

Publication, dissemination and network collaboration in the documentation of digital collections of memory institutions: interoperability between the information environments Wikidata, Wikimedia Commons, Wikipedia and the free software Tainacan

SWIB21
Semantic Web in Libraries

Dalton Martins
daltonmartins@unb.br
November, 2021



Where am I from?



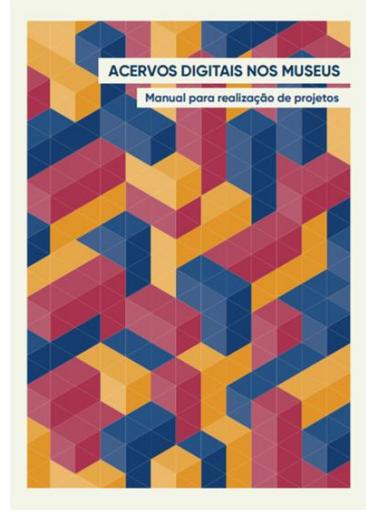
University of Brasília
Faculty of Information Science



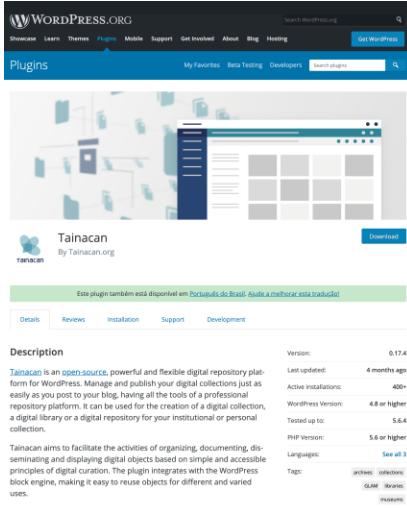
Let's get started...

An **overview** of our
research

Research and development of solutions for digital collections



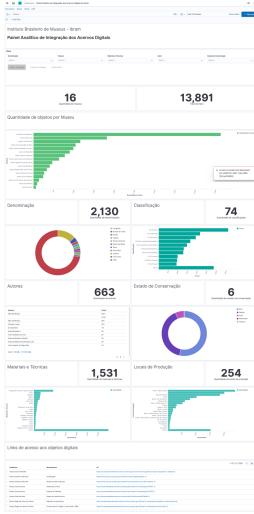
**Training material
and project
management
support:**
technological
maturity diagnosis



**Software for
organizing,
disseminating and
managing digital
collections:** plugins
and themes for
Wordpress



**Scientific research
in masters,
doctorates,
scientific initiation
in topics related to
digital cultural
heritage**



**Research and
development of
**technology and
policies for
aggregation, search
and retrieval of
massive data** from
distributed digital
collections**



**Data Science and
Machine Learning
Processes** for collecting,
analyzing, processing,
enriching, reconciling,
generating metadata
and loading data

Software for organizing,
disseminating and managing digital
collections: plugins and themes for
WordPress



Tainacan

Software for digital collections (i): plugins and themes for WordPress

The screenshot shows the WordPress.org Plugins search results page. The search bar at the top contains 'Search WordPress.org' and 'tainacan'. Below the search bar, there's a navigation menu with links to Showcase, Learn, Themes, Plugins, Mobile, Support, Get Involved, About, Blog, and Hosting. A large blue button labeled 'Get WordPress' is also visible. The main content area has a blue header with the word 'Plugins'. Below this, there are four plugin cards for 'Tainacan', 'Tainacan Extra View Modes', 'Tainacan URL Metadata Type', and 'Tainacan Support for Blocksy'.

Showing results for: **tainacan**

Tainacan
★★★★★ (7)
Tainacan is an open-source, powerful and flexible digital repository platform for WordPress. With all the tools of a professional repository platform, ...
Tainacan.org
400+ active installations
Tested with 5.6.4

Tainacan Extra View Modes
★★★★★ (0)
A view modes plugin for Tainacan, which registers a list of 8 extra view modes that may be used to display your items list.
tainacan
50+ active installations
Tested with 5.6.4

Tainacan URL Metadata Type
★★★★★ (0)
An extra metadata type plugin for Tainacan, which allows creating metadata that displays an embed URL, such as YouTube, Instagram or Flickr.
tainacan
70+ active installations
Tested with 5.5.5

Tainacan Support for Blocksy
★★★★★ (0)
A plugin for integrating Tainacan plugin pages with the amazing Blocksy theme.
tainacan
Fewer than 10 active installations
Tested with 5.7.2

4 plugins

<https://wordpress.org/plugins/search/tainacan/>



The screenshot shows the Tainacan Interface theme interface. It features a header with the Tainacan logo and navigation links for Home, Criação, Repository, Tainacan, Help, Blog, and Categories. The main content area displays a landscape image of a path through trees. Below the image, there's a circular thumbnail and some descriptive text about the theme. On the left, there's a sidebar with filters for Title, Author, and Category. On the right, there are two more thumbnail images with their respective descriptions.

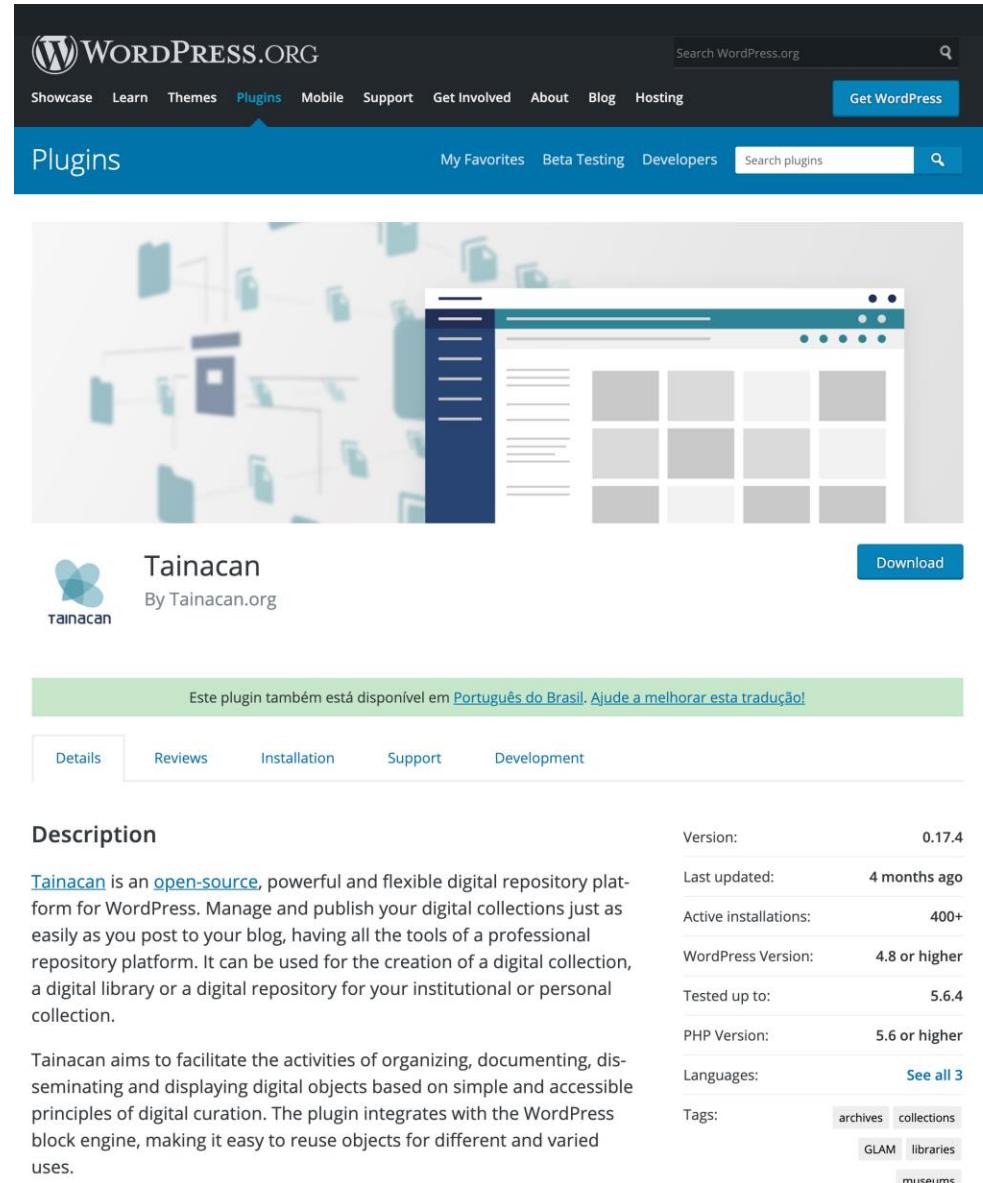
Tainacan Interface

1 theme

<https://wordpress.org/themes/tainacan-interface/>

Software for digital collections (ii): Tainacan plugin

+ 600 active installations
+ 11.738 downloads



The image shows a screenshot of the WordPress.org Plugins page. At the top, there's a navigation bar with links for Showcase, Learn, Themes, Plugins (which is the active tab), Mobile, Support, Get Involved, About, Blog, and Hosting. There's also a search bar and a 'Get WordPress' button. Below the navigation is a blue header bar with 'Plugins' on the left, 'My Favorites', 'Beta Testing', 'Developers', and a search bar. The main content area features a large image of a digital collection interface with various items in a grid. Below the image, the plugin card for 'Tainacan' is displayed, including its logo, name, developer information, a 'Download' button, and a note about available translations. The card also includes tabs for Details, Reviews, Installation, Support, and Development. The 'Details' tab is selected. The 'Description' section contains text about the plugin's purpose and features. To the right of the description are technical details like version, last update, active installations, and supported platforms. At the bottom, there are sections for Tags and Languages.

