Difficulties Introducing MediaWiki to Technical and Non-technical Audiences

(and a story... about a button)

Who Are We?

	Tina	Mark
Education	B.Sci in Comp Sci, Masters in Mechatronics	Diploma in Computer Engineering Technology
Specialties	MediaWiki, process automation, efficiency	Servers, storage, VM, DR/BC, electronics
MediaWiki Experience	~15 years	no
SQL	yes	none
PHP	yes	nope
Cargo	yes	pants or ships?
Linux on SBCs	ehh maybe?	yes
Problem-Solving Style	"I think I brought enough tools"	"Let me find the datasheet"

Why Are We Here?

- We've been friends for 30 years.
- Tina is a MediaWiki advocate and has been telling Mark about it for a decade.
- An opportunity came up to build a small MediaWiki kiosk for a local museum and Tina wrangled Mark into helping.
- We spent the next four months about ready to strangle each other.
- We were both surprised at how differently we saw/approached MediaWiki.
- But it worked out, worked well, we are still friends, and other museums have signalled interest in setting up a wiki.
- Tina thought it would be a good idea to share our experience.

Mark: To do...

Rewrite the whole presentation this evening because of all the stuff I learned yesterday.

Stayed up too late, rewrite most of the presentation tomorrow morning

Woke up too late, try to fix stuff at breakfast.

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The Task...

- A small kiosk so the public could browse the museum's collections of photos, information about the photos, as well as stories, documents, and potentially video.
- Able to arrange the content into "collections" while showing the relationships between the containers and items.
- No network connection available.
- Must be small, inexpensive, and reliable.
- The museum is staffed by volunteers, mainly retirees with different backgrounds but with comprehensive knowledge of the stories behind the photos and artifacts in the museum.
- More information about the build provided in our previous chat.





WordPress would work, some nice themes out there.

Can you put MediaWiki on a Pi?



It'll be offline, mostly static... what about writing something custom?

MediaWiki, Mark. You have to finally try MediaWiki.



Okay, okay. Mediawiki.

CARGO! 9





What?

MediaWiki: Amazing, Yet Frustrating

The power, flexibility, and usefulness of the WikiMedia platform is not in dispute:

- Wikipedia
- Fan wikis
- Product wikis
- Business wikis
- Wikis... about wikis

But unless you're already immersed in the environment, it can be difficult to get into or even understand how it may be the best tool for the job.

And saying, "You know, Wikipedia? It's like that" does not help.

Why?

- It's a different way of thinking about information than traditional websites or blogs (Tina will touch on this in her upcoming talk).
- It requires a suite of other software (and the expectation of some knowledge with that software)
- Editing (particularly long entries) can be taxing.
- It's involved enough that you can't spend an hour on it and then come back a month later.
- Functionality that casual office software users expect is not part of the base install.
- Configuration files can be dead ends, red herrings, and long trips down a rabbit hole.
- Documentation isn't particularly helpful for the casual or beginning user.

The Installation...

Alright, I've got a Pi set up. Ready to wiki it up.



It's easy to install, I've done a lot.

What do you need me for, then?





You're the Pi guy. Look at mediawiki.org, instructions are there.



Hey, it's a wiki



Right?

The Installation...

🛱 Set up and run MediaWiki

- Download, install and configure
 MediaWiki
- Add functionality by installing extensions
- Problems? See errors and symptoms and FAQ
- Don't own a server? Find hosting services
- Get professional development and consulting
- Join MediaWiki Stakeholders user group

Alternatives to manual installation

Some users may prefer to skip manual installation by using a pre-integrated MediaWiki software appliance or hosting services. Repositories of some Linux distributions also increasingly offer packages for MediaWiki, with different degrees of frequency and extensions coverage (e.g. Debian, Ubuntu, Fedora, Gentoo).

```
mark@testpi: ~
                                                                               X
ibwww-mediawiki-client-perl/stable, stable 0.31-2.2 all
 simple CVS-like interface for editing MediaWiki websites
ibzim-dev/stable 8.1.1-0.2 arm64
 library implementation of ZIM specifications (development)
ibzim8/stable 8.1.1-0.2 arm64
 library implementation of ZIM specifications
ediawiki/stable,stable,stable-security,stable-security 1:1.39.5-1~debl2ul all
 website engine for collaborative work
ediawiki-classes/stable,stable,stable-security,stable-security 1:1.39.5-1~debl2
ul all
 website engine for collaborative work - standalone classes
ediawiki-extension-codemirror/stable, stable 4.0.0~qit20221204.b897975-1 all
 Syntax highlighting in MediaWiki's wikitext editor
ediawiki-extension-youtube/stable, stable 1.9.3~git20221020.e005c0b-1 all
 Embed YouTube and other videos into MediaWiki pages
ediawiki-skin-greystuff/stable, stable 1.2.5~git20220922.60bda8c-2 all
```

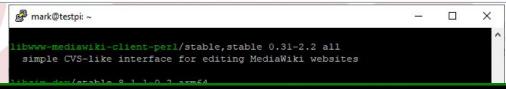
The Installation...

