PCC Wikibase Exploration Report

June 2022

by PCC Standing Committee on Applications

Executive Summary

In response to suggestions made during the PCC Participants' Meeting in February 2022 about having a PCC Wikibase instance, PCC Chairs asked the Standing Committee on Applications (SCA) to explore the pros and cons of doing so (including both technical and non-technical aspects). SCA surveyed a number of organizations with Wikibase instances in April 2022 and asked about their experiences with installation and implementation of a Wikibase instance. Based on the survey findings, SCA recommends that the PCC explore joining the waitlist for Wikibase.cloud, a "'Wikibase as a Service' platform that offers open knowledge projects a new way to create Wikibases quickly and easily"[1]. Wikibase.cloud would require no installation - which may help mitigate any concerns with IT security and infrastructure - and would allow creation of external user accounts and easier administration.

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[1] Wikibase Development team, Wikimedia Deutschland. "Application For Early Access To Our Private Beta Of Wikibase.Cloud," https://lime.wikimedia.de/index.php/717538

Introduction/Background

In response to suggestions made during the PCC Participants' Meeting in February 2022 about having a PCC Wikibase instance, PCC Chairs asked SCA to explore the pros and cons of doing so (including both technical and non-technical aspects). SCA received the names of a number of institutions who had installed a Wikibase instance and sent out a survey in April 2022 to gather their feedback on their experiences.

Methodology

SCA created a survey to collect individual experiences with Wikibase. The survey was broken into several sections, including respondents' backgrounds, installation, administration, and usage of Wikibase or WBStack (a pilot of "Wikibase as a service," and which has since been superseded by Wikibase.cloud). Each section offered questions with pre-selected options, Likert-scale questions, as well as free-text fields. The survey also offered participants opportunities to upload relevant documentation files and/or provide links to publicly available documentation.

To draft appropriate questions to ask about Wikibase, SCA did some preliminary research into Wikibase, particularly through looking at available documentation from the LD4 Wikidata Affinity Group/Wikibase and WBStack Working Hour. From this, SCA determined that incorporating WBStack into the survey might also yield relevant information. However, given that SCA did not have hands-on experience with Wikibase, some assumptions were made, particularly for questions with pre-selected options, such as the number of staff that might be involved in Wikibase installation and administration, and various barriers to installing, administering, and using Wikibase/WBStack. The survey was also crafted primarily with individual institutions in mind, and therefore some questions may not have been as relevant for those answering from other perspectives, such as a community instance.

Because of the narrow focus of this survey, rather than distributing the survey through listservs such as the PCCList listserv, SCA collected contact information for people who were known to have participated in Wikibase efforts, and sent direct invitations to those people, as well as a follow-up message as the survey deadline approached.

Survey Results

Of the 10 invitations SCA sent, 6 people responded to the survey. One participant responded twice in different capacities, for a total of 7 responses.

Demographics

Of the 6 respondents, half were in metadata positions within academic libraries; within that category, two were heads of their respective department or unit. The other three respondents were a senior technical manager in a library vendor organization, a head of systems in another university unit, and a business analyst/scrum master in the IT department of a national library.

One respondent submitted two responses based on their participation in two different Wikibase efforts - one for their institution, and one for a community-based instance.

Regarding the respondents' roles in each of the 7 Wikibase efforts, over half of the respondents were involved in all aspects of Wikibase/WBStack, including: hands-on installation, installation and administration oversight, day-to-day administration, and technical support.

Project Backgrounds

The survey asked respondents what their initial reasons were for installing and using Wikibase or WBStack. Respondents' answers related to managing vocabularies, linked data storage, linked data infrastructure, and interest in Wikibase features such as ontology management, items history, and querying.

One respondent mentioned their chief reasons as being "seeing if WBStack could stand in as a reconciliation service for locally managed vocabularies and/or small external vocabularies like MARC Languages" and "to explore WBStack as a tool for authority file maintenance, recon, and cleanup projects." Another respondent mentioned Wikibase being used in a project "to explore the use of alternate labels for LCSH headings."

Another respondent also mentioned that the Wikibase environment was of interest for "[building] a group of cultural institutions users." Respondents also used words such as "exploring," "evaluating", and "experimentation" to describe their reasons for installing and using Wikibase or WBStack.

Most respondents did not consider alternative software before deciding on Wikibase or WBStack for their needs. One respondent mentioned that "Wikidata is the alternative, but is less controlled by the institution and data could be changed by anyone, whereas there is more control over linked data in a standalone Wikibase." Two respondents mentioned they had considered building homegrown software. One respondent also mentioned considering Apache Marmotta for their purpose of infrastructure for a linked data pilot study, but "it did not have all of the features we needed and was too heavy weight in other feature support."

