

Build your knowledge base with Wikibase & Wikidata

@ Wikitechstorm 26th/27th of october 2018

Wikibase Website: <http://wikiba.se/>

Email: sandra.muellrick@wikimedia.de

Twitter: @ thewaxyfrog



Content

- It's a Wikibase
- Use Case's
- Data Model
- Wikibase Repository
- Wikibase Client
- Wikibase Installation
- Work with Wikibase



It's a Wikibase



WIKIMEDIA
DEUTSCHLAND

Wikipedia

Not logged in | [Talk](#) | [Contributions](#) | [Create account](#) | [Log in](#)

[Read](#) | [Edit](#) | [View history](#) |



WIKIPEDIA
The free encyclopedia

Main page
Contents
Featured content
Current events
Random article
Donate to Wikipedia
Wikipedia store

Interaction
Help
About Wikipedia
Community portal
Recent changes
Contact page
Tools
What links here
Related changes
Upload file
Special pages
Permanent link
Page information
Wikipedia logo
Cite this page

Print/export
Create a book
Download as PDF
Printable version

In other projects
Wikimedia Commons

Language
العربية
Cymraeg
Deutsch
Español
Esperanto
Français
Bahasa Indonesia
Italiano
Lëtzebuergesch
Lietuvių
Magyarország
日本語
Norsk bokmål
Polski
Português
Slovenščina
Українська
中文

[GSR](#) [list](#)

[Article](#) | [Talk](#)

South Pole Telescope

From Wikipedia, the free encyclopedia

The **South Pole Telescope (SPT)** is a 10 meter (394 in) diameter telescope located at the Amundsen–Scott South Pole Station, Antarctica. The telescope is designed for observations in the microwave, millimeter-wave, and submillimeter-wave regions of the electromagnetic spectrum, with the particular design goal of measuring the faint, diffuse emission from the cosmic microwave background (CMB).^[k] The first major survey with the SPT—designed to find distant, massive, clusters of galaxies through their interaction with the CMB, with the goal of constraining the dark energy equation of state—was completed in October 2011. In early 2015, a new camera was installed on the SPT with even greater sensitivity and the capacity to measure the polarization of incoming light. This camera is designed to measure the so-called "B-mode" or "curl" component of the polarized CMB, leading to constraints on the mass of the neutrino and the energy scale of inflation.^[l]

The SPT collaboration is made up of over a dozen (mostly North American) institutions, including the University of Chicago, the University of California, Berkeley, Case Western Reserve University, Harvard/Smithsonian Astrophysical Observatory, the University of Colorado Boulder, McGill University, The University of Illinois at Urbana-Champaign, University of California, Davis, Ludwig Maximilian University of Munich, Argonne National Laboratory, and the National Institute for Standards and Technology. It is funded by the National Science Foundation.

Contents [hide]

- Microwave/millimeter-wave observations at the South Pole
- The telescope
- The SPT-SZ camera
- The SPTpol camera
- Science goals
- Funding
- Current status
- See also
- References
- External links

Microwave/millimeter-wave observations at the South Pole [edit]

The South Pole is the premier observing site in the world for millimeter-wavelength observations. The Pole's high altitude (2.8 km/1.7 mi above sea level) means the atmosphere is thin, and the extreme cold keeps the amount of water vapor in the air low.^[m] This is particularly important for observing at millimeter wavelengths, where incoming signals can be absorbed by water vapor, and where water vapor emits radiation that can be confused with astronomical signals. Because the sun does not rise and set daily, the atmosphere at the pole is particularly stable. Further, there is no interference from the sun in the millimeter range during the months of polar night.

The telescope [edit]

The telescope is a 10-meter (394 in) diameter off-axis Gregorian telescope in an altazimuth mount (at the poles, an altazimuth mount is effectively identical to an equatorial mount). It was designed to allow a large field of view (about 1 square degree) while minimizing systematic uncertainties from ground spill-over and scattering off the telescope optics. The surface of the telescope mirror is smooth down to roughly 25 micrometers (one thousandth of an inch), which allows sub-millimeter wavelength observations. The secondary mirror is coated to 10 K, and metal mesh filters block excess high frequency radiation to keep the thermal loading on the camera down. A key advantage of the SPT observing strategy is that the entire telescope is scanned, so the beam does not move relative to the telescope mirrors. The fast scanning of the telescope and its large field of view makes SPT efficient at surveying large areas of sky, which is required to achieve the science goals of the SPT cluster survey and CMB polarization measurements.^[n]^[o]

The SPT-SZ camera [edit]

The first camera installed on the SPT contained a 960-element bolometer array of superconducting transition edge sensors (TES), which made it one of the largest TES bolometer arrays ever built. The focal plane for this camera (referred to as the SPT-SZ camera because it was designed to conduct a survey of galaxy clusters through their Sunyaev-Zeldovich Effect signature) was split into six pie-shaped wedges, each with 160 detectors. These wedges observed at three different frequencies: 95 GHz, 150 GHz, and 220 GHz. The modularity of the focal plane allowed it to be broken into many different frequency configurations. For the majority of the life of the camera, the SPT-SZ focal plane had one wedge at 95 GHz, four at 150 GHz, and one at 220 GHz.

The SPTpol camera [edit]

The camera currently installed on the SPT—also designed with superconducting TES arrays—is even more sensitive than the SPT-SZ camera and, crucially, has the ability to measure the polarization of the incoming light (hence the name SPTpol—South Pole Telescope POLarimeter). The 780 polarization-sensitive pixels (each with two separate TES bolometers, one sensitive to each linear polarization) are divided between observing frequencies of 90 GHz and 150 GHz, and pixels at the two frequencies are designed with different detector architectures. The 150 GHz pixels are corrugated-feedhorn-coupled TES polarimeters fabricated in monolithic arrays at the National Institute of Standards and Technology. The 90 GHz pixels are individually packaged dual-polarization absorber-coupled polarimeters developed at Argonne National Laboratory. The 90 GHz pixels are coupled to the telescope optics through individually machined contoured feedhorns.

Science goals [edit]

The first key project for the SPT, completed in October, 2011, was a 2500-square degree survey to search for clusters of galaxies using the Sunyaev-Zel'dovich effect, a distortion of the cosmic microwave background radiation (CMB) due to interactions between

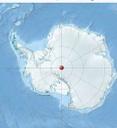
[Coordinates](#) [SPT/SPE](#)

South Pole Telescope



The South Pole Telescope in November 2009

Alternative names	SPT
Named after	South Pole
Observatory	Amundsen–Scott South Pole Station
Location(s)	South Pole, Antarctic Treaty area, Antarctica
Coordinates	66°5′S 0°E﻿ / ﻿2.8 km (0.260 mi)﻿ / ?
Built	November 2006–February 2007
First light	18 February 2007
Telescope style	Cosmic microwave background experiment Gregorian telescope radio telescope
Diameter	10.0 m (32 ft 10 in) ^[p]
Secondary diameter	1 m (3 ft 3 in)
Mass	280 t (280,000 kg) ^[q]
Angular resolution	1.1 minuta of arc
Collecting area	78.5 m² (845 sq ft)
Mounting	altazimuth mount
Website	pola.uchicago.edu



Location of South Pole Telescope [Related media on Wikimedia Commons](#) [\[edit on Wikidata\]](#)

Wikipedia

What is it? Why is it cool?

Wikipedia is a free online encyclopedia that anyone can edit. Wikipedia is the largest and most popular general reference work on the Internet, and is ranked the fifth-most popular website. It is available in almost 300 languages.