Set up and run MediaWiki

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wediawiki/stable, stable, stable-security, stable-security 1:1.39.5-1~deb12ul all website engine for collaborative work

- Don't own a server? Find nosting services
- Get professional development and consulting
- Join MediaWiki Stakeholders user group

```
mediawiki/stable, stable, stable-security, stable-security 1:1.39.5-1~debl2ul all
   website engine for collaborative work

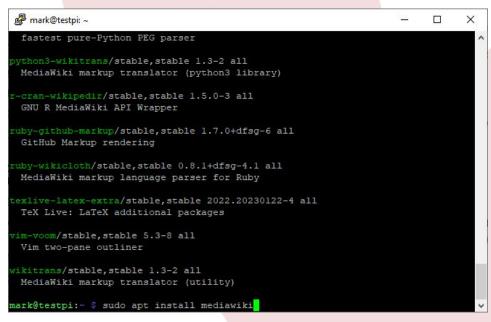
mediawiki-classes/stable, stable, stable-security, stable-security 1:1.39.5-1~debl2
ul all
   website engine for collaborative work - standalone classes

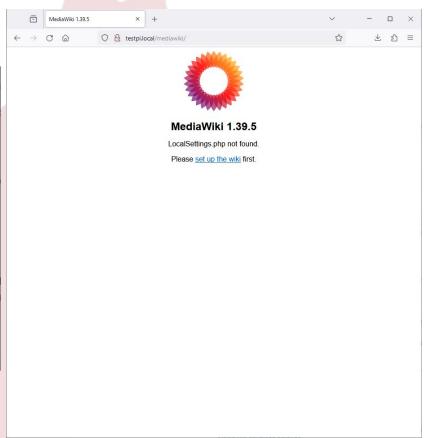
mediawiki-extension-codemirror/stable, stable 4.0.0~git20221204.b897975-1 all
   Syntax highlighting in MediaWiki's wikitext editor

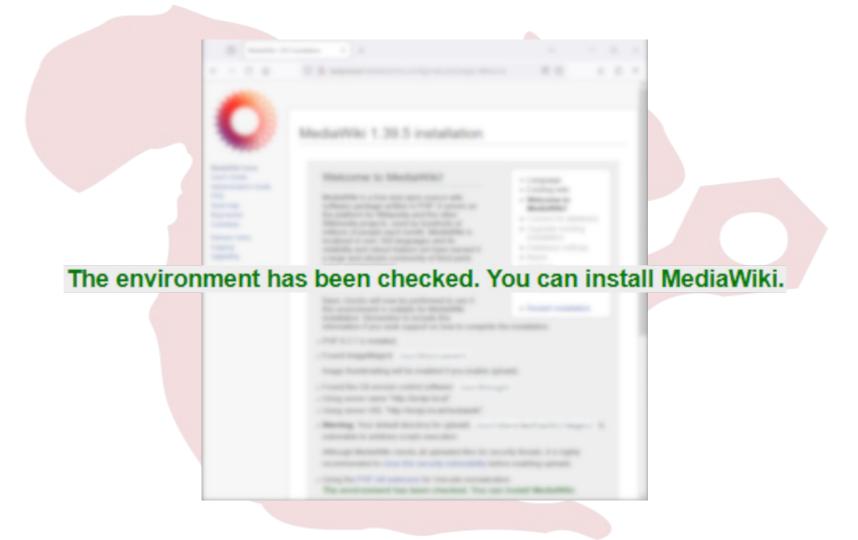
mediawiki-extension-youtube/stable, stable 1.9.3~git20221020.e005c0b-1 all
   Embed YouTube and other videos into MediaWiki pages

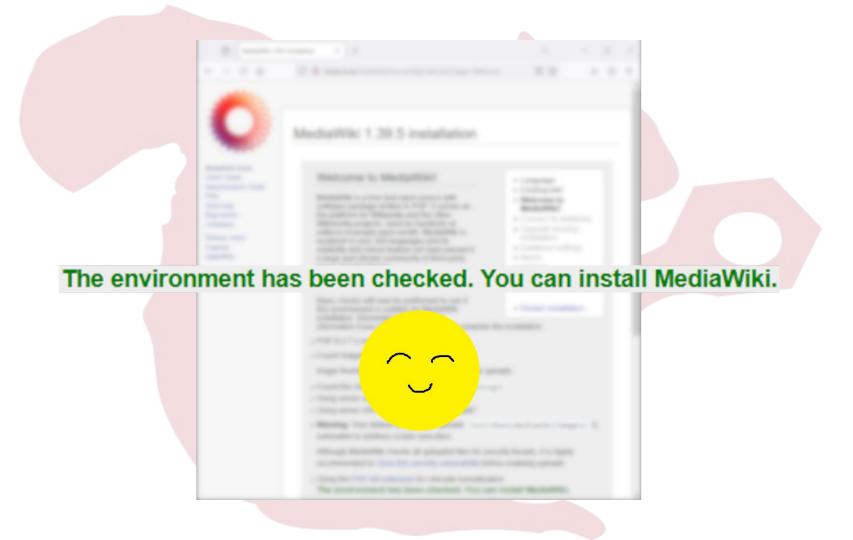
mediawiki-skin-greystuff/stable, stable 1.2.5~git20220922.60bda8c-2 all
```

Doesn't Get Much Easier Than This...



