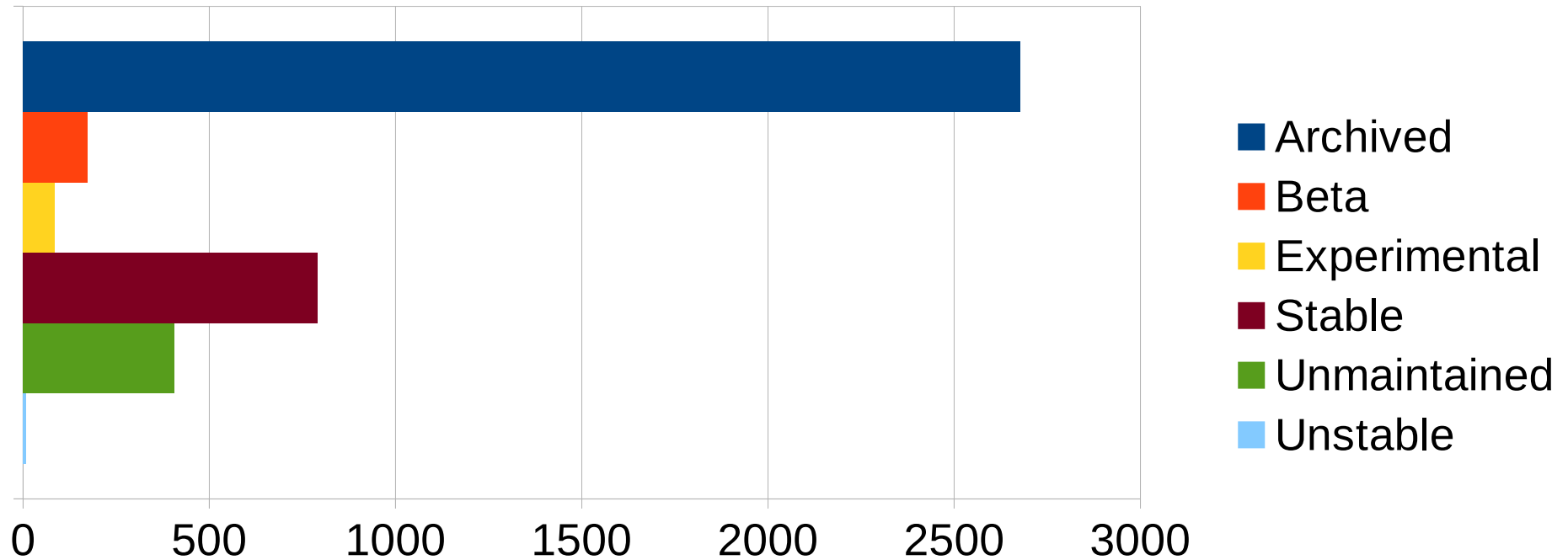


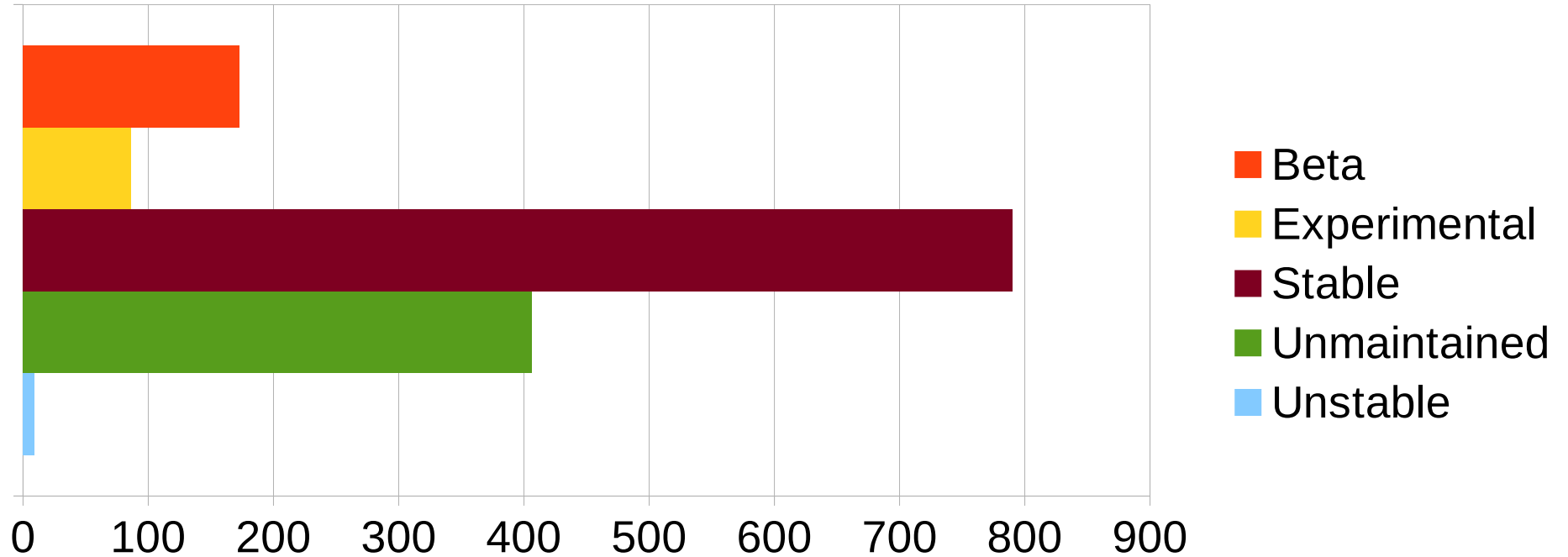
Creating a directory of extension and skin usability

Yaron Koren
MediaWiki Users and Developers Conference
Portland, Oregon, USA
April 17, 2024

