



Canasta

basket **canasta** canestro corbeille Korb кошик 筐子 سلة टोकरी 籠 корзина

State of Canasta

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What's Canasta?



Canasta

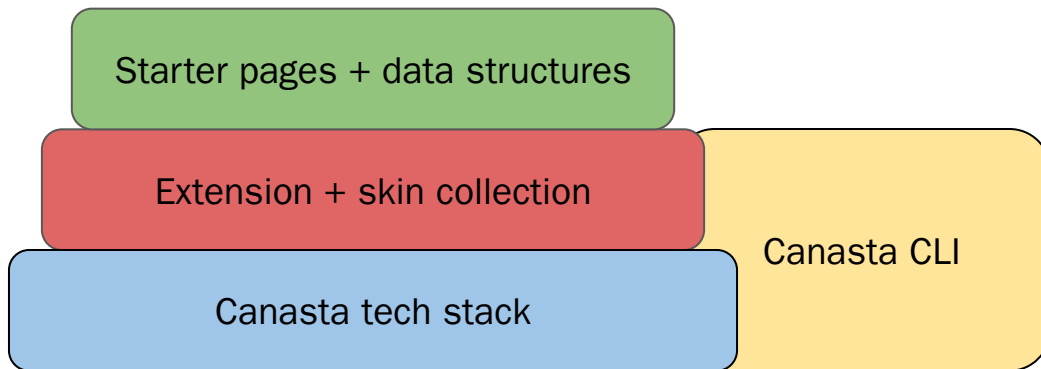
- “A comfy home for your data”
- All-in-one MediaWiki package
 - Docker-based stack powering MediaWiki
 - 100+ extensions already included
 - Data structures and packages ready for install
- Reducing technical and administrative complexity
 - Spend less time setting up, gain back more time for using your wiki



Components of Canasta



Canasta



Who's using the Canasta stack?



Canasta

Several companies in the MediaWiki industry have adopted the Canasta stack:

- WikiWorks
- WikiTeq
- MyWikis
- ...and more? :)



Canasta tech stack

Extension + skin collection

Starter pages + data structures

Who's considering/already using Canasta?



Canasta




Some statistics



Canasta

- Nearly 10,000 downloads
- Frequent updates from many contributors
- Lots of ideas in the pipeline

Details

 CanastaWiki

 Canasta

 MIT License

Last published

1 day ago

Issues

28

Total downloads

9.33K



100+ extensions and skins



Canasta

- Curated and vetted
- Criteria for adding extensions and skins
 - Works with the version of MediaWiki used by Canasta (currently 1.35)
 - Stable
 - Actively maintained and low risk of abandonment
 - Provide unique value that isn't provided by any other bundled extension

Skins included in Canasta

- Chameleon
- Cologne Blue
- Mirrored News
- Modern
- MonoBook
- Pivot
- Refreshed
- Timeless
- Vector

Extensions included in Canasta

Administrative tools

[Admin Links](#) · [Interwiki](#)

Analytics

[ContributionScores](#) · [Editcount](#) · [GoogleAnalyticsMetrics](#) · [GTag](#) · [HotnetLinks](#) · [WhoisWatching](#)

Automated page creation & modification

[Data Transfer](#) · [Page Exchange](#) · [Replace Text](#)

Communication

[CommentStreams](#) · [ContactPage](#) · [DiscussionTools](#) · [DismissableSiteNotice](#) · [Echo](#) · [GlobalNotice](#) · [MassMessage](#) · [MassMessageEmail](#) · [NewUserMessage](#) · [Thanks](#) · [WikiForum](#)

Data storage and querying

[Cargo](#) · [Disambiguator](#) · [PageImages](#) · [Semantic Brackcumb Links](#) · [Semantic Compound Queries](#) · [Semantic Drilldown](#) · [Semantic Extra Social Priorities](#) · [Semantic MediaWiki](#) · [Semantic Result Formats](#) · [Semantic Scribunto](#) · [SimpleChanges](#) · [SubPageList](#)

Editing

[CharInsert](#) · [CodeEditor](#) · [CodeMirror](#) · [InputBox](#) · [LinkSuggest](#) · [Linter](#) · [Page Forms](#) · [SaveSpinner](#) · [TemplateData](#) · [TinyMCE](#) · [VEForm](#) · [VisualEditor](#) · [WikiEditor](#)

