

About This Knowledge Base

- [What's new in the Knowledge Base for April 2021?](#)
- [Knowledge Base Guidelines](#)
- [What should be posted in this Knowledge Base?](#)
- [Who can post to this Knowledge Base?](#)
- [How do I create a page in the UCLA Knowledge Base?](#)
- [How do I delete a page from the KB?](#)
- [Knowledge Base Use Cases](#)
- [What to do about duplicate Knowledge Base pages](#)
- [Knowledge Base Contributor First Steps](#)
- [Finding things in this Knowledge Base](#)
- [What other universities have knowledge bases and what can we learn from them?](#)
- [Original Knowledgebase](#)
 - [What is the purpose of this knowledgebase?](#)
 - [How will we measure success of this knowledgebase?](#)
 - [Where can I find out more about this knowledgebase?](#)
 - [UCLA Knowledgebase Presentation at UCCSC 2010](#)
 - [Are there any prizes for posting to the Knowledgebase?](#)
 - [Knowledge Base Changes for March 2017](#)

What's new in the Knowledge Base for April 2021?

Welcome to the new BookStack Knowledge Base! BookStack is a brand new, open-source platform for sharing information, and we are excited to adopt it to help modernize our UCLA Knowledge Base.

What are the advantages of BookStack?

- New, modern design
- Easy to post, organize, and find content
- Open-source, continually updated software

What are some of the features of the BookStack Knowledge Base?

- More advanced organization: Pages can be sorted into books and chapters to make it easier to find or browse relevant information. When posting a page, you can sort it into the most relevant book or chapter or create a new one. We've introduced several books to make the existing pages, carried over from the original Knowledgebase, easier to browse.
- Advanced searching: Search by book, chapter, page title, page content, or tag and use the available filters to find what you're looking for quickly.
- WYSIWYG ("What You See Is What You Get") editor: The editor provides support for all the formatting options you expect plus link editing, media/upload management, and an integrated diagram editor, while being much easier to use than a markup language. If you want more flexibility, you can also edit the page HTML directly.
- Tags: Pages, chapters, and books can all be tagged. Tags can have both names and values.
- Permalinks: When linking to the Knowledge Base, you can link to a specific part of a page and get a link that won't break if the page is renamed or recategorized.
- Mobile-friendly: BookStack has a convenient smartphone view.
- For more information on using BookStack, see the [BookStack User Documentation](#).

Technical Details

If you're interested in the technical stuff, you can check out the [BookStack GitHub repo](#).

Knowledge Base Guidelines

Please Do

- Update articles in your area of expertise.
- Create a new page if you want to remember a particular tool, technique, or website and it's not private information.
- Create a new page if you want to share a resource or some information that has helped you.
- Create a new page if you want to direct people to little known sections of your department website.
- Create a new page if you want to collect a set of other articles together, e.g. advice for new faculty.
- Categorize your new pages into books and (optionally) chapters as you see appropriate. You may create a new chapter or book if you think it makes more sense.
- Watch out for outdated content. Some pages in the Knowledge Base have not been updated in a very long time and may not be accurate anymore.
- Review old pages and update them or tag them as REVIEWED, TO BE VERIFIED, DEPRECATED, or TO BE DELETED:
 - Update any article you think is incorrect. Make any and all changes you think are necessary.
 - Update broken links if you can.
 - Add REVIEWED as a tag, with the date in the tag value, if the content is up-to-date and all the links are working.
 - Add TO BE VERIFIED as a tag if you think a page should be checked by someone specific. Please forward it to them and ask them to make any changes necessary.
 - Add DEPRECATED as a tag and at the top if a page refers to something that is out of date but might be useful to keep around for institutional memory. If non-obvious, explain why.
 - Add TO BE DELETED as a tag and at the top of a page if you think an entire article should be deleted. Please explain why. Someone with delete privileges will review these pages from time to time.
- Keep in mind that changing a page title, changing a book title, or moving a page may break bookmarked links (although BookStack can sometimes still find the right page). You may want to notify the original poster and any updaters if you do this.
- To prevent the above problem, if you want to create a link to a Knowledge Base page, use a permalink instead of the address you see in the address bar. To do so, highlight a piece of text on the Knowledge Base page you want to link to, then copy the link that appears. It will look like this: <https://kb.ucla.edu/link/961#bkmrk-page-title>. You can remove the part after the pound sign (#). These kinds of links are not affected by changing page names,