[Give it a try!](#)

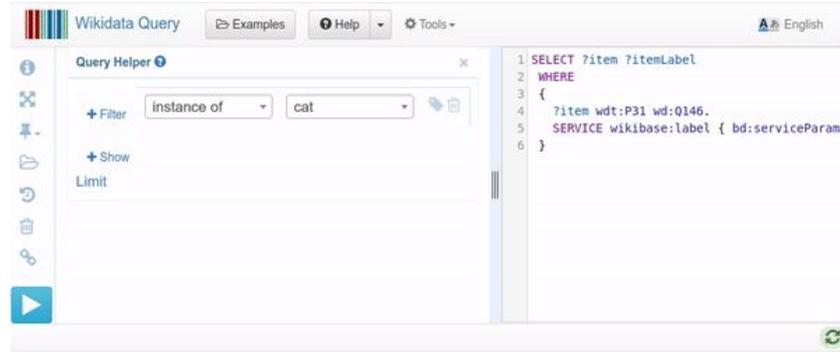
How does it use Wikidata?

Support for Wikimedia projects such as Wikipedia is one of the main reasons why Wikidata was created as a central repository of structured data. Wikidata content is used for interwiki links, infoboxes and lists.



WIKIMEDIA
DEUTSCHLAND

Wikidata Query Service



Wikidata Query Service

What is it? Why is it cool?

Wikidata Query Service (WDQS) is a public service designed to provide a SPARQL endpoint which allows you to query against the Wikidata data set.

[Give it a try!](#)

How does it use Wikidata?

The Wikidata Query Service is the main entry point for asking questions about the structured data in Wikidata. It provides a rich interface with example queries and a query helper as well as documentation on SPARQL.



WIKIMEDIA
DEUTSCHLAND

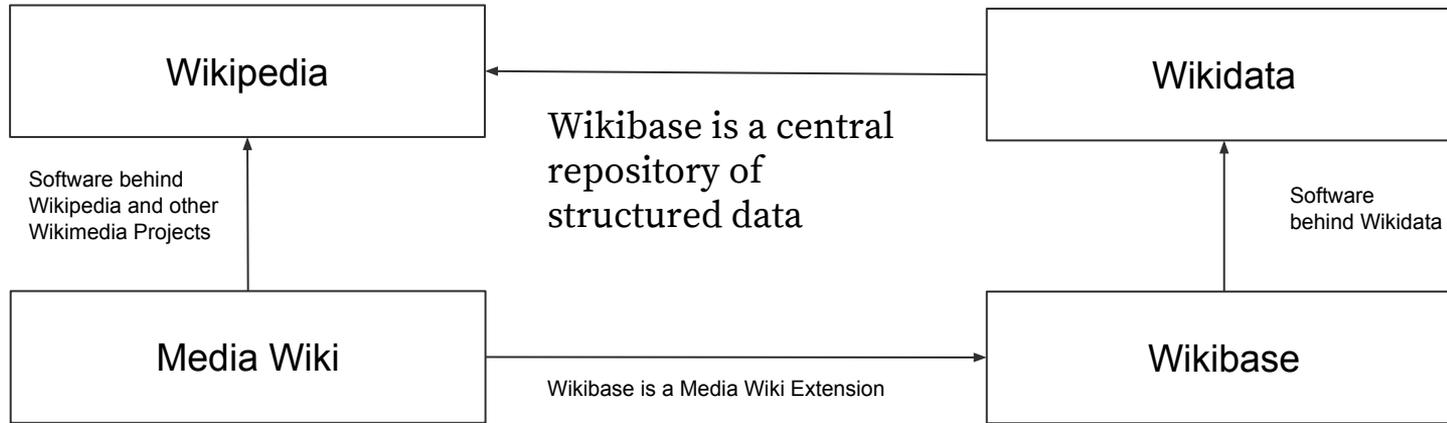
What is Wikibase?

- Wikibase is the software for creating a knowledge database.
- Wikidata is based on Wikibase and Wikibase instances can be linked to Wikidata so that more Free Knowledge flows into Wikimedia projects.
- Functionality for creating and managing a knowledge base, including user-defined properties
- Wikibase instances can be set up individually and linked with each other.
- A comprehensive JavaScript-based user interface for easy access and updating your data.
- A data model that takes knowledge diversity and multilingual use seriously.
- Exports data to a variety of formats including JSON, RDF/XML, N3 and YAML.
- Querying and viewing data with SPARQL.

Wikibase Advantages

- Open Source
- An all-hand-purpose data model that takes knowledge diversity sources, and multilingual usage seriously
- Collaborative - can be read and edited by and machines
- User-defined properties
- Statement-level references and qualifiers
- Version history

How is everything connected?



Use Cases



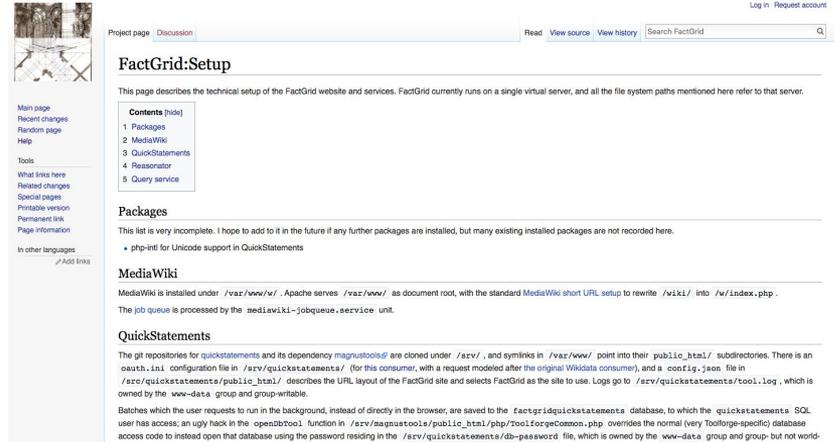
WIKIMEDIA
DEUTSCHLAND

Factgrid Project

What is it? Why is it cool?

Dr. Olaf Simons works as a historian at the University of Erfurt's Gotha Research Centre. He is the initiator of FactGrid, a database for historians. As a long-term Wikipedia editor, he grasped the potential of Wikibase for historical research early on.

[Blog](#)



The screenshot shows a MediaWiki page titled "FactGrid:Setup". The page content includes:

- Contents** (hide):
 - 1 Packages
 - 2 MediaWiki
 - 3 QuickStatements
 - 4 Reasonator
 - 5 Query service
- Packages**: A section stating that the list is very incomplete and many existing installed packages are not recorded. A bullet point lists "php-intl for Unicode support in QuickStatements".
- MediaWiki**: A section stating that MediaWiki is installed under `/var/www/`, Apache serves `/var/www/` as document root, and the standard MediaWiki short URL setup is used. It also mentions that the job queue is processed by the `mediawiki-jobqueue.service` unit.
- QuickStatements**: A section explaining that the git repositories for `quickstatements` and its dependency `magnustools` are cloned under `/srv/`, and symlinks in `/var/www/` point to their `public_html/` subdirectories. It also mentions a `search.ini` configuration file in `/srv/quickstatements/` and a `config.json` file in `/srv/quickstatements/public_html/`.

The page also features a sidebar with navigation links such as "Main page", "Recent changes", "Random page", "Help", "Tools", "What links here", "Related changes", "Special pages", "Printable version", "Permanent link", "Page information", "Help", and "In other languages".