WORDPRESS.ORG

Showcase Learn Themes **Plugins** Mobile Support Get Involved About Blog Hosting

Search WordPress.org

Plugins My Favorites Beta Testing Developers Search plugins

Tainacan By Tainacan.org Download

Este plugin também está disponível em [Português do Brasil](#). Ajude a melhorar esta tradução!

Details Reviews Installation Support Development

Description

Tainacan is an [open-source](#), powerful and flexible digital repository platform for WordPress. Manage and publish your digital collections just as easily as you post to your blog, having all the tools of a professional repository platform. It can be used for the creation of a digital collection, a digital library or a digital repository for your institutional or personal collection.

Tainacan aims to facilitate the activities of organizing, documenting, disseminating and displaying digital objects based on simple and accessible principles of digital curation. The plugin integrates with the WordPress block engine, making it easy to reuse objects for different and varied uses.

Version: 0.17.4

Last updated: 4 months ago

Active installations: 400+

WordPress Version: 4.8 or higher

Tested up to: 5.6.4

PHP Version: 5.6 or higher

Languages: See all 3

Tags: archives collections GLAM libraries museums

Software for digital collections (iii): Tainacan plugin

<https://wordpress.org/plugins/tainacan/>

let's take a look in Tainacan...

Research and development
in technologies and policies
for massive data
aggregation of digital
collections

Data aggregation technologies and policies (i): systematic review of work processes

Received: 12 January 2021 | Revised: 5 April 2021 | Accepted: 9 May 2021
DOI: 10.1002/asi.24498

RESEARCH ARTICLE

JASIST WILEY

Workflow models for aggregating cultural heritage data on the web: A systematic literature review

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Coordenação de Aperfeiçoamento de
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Brasília

Abstract

In recent years, different cultural institutions have made efforts to spread culture through the construction of a unique search interface that integrates their digital objects and facilitates data retrieval for lay users. However, integrating cultural data is not a trivial task; therefore, this work performs a systematic literature review on data aggregation workflows, in order to answer five questions: What are the projects? What are the planned steps? Which technologies are used? Are the steps performed manually, automatically, or semi-automatically? Which perform semantic search? The searches were carried out in three databases: Networked Digital Library of Theses and Dissertations, Scopus and Web of Science. In Q01, 12 projects were selected. In Q02, 9 stages were identified: Harvesting, Ingestion, Mapping, Indexing, Storing, Monitoring, Enriching, Displaying, and Publishing LOD. In Q03, 19 different technologies were found. In Q04, we identified that most of the solutions are semi-automatic and, in Q05, that most of them perform a semantic search. The analysis of the workflows allowed us to identify that there is no consensus regarding the stages, their nomenclatures, and technologies, besides presenting superficial discussions. But it allowed to identify the main steps for the implementation of the aggregation of cultural data.

1 | INTRODUCTION

Institutions responsible for the custody of cultural heritage collections in Brazil and especially abroad have invested in the digitalization and dissemination of their digital collections on the web. This movement has resulted in a large amount of available content, which brings challenges to the discovery of digital resources to deal with cultural heritage. This trend has made it essential to provide users with an efficient way to find digital objects, by offering integrated search interfaces. The international scenario presents us with several solutions for an integrated interface, Europeana being the best-known example. In Brazil, there is still no widely applied solution, as national initiatives are generally restricted to small projects in local institutions.

Although there are a variety of solutions, it is consensual that getting together cultural data brings additional difficulties, due to the diversity of types of digital objects. We can state that there is no simple solution, but conversely, there are very challenging software engineering and data modeling problems (Avazpour, Grundy, & Zhu, 2019).

To understand the data aggregation models of cultural collections proposed worldwide aiming at their customization and development for the Brazilian reality, we proposed a systematic literature review (SLR), with the objective of answering five research questions: What are the projects? What are the steps foreseen for data aggregation? What are technologies used? Are the steps performed manually, automatically, or semi-automatically? Which perform semantic search?

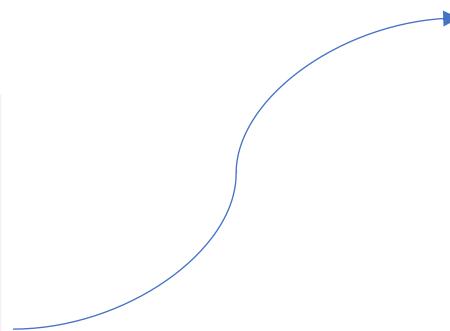
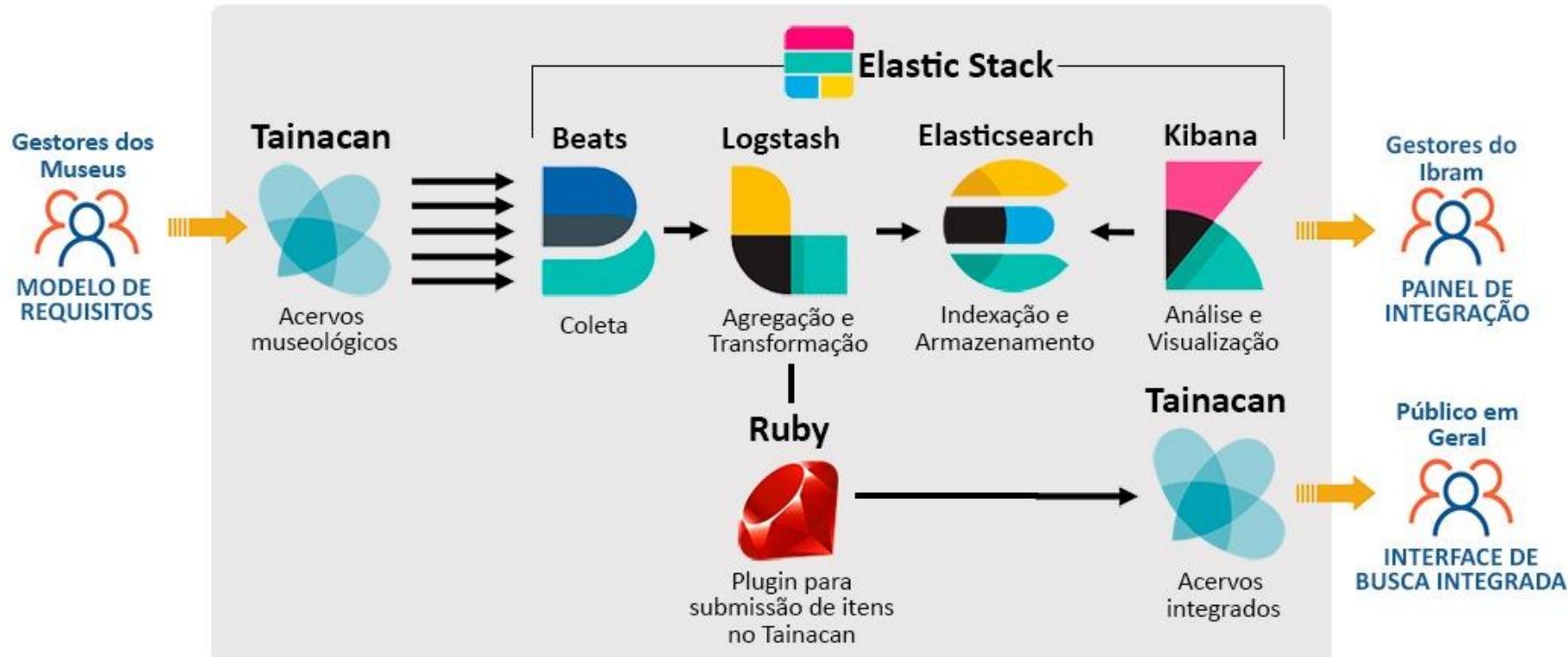


TABLE 5 Steps for data aggregation

No.	Step	Description
1	Harvesting	Extraction of data in its raw form. In general, in OAI-PMH format
2	Ingestion	Receive the data extracted in the collection
3	Mapping	Mapping metadata schemas, performing the transformation from the source scheme to the target scheme
4	Indexing	Metadata indexing service
5	Storing	Store the collected data
6	Monitoring	Interface for monitoring results for possible human interference
7	Enriching	Enrich the metadata through other existing data on the web
8	Displaying	Make the aggregated data available through API, which displays the data in RDF, OAI-PMH or JSON format
9	Publishing LOD	Publish on Linked Open Data