Wikibase/WBStack Installation

Most institutions had between 1 and 3 people involved in Wikibase/WBStack installation.
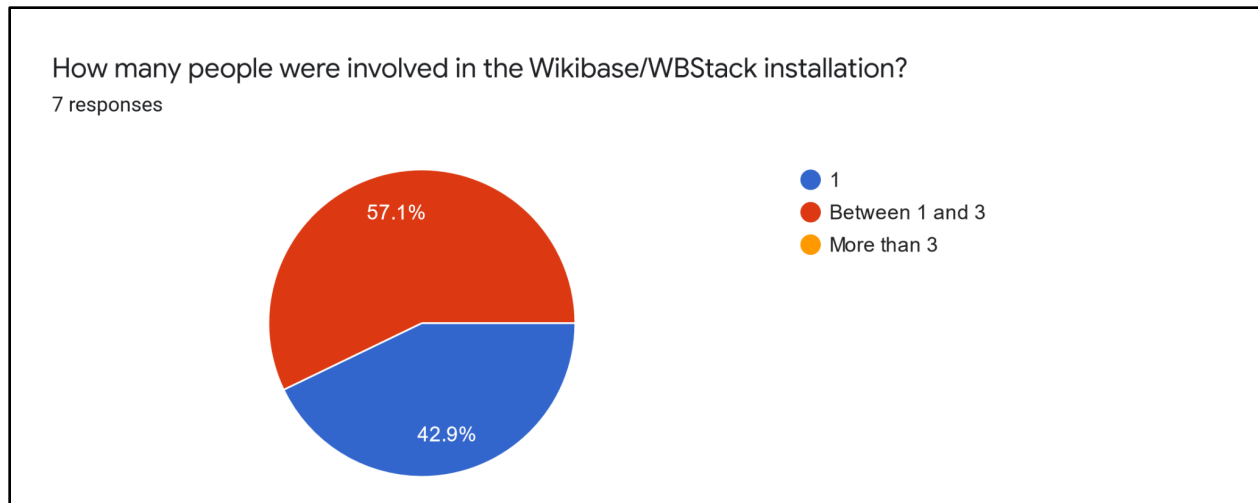
Methods of installation included: installing WBStack, using Wikibase Docker image, using Git and Composer, and downloading MediaWiki and manually installing the Wikibase extension.
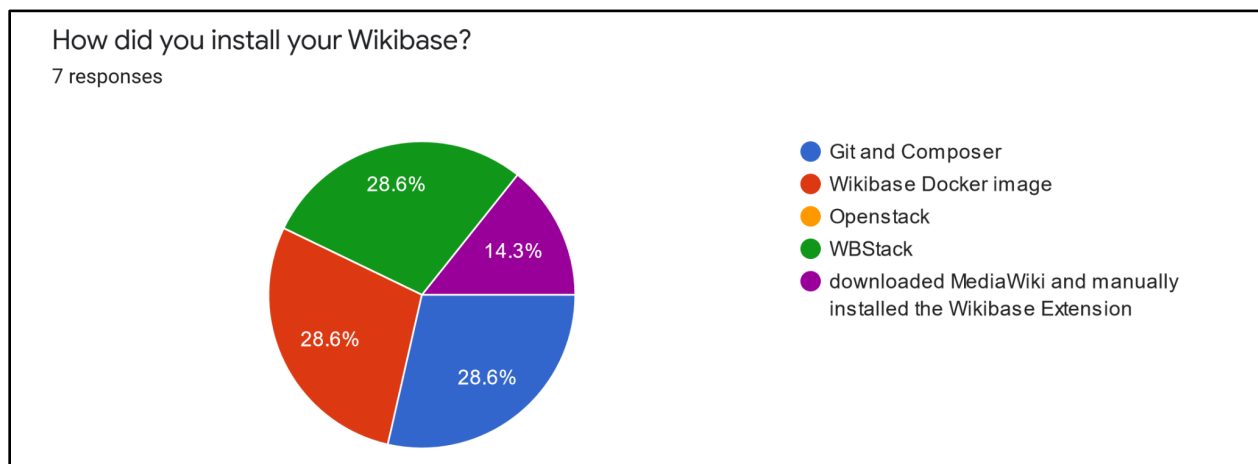

In terms of time spent on installation, those who used WBStack noted minimal time for "installation" in the range of 1-2 hours, as WBStack does not require installation, but instead, filling out a short web form to apply for WBStack. Instead, one respondent mentioned that subsequent setup activities such as "data modeling, setting up properties, and importing items took many hours."

One respondent who used Wikibase Docker image to install Wikibase estimated 80 hours spent on installation.

Respondents who used Git and Composer estimated between 30 and 40 hours spent on installation. One respondent put their answer in context that four years ago, this was the only available option for installation.

The respondent who downloaded MediaWiki also estimated 40 hours for the installation.

With regard to respondents' familiarity with the associated technical components before installation, with 1 being not familiar at all and 5 being very familiar, most respondents were not especially familiar with the technical components before they started, and nobody was extremely familiar with them.

Initially, how familiar were you with the technical components required in installing Wikibase/WBStack?