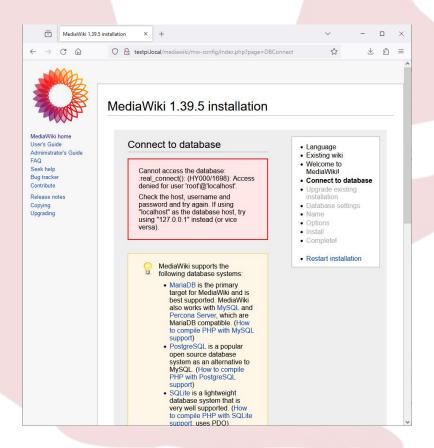


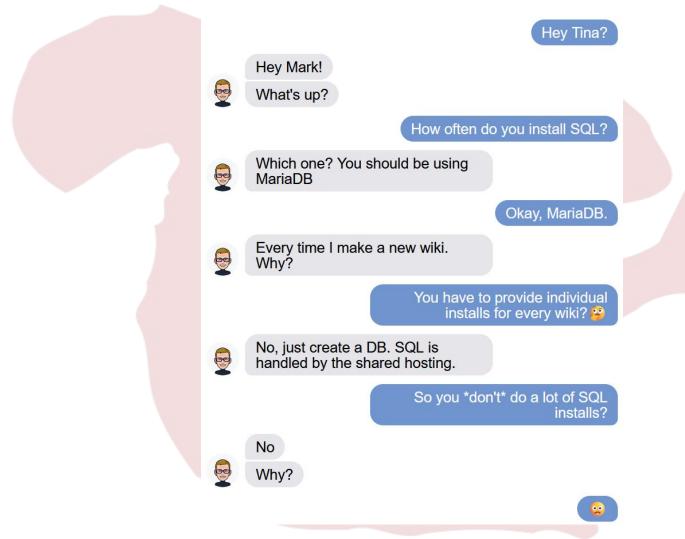




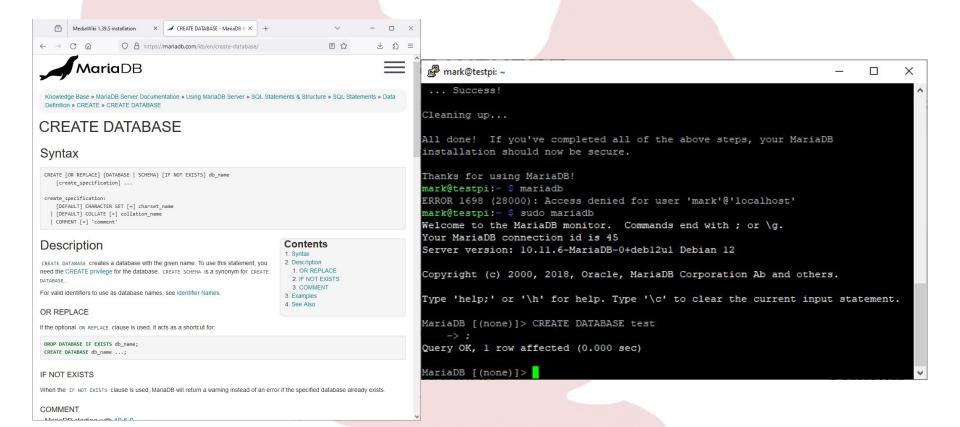
So... I've Never Been a DBA

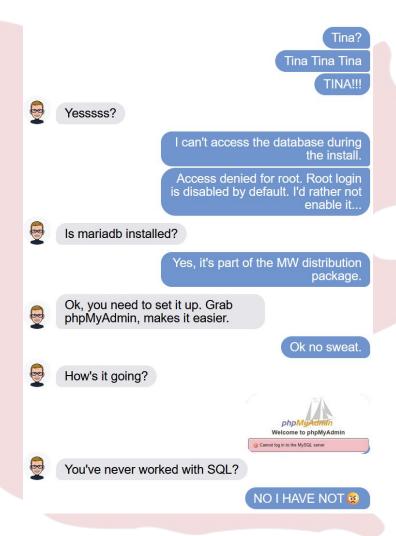






MariaDB, MySQL Shenanigans

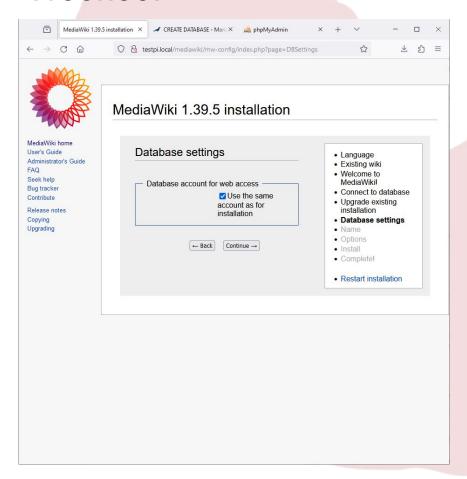


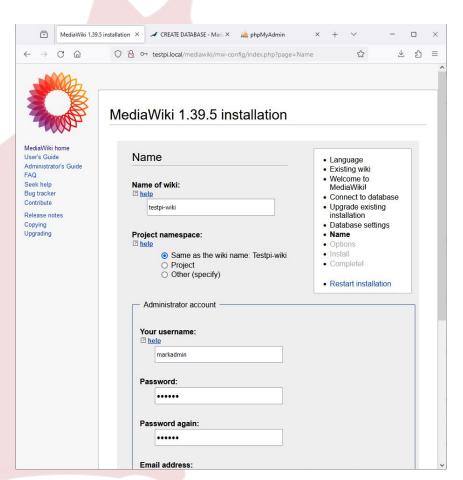


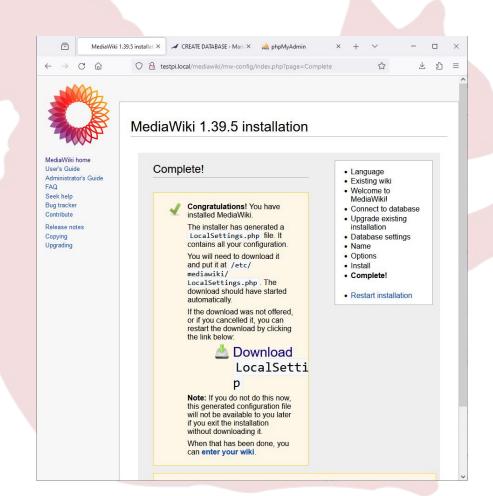
Fumbling Around...

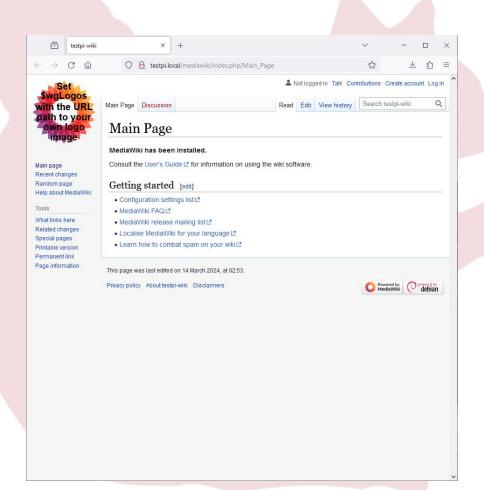
```
mark@testpi: ~
                                                                             X
mark@testpi:~ 🖇 sudo mariadb-secure-installation
```

Woohoo!