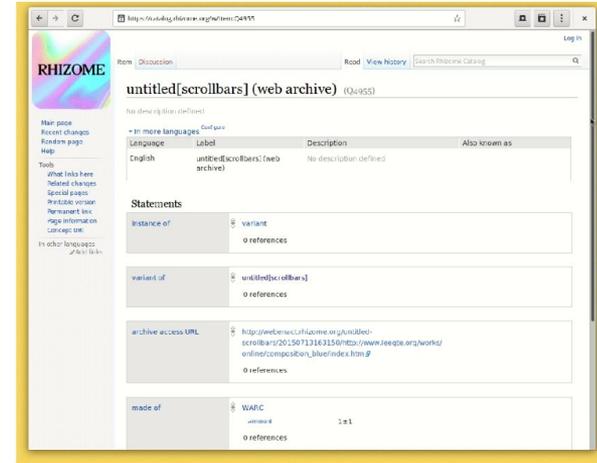
Rhizome

What is it? Why is it cool?

[Rhizome](#), an arts organization in New York City, was one of the early adopters of Wikibase, having been using it since 2015 for its archive of born-digital art and digital preservation activities.

In general, we found that classic database systems are very limited for our purposes. Databases for collections in the art and museum sector tend to use categories that are assigned to classic art: there, an artwork usually has one creator, a single date of creation, it has a physical location and maybe dimensions. The Wikibase software, with its basic [schema of items, properties and qualifiers](#), offers a lot more flexibility to describe an ever-changing field like internet art. You don't need to have a fixed worldview in place before you can start describing your objects; you can experiment, feel your way into it, and change the meaning of concepts over time. And even if you have a few 'outlier objects'—exceptional cases—in your collection, you can still describe them in a meaningful way, without disturbing the other objects.

[Blog](#)

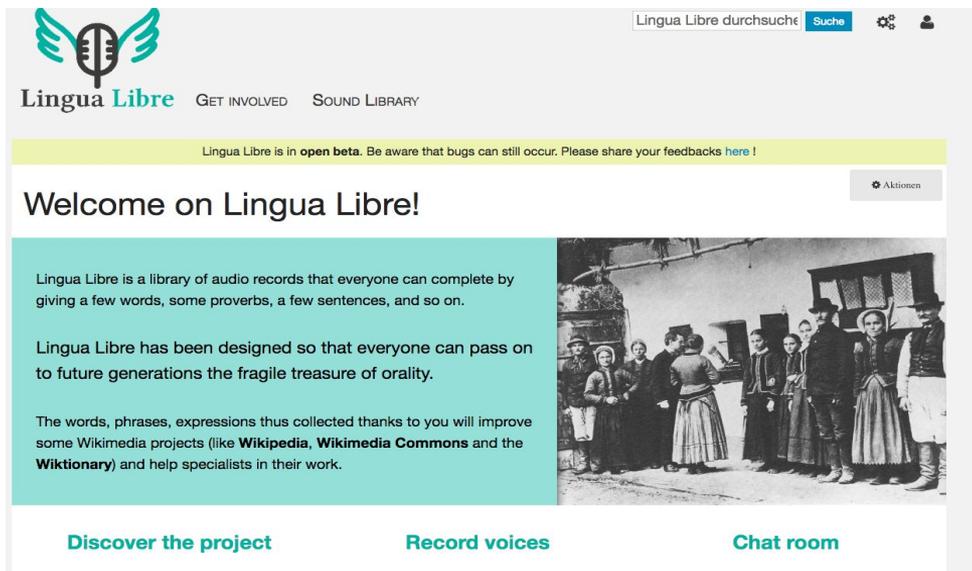


untitled[scrollbars] (2000) by Jan Robert Leegte is described in Rhizome's Full view of an artwork record in Rhizome's Wikibase Catalog



WIKIMEDIA
DEUTSCHLAND

Translations in Text and Audio for language publishers: LinguaLibre



The screenshot shows the Lingua Libre homepage. At the top left is the logo, a stylized microphone with wings. Below it, the text "Lingua Libre" is followed by "GET INVOLVED" and "SOUND LIBRARY". A search bar contains "Lingua Libre durchsuche" and a "Suche" button. A yellow banner reads "Lingua Libre is in open beta. Be aware that bugs can still occur. Please share your feedbacks here!". Below this is a "Welcome on Lingua Libre!" message with an "Aktionen" button. A teal box contains text about the project's purpose and its connection to Wikimedia. To the right is a black and white photograph of a group of people in traditional attire. At the bottom are three buttons: "Discover the project", "Record voices", and "Chat room".

Lingua Libre

GET INVOLVED SOUND LIBRARY

Lingua Libre durchsuche Suche

Lingua Libre is in **open beta**. Be aware that bugs can still occur. Please share your feedbacks [here](#) !

Welcome on Lingua Libre!

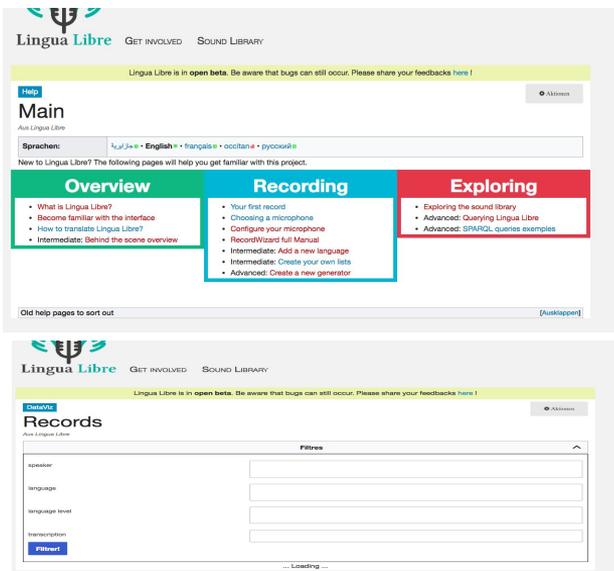
Aktionen

Lingua Libre is a library of audio records that everyone can complete by giving a few words, some proverbs, a few sentences, and so on.

Lingua Libre has been designed so that everyone can pass on to future generations the fragile treasure of orality.

The words, phrases, expressions thus collected thanks to you will improve some Wikimedia projects (like **Wikipedia**, **Wikimedia Commons** and the **Wiktionary**) and help specialists in their work.

Discover the project Record voices Chat room



The screenshot shows the "Main" page of Lingua Libre. It features a search bar with "Sprachen:" and a list of languages: العربية, English, français, occitan, and pyrookee. Below the search bar is a "New to Lingua Libre?" section with three columns: "Overview", "Recording", and "Exploring", each containing a list of links. At the bottom, there is a "Records" section with a "Filter" button and a form with fields for "language" and "language level".

Lingua Libre GET INVOLVED SOUND LIBRARY

Lingua Libre is in **open beta**. Be aware that bugs can still occur. Please share your feedbacks [here](#) !

Aktionen

Main

View Lingua Libre

Sprachen: العربية • English • français • occitan • pyrookee

New to Lingua Libre? The following pages will help you get familiar with this project.

Overview	Recording	Exploring
<ul style="list-style-type: none">What is Lingua Libre?Become familiar with the interfaceHow to translate Lingua Libre?Intermediate: Behind the scene overview	<ul style="list-style-type: none">Your first recordChoosing a microphoneConfigure your microphoneRecordWizard full ManualIntermediate: Add a new languageIntermediate: Create your own listsAdvanced: Create a new generator	<ul style="list-style-type: none">Exploring the sound libraryAdvanced: Querying Lingua LibreAdvanced: SPANGL queries examples

Old help pages to sort out [\[ausklippen\]](#)

Records

Filter

language

language level

Filter

... Loading ...

