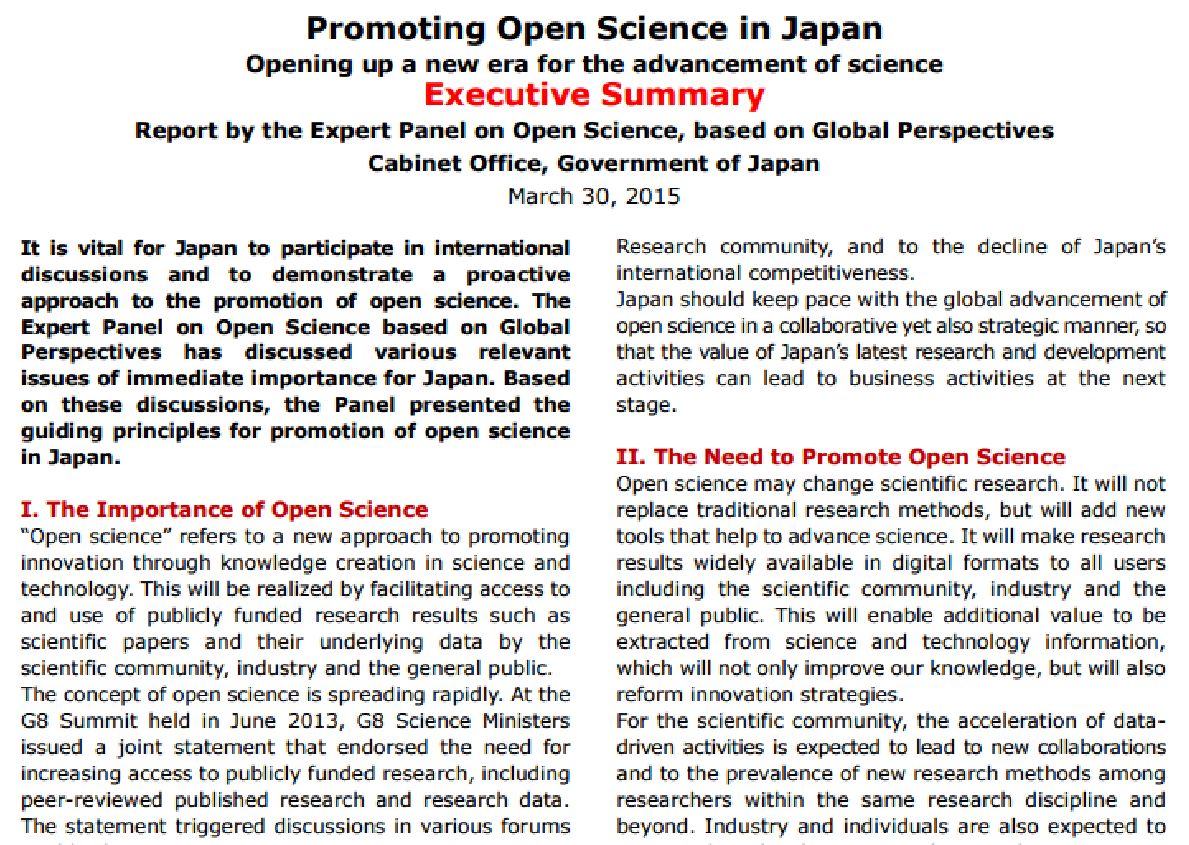
Bridging Continents

- Open Access
  - Basic
    - Propagates our Open Access Experiences to Asian Communities
  - Advanced
    - Contributes Japanese Contents to the International Aggregator
    - Current Open Access Policy Deployment in Japan
      - Firstly Adopted by Kyoto University in 2015 and followed by Tsukuba University, Tokushima University, Kyushu University International Research Center for Japanese Studies.
- Open Research Data?

Open Science Report from Japanese Cabinet Office



Promoting Open Science in Japan

Opening up a new era for the advancement of science

Executive Summary

Report by the Expert Panel on Open Science, based on Global Perspectives
Cabinet Office, Government of Japan
March 30, 2015

It is vital for Japan to participate in international discussions and to demonstrate a proactive approach to the promotion of open science. The Expert Panel on Open Science based on Global Perspectives has discussed various relevant issues of immediate importance for Japan. Based on these discussions, the Panel presented the guiding principles for promotion of open science in Japan.

I. The Importance of Open Science

"Open science" refers to a new approach to promoting innovation through knowledge creation in science and technology. This will be realized by facilitating access to and use of publicly funded research results such as scientific papers and their underlying data by the scientific community, industry and the general public.
The concept of open science is spreading rapidly. At the G8 Summit held in June 2013, G8 Science Ministers issued a joint statement that endorsed the need for increasing access to publicly funded research, including peer-reviewed published research and research data. The statement triggered discussions in various forums worldwide.

Research community, and to the decline of Japan's international competitiveness.
Japan should keep pace with the global advancement of open science in a collaborative yet also strategic manner, so that the value of Japan's latest research and development activities can lead to business activities at the next stage.