7 responses
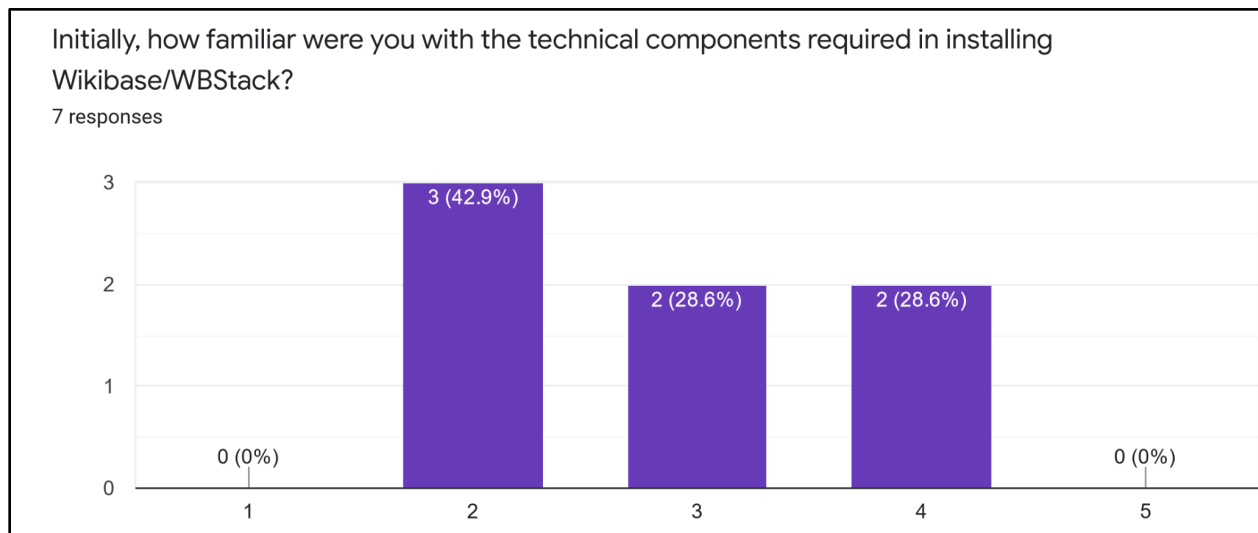
Barriers to Installation

In asking about barriers to installation, the survey provided options related to documentation, technical expertise, IT, institutional support, and staff time, and asked respondents to rate each option as either "very much a barrier," "somewhat of a barrier," or "not much of a barrier".
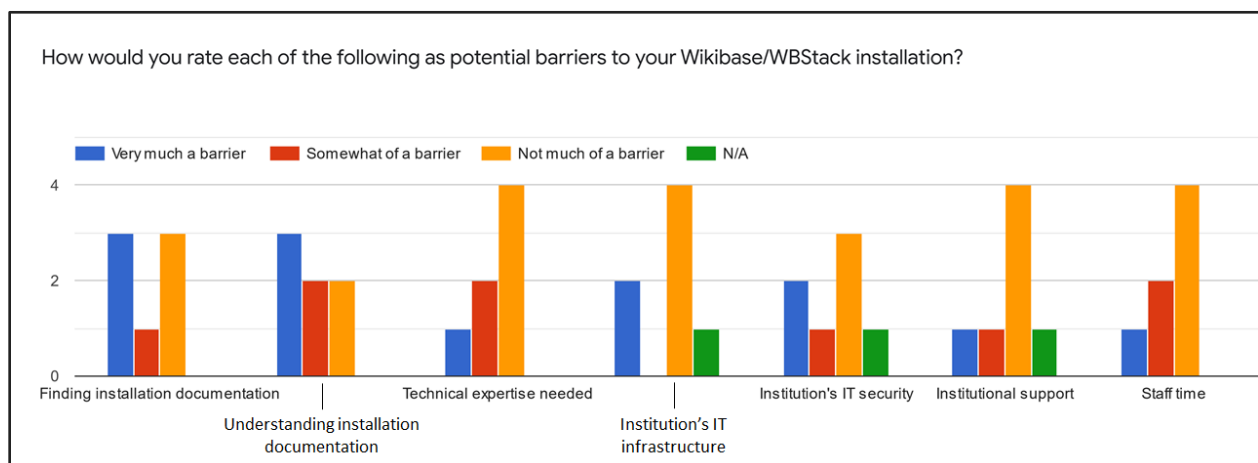
Three respondents rated both finding and understanding installation documentation as very much a barrier.

More than half of respondents did not rate technical expertise as a barrier to installation; this was across different methods of installation, the range of familiarity with technical components, and included those with metadata as well as systems-related job titles.

With regard to respondents' institutional environments, some respondents rated their IT's infrastructure and security as "very much a barrier", including one respondent who was unable to successfully install Wikibase.

Most respondents did not rate institutional support or staff time as barriers to installation.

One respondent who installed WBStack rated IT infrastructure and security as "very much a barrier" to their installation of a full Wikibase: "My department would have been interested in managing a full Wikibase instance, but this is a non-starter because our systems and IT department would be unlikely to allow a Wikibase instance without a mandate from a high level in the libraries administration. However, WBStack has been great as a way to explore what we might do in Wikibase, without worrying about installation, updates, and maintenance, which may indeed be outside of the realm of expertise within my department."

In providing a free-text option for respondents to detail additional barriers to a successful Wikibase/WBStack installation, respondents noted things such as "hard-coded variables that expected to be used in Wikidata" as well as the fact that "backup and restoration are not well documented or designed." One respondent's answer pointed to barriers with IT security: "We wanted it to be a distributed application available to selected staff using http and browsers. We were given very limited server space and strict security rules; we weren't able to open any ports, for example, and, as we saw it, we needed to do that to make the http service run. We fell short of trying to accomplish this using ssh port forwarding or using ss as a socks proxy because we ran out of time on the project."

Installation Results

Upon installation, when asked if the technology worked as expected, while one respondent directly said it worked as expected, over half of the respondents had to make adjustments after installation, such as having to "configure a bunch of hard-coded settings to get the system working. We had trouble deploying the Query Service." Another comment was related to running it on XAMPP; as one respondent noted, "I believe running it on XAMPP was an adjustment. Person installing felt hindered by doing this in a command-line only environment (if I remember correctly she wanted to preview the output to browser) and loaded browsh. Also lots of scrambling and redirection resulted from trying to build it out and having dependencies break."

Several respondents noted stability issues with various aspects going down on a regular basis: "The bg updater was the biggest issue. It went down several times a day. We had to build an automatic job to check if bgupdater is up in order to restart it if not." One respondent noted

surprise at the unexpected configuration of Wikibase's storage layer: "its storage layer is using the same framework as a wiki page, and thus, Items and Properties are just strangely formatted wiki pages internally. That results in a very different set of capabilities that are possible, because the wikibase is very much only a data store. It does not evaluate relationships between Items at all. That's done in external tooling."

## Additional Configurations and Integrations

When asked what additional installation components/configurations have been added, respondents mentioned Wikibase Quality Constraints, a reconciliation service for OpenRefine with WBStack, WBQS, QuickStatements, and a custom OpenSearch layer.

One respondent noted, "We tried [creating] a reconciliation service in OpenRefine, but there were some issues in WBStack with this. I think these problems are supposed to be resolved in WBStack instances created later than ours, and in Wikibase Cloud." Another comment about WBStack was, "In WBStack, the query service is a default feature of an instance, but you have to declare custom prefixes in queries or use full property and item URIs in order for the query service to work."

Most Wikibase instances are not integrated with institutions' existing systems. From those who answered "Yes," one respondent mentioned that they have "integrated the wikibase/mediawiki authentication to our development platform, a self hosted Gitlab." Another respondent mentioned that "Wikibase is considered as an extended database. Consequently softwares with specific business functionalities and screens use api.php and Sparql endpoint in order to interact with our Wikibase."

One respondent whose institution did not yet have Wikibase/WBStack integrated into existing systems expressed interest in "WBStack being integrated with our Fedora-based DAMS, especially for tasks like authority control / controlled vocabulary management, and as a kind of 'middleware' for broadening input into metadata creation and management processes, for example by opening up the WBStack instance to special collections curators and subject matter experts who are not trained catalogers / metadata workers."

Overall, when asked to rate the ease of installing Wikibase/WBStack on a scale of 1 to 5, with 1 being very difficult, respondents who installed WBStack rated the installation "5" for "very easy". Other methods had more mixed ratings between "2" and "4".