page locations, or book names. See [Page Permalinks · BookStack \(bookstackapp.com\)](#) for more information.

- Look for articles where you can contribute, such as anything titled “Has anyone tried ...”
- Add yourself to this page: [How do you keep up with technology?](#)

Please Don't

- Post a new article without searching to see if it's already in the Knowledge Base.

What should be posted in this Knowledge Base?

You should post anything that you think might be helpful in the future. This could include:

- links to UCLA resources
- links to resources of use to people at UCLA
- links to your own or other tutorials
- links to hard-to-find writeups
- links to useful resources, e.g. when buying a digital camera or computer, telephone, etc.

You should also create a page if:

- you want to remember a particular tool, technique, or website
- you want to share a resource or some information that has helped you
- you want to direct people to little known sections of your department website
- you want to collect a set of other articles together, e.g. advice for new faculty

Who can post to this Knowledge Base?

Anyone employed by UCLA, full- or part-time, can post answers to this Knowledge Base and edit other people's answers. All contributors' names will show up in the page history and all previous versions of answers will be saved.

If you find mistakes in the Knowledge Base, fix them. Or if you don't have privileges, let the contributor(s) know so they can fix them. Thanks for your contributions!

How do I create a page in the UCLA Knowledge Base?

1. Make sure you are logged in to the Knowledge Base.
2. Before creating a new page, please search the Knowledge Base and confirm there is not already a similar page.
3. Decide where to categorize your new page. Choose a book and, optionally, a chapter to create the page in. If your page doesn't fit in any existing book or chapter, feel free to create a new one.
4. Once you are in the book or chapter you want to create the page in, click "New page" in the right panel under "Actions". If you are on mobile, you may need to click the "Info" tab to see the actions.
5. Fill out your page. Notice on the right panel, there are four icons. You can use these to add tags and attachments or use page templates (advanced).
6. Add any tags you think will help people find your page more easily. To do so, click the tag icon in the right panel and fill in the Tag Name fields. The Tag Value field is usually left empty, but you may use it if you want.
7. Press "Save Page" near the top right to submit your new page. Thank you for your contribution!

How do I delete a page from the KB?

If you are logged in, you should be able to delete any pages you have written. For other pages, please do not change the title or the content, but add TO BE DELETED as a tag and to the top of the page, with an explanation if necessary. That way it's easy to see what's being deleted.

Then email help@ssc.ucla.edu and give the link to the page(s) you want deleted.

Knowledge Base Use Cases

Here are some of UCLA Knowledgebase Use Cases, with examples. Please add others as they occur to you.

- Any info that took you a long time to find:
 - <https://kb.ucla.edu/link/680>
- Case Studies of particular challenging debugging:
 - <https://kb.ucla.edu/link/1195>
- Personal bookmarking of things you want to come back to (others might find useful):
 - <https://kb.ucla.edu/link/1125>
 - <https://kb.ucla.edu/link/1070>
- Marketing, help people find a little known resource on your website.
 - <https://kb.ucla.edu/link/499>
 - <https://kb.ucla.edu/link/1188>
- Get other opinions:
 - <https://kb.ucla.edu/link/532>
- Record (and find) particularly useful info:
 - <https://kb.ucla.edu/link/89>
 - <https://kb.ucla.edu/link/67>
 - <https://kb.ucla.edu/link/240>

