SciELO Documentation

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General Info

1.1 About

1.1.1 About SciELO Methodology

The access to adequate and up-to-date scientific and technical information is essential for the economic and social development, specially to support decision making process in planning, formulation and implementation of public policies and to support professional development and practice. The results of scientific research are mainly communicated and validated through publication in scientific journals. This is valid for developed and developing countries. However, scientific journals from developing countries face several distribution and dissemination barriers, which limits the access and usage of locally generated scientific information.

SciELO - Scientific Electronic Library Online is a model for cooperative electronic publishing of scientific journals on the Internet. Especially conceived to meet the scientific communication needs of developing countries, particularly Latin America and the Caribbean countries, it provides an efficient way to assure universal visibility and accessibility to their scientific literature, contributing to overcome the phenomena known as 'lost science'. In addition, the SciELO model comprises integrated procedures for the measurement of usage and impact of scientific journals.

SciELO Model is product of a partnership among FAPESP (http://www.fapesp.br)— the State of São Paulo Science Foundation, BIREME http://www.bireme.br - the Latin America and Caribbean Center on Health Sciences Information, as well as national and international institutions related to scientific communication and editors. A pilot project, involving 10 Brazilian journals from different subject areas, was successfully carried out from March 1997 to May 1998, aimed at the development and evaluation of an adequate methodology for electronic publishing on the Internet. From June 1998, the project begins to operate regularly, incorporating progressively new journal titles and expanding its operation to other countries. Since 2002, the Project is also supported by CNPq http://www.cnpq.br - Conselho Nacional de Desenvolvimento Científico e Tecnológico.

The SciELO Model comprises three components.

The model's first component is the SciELO Methodology, which enables the electronic publication of complete editions of scientific journals, the organization of searchable bibliographical and full text databases, the preservation of electronic archives and the production of statistical indicators of the scientific literature usage and impact. The methodology includes also journal evaluation criteria based on international scientific communication standards. SciELO full

texts are enriched with dynamic hypertext links with national and international data bases, as for example, LILACS and MEDLINE.

The SciELO Model's second component is the application of the SciELO Methodology to operate web sites of collections of electronic journals. The SciELO Model envisages the operation of national sites as well as thematic sites. The pioneer application is the SciELO Brazil site http://www.scielo.br. Nowadays, Chile http://www.scielo.cl and Cuba http://www.scielo.sld.cu are also operating applications regularly. Several other countries are evaluating and/or being trained on the SciELO Methodology. SciELO Public Health http://www.scielosp.org, a regional thematic library covering Public Health scientific journals from Latin America and Spain, was launched in December 1999. A portal to integrate and provide access to the network of SciELO sites operates at http://www.scielo.org.

The Model's third component is the actual development of partnerships among national and international scientific communication players — authors, editors, scientific and technological institutions, funding agencies, universities, libraries, scientific and technological information centers etc, aiming at the dissemination, improvement and sustainability of the SciELO Model. The operation of the SciELO network is highly based on national infrastructures, which contributes to guarantee its future sustainability.

The successful development of the proposed SciELO network of Latin America and Caribbean scientific journals in the next years will contribute to make locally generated scientific information readily available, which will ultimately contribute to increase the usage of scientific and technical information on decision making process at different levels.

Applications Documentation Index

- SciELO PC-Programs Windows based toolchain to produce a SciELO journal's site
- SciELO Site for Windows the application behind http://www.scielo.br
- SciELO Site for Linux the application behind http://www.scielo.br
- SciELO Books set of applications behind SciELO Books project
- Journals OPAC narrative documentation for Journals OPAC releases.
- Ratchet Access stats tools for electronic journal publishing
- Wayta API to suggest institutions and countries names through a given string.
- SciELO Manager narrative documentation for SciELO Manager's releases.
- Balaio Ferramenta para triagem e submissão de artigos no SciELO.

$\mathsf{CHAPTER}\,3$

SciELO Publishing Schema

• Guidelines - Schema para deposito de artigos na metodologia SciELO.

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SciELO Websites Availability

Take a look at the last week availability at: http://stats.pingdom.com/u023lexvy750

Developer API

5.1 URL Shortening - API to generate short urls at ref.scielo.org

5.1.1 Current version: API v1

URL Shortening

Request:

GET /api/v1/shorten

Parameters:

url String of the URL to be shortened.