Overall, how would you rate the ease of installing Wikibase/WBStack?
7 responses
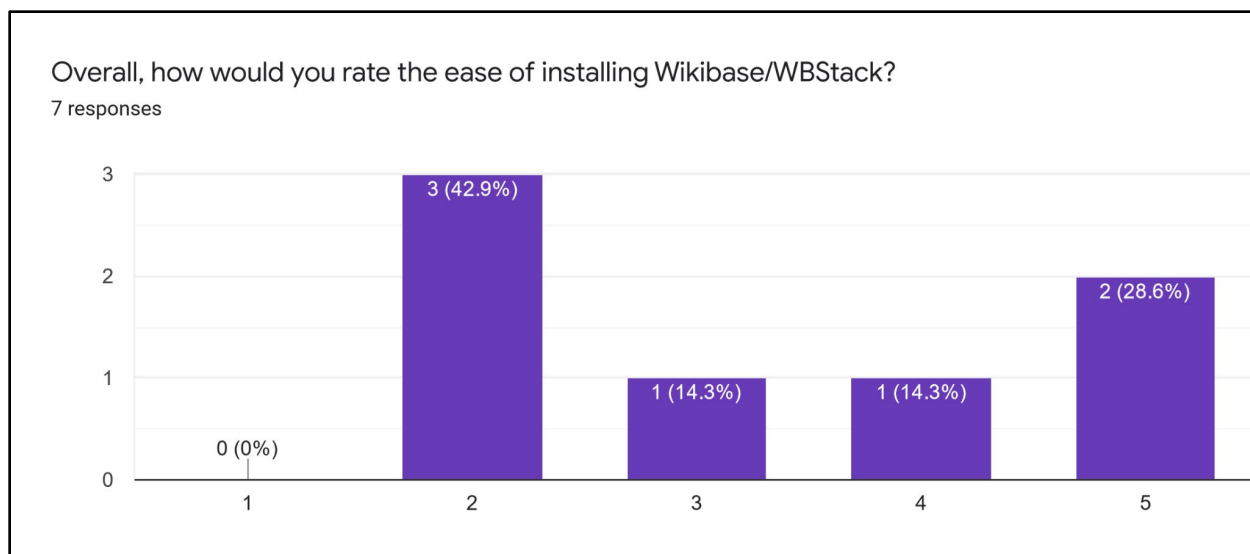
One respondent who used Git and Composer recommended the Docker installation method, saying "It's not really rigged for production work right from the start, but it makes the installation process much, much easier," though it should also be noted that one respondent who used the Docker installation method was unsuccessful in installing Wikibase due to IT barriers (and, as noted above, reported spending twice as much time attempting to install as respondents who used other methods). Another respondent who rated the ease of installation at "4" mentioned working with a provider, Wiki Valley, to install Wikibase using Git and Composer; prior to this, in testing whether to use Wikibase at all, the respondent's institution had installed Wikibase using Docker image.

As a bit of a caveat to the survey response, one participant commented, "It is difficult to rate the ease of installing Wikibase since we now have knowledge about doing it."

With the exception of one institution, who mentioned institutional barriers related to IT infrastructure and security, all other respondents were able to successfully install Wikibase/WBStack and move into the Administration section.

Wikibase/WBStack Administration

For the respondents who answered questions in the Administration section (n=6), almost all respondents reported being involved in all aspects of administration, including day-to-day administration, supervision/oversight/coordination of administration, and technical support.

There was no consistent answer about who administers the instance. Two respondents reported that their Wikibase instance was a prototype, or "not used on stage yet." Other departments mentioned include "Research" and "Original and Special Collections Cataloging"; one instance is administered through the community for which it was set up.

Over half of the respondents said only 1 person is involved in administration.

How many people are involved in administering Wikibase/WBStack?

6 responses

- 1
- Between 1 and 3
- More than 3

33.3%

66.7%
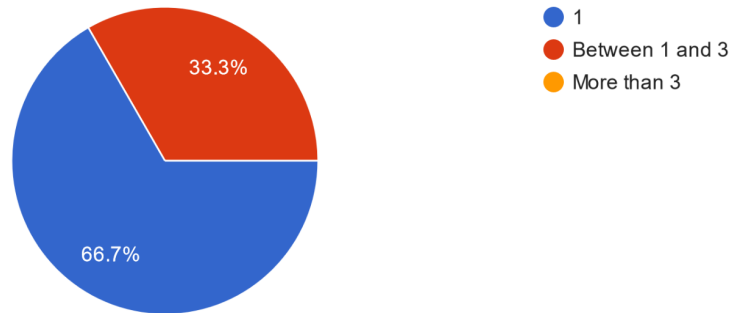
Account Creation

In terms of the number of accounts currently set up in respondents' Wikibase/WBStack instances, the answers ranged from 2 to 80, though all but one fell under 40. However, looking ahead to the question of current users, the number of current users did not necessarily correspond to the number of accounts.

Most respondents indicated that they spent 10 hours or fewer creating and maintaining accounts. Two respondents included details of some automation in account creation, such as setting up OAuth to Gitlab, or developing a script to automatically create accounts for new users.

Responses varied with regard to time spent maintaining Wikibase/WBStack software. For WBStack, one respondent noted that not too many hours are spent on maintenance, and that more time is spent on content. One respondent noted that they spend a few hours since "we are still developing our software on top of Wikibase." The most amount of time reported was 100 hours per year.

In terms of creating accounts, most respondents said that internal users can self-create accounts. For external users, most respondents said that their Wikibase configuration does not allow accounts to be set up for external users. Similarly, most respondents said that their Wikibase configuration does not allow external users to self-create accounts. However, one respondent using WBStack said "Yes" to all three account configuration questions.
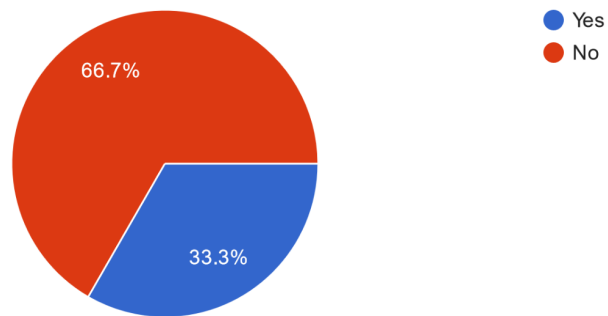
Does your configuration allow internal users to self-create accounts in Wikibase/WBStack?

6 responses

- Yes
- No

33.3%

66.7%
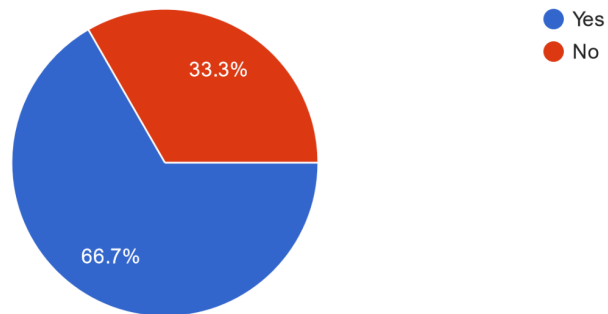
Does your configuration allow accounts to be set up for external users?