What to do about duplicate Knowledge Base pages

While we hope that everyone who adds a new article to the UCLA Knowledgebase will search first to avoid duplicating anything, occasionally it happens. Since the Knowledgebase is an experiment in community sharing, anything you can do to help solve the problem will be appreciated by everyone. Remember our motto: ***If you find a problem, fix it. If you can't fix it, tell someone who can.***

- Compare the articles closely and take note of differences, including in titles and tags.
- Compare their dates.
- Look at the contributors and see if you know them or can find them in the [UCLA Directory](#). (Many articles have been posted by student workers who have moved onto bigger and better things.)
- If you have login privileges:
 - Combine them into one, and edit the other one to just be a pointer to the other. (This will avoid breaking any internal or external links to that article.)
 - Email their contributors, telling them what you did, as a courtesy.
- If you don't have login privileges, and can find the contributors, email them the links and explain the problem and ask if one of them will combine them.
- If none of the above is possible, email help@ssc.ucla.edu.
- If you absolutely know that one of the articles is not linked by anything else, and is completely duplicated by another, but you don't have privileges to delete it, email help@ssc.ucla.edu.

Knowledge Base Contributor First Steps

- As a contributor to the UCLA Knowledgebase, first you need to login.
- Then go to <https://kb.ucla.edu/link/240> and edit it to add yourself. Or if you are shy, add just your sources in the top half of the page.
- Search your department and make sure those articles are correct.
- Search things you know about and make sure those articles are correct.

Finding things in this Knowledge Base

- **Search**

- See the BookStack User Documentation information on advanced searching:

<https://www.bookstackapp.com/docs/user/searching/>

- **Browsing**

- The home page shows the most recently updated pages.
- Clicking on Books will show all the topics there are pages about. Clicking a book will show all the pages and chapters in that book.
- Clicking on a contributor's name will show all the pages added by that person.
- Clicking on a tag will show all the pages with that tag.

- **Search Strategies**

- Think of a word or phrase that would have to be in the answer to your question.
- Think of synonyms to those words.
- Think of a person or department that might have answered that question.
- Think of what keywords you would have chosen if you were tagging that question.

What other universities have knowledge bases and what can we learn from them?

- Arizona State University – https://techbase.asu.edu/wiki/index.php/Main_Page (wiki based)
- Eastern Connecticut State University – <http://kb.easternct.edu/>
- Indiana <http://kb.iu.edu/> – [Educause Award](#) winning, 12 fulltime editors, \$1.2 million budget?
 - [About the Knowledge Base](#)
 - [What is the history of the Knowledge Base?](#)
 - [How does the Knowledge Base work?](#)
 - There are three “front doors” to the Knowledge Base: the menu, the glossary, and the search page.
 - The menu is sort of a hierarchy of categories, but leads to only a small subset of the total Knowledge Base content.
 - The glossary is an alphabetical collection of all the “What is...” documents in the Knowledge Base.
 - *Strong, well funded central approach with long history behind it. Ours seems more like a way of sharing information between widely distributed departments.*
- Miami University – <http://kb.muohio.edu/>
- North Carolina – <http://help.ncsu.edu/>
- Ohio State U. Knowledgebank – <http://kb.osu.edu/> Uses DSpace. [OSU KB Reports](#)
- Princeton <http://helpdesk.princeton.edu/kb/search.plx> or <http://kb.princeton.edu/>
- Wayne State University – <http://kb.wayne.edu/> “The Wayne State Knowledgebase is a repository of commonly asked question and answer sets. Its goal is to provide answers to your questions 24 hours a day, 7 days a week. A knowledgebase works under the assumption that the answer to one person’s question can help another person who may have the same question in the future. We answer many questions related to WSU services on a daily basis. The questions and their answers are then entered into the knowledgebase to help others.”
- Wisconsin – <http://helpdesk.wisc.edu/>
- UC Berkeley – <http://kb.berkeley.edu/>
- UC Davis – <http://xbase.ucdavis.edu/>
- UC Santa Cruz – is doing something interesting according to Ruth Sabean

- UC San Diego - <https://kb.sdsc.edu/>

Original Knowledgebase

Pages about the original Knowledgebase project.