Scientific publishers: Search data in a structured way such as [WikiGenomes](https://www.wikigenomes.org/)

Welcome to WikiGenomes.org

A freely open, editable, and centralized model organism database for the biological research community.
powered by Wikidata

Organism Search:

Start typing the name of an organism to continue or start by clicking one of the example organism links below.

Helicobacter pylori 26695
Chlamydia trachomatis 434/BU
Listeria monocytogenes EGD-e



[About WikiGenomes](#) [Help](#) [Source](#) [Terms of Use](#)

Wikibase Registry

This wiki hosts a [registry](#) of [Wikibase](#) instances.

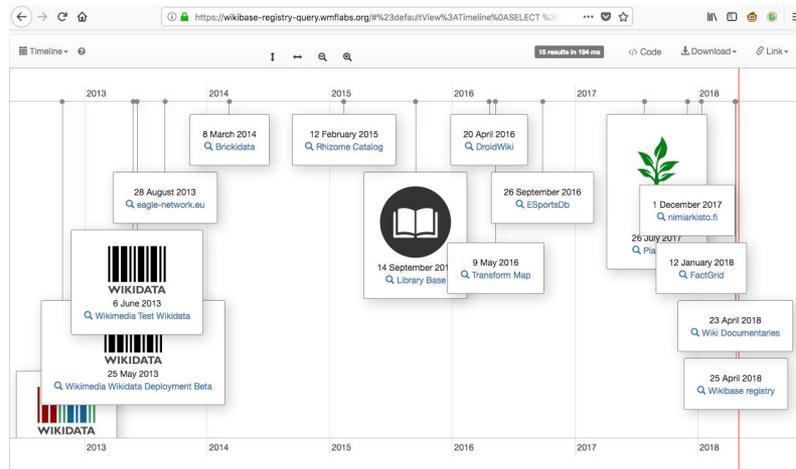
Set up in Antwerp during a [workshop on an ecosystem of Wikibase instances federated around Wikidata](#).

- [List of items](#)
- [List of properties](#)

If you have a Wikibase install to add please [go ahead](#).

The workboard for this project can be found on phabricator

<https://phabricator.wikimedia.org/tag/wikibase-registry/>



[Wikibase Registration](#)

Data Model



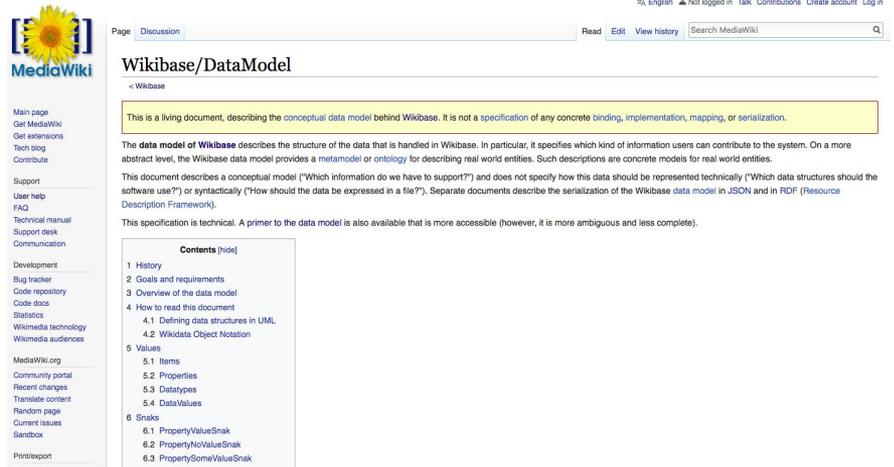
WIKIMEDIA
DEUTSCHLAND

Wikibase Data Model

The **data model** of [Wikibase](#) describes the structure of the data that is handled in Wikibase. In particular, it specifies which kind of information users can contribute to the system. On a more abstract level, the Wikibase data model provides a [metamodel](#) or [ontology](#) for describing real world entities. Such descriptions are concrete models for real world entities.

This document describes a conceptual model ("Which information do we have to support?") and does not specify how this data should be represented technically ("Which data structures should the software use?") or syntactically ("How should the data be expressed in a file?"). Separate documents describe the serialization of the Wikibase [data model](#) in [JSON](#) and in [RDF](#) ([Resource Description Framework](#)).

Link: <https://www.mediawiki.org/wiki/Wikibase/DataModel>



The screenshot shows the MediaWiki page for Wikibase/DataModel. The page title is "Wikibase/DataModel" and it is part of the Wikibase project. A yellow box at the top of the main content area states: "This is a living document, describing the conceptual data model behind Wikibase. It is not a specification of any concrete binding, implementation, mapping, or serialization." Below this, the page contains introductory text about the data model and a table of contents. The table of contents lists the following sections:

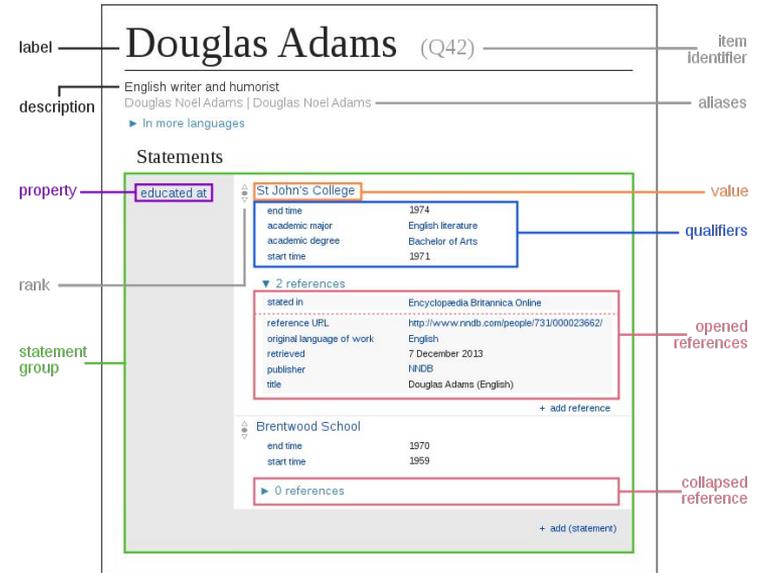
- 1 History
- 2 Goals and requirements
- 3 Overview of the data model
- 4 How to read this document
 - 4.1 Defining data structures in UML
 - 4.2 Wikidata Object Notation
- 5 Values
 - 5.1 Items
 - 5.2 Properties
 - 5.3 Datatypes
 - 5.4 DataValues
- 6 Snaks
 - 6.1 Property/ValueSnak
 - 6.2 Property/NoValueSnak
 - 6.3 Property/SomeValueSnak

Wikidata as an Example

When you look at the item page for Douglas Adams (Q42), you can see the following main sections:

- The **label** ("Douglas Adams" if your language is English).
- A short **description** ("English writer and humorist" in English)
- A list of **aliases** under which the item might also be known (including "Douglas Noël Adams", "Douglas Noel Adams", and several others in English)
- A short table of contents with quick links to other sections below
- A section "In other languages" that may list labels and descriptions in other languages you might know.
- The list of **statements**: this is the richest part of the data; we will look at it in detail below
- The list of **site links**: links to articles on Douglas Adams in Wikipedias and to related pages on other Wikimedia projects

https://meta.wikimedia.org/wiki/Wikidata/Data_model_update



Wikibase Repository



WIKIMEDIA
DEUTSCHLAND

Wikibase Repository II/II

[Wikibase Repository](#) is a MediaWiki extension that can turn a MediaWiki installation into a structured data repository. It allows editing and storing of that data.