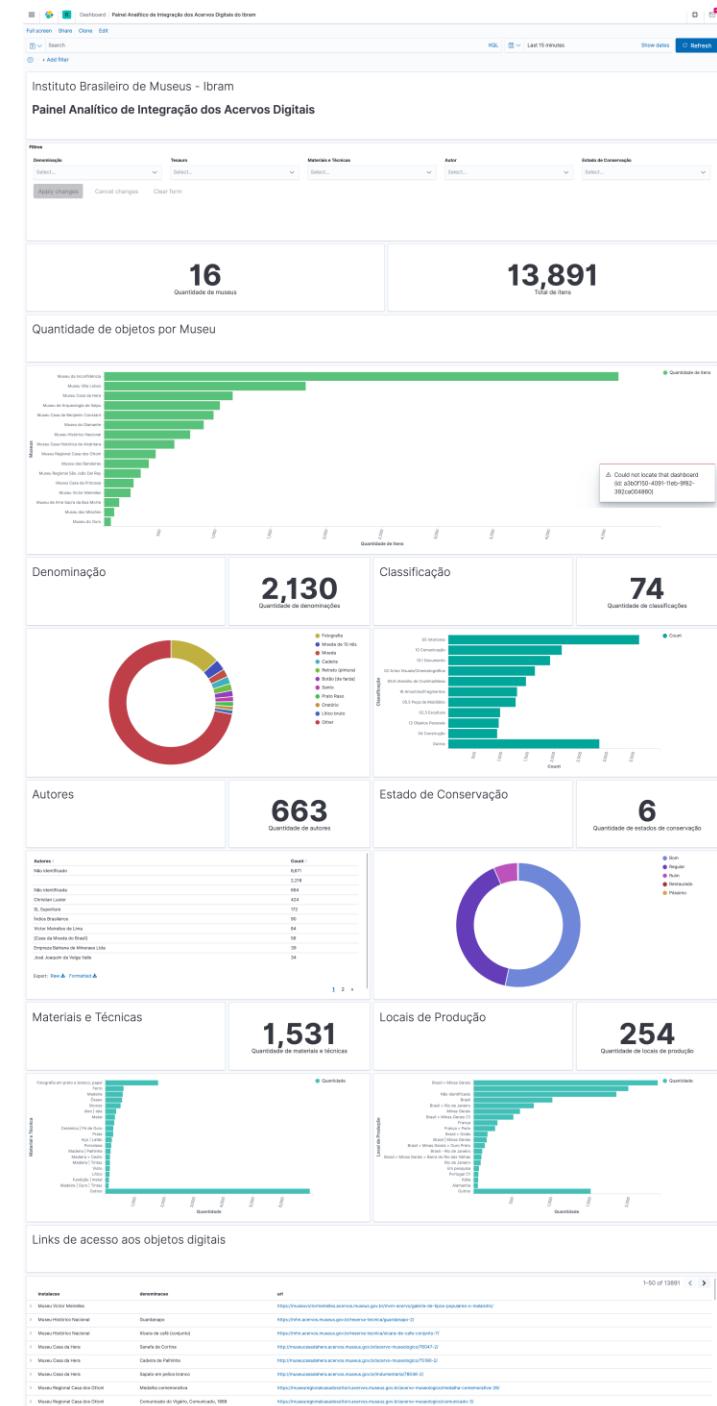
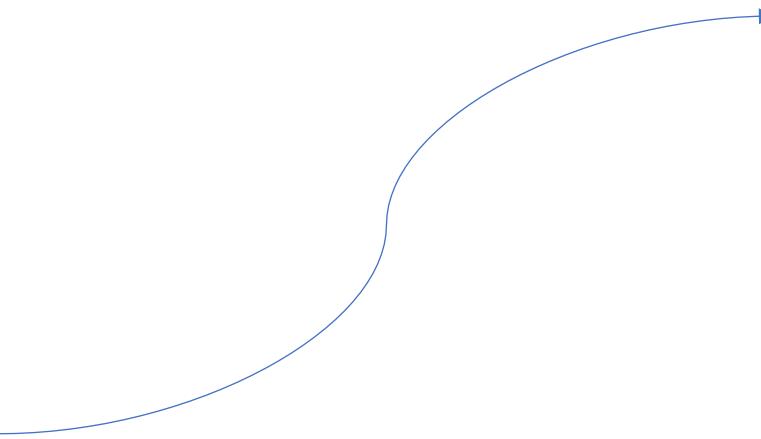
Source: authors, 2020.

Data aggregation technologies and policies (ii): technology integration



Data aggregation technologies and policies (iii): analytical dashboard


kibana

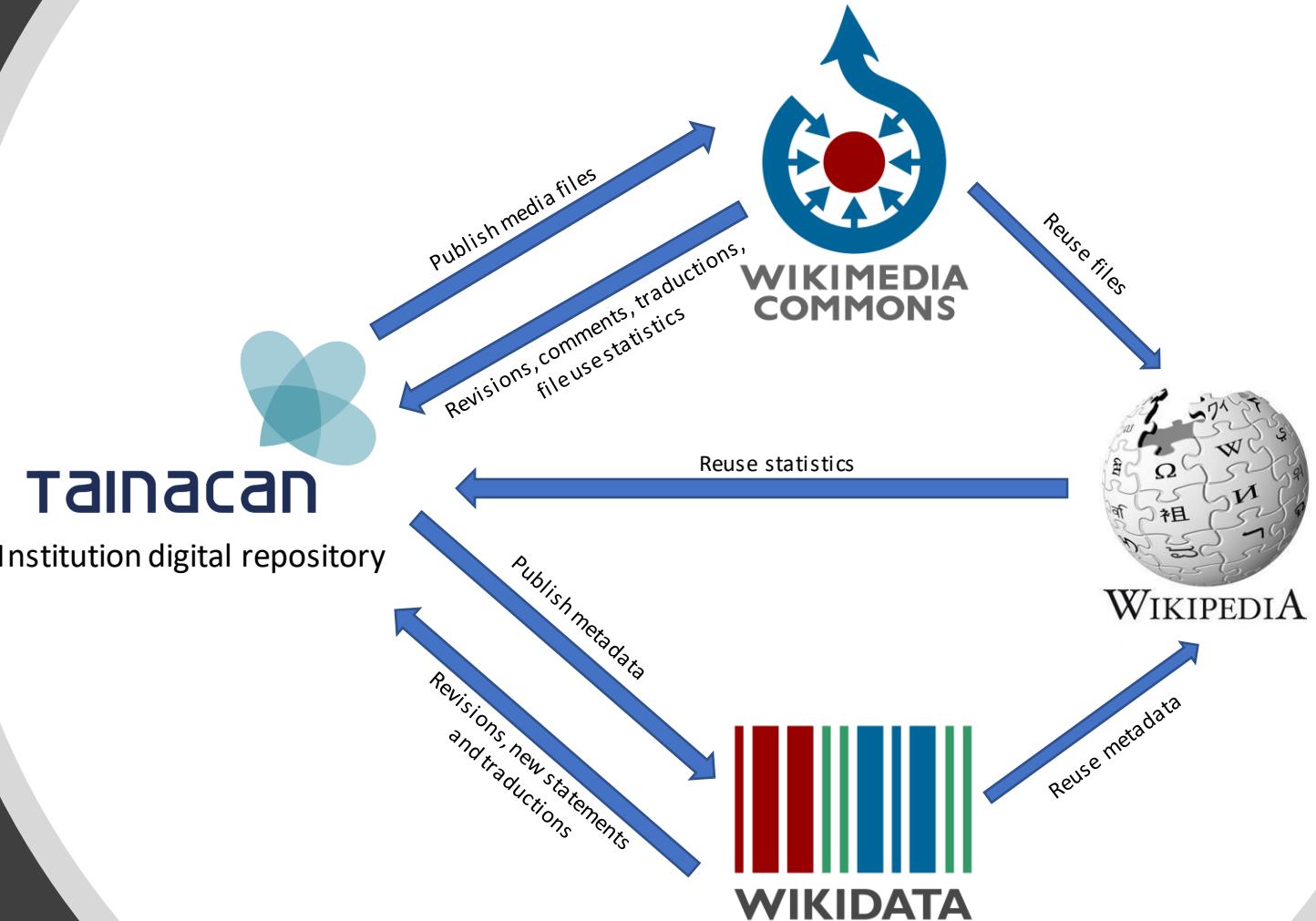


... and now...

The roundtripping !

(in research...)

General vision



References

Roundtripping references (i)

Content page Discussion

WIKI LOVES EARTH 2021 IN BRAZIL
Do you have photos of Brazilian nature reserves?
Share and compete for participation in a photographic expedition in Brazil.

Wikimedia Commons Data Roundtripping

14th century stone house by A.T. Gellerstedt, Public Domain

The Swedish National Heritage Board has researched and developed prototype tools and pilots to provide improved metadata (translations, data additions...) from Wikimedia Commons back to the source institution. This project ran from November 2018 to June 2019 and was part-funded by the European Union within the Europeana Common Culture project.