File upload & handling

[CommonsMetadata](#) · [GoogleDocCreator](#) · [ImageMap](#) · [MultiUpload](#) · [MultimediaViewer](#) · [PdfHandler](#) · [SimilesBatchUpload](#) · [TimedMediaHandler](#) · [UploadWizard](#)

HTML & multimedia support

[EmbedVideo](#) · [Flex Diagrams](#) · [Graph](#) · [HTML Tags](#) · [Image](#) · [Math](#) · [SimpleMathJax](#) · [Wikipedia](#)

Interface & display customization

[BetaFeatures](#) · [Gadgets](#) · [Header Footer](#) · [HeadScript](#) · [SkinPerPage](#)

Meta tags

[Description2](#) · [OpenGraphMeta](#) · [WikiSEO](#)

PDF export

[Collection](#)

Read & write access

[Approved Revs](#) · [LockAuthor](#) · [Lockdown](#)

Search

[AdvancedSearch](#) · [CirrusSearch](#) · [Elastic](#)

Social tools

[AJAXPoll](#) · [SocialProfile](#) · [VoteNY](#)

Spam control

[AbuseFilter](#) · [ConfirmEdit](#) · [Nuke](#) · [SmiteSeam](#) · [SpamBlacklist](#) · [TitleBlacklist](#)

Canasta tech stack

Extension + skin collection

Starter pages + data structures

Predefined data structures



Canasta

- Everything is made for you
- Page Exchange + Canasta = a match made in heaven
 - Included with Canasta
 - One line to enable, one more line for each package

```
wfLoadExtension( 'PageExchange' );  
$wgPageExchangePackageFiles[] =  
'https://raw.githubusercontent.com/CanastaWiki/CanastaPXConsultingCRM/main/page-exchange.json';  
$wgPageExchangePackageFiles[] = 'https://raw.githubusercontent.com/CanastaWiki/CanastaPXWidgets/main/page-exchange.json';
```

- Import, update, delete
 - No risk in trying a new package

Canasta tech stack

Extension + skin collection

Starter pages + data structures

Updates since SMWCon in October 2022



Canasta

- Upgraded to MediaWiki 1.39
 - Moved to using Elasticsearch 7.10
 - Remained on PHP 7.4
 - Extensions that support MediaWiki 1.39 were upgraded
- Moved to PHP-FPM and mpm_event for faster operation
- Kubernetes rewritten as containers running in one pod
 - CLI does not support K8s yet
- ARMv8 (AArch64) support



Canasta

What's next for Canasta?

Current development goals



Canasta

- GSoC 2023 project: Wiki farm support
 - Multiple wikis in the same Canasta container
- Multi-domain support via Traefik
 - Expected to replace Caddy

Wiki farm support



Canasta

- Inspired by the Wikimedia Foundation's approach
- One web container can handle requests for multiple wikis
 - Each wiki still has its own database
 - Much more resource efficient to run fewer web servers
- Take advantage of opcode cache
 - One opcode cache for MediaWiki can handle many wikis
- Support three use cases
 - 1. a different directory (e.g. example.com/a, example.com/b)
 - 2. a different subdomain (e.g. a.example.com, b.example.com)
 - 3. different domains for each wiki (example1.com, example2.com)

What's next? (Canasta tech stack)



Canasta

- Adding custom Composer support
 - Discussions underway on best way to implement this
- Refining support for orchestrators other than Docker Compose
 - Discussions ongoing about best way to design Kubernetes
 - Ideas about creating Helm charts for deployment of Kubernetes
- Add Kubernetes support to Canasta CLI
- Improved support for cloud container services
 - AWS ECS
 - Azure Container Instances

Canasta tech stack

Extension + skin collection

Starter pages + data structures

What's next? (Canasta tech stack)



Canasta

- Primary strength has been Docker Compose
 - Lightweight, simple, straightforward to use
 - CLI built around Docker Compose
 - Fewer complicated abstractions, less overhead
- Enhance our Kubernetes ecosystem support
 - Important to scaling Canasta for large enterprise users
 - Add support for Helm and Terraform
 - Add support for multiple Canasta containers (horizontal scaling)
- Currently, the best way to support this is up for discussion