Programmers Guide to Wikibase:

https://www.mediawiki.org/wiki/Wikibase/Programmer%27s_guide_to_Wikibase

wikiba.se



The screenshot shows the MediaWiki page for the Wikibase Repository extension. The page title is "Extension:Wikibase Repository". It features a navigation menu on the left with links for "Main page", "Get MediaWiki", "Get extensions", "Tech shop", "Contribute", "Support", "User help", "FAQ", "Technical manual", "Support desk", "Communication", "Development", "Bug tracker", "Code repository", "Code docs", "Statistics", "Wikimedia technology", and "Wikimedia audiences". The main content area includes a "Contents" table of contents, an "Installation" section with instructions, an "Integration with other extensions" section, and an "Available hooks" section. A right-hand sidebar provides a "Release status: beta" and a table of key features and requirements.

Wikibase Repository	
Release status: beta	
Implementation	API, Ajax, User interface, ContentHandler
Description	Structured data repository
Author(s)	The Wikidata team (contributors list [#])
Latest version	continuous updates
Compatibility policy	release branches
MediaWiki	master
PHP	5.5.9+
Database changes	Yes
License	GNU General Public License 2.0 [#] or later
Download	Download extension Git 1% <ul style="list-style-type: none">Download Git masterDownload repository (GIT Lib)commit historycode review readme

Wikibase Client



WIKIMEDIA
DEUTSCHLAND

Wikibase Client

[Wikibase Client](#) is a MediaWiki extension that can turn a MediaWiki installation into a client of a structured data repository. It allows to use and display data from a Wikibase Repository [via Lua modules](#) or [parser functions](#).

- Query and display data from a repository server on a client instance
- Immediately show changes of data from the connected repository
- Retrieve and display data using its Lua interface and parser functions
- And extensions:
 - ArticlePlaceholder - Provides a special page with information about a certain item inviting users to create an article

Wikibase Client

[Documentation](#) | [Download](#) | [Browse source](#) | [Review commits](#) | [CI status](#)

🔗 Query and display data from a repository server on a client instance

⚡ Immediately show changes of data from the connected repository

And extensions:

📄 ArticlePlaceholder - Provides a special page with information about a certain item inviting users to create an article.
[Documentation](#) | [Source \(github\)](#)

🔗 Retrieve and display data using its Lua interface and parser functions



WIKIMEDIA
DEUTSCHLAND

Wikibase Installation

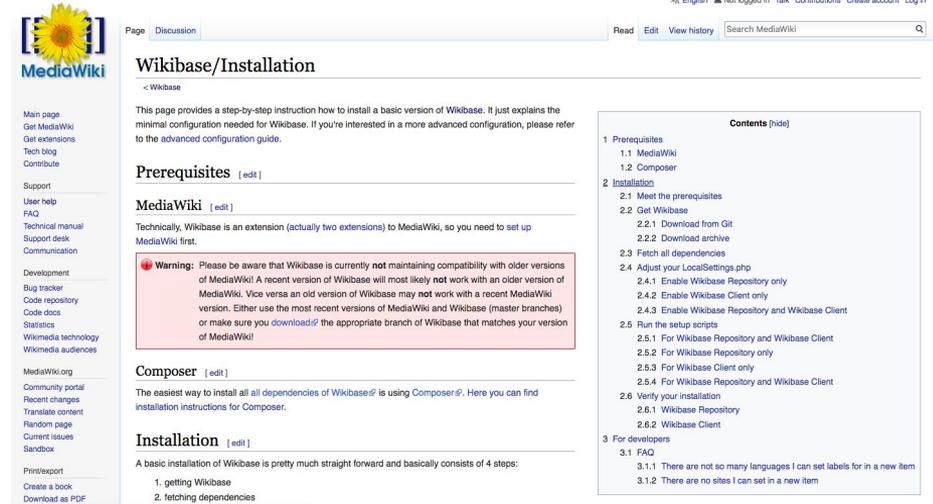


WIKIMEDIA
DEUTSCHLAND

Wikibase Installation

This page provides a step-by-step instruction how to install a basic version of [Wikibase](#). It just explains the minimal configuration needed for Wikibase. If you're interested in a more advanced configuration, please refer to the [advanced configuration guide](#).

<https://www.mediawiki.org/wiki/Wikibase/Installation>



The screenshot shows the MediaWiki page for Wikibase/Installation. At the top, there is a navigation bar with 'Page' and 'Discussion' tabs, and a search box. The main heading is 'Wikibase/Installation'. Below the heading, there is a warning box with a red icon and text: 'Warning: Please be aware that Wikibase is currently not maintaining compatibility with older versions of MediaWiki! A recent version of Wikibase will most likely not work with an older version of MediaWiki. Vice versa an old version of Wikibase may not work with a recent MediaWiki version. Either use the most recent versions of MediaWiki and Wikibase (master branches) or make sure you download the appropriate branch of Wikibase that matches your version of MediaWiki!'. Below the warning, there are sections for 'Prerequisites', 'MediaWiki', 'Composer', and 'Installation'. The 'Installation' section lists 4 steps: 1. getting Wikibase, 2. fetching dependencies, 3. For developers, and 3.1. FAQ. A table of contents is visible on the right side of the page.

MediaWiki

Main page
Get MediaWiki
Get extensions
Tech blog
Contribute

Support

User help
FAQ
Technical manual
Support desk
Communication

Development

Bug tracker
Code repository
Code docs
Statistics
Wikimedia technology
Wikimedia audiences

MediaWiki.org
Community portal
Recent changes
Translate content
Random page
Current issues
Sandbox

Print/export
Create a book
Download as PDF

en, English, Not logged in, Talk, Contributions, Create account, Log in

Page Discussion

Read Edit View history Search MediaWiki

Wikibase/Installation

< Wikibase

This page provides a step-by-step instruction how to install a basic version of Wikibase. It just explains the minimal configuration needed for Wikibase. If you're interested in a more advanced configuration, please refer to the advanced configuration guide.

Prerequisites [edit]

MediaWiki [edit]

Technically, Wikibase is an extension (actually two extensions) to MediaWiki, so you need to set up MediaWiki first.

Warning: Please be aware that Wikibase is currently **not** maintaining compatibility with older versions of MediaWiki! A recent version of Wikibase will most likely **not** work with an older version of MediaWiki. Vice versa an old version of Wikibase may not work with a recent MediaWiki version. Either use the most recent versions of MediaWiki and Wikibase (master branches) or make sure you **download** the appropriate branch of Wikibase that matches your version of MediaWiki!

Composer [edit]

The easiest way to install all all dependencies of Wikibase is using Composer. Here you can find installation instructions for Composer.