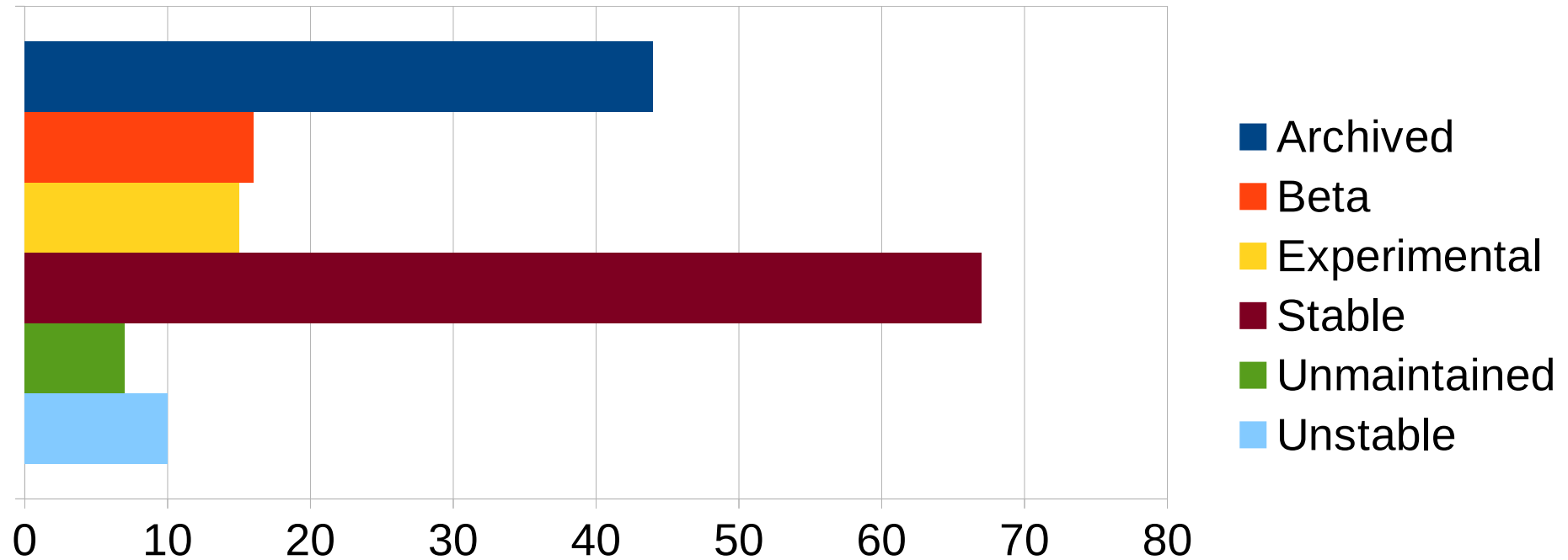
Extensions on mediawiki.org, by status



Non-archived extensions on mediawiki.org, by status

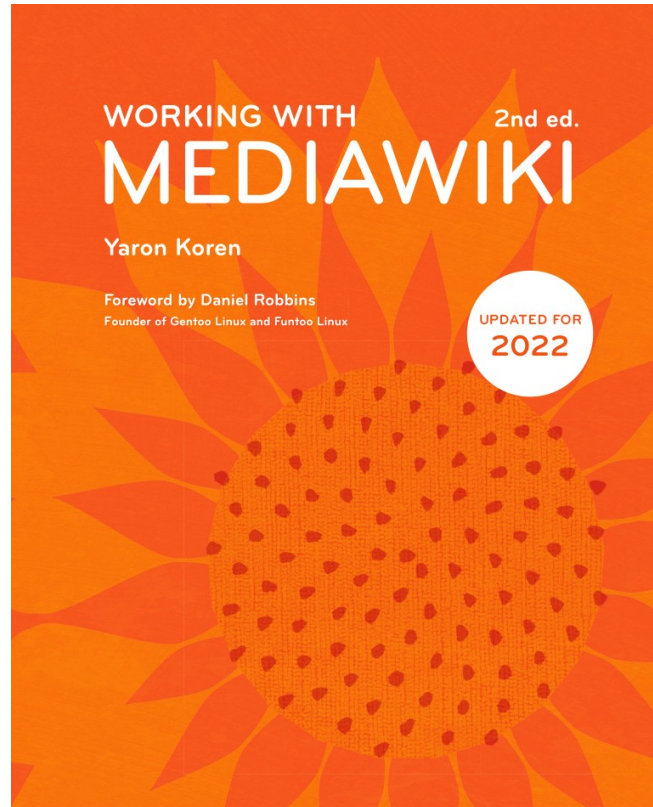


Skins on mediawiki.org, by status



How can MediaWiki administrators know which of these (hundreds of) extensions and (dozens of) skins to install?

One option



Needed: a dedicated resource
that will help people make this
decision.

"Complete" implementation

"I have MediaWiki version ___ installed, on operating system _____ version __, with web server _____ version __, database system ___ version __, and PHP version __. I would like the wiki to do _____. What is the set of extensions and skins I can install, and the commit ID and required libraries for each, that I can use for this purpose?"

Minimum implementation

“For the **current LTS** (long-term support) version of MediaWiki, running on the **recommended PHP version** and reasonable versions of **MySQL**, **Apache** and **Linux (Debian or Ubuntu)**, what are the set of recommended skins and extensions, and the recommended commit ID and required libraries for each?”

The "OnWikimedia" template

Denotes which extensions and skins are used on one or more Wikimedia sites.