Canasta tech stack

Extension + skin collection

Starter pages + data structures

What's next? (Canasta tech stack)



Canasta

- Two development tracks
 - Canasta Latest
 - Canasta Stable
- Canasta Latest receives new changes immediately
 - Ensures development is never halted due to bureaucracy
 - Latest features, always
 - Less emphasis on stability
- Canasta Stable emphasizes stability
 - Will be based off of certain commits in Canasta Latest
 - Emphasis on only including features that have been tested in Canasta Latest
 - Safe option for companies who prefer stability over being on the cutting edge

Canasta tech stack

Extension + skin collection

Starter pages + data structures

What's next? (Canasta tech stack)



Canasta

- Splitting the web and maintenance containers
 - Web container will be used for running Canasta
 - Maintenance container will be responsible for running all background scripts
- Scripts that will be moving to the maintenance container:
 - Job runner
 - Sitemap generator
 - Transcoder
 - ...and future maintenance scripts
- Allows for
 - Better resource management
 - Prioritize web requests over background jobs
 - Enables scaling without race conditions between web and maintenance containers

Canasta tech stack

Extension + skin collection

Starter pages + data structures

What's next? (Extensions + skins collection)



Canasta

- Workflow for proposing extensions and skins

- Extensions and skins should be nominated on the Canasta GitHub repo's section, with one issue per extension or skin being proposed.
 - If a group of extensions are being nominated at the same time, an additional issue should be created for tracking purposes for all of the "subissues" each containing an extension's proposal.
- Nominated extensions should be seconded by someone else before the extension can be considered for inclusion.
- Should meet the criteria for an includable extension or skin.
- Discussions about supporting or opposing inclusion should happen on the issue for proposing the extension. These discussions should follow the parameters governing Canasta inclusion, listed below. The consensus of that discussion will be considered as approval/disapproval for the inclusion. A reasonable time (~2 weeks) should be given for the public commenting period.
- If approved, someone should submit a PR to include the extension or skin. If no volunteers wish to make the PR, the extension and skin won't be added until someone makes the PR.

Canasta tech stack

Extension + skin collection

Starter pages + data structures

What's next? (Extensions + skins collection)



Canasta

- Criteria:

- Must be open source and free to use with a reasonable license (i.e. MIT, GPL, Affero).
- Actively maintained, both currently and in the foreseeable future.
- Relatively established and proven to work well (and interact with other extensions well) in production wikis.
- Reasonably relevant to a significant number of Canasta users, not just a small subset.
- In general, it should at least provide slightly different functionality. If the functionality is deemed too similar to an existing extension, then the extension should not be included.
- Tested and code reviewed.

Canasta tech stack

Extension + skin collection

Starter pages + data structures

What's next? (Starter pages + data structures)



Canasta

- A year after the release of Canasta 1.0 and still no progress on this?
- Until now!

Canasta tech stack

Extension + skin collection

Starter pages + data structures



Canasta

Introducing Canasta PM

What's Canasta PM?



Canasta

- Project management package
- Can be used either with or without Canasta
 - Will be a lot easier to install with Canasta :)
- Provides kanban board for your wiki
- Based on SemanticActions
- Developed jointly by WikiWorks and WikiTeq



How is Canasta PM installed?



Canasta

- Installation is via the Page Exchange extension
- Canasta:
 - `canasta extension enable`
`PageExchange, Cargo, PageForms, DisplayTitle, HeaderTabs, MagicNoCache, ParserFunctions, Variables`
- Non-Canasta:
 - Manually install Page Exchange and all other dependencies
- Add two lines to LocalSettings.php:

```
$wgPageExchangePackageFiles[] = 'https://raw.githubusercontent.com/CanastaWiki/CanastaPM/main/page-exchange.json';  
$wgRestrictDisplayTitle = false;
```



Canasta

Demo of Canasta PM

We need contributions!