Installation [edit]

A basic installation of Wikibase is pretty much straight forward and basically consists of 4 steps:

- getting Wikibase
- fetching dependencies
- For developers
- FAQ

3.1 There are not so many languages I can set labels for in a new item

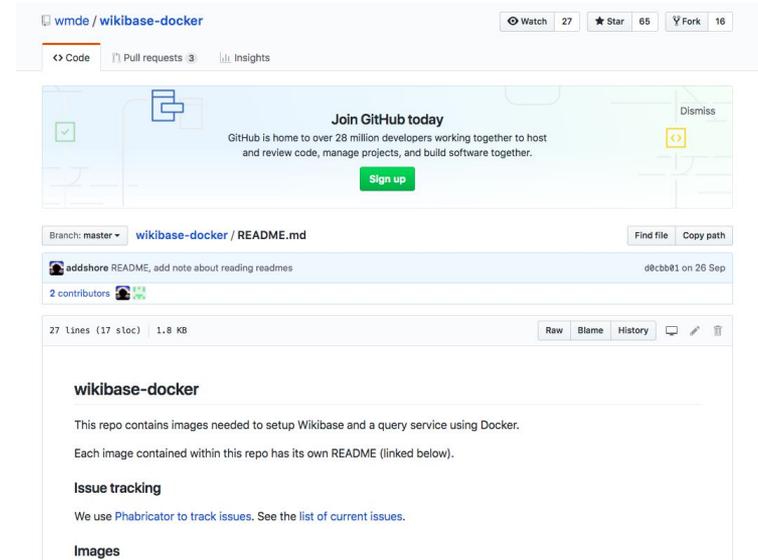
3.1.2 There are no sites I can set in a new item

Contents [hide]

- Prerequisites
 - MediaWiki
 - Composer
- Installation
 - Meet the prerequisites
 - Get Wikibase
 - Download from Git
 - Download archive
 - Fetch all dependencies
 - Adjust your LocalSettings.php
 - Enable Wikibase Repository only
 - Enable Wikibase Client only
 - Enable Wikibase Repository and Wikibase Client
 - Run the setup scripts
 - For Wikibase Repository and Wikibase Client
 - For Wikibase Repository only
 - For Wikibase Client only
 - For Wikibase Repository and Wikibase Client
 - Verify your installation
 - Wikibase Repository
 - Wikibase Client
- For developers
 - FAQ
 - There are not so many languages I can set labels for in a new item
 - There are no sites I can set in a new item

Installation with Docker

- Readme @ GitHub
<https://github.com/wmde/wikibase-docker/blob/master/README.md>
- The docker images can be found on docker hub @
<https://hub.docker.com/u/wikibase/>
- The Dockerfile for the images can be found @
<https://github.com/wmde/wikibase-docker>
- An example showing how the images can be pulled together with docker-compose can be found @
<https://github.com/wmde/wikibase-docker/blob/master/README-compose.md>
- If you want to try out or tool for generating your own docker-compose file you can try out
<https://docker-ui.wmflabs.org/>



The screenshot shows the GitHub repository page for `wmde/wikibase-docker`. At the top, there are buttons for Watch (27), Star (65), and Fork (16). Below that, there are tabs for Code, Pull requests (3), and Insights. A banner for "Join GitHub today" is visible. The main content area shows the `README.md` file for the `master` branch. The file content includes the repository name `wikibase-docker`, a description: "This repo contains images needed to setup Wikibase and a query service using Docker. Each image contained within this repo has its own README (linked below).", and sections for "Issue tracking" (using Phabricator) and "Images".

Docker Installation Learning

- Wikibase Docker Installation Presentation:
<https://addshore.com/tag/wikibase/>
- Customize you Wikibase Instance:
<https://addshore.com/2018/06/customizing-wikibas-e-config-in-the-docker-compose-example/>
- Short Video (5 Min.):
<https://addshore.com/tag/wikibase/>

The docker images can be found on docker hub @

<https://hub.docker.com/u/wikibase/>

The Dockerfile for the images can be found @

<https://github.com/wmde/wikibase-docker>

An example showing how the images can be pulled together with docker-compose can be found @

<https://github.com/wmde/wikibase-docker/blob/master/README-compose.md>

If you want to try out or tool for generating your own

docker-compose file you can try out <https://docker-ui.wmflabs.org/>



WIKIMEDIA
DEUTSCHLAND

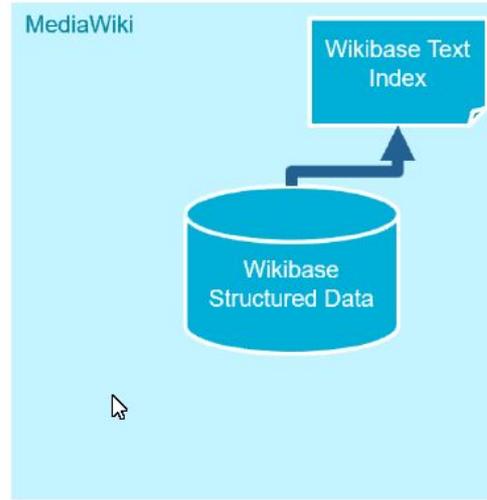
Work with the Wikibase Landscape



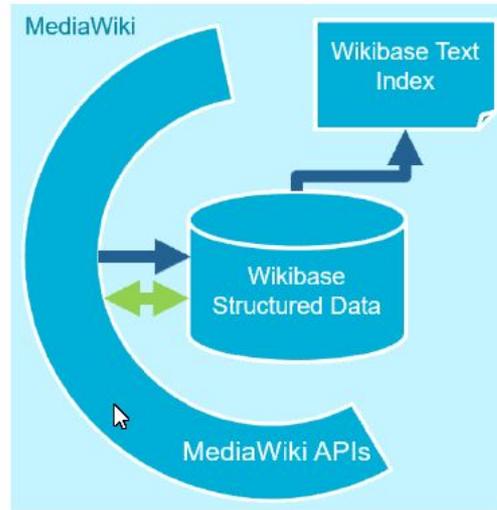
WIKIMEDIA
DEUTSCHLAND



The MediaWiki platform and its Wikibase extension provides a relational database for storing structured data

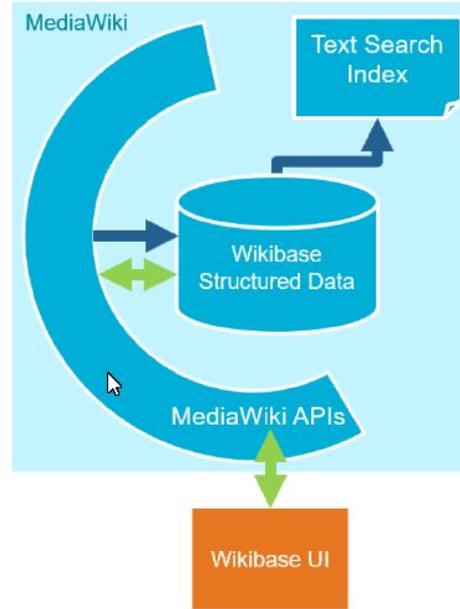


As structured data is created, updated, and deleted, a text index is automatically updated to support search and retrieval, duplicate detection, and disambiguation.