The "Used by" template

In use on mediawiki.org since 2022. Currently used for information on the following packages:

- BlueSpice
- Canasta
- Debian
- Open CSP
- semantic::core

The "Used by" template

...and the following wiki farms:

- Fandom
- Miraheze
- MyWikis
- ProWiki
- ShoutWiki
- Telepedia
- wiki.gg
- WikiForge

From bottom of “Timeless” skin page



This skin is being used on one or more [Wikimedia projects](#). This probably means that the skin is stable and works well enough to be used by such high-traffic websites. Look for this skin's name in Wikimedia's [CommonSettings.php](#) and [InitialiseSettings.php](#) configuration files to see where it's installed. A full list of the skins installed on a particular wiki can be seen on the wiki's [Special:Version](#) page.



This skin is included in the following wiki farms/hosts and/or packages:

[Canasta](#) · [Debian](#) · [Miraheze](#) · [MyWikis](#) [↗](#) · [ProWiki](#) [↗](#) · [semantic::core](#) [↗](#) · [WikiForge](#) [↗](#)

This is not an authoritative list. Some wiki farms/hosts and/or packages may contain this skin even if they are not listed here. Always check with your wiki farms/hosts or bundle to confirm.

Pages in category "Extensions included in wiki.gg"

The following 67 pages are in this category, out of 67 total.

A

- [Extension:AbuseFilter](#)
- [Extension:AntiSpooF](#)
- [Extension:ArrayFunctions](#)
- [Extension:Arrays](#)

C

- [Extension:Cargo](#)
- [Extension:CategoryTree](#)
- [Extension:CharInsert](#)
- [Extension:CirrusSearch](#)
- [Extension:Cite](#)
- [Extension:CiteThisPage](#)

- [Extension:MyVariables](#)

N

- [Extension:NoTitle](#)
- [Extension:Nuke](#)

O

- [Extension:OATHAuth](#)
- [Extension:OAuth](#)
- [Extension:OpenGraphMeta](#)

P

- [Extension:Page Exchange](#)
- [Extension:Page Schemas](#)

Example: CodeMirror extension

- Written by Pavel Astakhov
- Allows for IDE-style editing of wiki pages.
- Used by 8 of the 13 packages and wiki farms, plus Wikimedia.
- In my opinion, the strongest current candidate for bundling within MediaWiki!

Example 2: CookieWarning extension

- Written by Florian Schmidt et al.
- Displays the now-ubiquitous “This site uses cookies” popup warning
- Used by 8 of the 13 packages and wiki farms
- Another strong bundling (or maybe even integration) contender.

Other unexpectedly popular extensions, discovered via "Used by":

- Arrays (8 of 13) 😞
- Loops (8 of 13)
- Maps (8 of 13)
- Page Forms (8 of 13)
- Semantic MediaWiki (9 of 13)
- Variables (10 of 13) 😞

Example 3: DynamicPageList extensions

- DynamicPageList (Wikimedia): **2** “Used by”, + Wikimedia
- DynamicPageList (third-party) (*AKA DPL2*): **0** “Used by”
- DynamicPageList3: **6** “Used by”

Should there be a public listing of extensions and their popularity?

- e.g., "**Category:Extensions used in 6 of the cataloged MediaWiki packages and wiki farms**".
- Pros: Lets people see popularity at a glance
- Cons: The exact popularity is kind of random; could lead to "groupthink", i.e. extensions gaining popularity as a result of current popularity

Special case: Canasta

- In my (biased) opinion, the best MediaWiki package to use
- Complete, Docker-based solution
- Fully open source
- Consensus-based methodology for determining extension and skin inclusion

[🕒 Add Extension:Paragraph-based Edit Conflict Interface](#) extensions
#239 opened on Apr 29, 2023 by harej

[🕒 Add Extension:QuickInstantCommons](#) extensions
#238 opened on Apr 29, 2023 by harej

[🕒 Add Extension:OAuth](#) extensions
#237 opened on Apr 29, 2023 by harej

[🕒 Add Moderation extension](#) extensions
#203 opened on Jan 3, 2023 by jeffw16

[🕒 Add PagePermissions extension](#) extensions
#176 opened on Dec 8, 2022 by yaronkoren

How to choose the best version (down to the commit ID) of an extension, or skin?