Canasta

- Canasta couldn't be possible without open source community support
- What Canasta needs
 - **Developers.** Canasta was a large and ambitious project to start with. Now that it's stable, it still needs your help to add new features and expand its reach.
 - **Your input.** Feedback and suggestions from the community are crucial in deciding the direction of the project. Join the Canasta mailing list today!
 - **Funding.** To promote further development of Canasta, we need financial support to sustain our development initiatives.

More info



Canasta

- GitHub: github.com/CanastaWiki/Canasta
 - File bug reports and feature requests on our GitHub Issues page
- Website: canasta.wiki
 - Official resource for learning about Canasta and how to use it

Q&A session



Canasta

Now, we'll hold a Q&A session for the remaining time.

Ask about anything related to Canasta!

Appendix

Installing the Canasta PM package



Canasta

Packages

Available

Page names in *italics* already exist on this wiki.

Canasta PM

A general project management package.

Website: [Link](#)

Publisher: Canasta Project

Author: Yaron Koren

Pages: [Category:Project labels](#),
[Category:Project managers](#),
[Category:Projects](#), [Category:Statuses](#),
[Category:Task labels](#), [Category:Tasks](#),
[Form:Filter tasks](#), ([show more](#))

Language: en

License: CC-BY-SA 3.0

Required extensions: [Cargo](#),
[DisplayTitle](#), [HeaderTabs](#), [MagicNoCache](#),
[Page Forms](#), [ParserFunctions](#), [Variables](#)

[Install](#)

After it's installed



Canasta



Main page
Recent changes
Random page
Help about MediaWiki

Tools
Special pages
Printable version

Special page

Packages

Installed

Canasta PM

A general project management package.

Website: [Link](#)

Publisher: Canasta Project

Author: Yaron Koren

Pages: [Category:Project labels](#), [Category:Project managers](#), [Category:Projects](#), [Category:Statuses](#), [Category:Task labels](#), [Category:Tasks](#), [Form:Filter tasks](#), [Form:Project](#), [Form:Project label](#), [Form:Query tasks](#), [Form:Statuses](#), [Form:Task](#), [Form:Task label](#), [MediaWiki:CanastaPM.css](#), [MediaWiki:CanastaPM.js](#), [Canasta Test:Color list](#), [Canasta Test:Project labels](#), [Canasta Test:Project labels/1001](#), [Canasta Test:Project labels/1002](#), [Canasta Test:Project labels/1003](#), [Canasta Test:Project labels/1004](#), [Canasta Test:Statuses](#), [Canasta Test:Task labels](#), [Canasta Test:Task labels/1001](#), [Canasta Test:Task labels/1002](#), [Canasta Test:Task labels/1003](#), [Canasta Test:Task labels/1004](#), [Template:Filter tasks](#), [Template:Filter tasks item](#), [Template:Filter tasks link](#), [Template:Filter values](#), [Template:Get name](#), [Template:Get status list](#), [Template:Get task label](#), [Template:Labels table row](#), [Template:Project](#), [Template:Project label](#), [Template:Project table row](#), [Template:Query tasks](#), [Template:Render label](#), [Template:Render project label](#), [Template:Status](#), [Template:Status field](#), [Template:Task](#), [Template:Task for review table row](#), [Template:Task kanban tile](#), [Template:Task label](#), [Template:Task table row](#)

[Update / Uninstall](#)

Create a project



Canasta



[Main page](#)
[Recent changes](#)
[Random page](#)
[Help about MediaWiki](#)

[Tools](#)
[Special pages](#)
[Printable version](#)

Special page

Create Project: Project Sunflower

Project manager:

Pages in category [Project managers](#).

Date started:

No date selected

Date due:

No date selected

Status:

In progress

Labels:

Manage labels [here](#).

Details:

Summary:

This is a minor edit Watch this page

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[Main page](#)
[Recent changes](#)
[Random page](#)
[Help about MediaWiki](#)

[Tools](#)
[Special pages](#)
[Printable version](#)

Special page

Create Task

Project:

Task:

Date due:

Assignee(s):

Task status:

Task labels:
[Manage labels here.](#)

Related pages:

Details:

Summary:

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Creating a task on the taskboard



Canasta

Special page

Set SwgLogos with the URL path to your own logo image

[Main page](#)
[Recent changes](#)
[Random page](#)
[Help about MediaWiki](#)

Tools
[Special pages](#)
[Printable version](#)

Create Task

Project:

Task:

Date due:

Assignee(s):

Task status:

Task labels: Manage labels here.