What is the purpose of this knowledgebase?

The purpose of this knowledgebase is to share questions and answers among the dozens of Help Desks we have at UCLA. Some of our technology questions are specific to our departments, but our guess is that there are a large number of common questions. We believe that as the campus computing infrastructure becomes more and more interdependent, there is great value in sharing what we learn and know.

- Target Audience
 - First, our various help desk staff and student workers – if we don't use it no one will.
 - Second, campus groups and organizations such as BruinTech, Campus Web Publishers, UCLA Programmers Exchange, etc.
 - Staff, students and faculty – once we have enough in here that it's worth sharing.
- Use Cases
 - share writeups or tutorials
 - short FAQs to help with accuracy and training of student help desk workers
 - advertise obscure information, but useful, info on your own website
 - share your bookmarks and resources as you learn new technology
 - after a three hour search through MSDN, Google, or Stack Overflow, save the solution to your obscure problem so you and others can find it easily the next time
 - answers can be refined by others on campus to elaborate or make them clearer (and you can be notified if an answer changes)
- More Info
 - For the original writeup of the project, use cases, etc. See the project page at http://www.sscnet.ucla.edu/ssc/KnowledgeBase_Notes_from_CourseManagementConsortiumWiki.html

How will we measure success of this knowledgebase?

There will probably be many criteria for measuring the success of this UCLA Knowledgebase experiment. But the first one is how many people contribute to it and how often. Here are some numbers to start measuring that. For now they'll be added manually.

Date	5/1/2006	5/8/2006	5/15/2006	5/22/2006	5/29/2006	6/5/2006	6/19/2006	Articles with Answers
	110	155	306	363	434	458	488	Posts since last date — 45 151 57 71 24 30
	Articles w/o Answers	3	4	2	2	2	2	2
	Contributors	28	29	42	51	64	69	74
	Contributed more than	5	4	5	9	11	13	15
	Days since start	31	38	45	52	59	66	80
	Articles/day	3.5	4	6.8	6.9	7.4	6.9	6.1

The database was announced to the Help Desk/CSC Meeting on April 12, 2006. At that time it had 23 answers and roughly 10 contributors.

Please suggest other measures of success. Remember the first target audience is the staff of the 43 Help Desks at UCLA.

Possible Evaluation Criteria

- relevancy of articles as judged by user ranking (if we add that feature)
- number of queries per day
- number of new articles per day
- number of regular contributors
- percentage of help desks that contribute regularly
- percentage of help desks that use it for queries regularly
- anecdotal evidence of knowledgebase success

Where can I find out more about this knowledgebase?

This UCLA Knowledgebase is being planned and built as an experiment first in cooperation between various help desks on campus, and then later as a resource for the entire campus. Here are some introductory questions and answers.

- [What is the purpose of this Knowledgebase?](#)
- [Finding things in this Knowledgebase](#)
- [Partial search terms don't work without wildcard](#)
- [What should be posted?](#)
- [Who can post?](#)
- [How do I post a new article in Knowledgebase?](#)
- [What to do about duplicate articles](#)
- [Etiquette](#)
- [Contributor First Steps](#)
- [Reporting bugs or feature requests](#)
- [How will we measure success?](#)
- [Knowledgebase Timeframe](#)
- [How do I format my submission?](#)
- [How the Knowledgebase searches](#)
- [What to do if kb.ucla.edu search isn't working](#)
- [How to delete an article](#)
- [How to delete an attachment](#)

For more information see the [Knowledgebase Project Page](#)

UCLA Knowledgebase Presentation at UCCSC 2010

Knowledgebase Features

- Anyone employed by UCLA can edit any article, or add new ones.
- Or you can post questions.
- WYSIWYG editing, easy to learn.
- We keep track of all edits by name, and now you can diff between versions to see what changed.
- Can search, or browse by tags, authors or dates.
- RSS and email notifications.