The Canasta approach

- For extensions bundled in with MediaWiki, just go with that exact code
- For WMF-maintained extensions, go with the branch for the current MW version (e.g., REL1_39), and the latest commit in that branch
- For other extensions that have version releases, go with the latest released version
- For all other extensions, go with just the latest commit

Okay, but what if this version of the extension contains bugs?

A word about bugs

- The sad truth of software: every piece of software that does something useful contains bugs
- Bugs in a MW extension can be inherent to the code, or appear in interaction with all the other "moving parts" (MediaWiki, LAMP stack, Docker, libraries, other extensions and skins)

So, what to do about bugs?

- Bugs can range in severity from "Add deprecation warnings in logs" to "Delete the entire database"
- Major bugs of course must be dealt with
- In the ideal case, a major bug has already been fixed in the extension - and upgrading to that later code solves the problem

If the bugs are still there...

...and they're severe enough, there are three main options:

- Get the bug fixed in the extension code
- Apply a local patch
- Get rid of that extension

Case study: Maps not working with VisualEditor

Bug discovered by Pavel Astakhov, while running a Canasta-based Docker image

Submitted to the Maps extension GitHub repository, and committed by Jeroen De Dauw soon afterwards



JeroenDeDauw committed on Mar 6 Verified

2 parents [cbb1377](#) + [bea8bb0](#) commit [9b01a6b](#)

Showing 1 changed file with 7 additions and 1 deletion.

Whitespace

Ignore whitespace

Split

Unified

8 src/SemanticMW/QueryHandler.php

@@ -468,7 +468,13 @@ private function getTitleOutput(string \$titleText) {

468 }

469

470 private function getParser(): \Parser {

471 - return
MediaWikiServices::getInstance()->getParser();

472 }

468 }

469

470 private function getParser(): \Parser {

471 + \$user =
\RequestContext::getMain()->getUser();

472 + \$parser =
MediaWikiServices::getInstance()->getParser();

473 + if (!\$parser->getOptions()) {

474 + \$parser->setOptions(
new \ParserOptions(\$user));

475 + }

476 + \$parser->clearState();

477 + return \$parser;

478 }


Version of Maps was then updated in
Canasta.

✓ Upgrade Maps to include fix to work with VisualEditor (#367)

Browse files

The fix was added by [@pastakhov](#) .

🔑 master (#367)

 [yaronkoren](#) committed on Mar 7 Verified

1 parent [8f54c49](#) commit [26d5e38](#)

Showing 1 changed file with 1 addition and 1 deletion.

Whitespace

Ignore whitespace

Split

Unified

2 Dockerfile

@@ -376,7 +376,7 @@ RUN set -x; \
↑

```
376 # Maps  
377 && git clone --single-branch -b master  
https://github.com/ProfessionalWiki/Maps  
$MW_HOME/extensions/Maps \  
378 && cd $MW_HOME/extensions/Maps \  
379 - && git checkout -q  
5c87d702b30bb132d89ec03d24b7c19a9805db87 \  
380 # MassMessage
```

```
376 # Maps  
377 && git clone --single-branch -b master  
https://github.com/ProfessionalWiki/Maps  
$MW_HOME/extensions/Maps \  
378 && cd $MW_HOME/extensions/Maps \  
379 + && git checkout -q  
9b01a6bbd8e0d4277c152b7343efccae28b54d1c \  
380 # MassMessage
```

Current patches in Canasta

Currently, Canasta contains five patches, all related to Composer-based autoloading of SMW-related extensions.









vedmaka Adds SemanticWatchlist v 1.3.0 (#2...