Wikimedia Commons Data Roundtripping

Contents [edit]

- 1 Introduction
- 2 Background
- 3 Links to key documents
 - 3.1 Reports
 - 3.2 Posts and presentations
- 4 Commons category
- 5 Team

Introduction [edit]

The purpose of this project was to research, design and prototype technical solutions that would make it much easier and less work intensive for GLAM collections managers to review, copy and add to source additions to the metadata of the media files they have shared on Wikimedia Commons. The project aimed to:

- Research the desirability and requirements of GLAM-collections managers in regards to retrieving metadata added to their files post-upload on Wikimedia Commons
- Develop and test a prototype tool that supports GLAM-collections managers in identifying, reviewing and retrieving added or changed metadata to media files.
- Report on lessons learned and recommend future actions (or inaction).

This project also did some early experiments with Structured Data on Wikimedia Commons.

Background [edit]

Across the world galleries, libraries, archives and museums (GLAMs) have chosen to share media files from their collections on Wikimedia Commons. Once included in Wikipedia articles these media files are viewed, played and downloaded by more users than ever even visit most GLAMs websites. Those same users, Wikimedia community members, are not only free, but invited and encouraged to add their knowledge to the metadata and descriptions of those files on Wikimedia Commons. This can take many forms; corrected spelling mistakes, translations into other languages, categorisations, suggested corrections to errors, and new information are among them. With very very few exceptions, those additions remain on Wikimedia Commons and are not returned to the original source collections database of the GLAM. This means that quality improvements remain only on the Wikimedia platforms and are not available in the source collections databases themselves.

The project posits that this is an opportunity for the GLAMs participating in GLAMwiki collaboration and whose core mission typically includes researching and improving their own collections.

Links to key documents [edit]

- Project Brief: Wikimedia Commons Data Roundtripping
- Project Plan: Wikimedia Commons Data Roundtripping
- Project Timeline

Reports [edit]

Research Report – Returning commons community metadata additions and corrections to source.

Midterm Report

Final Report

Posts and presentations [edit]

- This Month in GLAM February 2019: SPECIAL STORY: Wikimedia Commons Data Roundtripping
- This Month in GLAM June 2019: Announcement of final report
- Presentation at Wikimania 2019

Commons category [edit]

Category:Wikimedia Commons Data Roundtripping

Team [edit]

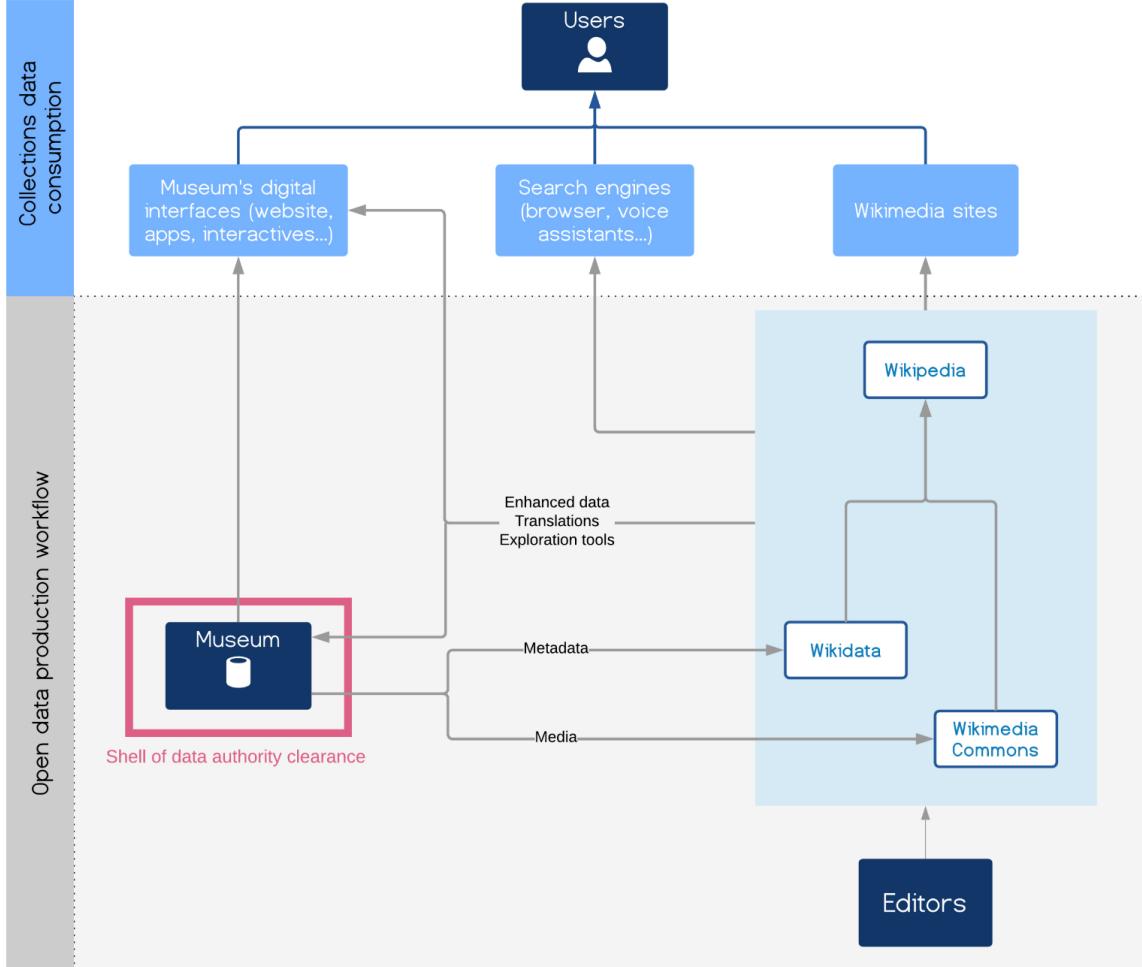
- Åke Larsson, Swedish National Heritage Board, Lead Developer and Product Owner
- Susanna Åberg, Project Administrator (contractor)
- Maarten Zeinstra, Researcher (contractor)
- Paweł Marynowski, Software Developer (contractor)

Category: Wikimedia Commons Data Roundtripping

This page was last edited on 19 August 2019, at 21:10.
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Privacy policy About Meta Disclaimers Mobile view Developers Statistics Cookie statement

https://meta.wikimedia.org/wiki/Wikimedia_Commons_Data_Roundtripping

Roundtripping references (ii)



MuseWeb About Attending Presenting Exhibiting Conference

Museum Collections on Wikipedia: Opening Up to Open Data Initiatives

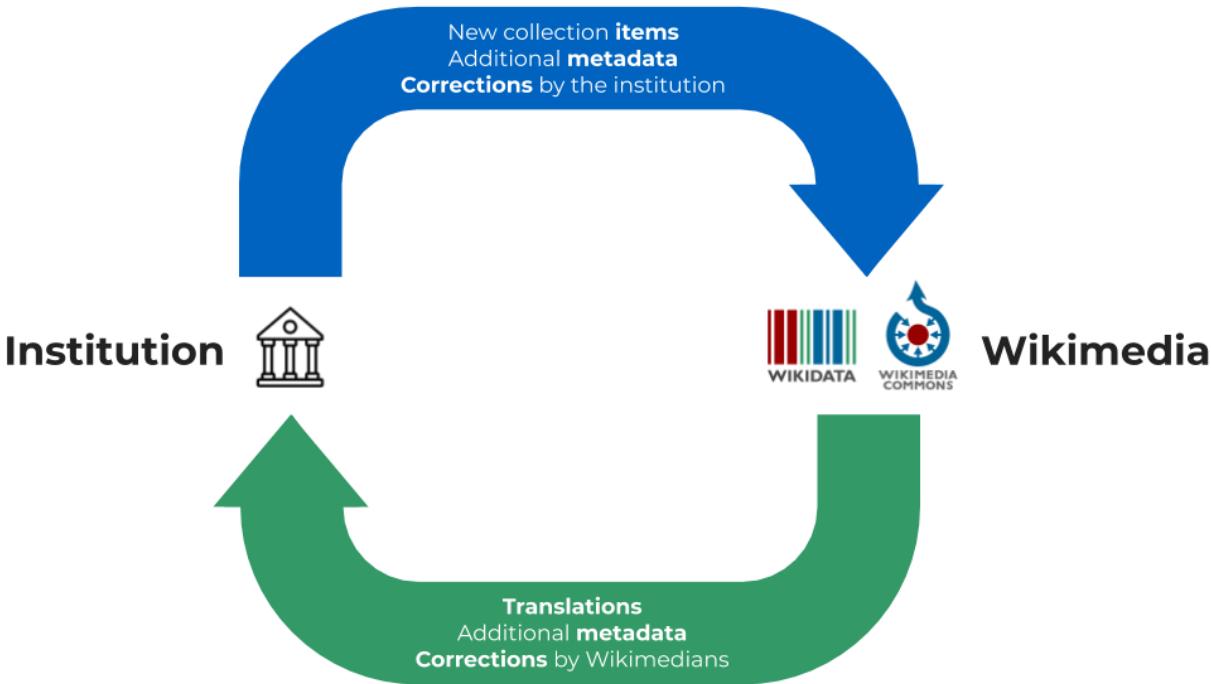
Elena Villaespesa, Pratt Institute, USA, Trilce Navarrete, Erasmus University Rotterdam, The Netherlands

Abstract

The Web has become an important source of information, made possible by structured data. Open linked data enables ubiquitous presence as machines increasingly filter our views—via preferred search engines, the knowledge graph, or Siri—particularly of content found in Wikidata. In this paper, we identify paintings in Wikidata and analyze their usage in the English Wikipedia to find substantial impact. Our results provide evidence that publication of collections as open data facilitate an increase in views, enriched data, automatic translation, and magnified visibility. We find that the usage of paintings and views present a long-tail structure with an underrepresentation of contemporary paintings. Collaborations between museums and Wikimedia yield increased impact, yet projects are unsustainable. We propose an adjusted work-flow to accommodate for Wikimedia projects and amplify the impact of opening museum collections data.