Vision (pardon the jargon)

- this is an experiment in collaboration - attempt to get our 48 help desks to share information
- crowdsourcing - we have a lot of technical people across campus. We believe there is great value in sharing what we all learn and know.
- Institutional Memory
- opportunity costs - not sharing information costs the next person who has to discover it on their own
- low admin overhead - any employee at UCLA can edit any article, but we keep track
- zero based budget - except for some Nanos we gave away the first year.
- social networking - find experts on campus (if they post)
- folksonomy - of course it has a tagging system, try Browse by Tags

<https://kb.ucla.edu/tags>

Guidelines

- Avoid private info or sensitive information. Anything you post is public. So don't post if you want it private.
- Any UCLA employee can edit any post. But you can set it to email you on any changes.

- If you absolutely don't want anyone to change it, put the info on your own site, and link to it from the KB.
- If you see something wrong, fix it. Or contact someone who can.

Stats

- Started April 1, 2006 (No joke)
- As of today, 01/27/2012, 1450 Articles by 240 Bruins
- Article with most edits (44): <https://kb.ucla.edu/link/240>
- That's also the article with the most contributors (22)
- Next, with 8 contributors is <https://kb.ucla.edu/link/910>
- 16 articles have 5 or more contributors.

N cnt url 1 22 <https://kb.ucla.edu/link/240> 2 8 <https://kb.ucla.edu/link/910> 3 7

<https://kb.ucla.edu/link/220> 4 7 <https://kb.ucla.edu/link/723> 5 7 <https://kb.ucla.edu/link/298> 6 7

<https://kb.ucla.edu/link/443> 7 7 <https://kb.ucla.edu/link/327> 8 6 <https://kb.ucla.edu/link/863> 9 6

<https://kb.ucla.edu/link/834> 10 6 <https://kb.ucla.edu/link/96> 11 5 <https://kb.ucla.edu/link/187> 12 5

<https://kb.ucla.edu/link/532> 13 5 <https://kb.ucla.edu/link/144> 14 5 <https://kb.ucla.edu/link/792> 15 5

<https://kb.ucla.edu/link/1048> 16 5 <https://kb.ucla.edu/link/140>

- 30 people have posted 10 or more new articles.
- 49 people have posted 5 or more new articles.
- 51 people have posted 1 new article.
- To get into the Top 10, you now need 26 articles.
- 208 people have contributed to 1 or more articles
- 67 people have contributed to 5 or more articles.
- 45 people have contributed to 10 or more articles.
- 18 people have contributed to 20 or more articles.
- 1571 days since KB went live.
- Which is roughly 1122 working days (not counting vacations or furloughs, so with 1255 articles, we're doing better than one per working day. But that's not nearly enough.
- So with 1435 Programmers and Computer Support people on campus, not counting student workers, and only 208 contributors so far, we're still at the early stages of this experiment.
- The last time we gave away a prize was Oct. 13, 2006 . (iPod Nanos in random drawings.)
- 634 articles since then.
- Little known fact. You can upload files along with an article. 7 articles have file uploads

N cnt url 1 2 <https://kb.ucla.edu/articles/locally-installing-cclmoodle> 2 2

<https://kb.ucla.edu/link/1157> 3 2 <https://kb.ucla.edu/link/1260> 4 1 <https://kb.ucla.edu/link/1197> 5 1

<https://kb.ucla.edu/link/1213> 6 1 <https://kb.ucla.edu/link/298-apache-multiple-virtual-host-configuration-for-moodle> 7 1