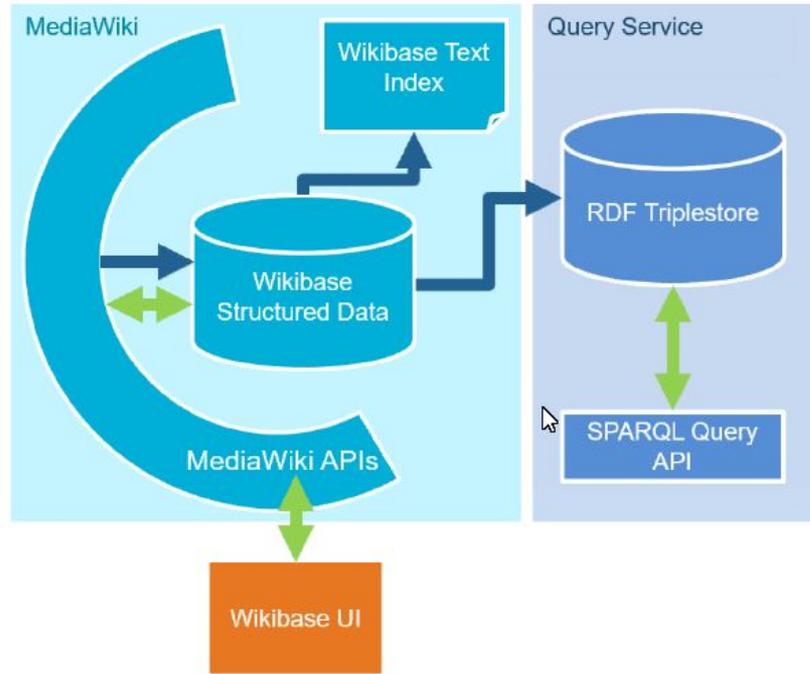


To query the structured data. You need the sparql query service for that.

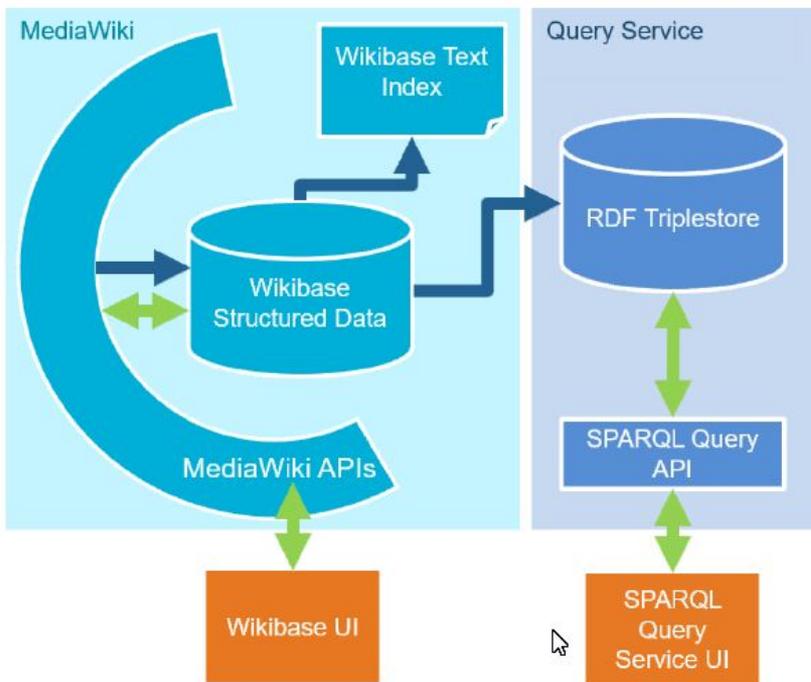
A suite of MediaWiki APIs support authentication and authorization, search and retrieval, and data creation and editing by user interfaces and APIs.



The Wikibase UI is the default interface for manual data entry along with search and retrieval.

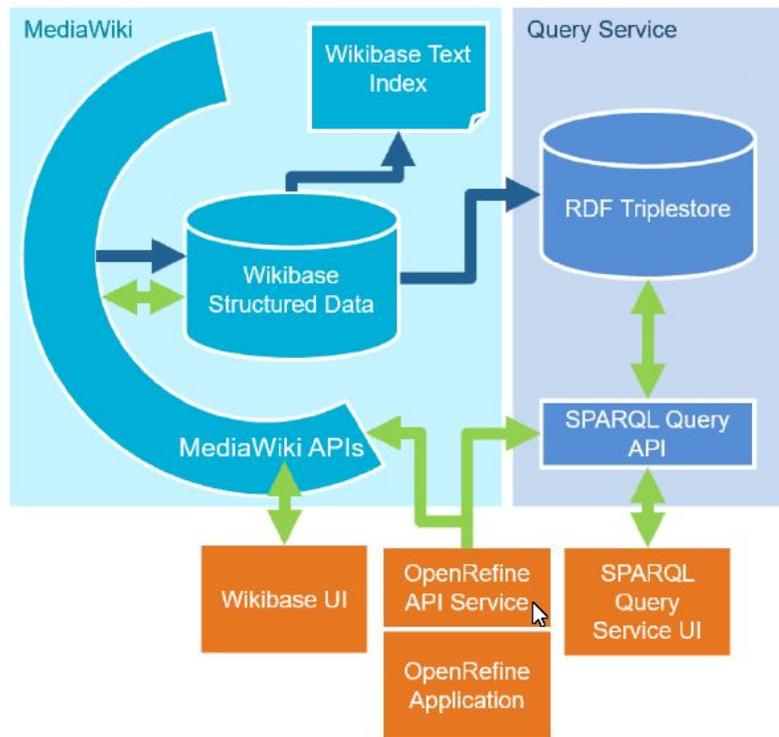


Separate from the MediaWiki / Wikibase platform is a Query Service, including an RDF Triplestore and a SPARQL Query API. Data in the triplestore is automatically synchronized at regular intervals with data from Wikibase.