Keywords: Wikipedia, Wikidata, paintings, linked open data, metrics, open access

Roundtripping references (iii)



Diff

Categories

About

Submit

Wikimania 2021

English ▾

Search ...



Data Roundtripping: a new frontier for GLAM-Wiki collaborations

December 13, 2019 by Sandra Fauconnier



Dancers around the may pole, Oxford, Ohio, 1926. Photo by Frank R. Snyder; Miami University Libraries—Digital collections, no known copyright restrictions

For more than 10 years now, cultural institutions around the world have partnered with Wikimedians to make their collections more visible and to encourage re-use via Wikimedia platforms. Collaborations of this kind, [GLAM-Wiki projects](#) (with Galleries, Libraries, Archives and Museums), often use Wikipedia and Wikimedia Commons as platforms. Images of cultural collections are uploaded to Wikimedia's media repository Wikimedia Commons and are re-used as illustrations in Wikipedia articles.

For several years, a growing number of GLAM-Wiki partnerships also work with [Wikidata](#), the free, multilingual knowledge base of the Wikimedia ecosystem. Cultural institutions and Wikimedians upload data about cultural collections to Wikidata: it provides an accessible way to publish collections data as [Linked Open Data](#), and makes the collection data multilingual, re-usable and discoverable across the web. Since 2019, files on Wikimedia Commons can now also be described with multilingual [structured data](#) from Wikidata. This will make the (structured) data component of GLAM-Wiki collaborations even more prominent in the future.

**4 big problems/steps to
solve....**

4 big problems to solve

1
reconciliation
of metadata values

2
data publishing workflow:
creation of items,
media files on
Wikimedia Commons
and metadata on
wikidata

3
monitoring workflow of editions and
collaborations

4
monitoring reuse data:
indicators and metrics

1

reconciliation of
metadata values

1.

reconciliation of metadata values

▼ city	▼ country
Oxford	GB
Paris	FR
Geneva	CH
Cambridge	GB
Cambridge	US
London	CA
London	GB



▼ city	▼ country
Oxford	GB
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Oxford (100)	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Oxford (71)	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Oxford (71)	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Create new topic	
Search for match	
Paris	FR
Choose new match	
Geneva	CH
Choose new match	
Cambridge	GB
Choose new match	
Cambridge	US
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Cambridge (100)	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Cambridge (100)	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Cambridge (100)	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Cambridge (71)	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Cambridge (71)	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Create new topic	
Search for match	



1.

reconciliation of metadata values

Wikidata reconciliation for OpenRefine

This web service can be used to align datasets to Wikidata items in OpenRefine.

Use the following URL in OpenRefine: <https://wikidata.reconci.link/en/api>.

Replacing "en" by another language code will display items and properties in your language, when they are available.

This interface works with OpenRefine from 2.6 rc2 onwards. It is not compatible with Google Refine.

- [Documentation of the protocol](#)
- [Documentation of this application for developers and Wikibase admins](#)
- [Source](#)
- [Bug tracker](#)
- [Service status](#)

<https://wikidata.reconci.link/>

1. reconciliation of metadata values



Reconciliation Service API v0.1

A protocol for data matching on the Web



Draft Community Group Report 19 March 2021

Latest editor's draft:

<https://reconciliation-api.github.io/specs/latest/>

Editors:

[Antonin Delpeuch](#) (University of Oxford)

[Adrian Pohl](#) (hbz, Cologne)

[Fabian Steeg](#) (hbz, Cologne)

[Thad Guidry Sr.](#)

Participate:

[GitHub reconciliation-api/specs](#)

[File a bug](#)

[Commit history](#)

[Pull requests](#)

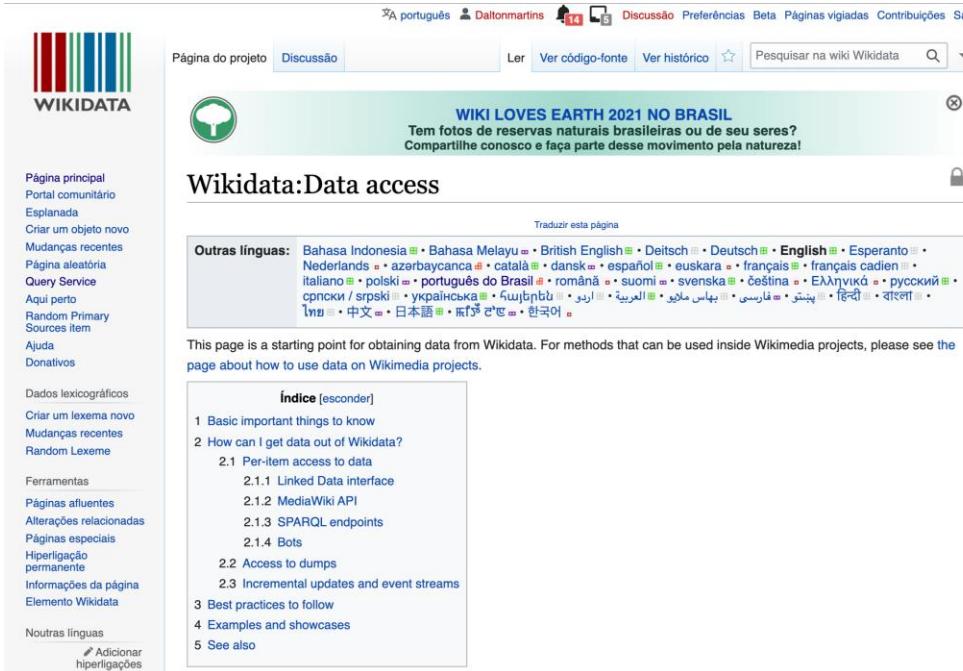
Copyright © 2021 the Contributors to the Reconciliation Service API v0.1 Specification, published by the [Entity Reconciliation Community Group](#) under the [W3C Community Contributor License Agreement \(CLA\)](#). A human-readable [summary](#) is available.

<https://reconciliation-api.github.io/specs/0.1/>

2

data publishing workflow

2. data publishing: wikidata



The screenshot shows the 'Wikidata:Data access' page. At the top, there's a banner for 'WIKI LOVES EARTH 2021 NO BRASIL'. Below it, the main title is 'Wikidata:Data access'. A sidebar on the left contains links for various Wikidata categories like 'Página principal', 'Portal comunitário', and 'Ferramentas'. The main content area includes sections for 'Outras línguas' (with links to many languages) and 'Índice' (with numbered sections from 1 to 5).

MediaWiki API

See the [documentation of the API](#).

Caution: Some API modules, in particular those accessed via action=query, will return raw page content. For entity pages, that raw page content is *not* guaranteed to use any documented format or follow any standard structure. Raw page content should be treated as an opaque blob. For access to the canonical JSON form of entity pages, use the [wbgetentities](#) and [wbsearchentities](#) modules.

SPARQL endpoints

You can query the data in Wikidata through our SPARQL endpoint, the [Wikidata Query Service](#). The service can be used both as an interactive web interface, or programmatically by submitting [GET](#) or [POST](#) requests to

<https://query.wikidata.org/sparql>. RDF data can alternatively be accessed via an Linked Data Fragments[1] interface at <https://query.wikidata.org/bigdata/ldf>. See the [user manual](#) and local [community pages](#) for more information.

Bots

You can also access the API by using a bot. See [Wikidados:Robôs](#) for more on bots.

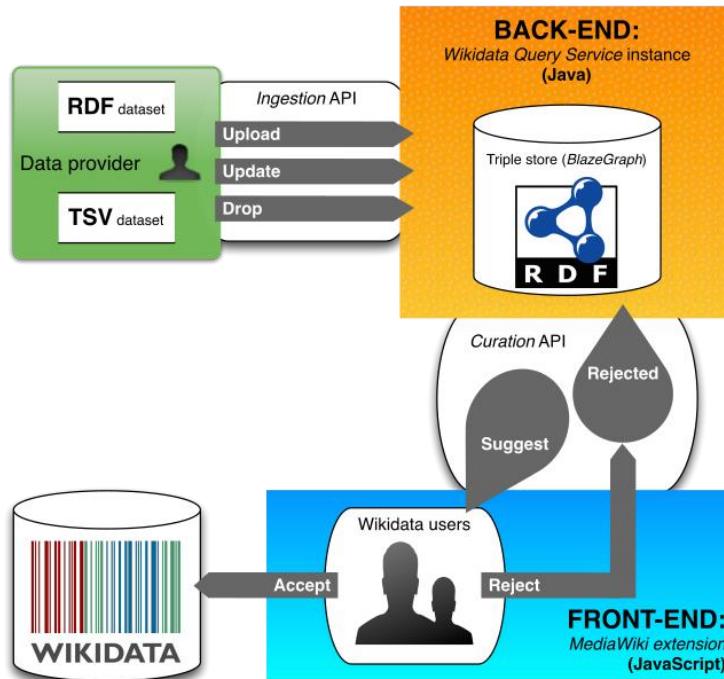
Access to dumps

You can download dumps of the whole content of Wikidata. See the [database dumps documentation](#).



https://www.wikidata.org/wiki/Wikidata:Data_access

2. data publishing: wikidata



Back-end implementation [editar]

Data format [editar]

The tool currently accepts datasets serialized in [QuickStatements](#) (Q20084080). While it is indeed a very compact format, useful to upload large datasets, it is totally non-standard: the only available documentation is contained in the QuickStatements service page itself.^[20] Hence, we foresee the support of stable formats for both the self-sustainability of the project and a standardized data donation workflow. Still, we will keep the QuickStatements support.