<https://kb.ucla.edu/link/1158>

Use Cases

- share writeups or tutorials
 - <https://kb.ucla.edu/link/1010>
- find out if anyone else is using something
 - <https://kb.ucla.edu/link/532>
 - <https://kb.ucla.edu/link/1070>
 - <https://kb.ucla.edu/link/1217>
 - <https://kb.ucla.edu/link/528>
- short FAQs to help with accuracy and training of student help desk workers
- advertise university resources
 - <https://kb.ucla.edu/link/89>
 - <https://kb.ucla.edu/link/581>
- document data sources
 - <https://kb.ucla.edu/link/1351>
 - <https://kb.ucla.edu/link/1350>
 - <https://kb.ucla.edu/link/1353>
 - <https://kb.ucla.edu/link/134>
- add links to content on your own website
 - <https://kb.ucla.edu/link/499>
- share your bookmarks and resources as you learn new technology
- build a custom set of questions for certain groups
 - e.g. new instructors or TAs (including info on VPN access to Library resources, etc.)
 - <https://kb.ucla.edu/link/766>
 - <https://kb.ucla.edu/link/67>
- compile lists of campus resources
 - <https://kb.ucla.edu/link/327>
- get help from colleagues in answering support questions
 - <https://kb.ucla.edu/questions>
- summarize threads from mailing lists – Harry Mangalam from UCI has been a great source, letting me post these UCCSC listserv posts with his permission.
 - <https://kb.ucla.edu/link/1205>
 - <https://kb.ucla.edu/link/999>
- experiments
 - <https://kb.ucla.edu/link/240>
- after a three hour search through MSDN, save the solution to an obscure problem so you and others can find it easily the next time
- (potentially) daily reports can be made to see what questions are most popular

- answers can be refined by others on campus to elaborate or make them clearer

Biggest Problems

- Participation
- Cleanup of old articles.

Ideas for Future

- have a photo of someone, with a short blurb saying how they use the knowledgebase, and their name and dept on the bottom, with a link to More Info, where they get a paragraph to give more detail. Below this, we could have an Add Yourself link, which lets any UCLA person upload an photo, and give their example. It then waits for an approval before it gets put into the rotation. This would simultaneously highlight techs across campus, and excite interest in who is going to be showing today. The key question is can we get enough people willing to let their photo go up? And do we want to limit this to contributors?
- UC-wide? Would that make sense?
- Managers need to tell their help desk staff to check the KB first. And if the answer isn't there, add it when you learn it.

Helpdesk Consortium and the UCLA Knowledgebase

UCLA HDC (<http://www.hdc.ucla.edu>) – PROMOTING IT COLLABORATION at UCLA

- Share expertise, solutions, ideas, and resources to increase efficiency
- Increase responsiveness to end-users and customers
- Encourage professional development for IT Staff

Helpdesks

- Provide orientation and ongoing training for IT staff
 - <https://kb.ucla.edu/link/67>
- Improve customer experience in a multi-help desks environment
- Off-Hour Support
- Sharing up-to-date IT issues
- Tapping UCLA's Cognitive Surplus and social media collaboration
 - Cognitive Surplus: Creativity and Generosity in a Connected Age, by Clay Shirky

- The idea of “how the networked world allows people to form leaderless groups that still do useful work.” <http://www.wired.com/wiredscience/2008/08/clay-shirky-is/>
- New Feature in KB 2.0
 - The ability to post questions
 - RSS feed to website or email

Challenges

- Continue to promote usage and adoption
- Unanswered questions
- Accuracy of answers
- Obsolete articles

Thank you to Jackie Reynolds for all the support, and the iPod Nanos. And thank you to everyone who has contributed. And thanks to Timothy Ebertowski and Tom Phelan for letting us work on this.

Comments

Please add suggestions and comments here.

Are there any prizes for posting to the Knowledgebase?

This article is posted for historical purposes.

