

### **The Brazilian Network Cariniana**

Session 3
Building Capacity
Case Study

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### Introduction

- The work of the IBICT
- The actions taken
- The importance





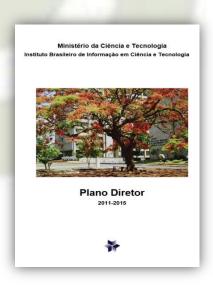
## ibict The Brazilian Institute of Information in **Science and Technology**

**10** years...

The integration of a distributed digital preservation national network









# The Distributed Digital Preservation Model

**Collaborative strategies and new models** 

**Cooperation among members** 

**Investment** 

The importance of partnerships

The benefits of sharing costs

**Effective preservation strategies** 





# The importance of the LOCKSS Alliance in Brazil

The establishment of an architecture of collaborative subnetworks for the treatment and preservation of electronic technical-scientific publications.







# Preservation of Open Access Content Published in Brazil

- The Brazilian reality
- **Open source software**
- Security
- Integration functionality



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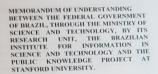


#### **Open Journal Systems**



IBICT as a national aggregator





The Federal Government of Brazil, through the Ministry of Science and Technology, created by law number 8.490, from November 19, 1992, with the headquarters on Esplanada dos Ministérios, building E, in Brasilia-DF, here, SERGIO MACHADO REZENDE, indicated through decree from July 2005, published in D.O.U (Official Publication) on July 21, 2005, resident and living in Brasilia-DF, identity card number 6321679, issued by SSP/ PE and CPF nº 027,390,467-15 by the research unit, the BRAZILIAN INSTITUTE FOR INFORMATION IN SCIENCE AND TECHNOLOGY, under the number 04.082.993/0001-49 ( CNPJ/MF), in the headquarters on SAS, Block 05, Lote 06 Building h em Brasilia-DF, hereinafter named Ibict, here represented by the Director, Professor Doctor Emir José Suaiden, Brazilian, married, identity card number 116.375.SSP/DF and CPF number 001.888.831-34 resident on SHIS QI 23, conjunto 8, casa 04, Brasilia-DF, Zip Code number 71.660.080, indicated by the Presidency of Republic, the Civil House, number 260 from April 12, de 2005 published in D.O.U number 70, from April 13, 2005, in the terms of competence that were delegated to him by Portaria Ministry of Science and Technology, number 407, from June 29, 2006 and PUBLIC KNOWLEDGE PROJECT (PKP) a research project, inaugurated in 1998 and directed by JOHN WILLINSKY, Khosla Professor of Education at Stanford University, Stanford CA, USA, 94305.

Given that the Public Knowledge Project directed by John Willinsky seeks to improve the scholarly and public quality of academic research through the research, development, implementation, and support of innovative open source software to support scholarly publishing and communication:

and given the fact that the Brazilian Institute for Information in Science and Technology is a unity of research of the Ministry of Science and Technology of Brazil that has the mission to promote the competence, the development of resources and the infrastructure of information on Science and Technology for the production, socialization and integration of scientific and technological knowledge;

and given that both the Public Knowledge Project and IBCT both aim to encourage the dissemination and use of scholarly research using online technologies and that both organizations work with and through regional and international networks, partners, and user communities for the achievement of their aims with the objective of building local capacity and sustainability;



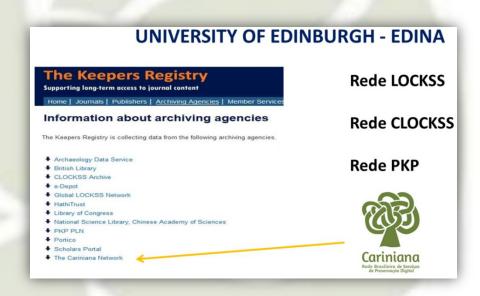
# The organizational aspects of digital preservation

Preservation in national territory













#### **First Actions**

Periodicals, books, theses and electronic dissertations

Training of professionals dedicated to the registration of collections in digital format





#### The Brazilian Network Services

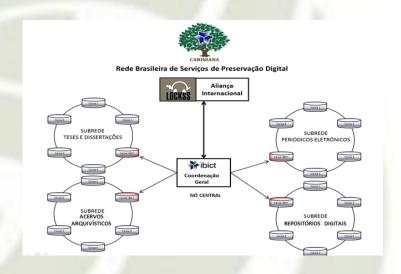
A system in a decentralized architecture.