Datasets from third-party providers should be serialized in RDF and follow the Wikidata RDF data model.^[21] We believe this is the most standard way for 2 reasons:

1. RDF is a mature Web standard, being a W3C recommendation since 1999;^[22]
2. The Wikidata RDF export format is claimed to be stable.^[23]

Main component [editar]

Given these premises, a *Wikidata Query Service*^[24] instance is a good fit for the back end, since it:

- uses a RDF triple store, i.e., [Blazegraph](#) as the storage engine;^[25]
- is claimed to be a stable Wikidata public API;^[26]
- is written in **Java**, probably a more adopted programming language compared to the [current implementation](#) in C++;
- has facilities to upload datasets in Wikidata RDF dump format;^[27]
- exposes APIs to access data via SPARQL, specifically useful for both the domain filter and the query text box features.^[28]

The [main tool](#) will support [full statements](#), while the [filter-based tool](#) should be fed with [Truthy statements](#).

Ingestion API [editar]

The Ingestion API is responsible for the interaction with third-party data providers. Incoming datasets are first **validated** against the Wikidata RDF data model. It will then provide the following facilities for datasets:

- upload;
- update;
- drop.

Curation API [editar]

The Curation API is responsible for the interaction with Wikidata users, with 2 main services. It will suggest claims for addition and flag the rejected suggestions in the back-end storage.

2. data publishing: wikidata

3. Work with the Wikidata community to import the data

There are several ways to add data to Wikidata including



Manual data entry

Everyone can add data to Wikidata [manually](#).

Online tools

There are a number of online tools to help with the import of data into Wikidata. Some of them that support specific workflows for data imports are:



- [Mix'n'match](#) contains lists of important concepts from reliable sources and allows to match the names to Wikidata entries with one click. It is possible to get your list included. Read [the blogpost about the motivation behind Mix'n'match](#).
- [The primary sources tool](#) allows for a curation workflow for data donations to Wikidata, where Wikidata editors can review, edit, or reject data offered to the community. It was initially developed for datasets from [Freebase](#), but can be used for any collection of very large non-curated datasets.
- [QuickStatements 2 \(Q29032512\)](#): allows users to create items and upload lists of statements based on input in tab-separated format exported from spreadsheets
- [fatameh](#) allows users to create fully populated items about scientific papers with one click.



Wikidata API

The [Wikidata API](#) is a web service that provides convenient access to wiki features, data, and meta-data over HTTP.



Bots

[Bots](#) (also known as robots) are tools used to make edits without the necessity of human decision-making. Bots on Wikidata can add interwiki links, labels, descriptions, statements, references, and can even create items, among other things. We also collect [hints and inspiration for your own code to import data with a bot](#).

https://www.wikidata.org/wiki/Wikidata:Data_donation

2. data publishing:commons



API Discussion Read Edit View history Search MediaWiki

API:Main page

Translate this page

Other languages: Bahasa Indonesia • Deutsch • English • Esperanto • Nederlands • Taqbaylit • Tiếng Việt • Türkçe • azərbaycanca • català • dansk • español • français • italiano • latviešu • lietuvių • polski • português • português do Brasil • română • svenska • čeština • български • русский • українська • تاریخچه • اردو • فارسی • پښتو • ریاستیہ • ହିନ୍ଦୀ • କୁଣ୍ଡଳୀ • 中文 • 文言 • 日本語 • 粵語 • ភាសា ດາວ • 한국어 • العربية

This page is part of the MediaWiki Action API documentation.

Contents [hide]

- 1 Overview
- 2 Quick Start
 - 2.1 Endpoint
- 3 Introduction
 - 3.1 Uses for the MediaWiki Action API
 - 3.2 Getting started with MediaWiki Action API
- 4 API documentation
- 5 Other APIs
- 6 Code stewardship

Overview [edit]

This page provides an overview of the MediaWiki Action API. This page is intended for technical contributors and software developers who wish to understand and use the MediaWiki Action API.

Quick Start [edit]

Endpoint [edit]

All Wikimedia wikis have endpoints that follow this pattern:

<https://www.example.org/w/api.php>

Examples of Wikimedia Wiki Endpoints	
API Endpoint	Wiki
https://www.mediawiki.org/w/api.php	MediaWiki API
https://meta.wikimedia.org/w/api.php	Meta-Wiki API
https://en.wikipedia.org/w/api.php	English Wikipedia API
https://nl.wikipedia.org/w/api.php	Dutch Wikipedia API
https://commons.wikimedia.org/w/api.php	Wikimedia Commons API
https://test.wikipedia.org/w/api.php	Test Wiki API

MediaWiki Action API

Basics

- Etiquette and usage guidelines
- All Query modules
- Get properties of pages
- List pages matching a criterion
- Get module parameters information
- Get meta information about the wiki and user

Authentication

- Get tokens for data modifying operations
- Login
- Logout

Accounts and Users

- Create an account
- Block or unblock a user
- Get info about the current user
- Get the current user's watchlist as a feed
- Change user options
- Change user group membership
- Send an email

Page Operations

- Create and edit a page
- Get the contents of a page
- Upload a file
- Import a page
- Delete a page
- Parse content of a page
- Watch or unwatch a page
- Purge cache for page(s)
- Rollback a page
- Move a page
- Patrol a page or revision
- Restore revisions of a deleted page

https://www.mediawiki.org/wiki/API:Main_page

<https://www.mediawiki.org/wiki/Manual:Pywikibot>

3

monitoring workflow
of editions and
collaborations
(examples...)

3. monitoring workflow: wikidata

WIKIDATA

Ler Ver Histórico Pesquisar na wiki Wikidata

Wiki Loves Earth 2021 no Brasil
Têm foto de reservas naturais brasileiras ou de seu sítio?
Compartilhe conosco e faça parte desse movimento pela natureza!

Coleção Alberto Santos Dumont (Q5677318)

coleção do Museu Paulista
Coleção Santos Dumont | Coleção Alberto Santos Dumont - CSD - CID

+ Novas ligações
+ Galeria

Língua	Rótulo	Descrição	Nomes alternativos
português	Coleção Alberto Santos Dumont	coleção do Museu Paulista	Coleção Santos Dumont Coleção Alberto Santos Dumont... CSD
Inglês	Santos Dumont Collection	Museu Paulista's collection	Coleção Santos Dumont Coleção Alberto Santos Dumont... CSD
português do Brasil	Coleção Alberto Santos Dumont	coleção do Museu Paulista	Coleção Santos Dumont Coleção Alberto Santos Dumont... CSD
español	Rótulo não definido	Descripción não definida	

Todas as línguas introduzidas

Declaraciones

instância de	+ coleção - 0 referência
subclasse de	+ coleção iconográfica - 0 referência
parte de	+ Coleção Museu Paulista - 0 referência

Imagem

Porta-Retrato, Acrílico do Museu Paulista da USP (18).jpg
3 098 x 2 060, 3,79 MB
- 0 referência

nomado em referência a	+ Alberto Santos Dumont - 0 referência
País	+ Brasil - 0 referência
localização	+ Museu Paulista - 0 referência
coleção	+ Coleção Museu Paulista - 0 referência
temário do acervo	+ 1 600 objeto concreto + 1 referência
na lista de interesse do wikiprojeto	+ GLAM do Museu Paulista - 0 referência
descrito na URL	+ https://www.products.usp.br/folheto-em-honorao-bdp/14372/V%2C%2F... Abra o link para visualizar o PDF. Pode ser necessário baixá-lo. - 0 referência

Identificadores

Wikipedia (2 entradas)	+ q5117vzyej - 0 referência
Wikidata (2 entradas)	+ Q5677318 - 0 referência
Wikinotícias (1 entradas)	+ Wikinotícias (1 entradas)
Wikiquote (1 entradas)	+ Wikiquote (1 entradas)
Wikipedia universitária (1 entradas)	+ Wikivoyage (1 entradas)
Wikcionário (1 entradas)	+ Outros sítios (1 entradas) common Category:Santos Dumont Collection

Esta página foi editada pela última vez em 15h17min de 29 de março de 2021.