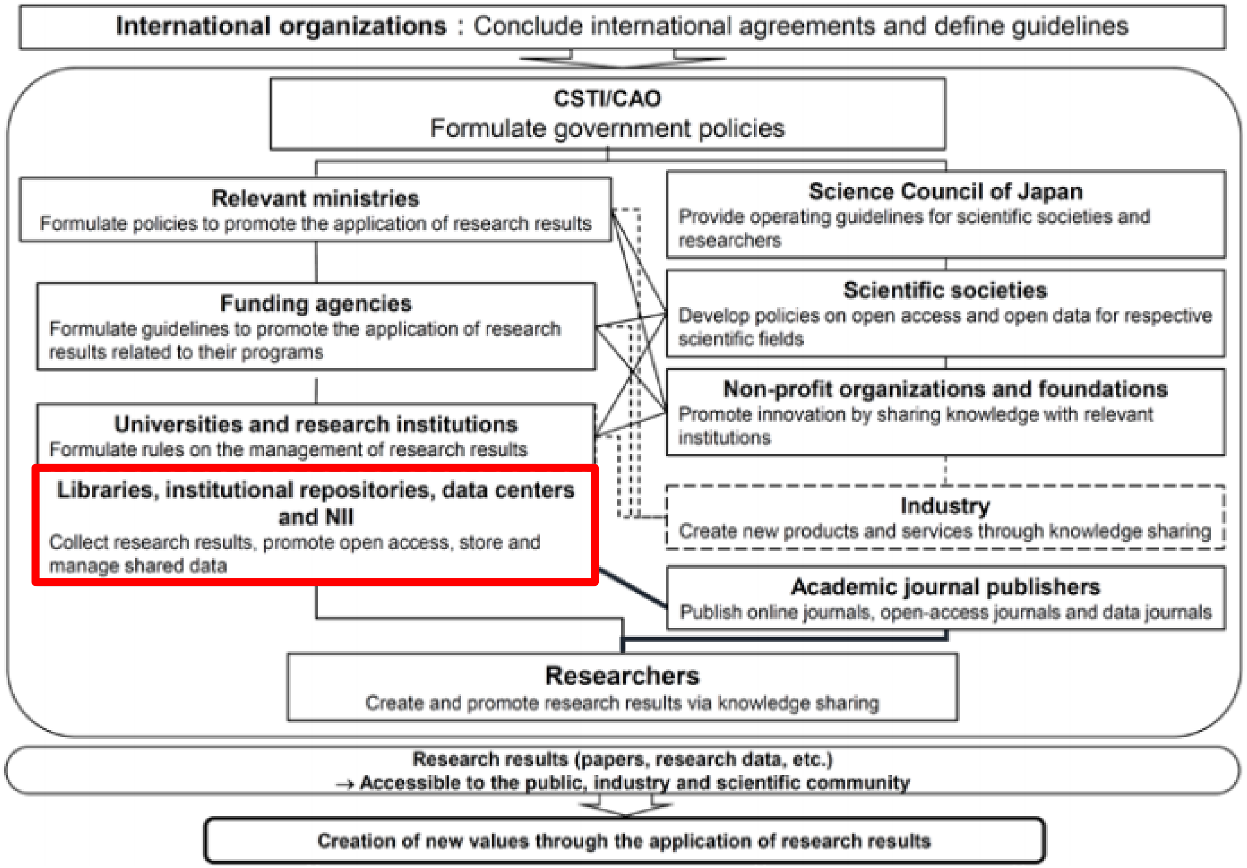
II. The Need to Promote Open Science

Open science may change scientific research. It will not replace traditional research methods, but will add new tools that help to advance science. It will make research results widely available in digital formats to all users including the scientific community, industry and the general public. This will enable additional value to be extracted from science and technology information, which will not only improve our knowledge, but will also reform innovation strategies.
For the scientific community, the acceleration of data-driven activities is expected to lead to new collaborations and to the prevalence of new research methods among researchers within the same research discipline and beyond. Industry and individuals are also expected to gain as they develop new products and services as a

http://www8.cao.go.jp/cstp/sonota/openscience/150330_openscience_summary_en.pdf

Framework of the Open Science in Japan

Correlation diagram of policy making and implementation



International organizations: Conclude international agreements and define guidelines

CSTI/CAO
Formulate government policies

Relevant ministries
Formulate policies to promote the application of research results

Funding agencies
Formulate guidelines to promote the application of research results related to their programs

Universities and research institutions
Formulate rules on the management of research results

Libraries, institutional repositories, data centers and NII
Collect research results, promote open access, store and manage shared data

Science Council of Japan
Provide operating guidelines for scientific societies and researchers

Scientific societies
Develop policies on open access and open data for respective scientific fields

Non-profit organizations and foundations
Promote innovation by sharing knowledge with relevant institutions

Industry
Create new products and services through knowledge sharing

Academic journal publishers
Publish online journals, open-access journals and data journals

Researchers
Create and promote research results via knowledge sharing

Research results (papers, research data, etc.)
→ Accessible to the public, industry and scientific community

Creation of new values through the application of research results

http://www8.cao.go.jp/cstp/sonota/openscience/150330_openscience_summary_en.pdf

NII SINET5 Infrastructure

SINET5 will start in April 2016

Collaboration and Promotion in Research and Education

Resource

- Promotion of academic information circulation and open access
- Collaborative promotion of institutional repository expansion

CiNii JAIRO Cloud

Federation

- Collaborative enhancement of authentication between universities

GakuNin Federation

eduroam

Cloud

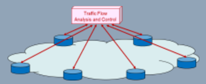
- Dramatic cost reduction and enhancement of research and education environment by tailored cloud services

GakuNin-Cloud Direct Connection

Security

- Network flow analysis and dynamic control
- Raise of security level for SINET users

Flow Analysis



VPN

Network

- Nationwide 100-Gbps backbone network and scalable network expansion
- High-speed direct international lines to USA, Europe, and Asia
- Introduction of new technologies such as SDN in response to user needs

Am I True?

- Importance of the Synchronization between Policy and Infrastructure development
  - Is there an understanding that policy and infrastructure are the inseparable pair?
- Impact of the National Level Infrastructure
  - Not only for the individual domain effort, national level infrastructure has strong benefit?

Cooperation rather than Competition?
We can work together?