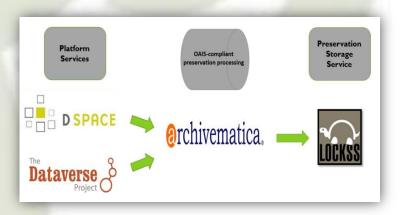
Long-term preservation of Brazilian scientific publications, concerns open access periodicals published in Brazil.

Archive of the doctoral theses.

Archive, catalog and preservation of research data.

Financed by the Brazilian Government and in particular by the MCTI (Ministério da Ciência, Tecnologia and Inovação). The MCTI gave resources to IBICT from 2013-2015.







#### **Everything started as...**

Seven Brazilian public universities.

The insertion and storage of electronic journals on the LOCKSS platform of the partner institutions that have free access publications.

Free membership of institutions.

Services to those institutions that have free access publications.

The network is currently composed of 11 nodes.





#### The Network from here...

The Cariniana staff consists of 27 people, only 2 are full time, 15 are civil servants from the partner institutions.

The archive's dimensions: 282 GB for 772 open access journals, for 13,327 Archival Units archived.

All archived electronic journals use OJS as a platform.

The institutions served by the network are 165 universities and Brazilian research centers.

We have still 425 OJS journals in process and 83 from 22 institutions waiting to be included.

The Brazilian network is starting to write plugins autonomously.





## Developing a trusted space for researchers datasets

Over the years, several methods have been used to store research results. However, these methods do not use a standardization of retrieval, availability and preservation of research data for the scientific community.

These data were stored inappropriately or even discarded without any management in the storage process.

Research data need to be structured, organized, made available and preserved so that future generations can use and understand the information described in them.



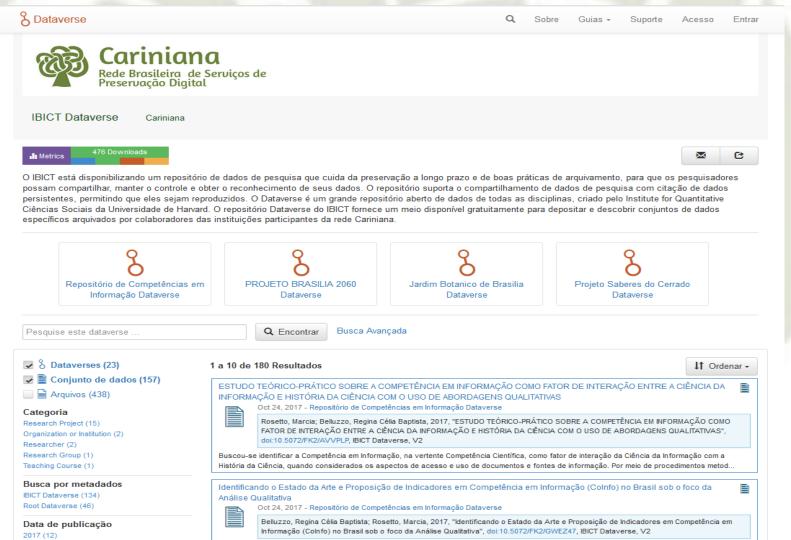




2015 (9)

### Long-term management of research data

Apresentam-se os resultados de pesquisa sobre o estado da arte da Competência em Informação (Colnfo) no Brasil (2000-2016) enquanto tema