6 responses

- Yes
- No

66.7%

33.3%

Does your configuration allow external users to self-create accounts in Wikibase/WBStack?

6 responses

- Yes
- No

83.3%

16.7%
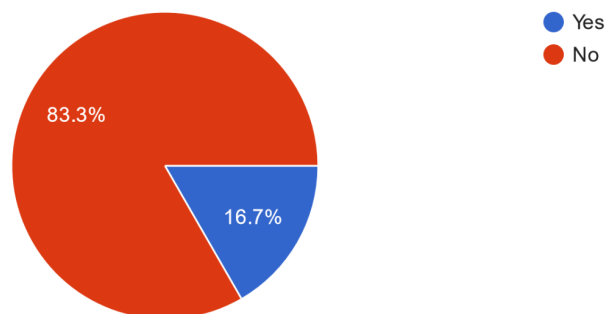
Another comment shared was, "One drawback of WBStack / Wikibase Cloud is that anyone can view the contents of the database, but it is possible to restrict editing to registered users."

Barriers to Administration

In asking about barriers to administration, the survey provided options related to documentation, technical expertise, IT, institutional support, and staff time, and asked respondents to rate each option as either "very much a barrier," "somewhat of a barrier," or "not much of a barrier".

Most people did not find these aspects of administration to be barriers. Finding administration documentation appears to have been the biggest barrier to administration.
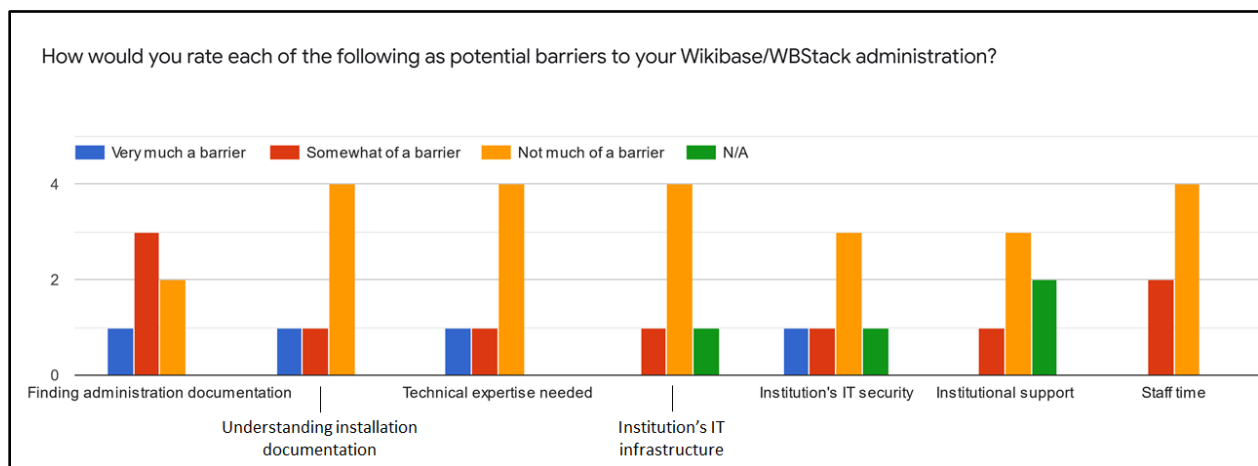
Using Wikibase/WBStack

Respondents who answered questions in the Using Wikibase/WBStack section (n=6) selected various combinations of user roles in Wikibase/WBStack in the Background section. Over half were Wikibase data editors/contributors, over half selected Wikibase task/project coordinator, and half selected "Wikibase trainer". One respondent wrote in "systems administrator."
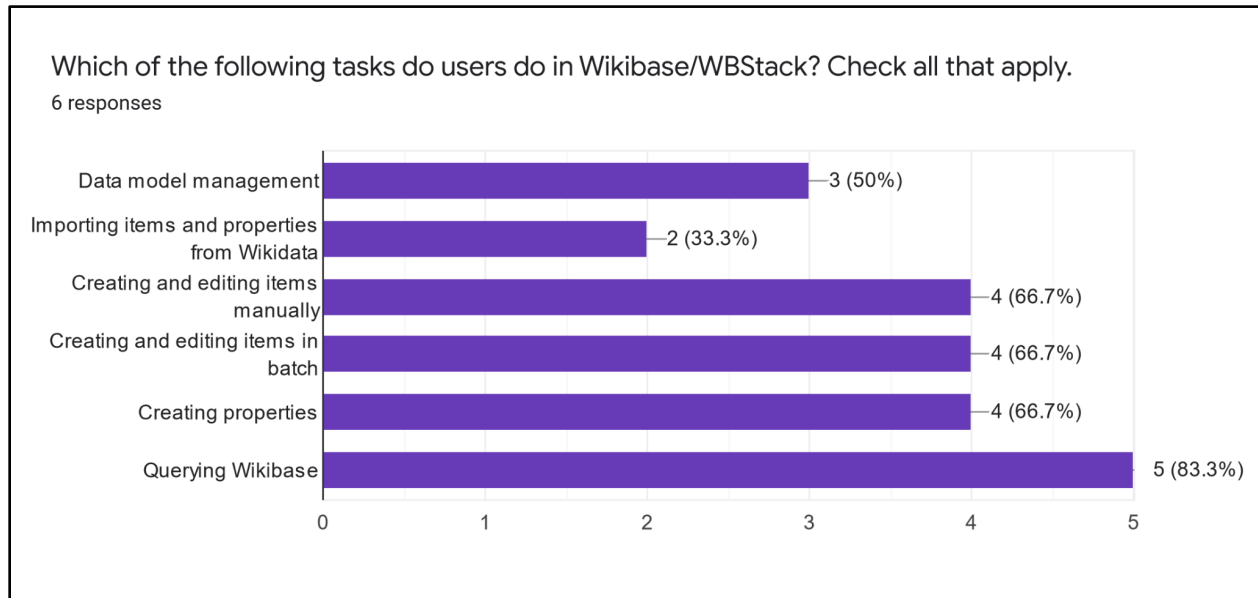
In terms of what departments users come from, half of the respondents reported that users came from cataloging or technical services, or are catalogers.

With the exception of one respondent, all other respondents' institutions have used Wikibase/WBStack for more than 1 year.