Related pages:

Details:

It has been decided to rewrite key aspects of the codebase in Rust, as this will bring significant performance improv

Summary:

This is a minor edit Watch this page

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Viewing a task



Canasta



[Main page](#)
[Recent changes](#)
[Random page](#)
[Help about MediaWiki](#)

[Tools](#)
[What links here](#)
[Related changes](#)
[Special pages](#)
[Printable version](#)
[Permanent link](#)
[Page information](#)
[Page values](#)

Page [Discussion](#)

[Read](#) [Edit with form](#) [Edit](#) [Edit source](#) [View history](#)

Rewrite PHP code in Rust

Project Sunflower/996207

Project	Project Sunflower
Due date	2023-05-01
Assignee(s)	Admin
Status	Open
Related page(s)	
Labels	<i>No results · No results</i>

It has been decided to rewrite key aspects of the codebase in Rust, as this will bring significant performance improvements in lieu of opcode caching. Furthermore, the syntax of Rust is less prone to errors.

Category: [Tasks](#)

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Editing a task



Canasta

Page [Discussion](#)

Edit Task: Project Sunflower/996207

Project Sunflower/996207

Project: ▾

Task:

Date due:

Assignee(s):

Task status: Open
 In progress
 Ready for review
 Blocked
 Completed
 Declined

Task labels: [Manage labels here](#)

Related pages:

Details:

It has been decided to rewrite key aspects of the codebase in Rust, as this

New position on the taskboard!



Canasta



Main page
Recent changes
Random page
Help about MediaWiki

Tools
What links here
Related changes
Special pages
Printable version
Permanent link
Page information
Page values

Page [Discussion](#)

[Read](#) [Edit with form](#) [Edit](#) [Edit source](#) [View history](#) [More](#)

Project Sunflower

Project manager	Not assigned
Start date	Not set
Due date	Not set
Status	In progress
Labels	

[Add task](#) [Search tasks in this project](#)

Kanban All tasks

Tasks: 1 [edit]

Open (0)	In progress (0)	Ready for review (1)	Blocked (0)	Completed (0)	Declined (0)
		Rewrite PHP code in Rust Due date: 2023-05-01 Assignee(s): Admin			

Category: [Projects](#)

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- Main page
- Recent changes
- Random page
- Help about MediaWiki
- Tools
- What links here
- Related changes
- Special pages
- Printable version
- Permanent link
- Page information
- Page values

Page [Discussion](#)

[Read](#) [Edit with form](#) [Edit](#) [Edit source](#) [View history](#) [★](#) [More v](#)

Project Sunflower

Project manager	Not assigned
Start date	Not set
Due date	Not set
Status	In progress
Labels	

[Add task](#)

[Search tasks in this project](#)

Kanban All tasks

Tasks: 1

[\[edit\]](#)

Open (1)	In progress (0)	Ready for review (0)	Blocked (0)	Completed (0)	Declined (0)
Rewrite PHP code in Rust Due date: 2023-05-01 Assignee(s): Admin					

Category: [Projects](#)

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- [Main page](#)
- [Recent changes](#)
- [Random page](#)
- [Help about MediaWiki](#)

Tools

- [What links here](#)
- [Related changes](#)
- [Special pages](#)
- [Printable version](#)
- [Permanent link](#)
- [Page information](#)
- [Page values](#)

Page [Discussion](#)

Read

[Edit with form](#)

[Edit](#)

[Edit source](#)

[View history](#)

Search Canasta Test

Project Sunflower

Project manager	Not assigned
Start date	Not set
Due date	Not set
Status	In progress
Labels	

[Add task](#)

[Search tasks in this project](#)

Kanban All tasks

Tasks: 1

[\[edit\]](#)

Open (0)	In progress (0)	Ready for review (0)	Blocked (1)	Completed (0)	Declined (0)
			<div style="border: 1px solid #ccc; padding: 5px;"> <p>Rewrite PHP code in Rust</p> <p>Due date: 2023-05-01</p> <p>Assignee(s): Admin</p> </div>		

Category: [Projects](#)

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