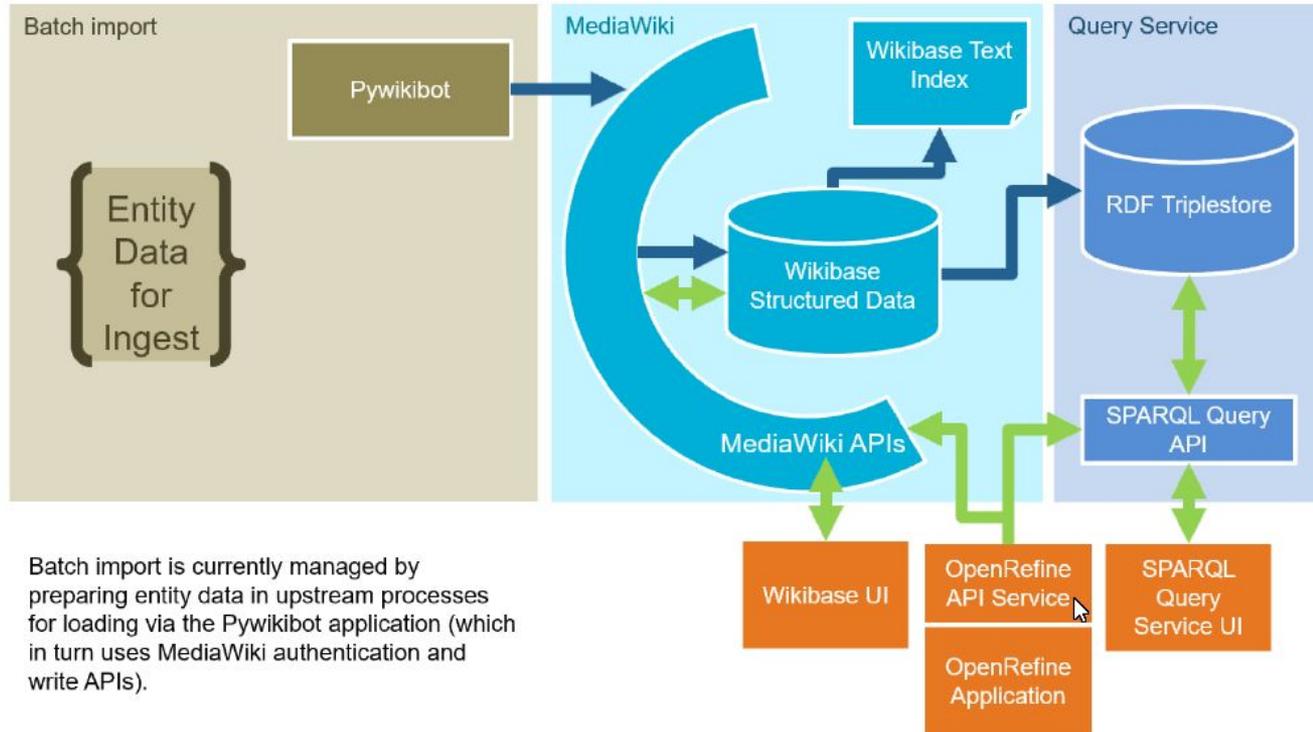


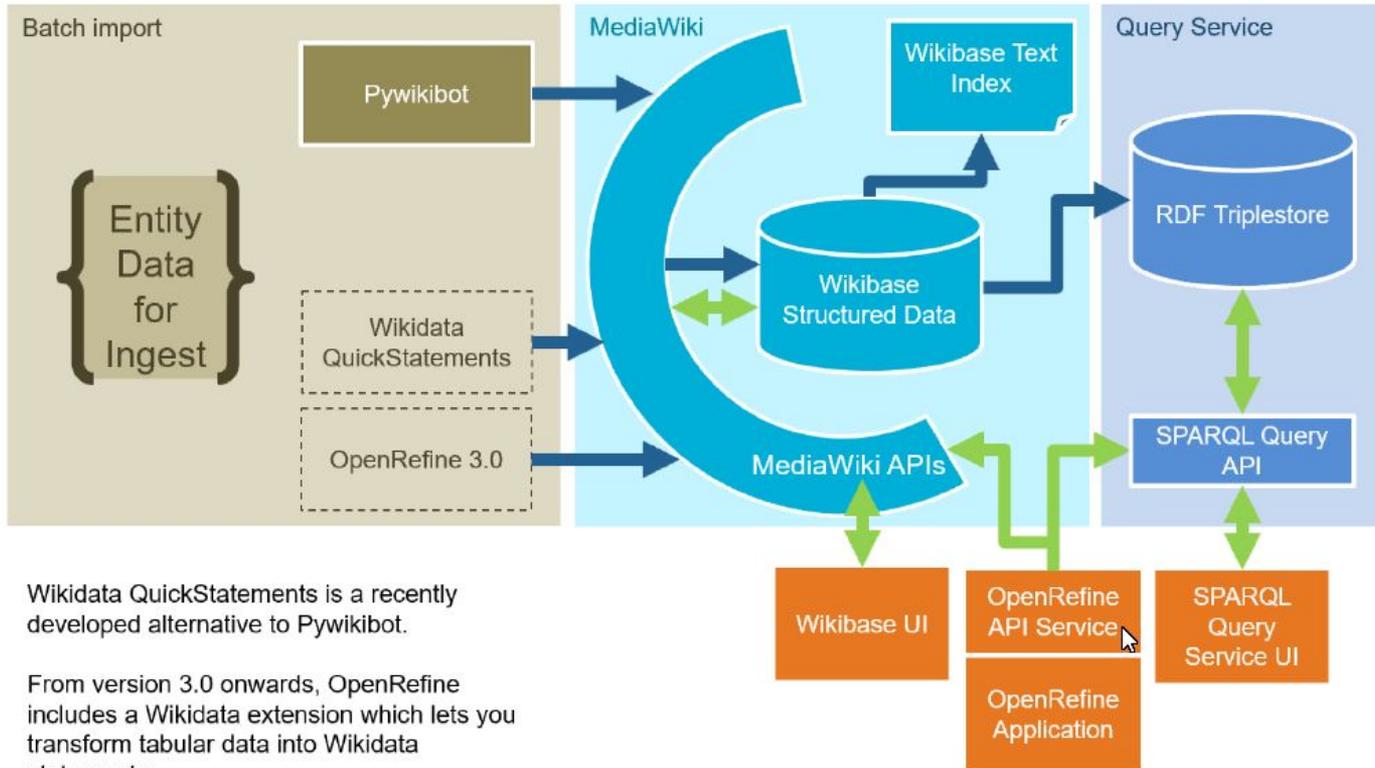
A Query Service browser UI provides a user-friendly interface to the SPARQL Query API.

[Wikibase Structured Data and the SPARQL Query API](#)
[Wikibase Structured Data and the SPARQL Query API](#)
[Wikibase Structured Data and the SPARQL Query API](#)



OpenRefine is a popular application for reconciling strings with external resources. An OpenRefine-compatible API endpoint uses both the MediaWiki APIs and SPARQL Query API, and can be used by the OpenRefine application and other compatible client applications.





Tools I / II

- **QuickStatements:** is a tool, written by Magnus Manske, that can edit Wikidata items, based on a simple set of text commands. The tool can add and remove statements, labels, descriptions, and aliases; as well as, add statements with optional qualifiers and sources. The command sequence can be typed in the import window or created in a spreadsheet, text editor and pasted in. It can also be created by external code like Lua called from a template and passed as URL. Data edited in OpenRefine.org can also be exported to QuickStatements format.
 - Quick Statements. <https://www.wikidata.org/wiki/Help:QuickStatements>
 - Use Case: <https://blog.factgrid.de/archives/811>
- **Open Refine:** OpenRefine (formerly Google Refine) is a powerful tool for working with messy data: cleaning it; transforming it from one format into another; and extending it with web services and external data.
 - Use Case: https://docs.google.com/presentation/d/1Jb8lhEgMc9PiU4X-Ozg846UGv11MgStTT6_RR2_d89g/edit#slide=id.g42878d69d8_1_16
 - Website: <http://openrefine.org/>
 - Open Refine on Wikidata: <https://tools.wmflabs.org/openrefine-wikidata/>
 - Open Refine on Wikibase: <https://github.com/wetneb/openrefine-wikibase>

Tools II / II

- **Pywikibot Python** library for loading data into Wikibase
 - <https://www.mediawiki.org/wiki/Manual:Pywikibot/Wikidata/de>
 - https://www.wikidata.org/wiki/Wikidata:Pywikibot_-_Python_3_Tutorial

Work with Wikibase

- Wikibase Mailinglist:
<https://lists.wikimedia.org/mailman/listinfo/wikibaseug>
- [Wikibase Online Workshop](#)
- Open Stack Run on Custom Wikibase:
<https://fuga.cloud/labs/using-openstack-to-run-custom-wikibase/>
- Wikibase for Research Infrastructure:
<https://medium.com/@thisismattmiller/wikibase-for-research-infrastructure-part-1-d3f640dfad34>

Example
Pilot
Project
OCLC

credits

- <https://www.mediawiki.org/wiki/Wikibase/Installation>
- <https://github.com/wmde/wikibase-docker/blob/master/README.md>
- <https://oclc.webex.com/ec3300/eventcenter/recording/recordAction.do?theAction=poprecord&siteurl=oclc&entappname=url3300&internalRecordTicket=4832534b0000000426b556aeb6ee0b5cb1d929bc7f6924fae9ef0cf996b905b751dd42ee95bc9082&renewticket=0&isurlact=true&format=short&rnd=1394940284&RCID=886b22cafbbd480a801842552cfec03e&rID=93689892&needFilter=false&recordID=93689892&apiname=lsr.php&AT=pb&actappname=ec3300&&SP=EC&entactname=%2FnbrRecordingURL.do&actname=%2Feventcenter%2Fframe%2Fg.do>
- www.wikiba.se
- www.wikidata.org