4418831 · 3 months ago



History

Name	Last commit message	Last commit date
 ..		
 SemanticWatchList.417851c22c...	Adds SemanticWatchlist v 1.3.0 (#299)	3 months ago
 semantic-breadcrumb-links-co...	Download all "real" extensions and sk...	7 months ago
 semantic-compound-queries-a...	Download all "real" extensions and sk...	7 months ago
 semantic-result-formats-comp...	Download all "real" extensions and sk...	7 months ago
 semantic-scribunto-autoload.p...	Download all "real" extensions and sk...	7 months ago



yaronkoren Download all "real" extensions an...



3a909ef · 7 months ago



History

Code

Blame

17 lines (17 loc) · 418 Bytes

Raw



```
1 diff --git a/extension.json b/extension.json
2 index 11c452d..cad612a 100644
3 --- a/extension.json
4 +++ b/extension.json
5 @@ -26,6 +26,11 @@
6     "ExtensionFunctions": [
7         "SemanticCompoundQueries::onExtensionFunction"
8     ],
9 -    "load_composer_autoloader": true,
10 +    "AutoloadNamespaces": {
11 +        "SCQ\\": "src/"
12 +    },
13 +    "AutoloadClasses": {
14 +        "SemanticCompoundQueries": "SemanticCompoundQueries.php"
15 +    },
16     "manifest_version": 2
17 }
```

Why have these changes not been added to the original extensions?

Still waiting. 😞

Add autoload to extension.json #60

[Edit](#)[Code](#)[Open](#)yaronkoren wants to merge 1 commit into `master` from `add-autoload-to-extension-json`[Conversation](#) 0[Commits](#) 1[Checks](#) 0[Files changed](#) 1

+6 -0

[Changes from all commits](#)[File filter](#)[Conversations](#)[Jump to](#)

0 / 1 files viewed

[Review changes](#)

6 extension.json

 Viewed

@@ -26,6 +26,12 @@

```
26         "ExtensionFunctions": [  
27  
28         "SemanticCompoundQueries::onExtensionFunction"  
28         ],
```

```
26         "ExtensionFunctions": [  
27  
28         ],  
29 +         "AutoloadNamespaces": {  
30 +             "SCQ\\": "src/"  
31 +         },  
32 +         "AutoloadClasses": {  
33 +             "SemanticCompoundQueries":  
34 +                 "SemanticCompoundQueries.php"  
34 +         },
```

What about non-major bugs?

There is a strong case for **not** trying to fix these in the standard release!

Every bug fix is an opportunity for additional bugs - both in the fix itself, and in any intermediate code changes that may have happened

Consistency is an important feature of packages

The fewer code changes are made, the more confidence users can have that it works as intended - since the code they are running will have been run by many others.

Any change to the code - including bug fixes - removes some of that confidence.

Thus, many bugs should simply wait for the next major release to be fixed.

Canasta YAML file

```
146     - MediaUploader:
147         commit: 1eddd91c506c1c0319e7b9a3e71d639130760b1fd
148     - Mermaid:
149         repository: https://github.com/SemanticMediaWiki/Mermaid
150         commit: fd792683fef3c84a7cdd56f8f474c4da0dd630f2 # v. 3.1.0
151     - MintyDocs:
152         branch: master
153         commit: 4496e33ce71d2c364b16599619c961a1a330bf14 # 1.0
154     - MobileFrontend:
155         commit: 7f9ecd976796d02988b40dff4a790c315d4651e6
```

Meza has a similar approach (also YAML)

```
403     - name: Echo
404       repo: https://github.com/wikimedia/mediawiki-extensions-Echo.git
405       version: "{{ mediawiki_default_branch }}"
406       config: |
407           $wgEchoEmailFooterAddress = $wgPasswordSender;
408
```


Most useful parts (“Phase 2”)

The most useful enhancements, beyond “minimum”, would be listing extensions and their versions for:

- Non-LTS MediaWiki versions
- Non-MySQL DB systems (i.e. PostgreSQL and SQLite)
- Specific feature needs (e.g. content publishing)

Questions / comments