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Política de privacidade Sobre a Wikipédia Economia de responsabilidade Versão móvel Acessos à dados Programmatic Estatísticas Declaração sobre "cookies"

<https://www.wikidata.org/wiki/Q56677318>

3. monitoring workflow: wikidata



Página principal
Portal comunitário
Esplanada
Criar um objeto novo
Mudanças recentes
Página aleatória
Query Service
Aqui perto
Random Primary Sources item
Ajuda
Doações

Dados lexicográficos
Criar um lexema novo
Mudanças recentes
Random Lexeme

Ferramentas
Páginas afiliadas
Alterações relacionadas
 Atom
Páginas especiais
Informações da página
URI do conceito

Browse Primary Sources

▲ back to top ▲

A português Daltonmartins Discussão Preferências Beta Páginas vigiadas Contribuições Sair
Ler Ver histórico Pesquisar na wiki Wikidata

Histórico de revisões de "Coleção Alberto Santos Dumont" (Q56677318) Ajuda

Ver registos para esta página (ver o registo de abusos)

▼ Filtrar revisões

Seleção de comparação: marque os botões de opção das revisões para comparar e pressione Enter ou o botão na parte inferior.

Legenda: (atu) = diferença com a revisão mais recente, (ant) = diferença com a revisão anterior, { (int: **letra de edição menor**) } = edição secundária.

Comparar as versões selecionadas Editar etiquetas das revisões selecionadas

Selecionar: Todas, Nenhuma, Inverter

• (atu | ant) 15h17min de 29 de março de 2021 MsynABot (discussão | contribs) m . . (7 746 bytes) (o) . . (Protected "Coleção Alberto Santos Dumont (Q56677318)": Highly used item; to be indefinitely semi-protected per Wikidata:Page protection policy#Highly used items; please use Template:Edit request on the item talk page if you cannot edit this item (Edit=Allow only autoconfirmed users) (indefinite))

• (atu | ant) 11h01min de 25 de janeiro de 2021 Lockal (discussão | contribs) . . (7 746 bytes) (+355) . . (Criou uma alegação: identificador do painel de informações do Google (P2671); g/11vzywng) (agradecer)

• (atu | ant) 23h52min de 21 de agosto de 2020 Sturm (discussão | contribs) . . (7 391 bytes) (+838) . . (Criou uma alegação: tamanho do acervo (P1436); 1,600 concrete object) (agradecer)

• (atu | ant) 00h23min de 16 de julho de 2019 Erick Soares3 (discussão | contribs) . . (6 553 bytes) (-8) . . (Alterou o rótulo [en]: Santos Dumont Collection) (agradecer)

• (atu | ant) 11h07min de 15 de julho de 2019 Erick Soares3 (discussão | contribs) . . (6 561 bytes) (+106) . . (Adicionou hiperligação para [enwiki]: Santos Dumont Collection) (agradecer)

• (atu | ant) 23h15min de 10 de junho de 2019 Edoderobot (discussão | contribs) . . (6 455 bytes) (+67) . . (Alterou um objeto: nl-description, python code - collectie)

• (atu | ant) 16h42min de 2 de abril de 2019 Joalpe (discussão | contribs) . . (6 388 bytes) (+394) . . (Criou uma alegação: imagem (P18): Porta-Retrato, Acervo do Museu Paulista da USP (18).jpg) (agradecer)

• (atu | ant) 22h23min de 19 de fevereiro de 2019 Joalpe (discussão | contribs) . . (5 994 bytes) (+127) . . (Adicionou hiperligação para /commonswiki: Category:Santos Dumont Collection) (agradecer)

• (atu | ant) 11h06min de 5 de fevereiro de 2019 Joalpe (discussão | contribs) . . (5 867 bytes) (+105) . . (Adicionou hiperligação para [ptwiki]: Coleção Santos Dumont) (agradecer)

• (atu | ant) 17h30min de 6 de dezembro de 2018 GiFontenelle (discussão | contribs) . . (5 762 bytes) (+239) . . (Adicionou nomes alternativos [pt]: Coleção Santos Dumont, Coleção Alberto Santos Dumont - CSD, CSD) (agradecer)

• (atu | ant) 17h30min de 6 de dezembro de 2018 GiFontenelle (discussão | contribs) . . (5 523 bytes) (+239) . . (Adicionou nomes alternativos [en]: Coleção Santos Dumont, Coleção Alberto Santos Dumont - CSD, CSD) (agradecer)

• (atu | ant) 17h30min de 6 de dezembro de 2018 GiFontenelle (discussão | contribs) . . (5 284 bytes) (+153) . . (Adicionou nomes alternativos [pt-br]: Coleção Alberto Santos Dumont - CSD, CSD) (agradecer)

• (atu | ant) 00h29min de 29 outubro de 2018 Joalpe (discussão | contribs) . . (5 131 bytes) (+436) . . (Criou uma alegação: na lista de interesse do wikiprojeto (P5008): GLAM do Museu Paulista (Q52760835), #petscan) (agradecer) (Etiqueta: Widar [1.4])

• (atu | ant) 04h14min de 17 de outubro de 2018 Ederporto (discussão | contribs) . . (4 695 bytes) (-413) . . (Removeu uma alegação: parte de (P361): Museu Paulista (Q371803), #quickstatements; #temporary_batch_1539749522793) (agradecer) (Etiqueta: QuickStatements [1.1])

• (atu | ant) 04h11min de 17 de outubro de 2018 Ederporto (discussão | contribs) . . (5 108 bytes) (-430) . . (Removeu uma alegação: membro de (P463): Museu Paulista (Q371803), #quickstatements; #temporary_batch_1539749326989) (agradecer) (Etiqueta: QuickStatements [1.1])

• (atu | ant) 04h07min de 17 de outubro de 2018 Ederporto (discussão | contribs) . . (5 538 bytes) (+417) . . (Criou uma alegação: parte de (P361): Coleção Museu Paulista (Q56677470), #quickstatements; #temporary_batch_1539749261732) (agradecer) (Etiqueta: QuickStatements [1.1])

• (atu | ant) 01h44min de 13 de outubro de 2018 Ederporto (discussão | contribs) . . (5 121 bytes) (+434) . . (Criou uma alegação: coleção (P195): Coleção Museu Paulista (Q56677470), #quickstatements; #temporary_batch_153974937856327) (agradecer) (Etiqueta: QuickStatements [1.1])

• (atu | ant) 01h44min de 13 de outubro de 2018 Ederporto (discussão | contribs) . . (4 687 bytes) (-430) . . (Removeu uma alegação: coleção (P195): Museu Paulista (Q371803), #quickstatements; #temporary_batch_153974937856327) (agradecer) (Etiqueta: QuickStatements [1.1])

• (atu | ant) 15h58min de 2 de outubro de 2018 Joalpe (discussão | contribs) . . (5 117 bytes) (+98) . . (Adicionou nome alternativo [pt-br]: Coleção Santos Dumont) (agradecer)

• (atu | ant) 15h59min de 20 de setembro de 2018 GiFontenelle (discussão | contribs) . . (5 019 bytes) (+5 019) . . (Criou um objeto novo: #quickstatements; #temporary_batch_1537459032179) (agradecer) (Etiqueta: QuickStatements [1.1])

Comparar as versões selecionadas Editar etiquetas das revisões selecionadas

Selecionar: Todas, Nenhuma, Inverter

<https://www.wikidata.org/wiki/Q56677318>

Política de privacidade Sobre a wiki Wikidata Exoneração de responsabilidade Versão móvel Acesso a dados Programadores Estatísticas Declaração sobre "cookies"



3. monitoring workflow: wikidata

This XML file does not appear to have any style information associated with it. The document tree is shown below.

<https://www.wikidata.org/w/index.php?title=Q56677318&feed=atom&action=history>

3. monitoring workflow: Wikimedia Commons

Wikimedia Commons logo

Main page
Welcome
Community portal
Village pump
Help center

Participate
Upload file
Recent changes
Latest files
Random file
Contact us

Tools
What links here
Related changes
Special pages
Permanent link
Page information
Concept URI
Cite this page
Nominate for deletion

Print/export
Download as PDF
Printable version

File Discussion

Wiki Loves Earth 2021 in Brazil
Do you have photos of Brazilian nature reserves?
Share and compete for participation in a photographic expedition in Brazil.