User Activity and Training

As mentioned in the Administration section, the number of accounts for an instance did not necessarily correlate with the number of current users that respondents reported. When asked how many people were currently using Wikibase/WBStack, answers ranged from "0" to "30, but not all are active."

All respondents reported that users were doing a variety of tasks in Wikibase/WBStack, and all provided options were selected by at least one respondent. The most frequent task reported was querying Wikibase, followed by creating and editing items manually and in batch as well as creating properties.

Which of the following tasks do users do in Wikibase/WBStack? Check all that apply.
6 responses

Task	Count
Data model management	3 (50%)
Importing items and properties from Wikidata	2 (33.3%)
Creating and editing items manually	4 (66.7%)
Creating and editing items in batch	4 (66.7%)
Creating properties	4 (66.7%)
Querying Wikibase	5 (83.3%)

With regard to time spent training users, answers ranged from "none" to "15 hours". One respondent noted that all staff self-trained. Another respondent noted that they are still in the building step.

Barriers to Using Wikibase/WBStack

In asking about barriers to respondents' institutions using Wikibase/WBStack as intended, the survey provided options related to adoption, workflow integration, training, expectations, institutional support, and staff time, and asked respondents to rate each option as either "very much a barrier," "somewhat of a barrier," or "not much of a barrier".

14

How would you rate each of the following as potential barriers to your institution using Wikibase/WBStack as intended?
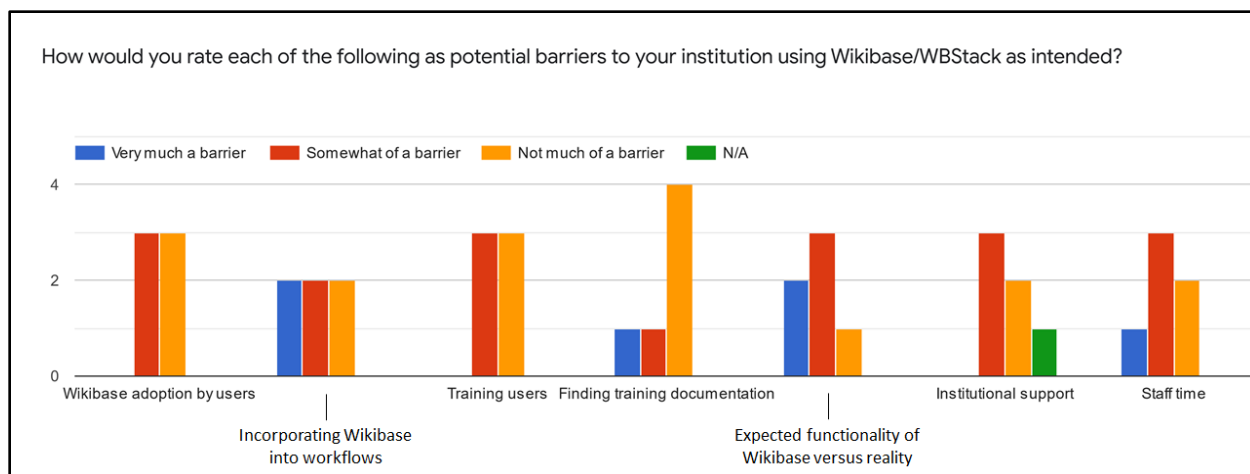
The biggest barrier appears to be expected functionality of Wikibase versus reality, with two respondents reporting it as "very much a barrier", and three respondents reported it as "somewhat of a barrier". Incorporating Wikibase into workflows was also "very much of a barrier" for two respondents, and "somewhat of a barrier" for another two respondents. One respondent also found staff time to be "very much a barrier," while three respondents found it to be "somewhat of a barrier." There was a split response for training users between "somewhat of a barrier" and "not much of a barrier," though one respondent cited finding training documentation as "very much a barrier."

In the free-text field, respondents reported additional details about barriers, including access restrictions (or lack thereof), challenges with data modeling, and issues with batch loading data into Wikibase.

One respondent mentioned that "the system was not designed for batch loading data and this was a major barrier to adoption in a large at-scale environment. They [sic] system works well for storing and managing large sets of data but the initial creation and loading of large amounts of data did not work well." Similarly, another respondent mentioned, "The main barriers concern the possibility to initialize Wikibase with a very large amount of items (millions of items)."

Another respondent commented that "[i]t was very difficult to manage the model in conjunction with the instance data. The RDF model generated by WikiBase was very odd and not what we wanted so we had to manually create our own RDF data."

Most respondents did not include an answer to the question about Wikibase/WBStack being incorporated into any existing workflows, and one commented "not yet used in this way."

Conclusion

In terms of overall satisfaction with Wikibase for its intended purpose, on a scale of 1 to 5, with 1 being not satisfied at all, most respondents reported being satisfied with Wikibase, with only one respondent being not satisfied at all.

Overall, how would you rate your satisfaction with Wikibase for its intended purpose?

7 responses

1 (14.3%)	0 (0%)	1 (14.3%)	5 (71.4%)	0 (0%)
1	2	3	4	5
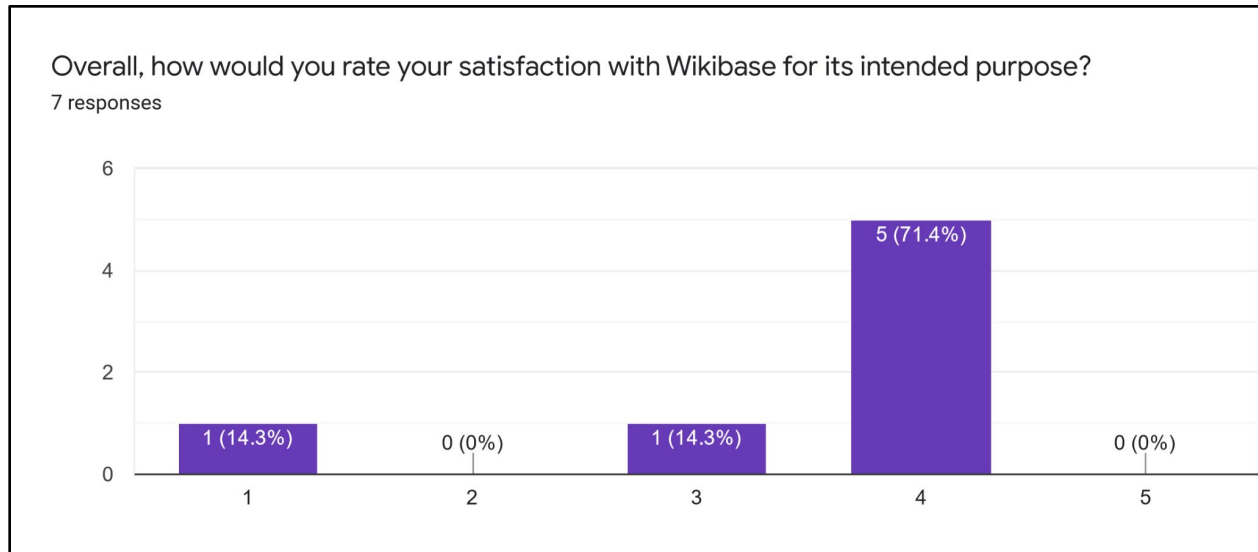
Considerations for PCC