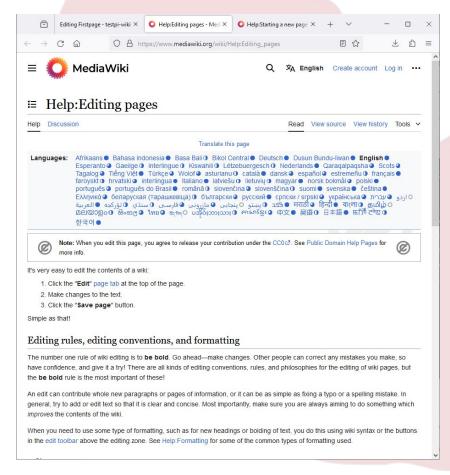


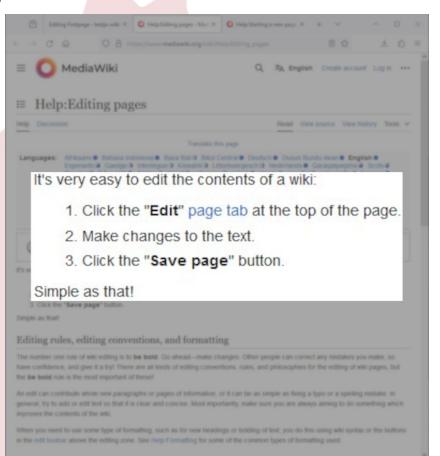


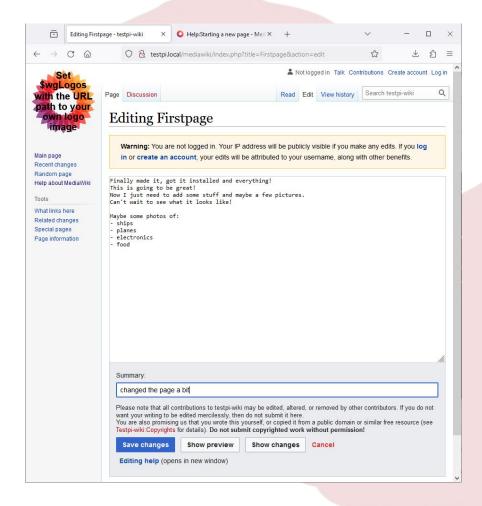


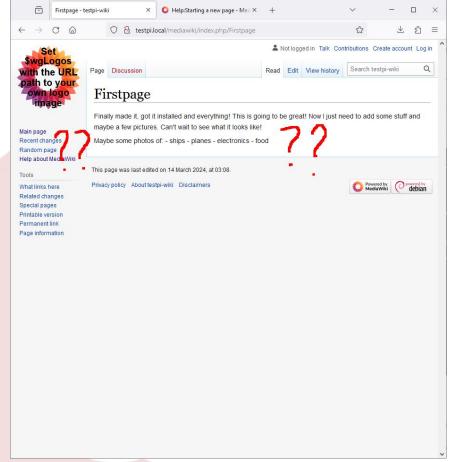


The Source Editor and Markup





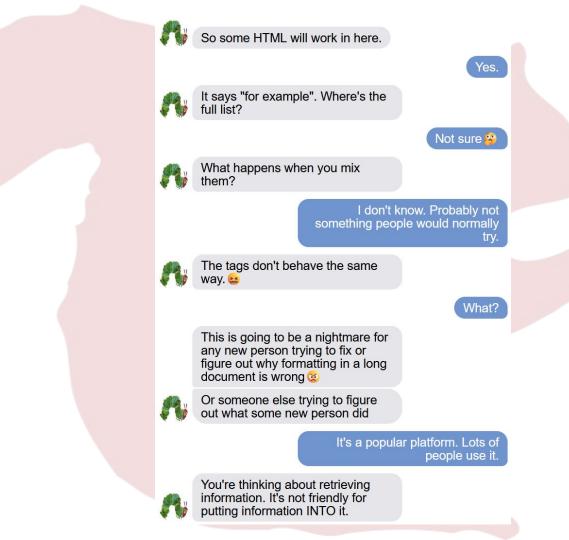




My Wife Is a Librarian

- She speaks many different kinds of descriptive tags and languages:
 - o 620.12 CAR 2008
 - KE1232|b.O83 2020
 - <img src="foo_pic.jpg" alt="Link to foo"
 style="width:42px;height:42px;">
 - o 008 191217p20192014nyu004 o v\$eng d

- Then I showed her the <u>Help:Formatting</u> page.
- She had... questions.



This is a test with no formatting.

This is a test with no formatting.

Opened with HTML, closed with HTML:

This is a test with this part in bold. This part should be plain.

Opened with HTML, closed with HTML:

Opened with MW markup, closed with MW markup:

This is a test with '''this part in bold.''' This part should be plain.

Opened with MW markup, closed with MW markup:

Opened with MW markup, closed with HTML:

This is a test with '''this part in bold. This part should be plain.

Opened with MW markup, closed with HTML:

Opened with HTML, closed with MW markup:

This is a test with this part in bold.''' This part should be plain.