File:Porta-Retrato, Acervo do Museu Paulista da USP (18).jpg

From Wikimedia Commons, the free media repository

Download Use this file Use this file Email a link Information



Size of this preview: 800 x 532 pixels. Other resolutions: 320 x 213 pixels | 640 x 426 pixels | 1,024 x 681 pixels | 1,280 x 851 pixels | 3,008 x 2,000 pixels.
Add a note

Original file (3,008 x 2,000 pixels, file size: 3.75 MB, MIME type: image/jpeg); ([request rotation](#)); ZoomViewer

Open in Media Viewer

File information Structured data

Captions

English Add a one-line explanation of what this file represents

Edit

[https://commons.wikimedia.org/wiki/File:Porta-Retrato,_Acervo_do_Museu_Paulista_da_USP_\(18\).jpg](https://commons.wikimedia.org/wiki/File:Porta-Retrato,_Acervo_do_Museu_Paulista_da_USP_(18).jpg)

3.

monitoring workflow: Wikimedia Commons

Revision history of "File:Porta-Retrato, Acervo do Museu Paulista da USP (18).jpg" ? Help

[View logs for this page](#) ([view abuse log](#))

▼ **Filter revisions**

Old versions of this media file ([Help](#)):

- (cur) = difference with current version, (prev) = difference with preceding version
- time and date = article as of that timepoint, username or IP address of the editor, m = minor edit, → = [section edit](#), ← = [automatic edit summary](#)
- Mark the radio boxes of the versions to compare and hit enter or the button at the bottom
- [Number of watchers](#) · [Pageviews Analysis](#) · [Page statistics](#)

Compare selected revisions

- (cur | prev) 22:46, 14 September 2020 BotMultichill ([talk](#) | [contribs](#)) . . . (3,450 bytes) (+1,306) . . . (Changed an entity: Adding structured data: camera & copyright) ([undo](#))
- (cur | prev) 15:58, 6 July 2020 JarektBot ([talk](#) | [contribs](#)) . . . (2,144 bytes) (+436) . . . (Created claim: [digital representation of \(P6243\): Porta-Retrato \(Q61766152\)](#), batch #38228) ([undo](#)) ([Tag: quickstatements \[2.0\]](#))
- (cur | prev) 06:54, 4 May 2020 JarektBot ([talk](#) | [contribs](#)) . . . (1,708 bytes) (+485) . . . (Created claim: [Wikimedia OTRS ticket number \(P6305\): 2017080710013454](#), batch #33446) ([undo](#)) ([Tag: QuickStatements \[1.5\]](#))
- (cur | prev) 13:17, 5 March 2020 Chatsam ([talk](#) | [contribs](#)) m . . . (1,223 bytes) (-33) . . . (removed [Category:Heraldic supporters](#)) ([undo](#) | [thank](#)) ([Tag: HotCat](#))
- (cur | prev) 15:50, 13 April 2019 Wieralee ([talk](#) | [contribs](#)) m . . . (1,256 bytes) (+11) . . . (Moving from [Category:Supports](#) to [Category:Heraldic supporters](#)) ([undo](#) | [thank](#)) ([Tag: Cat-a-lot](#))
- (cur | prev) 16:38, 2 April 2019 GiFontenelle ([talk](#) | [contribs](#)) . . . (1,245 bytes) (+1,245) . . . (pattypan 18.02) ([thank](#))

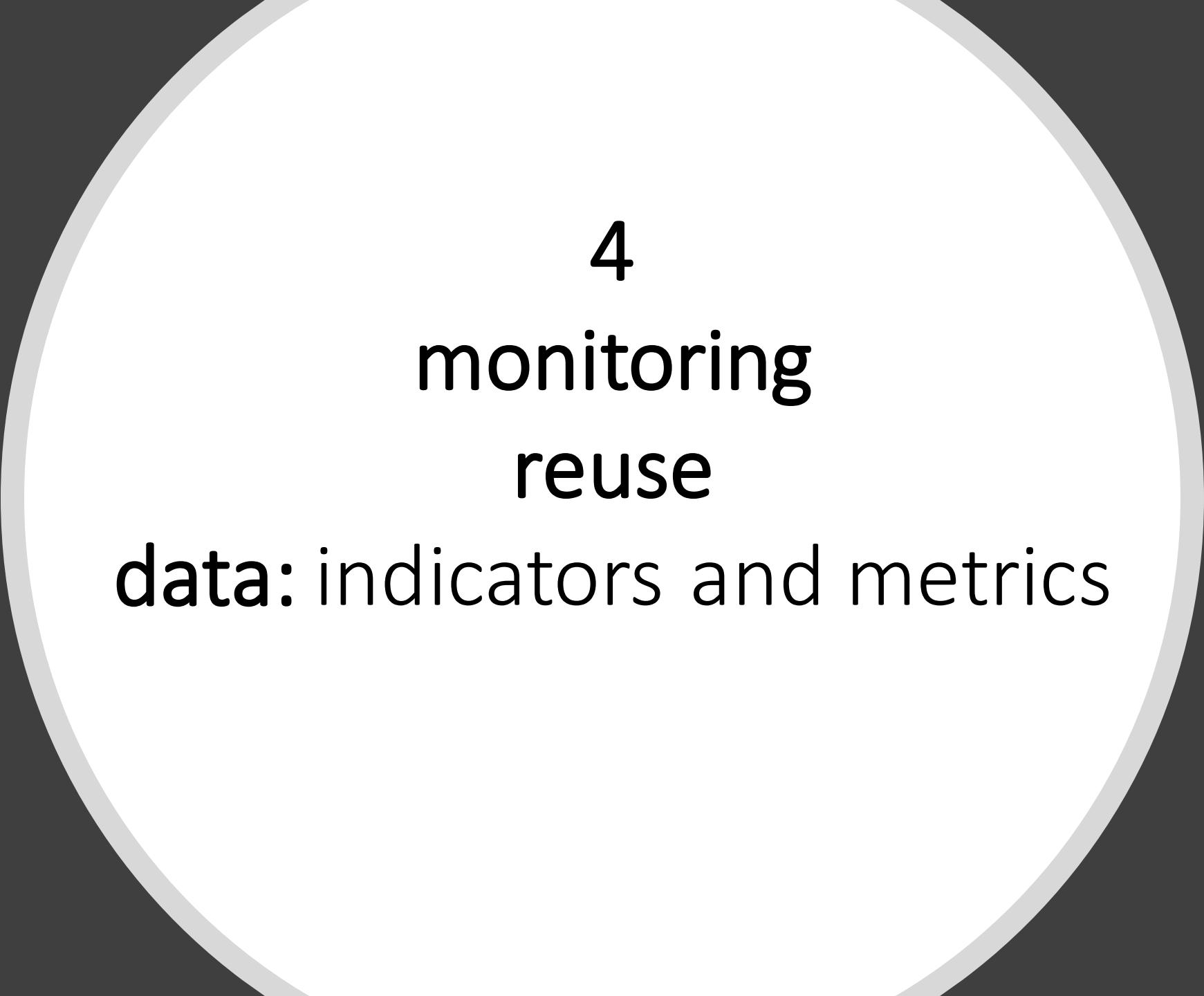
Compare selected revisions

[https://commons.wikimedia.org/w/index.php?title=File:Porta-Retrato,_Acervo_do_Museu_Paulista_da_USP_\(18\).jpg&action=history](https://commons.wikimedia.org/w/index.php?title=File:Porta-Retrato,_Acervo_do_Museu_Paulista_da_USP_(18).jpg&action=history)

3. monitoring workflow: Wikimedia Commons

This XML file does not appear to have any style information associated with it. The document tree is shown below.

[https://commons.wikimedia.org/w/index.php?title=File:Porta-Retrato,_Acervo_do_Museu_Paulista_da_USP_\(18\).jpg&feed=atom&action=history](https://commons.wikimedia.org/w/index.php?title=File:Porta-Retrato,_Acervo_do_Museu_Paulista_da_USP_(18).jpg&feed=atom&action=history)



4

monitoring
reuse

data: indicators and metrics

4

monitoring reuse data reference (iii)

Wikitech

Main page Recent changes Server admin log (Prod) Server admin log (RelEng) Deployments [curr] SRE/Operations Help Incident status

Cloud VPS & Toolforge Cloud VPS documentation Toolforge documentation Request Cloud VPS project Server admin log (Cloud VPS)

Tools What links here Related changes Special pages Permanent link Page information Cite this page

Print/export Create a book Download as PDF Printable version

Page Discussion Read View source View history Search Wikitech

Analytics/Systems/AQS

< Analytics | Systems

The **Analytics Query Service (AQS)** is a public facing API that serves analytics data from both a Cassandra and a [Druid](#) backend.

Contents [hide]

- 1 Hosted API
- 2 Scaling: Settings, Failover and Capacity Projections
- 3 Monitoring
- 4 Throttling
 - 4.1 2016-05-26
 - 4.2 2016-09-21
- 5 Developing a New Endpoint
- 6 Deployment
 - 6.1 Step 0: Testing AQS locally
 - 6.1.1 With cassandra
 - 6.1.2 With druid
 - 6.2 Step 1: Update the AQS deploy repository
 - 6.2.1 Issues with "src" path
 - 6.2.2 Issues with git review
 - 6.2.3 NPM vulnerabilities
 - 6.3 Step 2: Deploy using scap
 - 6.4 Step 3: Test
 - 6.4.1 Staging (beta)
 - 6.4.2 Production
 - 6.5 Troubleshooting Deployment
 - 6.5.1 Issues with deployment to labs deploy
 - 6.5.2 Issues with scap
 - 6.5.3 Check deploy logs:
 - 6.5.4 Check AQS logs:
- 7 Administration
 - 7.1 Cassandra CLI
 - 7.2 Load data into cassandra in beta
 - 7.3 Restbase status
 - 7.4 Cassandra status
 - 7.5 Cassandra logs
 - 7.6 Network Configuration
 - 7.7 Deploy new History snapshot for Wikistats Backend
 - 7.8 Useful commands
 - 7.8.1 Password
 - 7.9 Add fake data to Cassandra after wiping the cluster

<https://wikitech.wikimedia.org/wiki/Analytics/Systems/AQS>

research and development
challenge: integrating all
these parts into a new
roundtripping plugin to
WordPress

Thank you!

daltonmartins@unb.br