Here's our first contest:

"We Want Your Questions" raffle

Date: May 10, 2006 11:23:36 AM PDT

Dear Help Desk Consortium members: Please take advantage of this fun and valuable opportunity. Also please share this email with all your student workers (they are also eligible and our first raffle will take place before the end of the school year). If you can think of others in your area who might have Q&As for the KnowledgeBase, feel free to include them as well. Good luck to all of you. Help make our KnowledgeBase a terrific tool for yourselves and the entire campus!! Thanks. Jackie Reynolds

We Want Your Questions (and Answers)!!

(Sorry if you've seen this more than once.)

The UCLA Knowledgebase (<https://kb.ucla.edu>) is up and running (in beta). If you aren't familiar with the UCLA Knowledgebase, see this introduction.

<https://kb.ucla.edu/link/7>.

The good news is that 155 answers have been posted so far, by 29 people. The bad news is that most of those people have only submitted one or two questions. Since we want you to get in the habit of posting questions and answers all the time, we came up with the idea of a raffle.

Starting with the initial announcement of the KB (April 12th) until May 30th, we will enter your name into our raffle for EACH question/answer you submit to the KB. If you submit 10 entries to the KB by 5/30/06, you will have 10 chances to win our raffle. And what will you win? A brand new iPod Nano (1GB)courtesy of BruinTech!!

So start thinking about the questions that pop up with any regularity from your clients. When a person calls with a question, make it a habit to submit that question and your answer to the KB while it's fresh in your mind. If you have a particular strength in an area, write up a related procedure for us. Or, if you just want to bookmark a particularly good resource, add it to the knowledgebase. Help us build our Knowledgebase!

We'll do another raffle for summer submissions. But don't miss out on this one. The more you submit, the better your chances.

If you have any suggestions, there is a link to a Forum, after you login to <https://kb.ucla.edu> where we can all discuss strategies, request features and generally talk about the knowledgebase. We're particularly interested in how to make this more useful, and how we can get more people to contribute answers.

If you have any questions, contact Jackie Reynolds or Mike Franks.

Notes:

- Jackie and Mike are disqualifying themselves from the raffle.
- In this contest, we're focusing on new questions with answers. So editing other people's answers doesn't get you points for the raffle. Although please fix things if you find a mistake.

Thanks,

Mike Franks, Social Sciences Computing
Jackie Reynolds, AIS/BruinTech

Knowledge Base Changes for March 2017

Keith Rozett updated this Knowledge Base after a 7-year hiatus.

The biggest change was the ability to review existing articles.

Review Articles feature

- Logged-in users are encouraged to check existing articles for correctness, broken links, etc.
- A Review Articles link exists on the home page. This takes the user to a list of the 10 oldest articles that have not been checked.
- When viewing any article, logged-in users are able to take 3 new actions: mark the article as reviewed, edit it, or mark it as deleted.
 - If the article's information is correct and all the links work, the user should mark it as reviewed. The review time and name of the reviewer is recorded.
 - If the user finds errors or broken links, they should edit the article with the changes. This is the same edit feature that always existed in the Knowledge Base.
 - If the user thinks the article should be deleted, they can say so, but they must also provide a reason (e.g. the article is specific to something that no longer exists).
- Viewing an article shows a history of all reviews and marks for deletion at the bottom of the page.
- When viewing the list of articles that need review, users can also see a list of articles marked as reviewed and a list of articles marked for deletion.

Other new features

- New articles and edits are picked up by the search engine immediately, instead of every half hour.
- Deleting an article now keeps it in the database. Although it will disappear from the website, this gives us the ability to restore deleted articles in the future.
- The Knowledge Base now runs the latest version of Ruby on Rails (see technical details below).
- All requests are now HTTPS for added security.

Technical details

- Upgraded from CentOS 5.11 to 7.3.1611.
- Upgraded from Rails 2.3.5 to 5.0.2.
- Upgraded from Ruby 1.8.7 to 2.4.0.
- Sphinx search engine was upgraded to 2.2.11, which now supports real-time indices.
- More tests were added to give complete code coverage.