Opened with HTML, closed with MW markup:

'''This is a test with bold using MW markup.

It ends at the end of the paragraph even without closing it, right?

This is a test with bold using MW markup.

It ends at the end of the paragraph even without closing it, right?

This is a test with bold using HTML.

It ends at the end of the paragraph even without closing it, right?

This is a test with bold using HTML.

It ends at the end of the paragraph even without closing it, right?

Visual Editor

Can we make this look and act more like a word processor?



That would be Visual Editor. I don't think we should use it. A wiki isn't a Word document.

> I really think it's going to be easier to show people how to use this if the interface is more familiar.



I can enable it if you want but it's not going to behave the way you think.

> Please do, I think it's going to make everyone's lives a little easier.



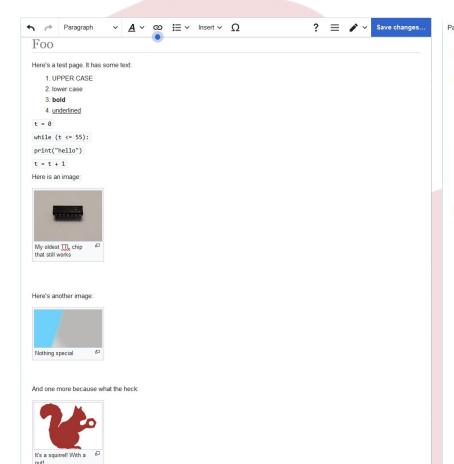
Done. Now you can click "Edit" instead of "Edit Source"

THANK YOU THIS IS AWESOME

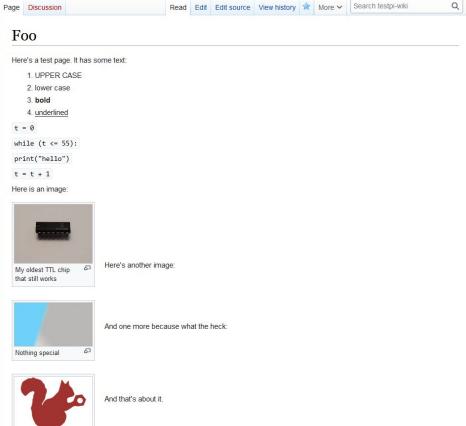


You're welcome 8



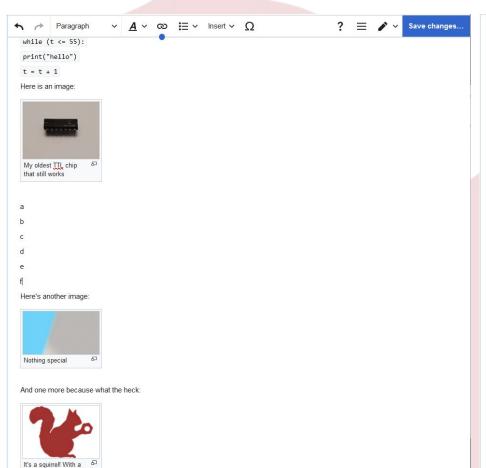


And that's about it.