Most respondents set up Wikibase/WBStack instances for their respective institutions. From this perspective, one challenge that led one respondent to an unsuccessful installation attempt was their institution's IT infrastructure and security, something for PCC to consider in terms of where and with which institution a PCC instance of Wikibase would be hosted.

Based on survey responses, WBStack, which "doesn't exactly require installation, but setting up an instance is as easy as filling in a short web form," appears to be a possible way to circumvent many installation challenges (including IT security) as well as maintenance workloads. To reiterate one respondent's answer, "My department would have been interested in managing a full Wikibase instance, but this is a non-starter because our systems and IT department would be unlikely to allow a Wikibase instance without a mandate from a high level in the libraries administration. However, WBStack has been great as a way to explore what we might do in Wikibase, without worrying about installation, updates, and maintenance, which may indeed be outside of the realm of expertise within my department."

Additionally, responses from the community-based instance of WBStack may be the most relevant to PCC, which is also not institution-based. Based on survey responses, WBStack can support "external" users creating their own accounts. While the survey did not ask questions regarding different levels of privileges, these account users are able to perform many Wikibase

activities, including data model management, creating and editing items manually and in batch, creating properties, and querying Wikibase.

*A Note on WBStack and its migration to Wikibase.cloud. While survey participants described their experiences with WBStack, WBStack has since been superseded by [Wikibase.cloud](#), which "uses the same codebases, and architecture as WBStack.com does currently, but it is maintained by a team at Wikimedia Deutschland"[2].

Those who are interested in becoming a new user can apply to join a [waiting list](#), which will be considered after migration of existing WbStack users is complete. The waiting list request consists of 8 questions that include describing the potential user(s) and purpose of the Wikibase.cloud instance.

If PCC wishes to pursue Wikibase.cloud as an option for a PCC Wikibase instance, or as a first step of exploration before considering a full Wikibase instance, the survey yielded some issues to consider, such as:

> **Access:** "One drawback of WBStack / Wikibase Cloud is that anyone can view the contents of the database, but it is possible to restrict editing to registered users."

> **User management:** "I think understanding user management is a big topic…if a WBStack / Wikibase Cloud instance were attempted at a PCC-Scale, the administrators would definitely need to have a better grasp of user management."

> **Data modeling:** "Developing a data model is quite challenging…even if you map properties to Wikidata properties, the properties in your instance don't inherit the "dependent" properties from Wikidata."

> **Carrying over Wikidata functionality:** "[F]unctionalities of certain constraining and formatting properties (e.g. formatter URL) in Wikidata involve some customizations in Wikidata, and these do not necessarily translate into a Wikibase / WBStack instance."

One other issue that was not brought up in relation to WBStack, but other methods of standing up a Wikibase instance, is the observation that it is challenging to import a large batch of data into Wikibase. To reiterate one respondent's comment, "the system was not designed for batch loading data and this was a major barrier to adoption in a large at-scale environment. They [sic] system works well for storing and managing large sets of data but the initial creation and loading of large amounts of data did not work well."

With regard to training, more follow-up may be needed, as the survey responses did not provide a clear picture with regard to training users to use Wikibase or WBStack.

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[2] "WBStack close and migration," https://addshore.com/2022/02/wbstack-close-and-migration/

Appendix 1: Survey

PCC Wikibase Questionnaire

Thank you for taking the time to fill out this questionnaire! The purpose of this questionnaire is to gather information about institutions' Wikibase experiences. The PCC is considering setting up a Wikibase instance for entity management, and would like to better understand how the Wikibase installation and maintenance worked for other institutions, including technical and social aspects.

Your responses will inform a report that the PCC Standing Committee on Applications will provide to the PCC Policy Committee.

If any question or section does not apply to your area of responsibility or experience, please feel free to skip. If you know of anyone else at your institution who may have valuable information to convey through this form, please also feel free to pass this questionnaire along.

Please fill out this questionnaire by 04/29/2022.

For any questions about this form, please contact Liz Bodian (lizbodian@brandeis.edu) and Erica Zhang (ezhang20@library.ucla.edu).

Background

Job title

Department

What was/were the initial reason(s) for installing and using Wikibase/WBStack?

Did you consider any alternative software before deciding on Wikibase/WBStack for your needs? If so, please describe these alternatives. In what ways did they meet and not meet your needs?

Were you involved in the hands-on installation of Wikibase/WBStack?
  - ○   Yes
  - ○   No

Were you involved in the supervision/oversight/coordination of the installation of Wikibase/WBStack?
  - ○   Yes
  - ○   No

Are you involved in the day-to-day administration of Wikibase/WBStack?
- ○ Yes
- ○ No

Are you involved in the supervision/oversight/coordination of Wikibase/WBStack administration?
- ○ Yes
- ○ No

Are you involved in technical support of Wikibase/WBStack administration?
- ○ Yes
- ○ No

What is your role(s) in using Wikibase/WBStack? Check all that apply.
- ● Wikibase trainer
- ● Wikibase task/project coordinator
- ● Wikibase data editor/contributor
- ● N/A
- ● Other:

Installation

The following questions relate to the installation of Wikibase/WBStack. If you answered "No" to all roles related to installation in the Background section, please skip to the next section.

How many people were involved in the Wikibase/WBStack installation?
- ○ 1
- ○ Between 1 and 3
- ○ More than 3

How many hours in total do you estimate your staff spent to install Wikibase/WBStack?