### Integration





## OJS-Dataverse Integration



#### OJS Journal



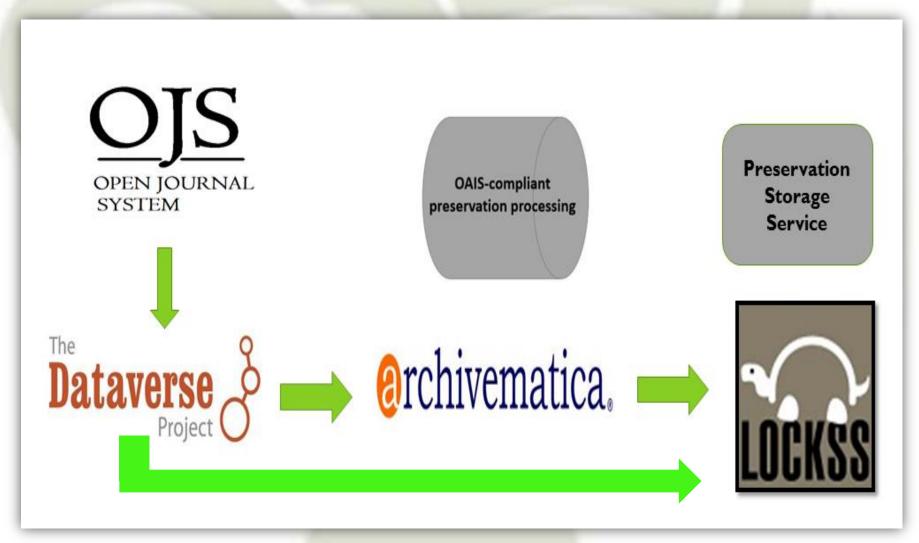
## Citation to Data Citation to Article

#### Journal Dataverse





### **Data Preservation Life Cycle**





#### **Distributed Preservation<sup>2</sup>**

PUBLIC

Software

Research

Community

Services

Support

PUBLIC Knowledge Project PKP is a multi-university initiative developing (free) open source software and conducting research to improve the quality and reach of scholarly publishing

Public Knowledge Project > PKP LOCKSS

#### PKP LOCKSS

PKP has developed a Private LOCKSS Network (PLN) to digitally preserve OJS journals. The LOCKSS program offers decentralized and distributed preservation, seamless perpetual access, and preservation of the authentic original version of the content. The PKP PLN ensures that journals that are not part of the Global LOCKSS Network, which primarily preserves content from larger publishers and vendors, or an existing PLN, which preserve small numbers of OJS journals hosted by member libraries, can be preserved using the LOCKSS program. For additional details about the PKP PLN, see the high level overview (an early discussion document).

With the release of OJS 2.4.8, the PKP PLN is now open to the OJS user community!

Join the PLN

#### **Current usage**

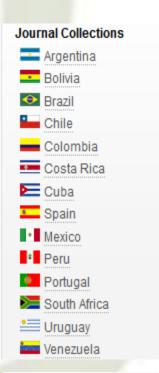
As of May 23, 758 journals had registered with the PN, and deposited 19,779 issues.

US	165	Ireland	24
Brazil	134	Russia	19
Canada	97	Argentina	18
Indonesia	65	UK	15
Italy	57	Germany	15
Costa Rica	35	Singapore	12



#### **More OA Journals**





1285 Active journals

52356 Issues

745182 Articles



#### Conclusion

- As distributed digital preservation solution, Stanford University's LOCKSS program meets the requirements mentioned in the OAIS reference model.
- © Cariniana Network follows the relevant internationally established standards and best practices for definitions of access, archiving and dissemination of preserved digital documents.
- Following the commitment of the IBICT to managing the life cycle of the digital collections and making the scientific and technological information available in the long term, the objective of the Cariniana network is focused on the fulfillment of the functional requirements that allow the preservation and real custody of these collections.



PASIG 2019
February 11, 2019
EL Colegio de México
Mexico City

## **MUITO OBRIGADO!**