It's a squirrel! With a

nut!



nut!

₽And that's about it.

Foo

Here's a test page. It has some text:

- 1. UPPER CASE
- 2. lower case
- 3. bold
- 4. underlined

t = 0

while (t <= 55):

print("hello")

t = t + 1

Here is an image:



b

50.00

.

Here's another image:



And one more because what the heck:



And that's about it.



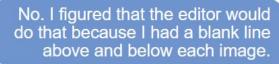


Hey Mark!

Okay, so things aren't lining up on the page the way I expected.



This is why I warned you. Have you tried turning off wrap text for each image?





Visual Editor is not a word processor.

I don't think this is going to work.



Editing source gives you better control and you can see what's going on.

File Uploads and Page Creation

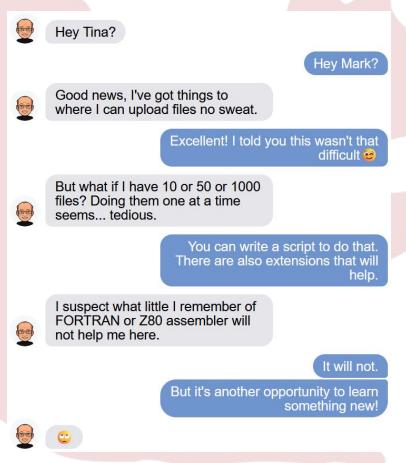
The museums we've spoken with already have a lot of data:

- Existing web presence
- Word documents
- PDFs
- Image files
- A lot of paper to scan/OCR/convert
- Artifacts to photograph and document

For people with average computer skills but no familiarity with MediaWiki, it takes over five minutes to upload one image and copy/paste to create a simple page - even more if there is formatting involved.

As you get used to it you can find timesaving tricks, but it can be frustrating at first.

And What if They Have 1000 Images?

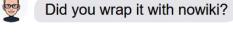


Data Loss

How many people have seen data loss in a well-maintained MediaWiki installation?

But what about data loss before it's been committed to the wiki?

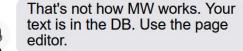




Just go back in and take it out.

I searched the whole MW directory structure and can't find it.

63



But... 500 Internal Server Editor 😕

Ok, I'll take a look.

MARK.

That was TWO HOURS of work 😖



There are MediaWiki extensions for everything you're complaining about.

That doesn't help me when I'm in the basement of a steel building with no network...

And how am I supposed to know which extensions exist, which ones work, and what they do?



That can be a problem. But you'll learn what's out there.

It's 2024. Why do I need to find, install, and test an add-on for functionality that was available in word processors 30 years ago? ♀



It's open source, you could always contribute or fork it and change it yourself.

TINA.



Yesssss?

I AM GOING FOR A NAP

THEBUTTON







Why remove those buttons?

- Offline wiki.
- Nowhere for the links to go
- Don't want people to get errors or stuck
- Less work and should be easier to maintain than editing DNS or hosts, plus makes more sense than DNS or hosts just pointing back to the wiki.
 - Or, it should've been...

Poweredby MediaWiki button is easy to find

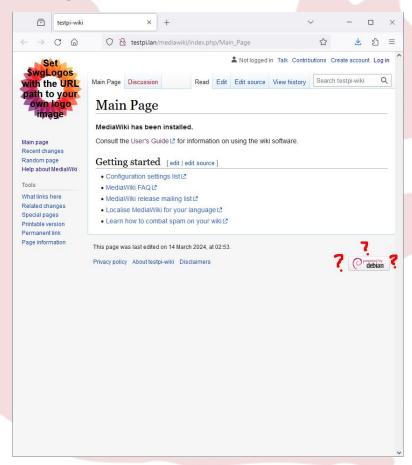
MainConfigSchema.php: Commenting it out: no change SetupDynamicConfig.php: Commenting the block out: removed the button/link

But wait. Maybe there's an easier way to do this...

Remember LocalSettings.php!

```
mark@testpi: /usr/share/mediawiki
                                                                                ×
$wgDiff3 = "/usr/bin/diff3";
## Default skin: you can change the default skin. Use the internal symbolic
## names, e.g. 'vector' or 'monobook':
$wgDefaultSkin = "vector";
 Enabled skins.
 The following skins were automatically enabled:
wfLoadSkin( 'MinervaNeue' );
wfLoadSkin( 'MonoBook' );
wfLoadSkin( 'Timeless' );
wfLoadSkin( 'Vector');
 End of automatically generated settings.
 Add more configuration options below.
wfLoadExtension( 'VisualEditor');
unset($wgFooterIcons['poweredby']);
```

That's... not quite right



Next Step...