How did you install your Wikibase?
- ○ Git and Composer
- ○ Wikibase Docker image
- ○ Openstack
- ○ WBStack
- ○ Other:

Initially, how familiar were you with the technical components required in installing Wikibase/WBStack?
- ○ Not familiar at all
- ○ 1
- ○ 2
- ○ 3

- ○ 4
- ○ 5
- ○ Very familiar

Please add any additional comments about aspects of the installation that you had little experience with prior to the installation:

How would you rate each of the following as potential barriers to your Wikibase/WBStack installation?

	Very much a barrier	Somewhat of a barrier	Not much of a barrier	N/A
Finding installation documentation	○	○	○	○
Understanding installation documentation	○	○	○	○
Technical expertise needed	○	○	○	○
Institution's IT infrastructure	○	○	○	○
Institution's IT security	○	○	○	○
Institutional support	○	○	○	○
Staff time	○	○	○	○

Upon initial installation, did the technology work as expected? If not, please describe any additional adjustments (other than local configurations) needed.

If you experienced other barriers to a successful Wikibase/WBStack installation, or want to emphasize the biggest barrier to installation you encountered, please describe here.

Please describe any additional installation components/configurations beyond the basic Wikibase/WBStack instance that your institution installed (e.g. extensions, configuring query services, etc.).

Is your Wikibase/WBStack integrated with any existing systems?

- ○ Yes
- ○ No
- ○ N/A

Please describe any integrations that your institution configured. Please also describe any integrations your institution would like to configure.

Overall, how would you rate the ease of installing Wikibase/WBStack?

	1	2	3	4	5	
Very difficult	○	○	○	○	○	Very easy

If there is any additional information about your experience with the installation of Wikibase/WBStack that has not been covered by these questions, but that you feel would be relevant to the PCC, please feel free to share here.

If you have any local documentation that can be shared about the installation, please upload here or see next question.

If you have a public link to documentation, please add it here.

Were you able to successfully install Wikibase/WBStack?
- ○ Yes
- ○ No (the form will skip the Administration and Using Wikibase sections)

Administration

The following questions relate to the administration (e.g. account set-up and maintenance, troubleshooting, etc.) of Wikibase/WBStack. If you answered "No" to all roles related to administration in the Background section, please skip to the next section.

What department administers your Wikibase/WBStack?

How many people are involved in administering Wikibase/WBStack?
Mark only one oval.
- ○ 1
- ○ Between 1 and 3
- ○ More than 3

How many accounts are currently set up in your Wikibase/WBStack?

How many hours do you estimate your staff spend on, or have spent on, creating and maintaining accounts in Wikibase/WBStack?

How many hours do you estimate your staff spend on maintaining Wikibase/WBStack software?

Does your configuration allow internal users to self-create accounts in Wikibase/WBStack?
Mark only one oval.
- ○ Yes
- ○ No

Does your configuration allow accounts to be set up for external users?
Mark only one oval.
- ○ Yes
- ○ No

Does your configuration allow external users to self-create accounts in Wikibase/WBStack?
Mark only one oval.
- ○ Yes
- ○ No

How would you rate each of the following as potential barriers to your Wikibase/WBStack administration?

	Very much a barrier	Somewhat of a barrier	Not much of a barrier	N/A
Finding administration documentation	○	○	○	○
Understanding administration documentation	○	○	○	○
Technical expertise needed	○	○	○	○
Institution's IT infrastructure	○	○	○	○
Institution's IT security	○	○	○	○
Institutional support	○	○	○	○

Staff time	○	○	○	○

If you experienced other barriers to administering Wikibase/WBStack, or want to emphasize the biggest challenges to administration you have encountered thus far, please describe here.

If there is any additional information about your experience with the administration of Wikibase/WBStack that has not been covered by these questions, but that you feel would be relevant to the PCC, please feel free to share here.

If you have any local documentation that can be shared about the installation, please upload here or see next question.

If you have a public link to documentation, please add it here.

Using Wikibase

The following questions relate to the user experience of Wikibase/WBStack, including tasks and training. If you checked "N/A" in the Background section, please skip to the next section.

What department(s) do users of your Wikibase/WBStack come from?

How many people are currently using your Wikibase/WBStack?

How long has your institution been using your Wikibase/WBStack?
- ○ Less than a month
- ○ Less than 6 months
- ○ Less than a year
- ○ More than a year

Which of the following tasks do users do in Wikibase/WBStack? Check all that apply.
- ● Data model management
- ● Importing items and properties from Wikidata
- ● Creating and editing items manually
- ● Creating and editing items in batch
- ● Creating properties
- ● Querying Wikibase
- ● Other:

How much time do you estimate was spent training users on how to work in Wikibase/WBStack?

How would you rate each of the following as potential barriers to your institution using Wikibase/WBStack as intended?

	Very much a barrier	Somewhat of a barrier	Not much of a barrier	N/A
Wikibase adoption by users	○	○	○	○
Incorporating Wikibase into workflows	○	○	○	○
Training users	○	○	○	○
Finding training documentation	○	○	○	○
Expected functionality of Wikibase versus reality	○	○	○	○
Institutional support	○	○	○	○
Staff time	○	○	○	○

If you experienced other barriers to your institution using Wikibase/WBStack as intended, please describe here.

If Wikibase/WBStack is incorporated into any existing workflows, please describe here.

If there is any additional information about your experience with the adoption and use of Wikibase/WBStack that has not been covered by these questions, but that you feel would be relevant to the PCC, please feel free to share here.

If you have any local documentation that can be shared about the installation, please upload here or see next question.

If you have a public link to documentation, please add it here.

Final Thoughts

Overall, how would you rate your satisfaction with Wikibase for its intended purpose?

	1	2	3	4	5	
Not satisfied at all	○	○	○	○	○	Very satisfied

Thank you so much for taking the time to provide us with your experience using Wikibase - we really appreciate it! Please feel free to share anything else about your experience that hasn't been covered in this survey that you think would be relevant to PCC considering Wikibase for entity management.

Please provide an email in case we have further questions for you.

Appendix 2: Links to documentation

Each section of the survey provided an opportunity for respondents to share either files or links related to their installation, administration, or usage of Wikibase/WBStack. Following is a compiled list of links shared:

Installation:
- https://drive.google.com/drive/folders/1pYwTKlzEAAiDFNSeXCtkjb9lDmbDbyd3?usp=sharing

Administration:
- https://ld4-wbs-test.wikibase.cloud/wiki/Main_Page