Optional Parameters:

callback String of the callback identifier to be returned when using JSONP.

Example Request:

\$ curl -X GET ref.scielo.org/api/v1/shorten?url=http://www.scielo.org

Example Response:

"http://ref.scielo.org/rjnnhd"

- ArticleMeta RESTful API API to retrieve metadata from SciELO articles, journals, issues and collections.
- CitedBy RESTful API API to retrieve citations from SciELO articles.

Support

Using Support Wisely

Before asking a technical question on the maillist(s), please make sure to try the following things (paraphrased from Before You Ask):

- Try to find an answer by reading the manual.
- Try to find an answer by searching the maillist archives.
- Try to find an answer by searching the Web.
- Try to find an answer by inspection or experimentation.
- If you're a programmer, try to find an answer by reading the source code.

For technical questions related to SciELO projects, like installation issues, can be discussed on the scielo-discuss mail list

How to subscribe

Send an e-mail to: scielo-discuss+subscribe@googlegroups.com

How to unsubscribe

Send an e-mail to: scielo-discuss+unsubscribe@googlegroups.com

For development questions related to SciELO projects can be discussed on the scielo-dev mail list.

How to subscribe

Send an e-mail to: scielo-dev+subscribe@googlegroups.com

How to unsubscribe

Send an e-mail to: scielo-dev+unsubscribe@googlegroups.com

Development Guidelines

Any product or piece of code to be incorporated into the SciELO Project must follow certain procedures and development standards in order to ensure quality, consistency and maintenance of products that are part of the SciELO Project.

7.1 Configuration and Change Management

7.1.1 Source Code Versioning

While developing softwares, tools, applications, services or any kind of IT product for the SciELO Project, the developer must:

- Be familiarized with Git version control system (see ProGit Book)
- Have an account at GitHub
- Participate at the (SciELO Project) at GitHub
- Fork the project that he is going to work
- Send "Pull Requests" to the main project repository

The SciELO IT team, must: * Maintain the main project repository under the SciELO Project profile * Validate all "Pull Requests", by performing code reviews and running the automatic tests

7.1.2 Bugs and New Features

While developing softwares, tools, applications, services or any kind of IT product for the SciELO Project, the developer must:

- Make use of a tracking changes system
- The tracking changes system could be a third-party system
- It's important to keep references to all the available documentations

The SciELO IT team, must:

• Provide an tracking change system if the developer does not have one

7.2 Coding Style and Standards

Projects under the SciELO Project scope have rigorous standards for both coding style, testing, and documentation.

You may notice there are lots of legacy projects that don't follow the presented standards. Yes, it is a tragedy but we are fixing them little by little.

7.2.1 Documentation Styling

Every project needs to have documentation built with sphinx. This will allow us to easily integrate it with all the other docs.

For more information, see:

- reST Specification
- sphinx
- · Read the Docs

7.2.2 Documentation Coverage

If you fix a bug, and the bug requires an API or behavior modification, all documentation in the package which references that API or behavior must change to reflect the bug fix, ideally in the same commit that fixes the bug or adds the feature.

7.2.3 Change Log

Feature additions and bugfixes must be added to the CHANGES.txt file in the prevailing style. Changelog entries should be long and descriptive, not cryptic. Other developers should be able to know what your changelog entry means.

7.2.4 Coding Style

Currently we only support codes written in PHP5.2 or latest, and Python 2.6 or latest. All codes should follow it's respective style-guide. Recent projects tend to be developed with Python using Google Styleguide as a base for coding standards. Indentation on template files are defined as 2 spaces, in order to prevent excessive depth.

• Python: Google Styleguide

• PHP: Zend Coding Style

7.3 Development Architecture

Technological Stack

Pyramid, Django,
TwitterBootStrap

Python

Python

PHP

PostgreSQL MySQL MongoDB CouchDB

GNU/LINUX (CentOS)

7.3.1 Frameworks, api's and components accepted

For new developments, there is a list of all technologies accepted by SciELO to be used in third party developments.

Programming Languages

• Python 2.7 or upper

Frameworks

- Django 1.4.4 or upper
- Pyramid 1.4 or upper

API's

• Updated Python API's

Databases

- PostgreSQL 9.2.3 or upper
- MongoDB 2.2.3 or upper

OS

• Linux CentOS

7.4 Unit Testing

7.5 Adding Dependencies and Third-party Software