Finally! PlatformSettings.php! Makes sense! But...

```
mark@testpi: /usr/share/mediawiki/includes
                                                                                     mark@testpi: /usr/share/mediawiki/includes
?php
                                  Debian defaults for MediaWiki
                                                                                                  ,met$$$$$gg.
                                                                                                                        Debian defaults for MediaWiki
                     """YSS.".
                                                                                                                        NEVER EDIT THIS FILE
                                  NEVER EDIT THIS FILE
     ,$$P'
                                                                                           .SSP'
    ',$$P
                                  To customize your installation,
                                                                                           , SSP
                                                                                                                 ssb:
                                                                                                                        To customize your installation,
     dss'
              ,$P"1
                                                                                                    , $P" !
                                  edit "LocalSettings.php".
                                                                                           dss'
                                                                                                                        edit "LocalSettings.php".
     SSP
              d$'
                                                                                           SSP
                                  See includes/DefaultSettings.php
                                                                                                                        See includes/DefaultSettings.php
                                  for more instructions and tips.
                                                                                                                        for more instructions and tips.
               . "Y$$$$P"'
                                                                                                     . "YSSSSP"
                                                                                           YSS.
      ssb
                                                                                            SSb
      YSS
                                                                                            YSS
          SSb.
                                                                                                ssb.
            YSSb.
                                                                                                  YSSb.
              · "Y$b.
 This program is free software; you can redistribute it and/or modify
                                                                                       This program is free software; you can redistribute it and/or modify
  it under the terms of the GNU General Public License as published by
                                                                                       it under the terms of the GNU General Public License as published by
  the Free Software Foundation; either version 2 of the License, or
                                                                                        the Free Software Foundation; either version 2 of the License, or
```

So, off to DefaultSettings.php! But...

```
mark@testpi: /usr/share/mediawiki/includes
                                                                                   mark@testpi: /usr/share/mediawiki/includes
                                                                                   ?php
 ?php
                                                                                     THIS IS A DEPRECATED STUB FILE!
  THIS IS A DEPRECATED STUB FILE!
  Default settings are now defined in the MainConfigSchema class.
                                                                                     Default settings are now defined in the MainConfigSchema class.
  To get default values for configuration variables, use the ConfigSchema servi
                                                                                    * To get default values for configuration variables, use the ConfigSchema servi
 e object.
                                                                                   ce object.
  @file
                                                                                     @file
  @deprecated since 1.39
                                                                                     @deprecated since
se MediaWiki\MainConfigSchema;
                                                                                   use MediaWiki\MainConfigSchema;
if (function exists('wfDeprecatedMsg')) {
                                                                                  if (function exists('wfDeprecatedMsg')) {
        wfDeprecatedMsq(
                                                                                           wfDeprecatedMsq(
                'DefaultSettings.php is deprecated and will be removed. '
                                                                                                   'DefaultSettings.php is deprecated and will be removed. '
                . 'Use the ConfigSchema service object instead.',
                                                                                                  . 'Use the ConfigSchema service object instead.',
                11.39
                                                                                                   11.391
DefaultSettings.php
                                                                                  DefaultSettings.php
```

So... off to MainConfigSchema. It's large.

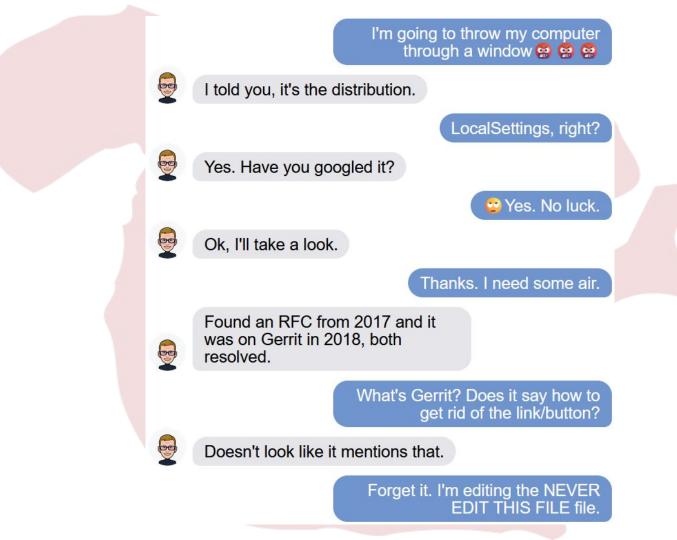
```
mark@testpi: /usr/share/mediawiki/includes
                                                                                 X
mark@testpi:/usr/share/mediawiki $ cd includes/
mark@testpi:/usr/share/mediawiki/includes $ ls -la MainConfigSchema.php
-rw-r--r 1 root root 377332 Mar 21 09:33 MainConfigSchema.php
mark@testpi:/usr/share/mediawiki/includes $
```

And Doesn't Have "ebian" in it

```
mark@testpi: /usr/share/mediawiki/includes
                                                                                X
mark@testpi:/usr/share/mediawiki/includes $ ls -la MainConfigSchema.php
-rw-r--r- 1 root root 377332 Mar 21 09:33 MainConfigSchema.php
mark@testpi:/usr/share/mediawiki/includes $ grep ebian MainConfigSchema.php
mark@testpi:/usr/share/mediawiki/includes $
```

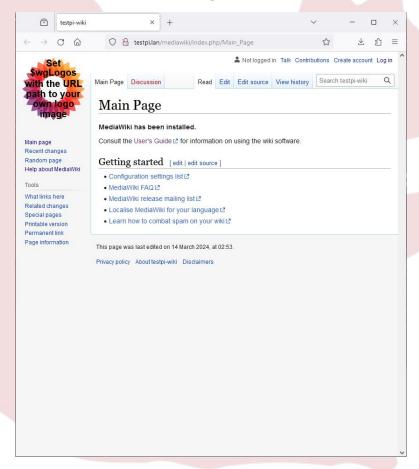
But it *does* have poweredby_mediawiki in it. So, uh...

```
mark@testpi: /usr/share/mediawiki/includes
                                                                                X
mark@testpi:/usr/share/mediawiki/includes $ ls -la MainConfigSchema.php
-rw-r--r 1 root root 377332 Mar 21 09:33 MainConfigSchema.php
mark@testpi:/usr/share/mediawiki/includes $ grep ebian MainConfigSchema.php
mark@testpi:/usr/share/mediawiki/includes $ grep oweredby MainConfigSchema.php
         * Abstract list of footer icons for skins in place of old copyrightico
and poweredbyico code
         * You can add new icons to the built in copyright or poweredby, or you
can create
         * by skin; Monobook and Vector will turn poweredby into f-poweredbyico
while Modern
         * turns it into mw poweredby.
                        "poweredby" => [
                                        // "$wgResourceBasePath/resources/assets
/poweredby mediawiki 88x31.png"
mark@testpi:/usr/share/mediawiki/includes $
```



```
mark@testpi: /usr/share/mediawiki/includes
 * You should have received a copy of the GNU General Public License along
 * with this program; if not, write to the Free Software Foundation, Inc.,
 * 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.
 YES, I KNOW IT WILL BE OVERWRITTEN WHEN IT'S UPGRADED
 Add a "powered by Debian" footer icon
#$wgExtensionFunctions[] = function () {
       global $wgFooterIcons, $wgResourceBasePath;
       $wgFooterIcons['poweredby']['debian'] = [
                'src' => "$wgResourceBasePath/resources/assets/debian/poweredby debian lx.png",
                'url' => 'https://www.debian.org/',
                'alt' => 'Powered by Debian',
                'srcset' =>
                        "$wgResourceBasePath/resources/assets/debian/poweredby debian 1 5x.png 1.5x, " .
                        "$wgResourceBasePath/resources/assets/debian/poweredby debian 2x.png 2x",
#3;
$wgCacheDirectory = '/var/cache/mediawiki';
```

At least it worked - icons are gone.



About PlatformSettings.php

• There was no documentation so we started this page and asked some questions in its discussion tab, but no further info



So if I want to turn something off, I need to create a setting for it and then turn it off?

Don't blame MW, it's the distro that put that icon in there.





If you bought a car and a shop put square wheels on it, would you blame the manufacturer?

No, but the manual that comes with the car should tell me how to change the wheels without directing me to the middle of an abandoned airport, right?



You may have a point.

From The Non-Wiki-Savvy Perspective...

Initial installation, configuration, and population has stumbling blocks but is not that difficult.

It's different enough from common software that without practice the skills are easily lost. Even more so for those who are not particularly comfortable with computers in the first place.

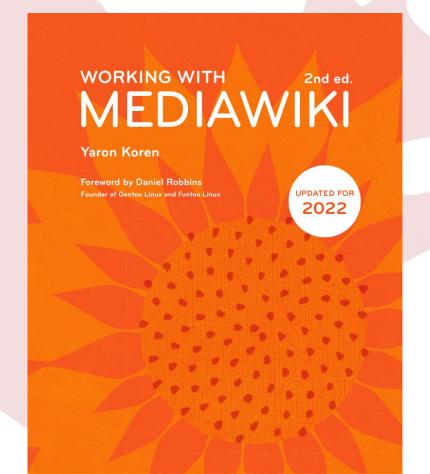
Creating new pages, updating existing pages, and removing dead pages tends to fall by the wayside.

People become frustrated with the stale data, knowledge is lost, and it becomes easier to just let it go instead of fighting with it.

Is He Here Just To Complain?

- Initially this presentation was called "Tina Made Me Use Mediawiki and I Don't Like It: Please Don't Throw Things At Me".
- But the thing is, I do like it. It's powerful, useful, stable, has a remarkable community behind it, works for organizations and collections of any size, and once you're used to it, it makes a lot more sense.
- It's not easy to take those first few steps, though. Both of us have had the same discussions with other people: Tina at work (and with Mark), Mark with several... "test subjects".
- Clear, accurate, complete documentation is the single best solution to address the problems we ran into.
- How can people help?

I Wish Someone Had Told Me About This Six Months Ago



Questions?

(You can yell at us, too...)