Measuring MediaWiki Usage

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Who is using MediaWiki?

Customer #1: Wikimedia projects (e.g. Wikipedia)

Who else?

Imagine a world in which every single human being can freely share in the sum of all knowledge

Who is MediaWiki usage information important to?

MediaWiki core developers

Extension developers

Product managers

Wiki administrators

Wiki users

Executives

Topics

Pingback

Extension pages on mediawiki.org

Grafana/Github/Bitergia

WikiApiary

Examining and comparing wikis

Future?

I will point out current sources of MediaWiki usage information and show where current information is lacking.

Pingback

Name	Description	Example	Rationale
wiki	Cryptographically random hash	49748f9060251596beb44eaac206135c	This is a unique hash that is generated once per MediaWiki installation and then saved in the updatelog table under the "PingBack" key.
database	Configured database type	"mysql", "sqlite"	To understand the usage and popularity of different database types.
MediaWiki	MediaWiki version	"1.28.0"	To see the usage of different MediaWiki versions, and when people update to newer versions.
PHP	PHP version	"5.6.0", "7.0.9"	To see the usage of different PHP versions, and if we want to raise the minimum requirement, what the impact would be.
OS	Operating system and release	"Linux $version", "Windows $version"	To see how MediaWiki is used on different operating systems, and the versions of those operating systems
arch	Identifying 32-bit or 64-bit	"32", "64"	To see how extensively MediaWiki is used on 32-bit systems, and what the impact would be of only supporting 64-bit systems.
machine	Machine hardware	"x86_64"	To see what architectures MediaWiki is used with
serverSoftware	Web server software	"Apache/2.4.10 (Debian)"	To see which webservers MediaWiki is used with, and whether compatibility hacks for specific versions of webservers should be kept.
memoryLimit	php memory limit ⧉	220M	To see the amount of memory MediaWiki normally has available and what the impact would be of potentially raising MediaWiki's memory requirements.

https://www.mediawiki.org/wiki/Manual:$wgPingback
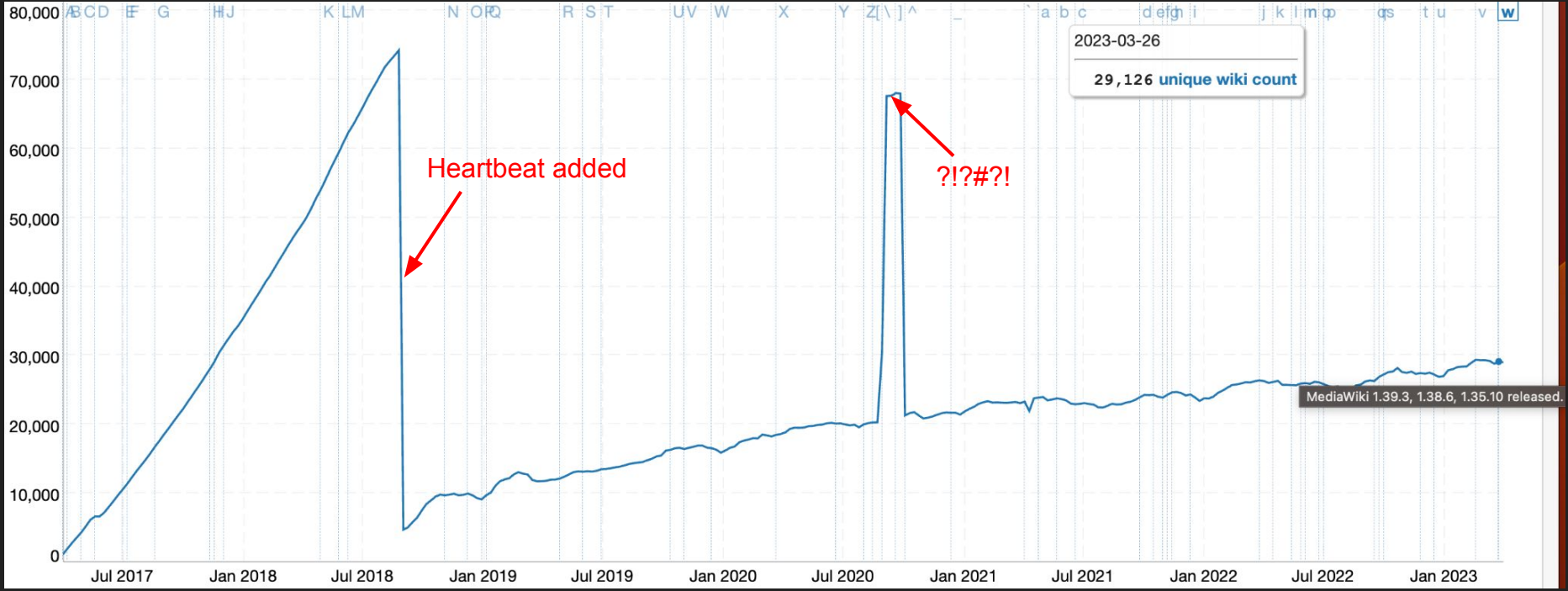
Pingback

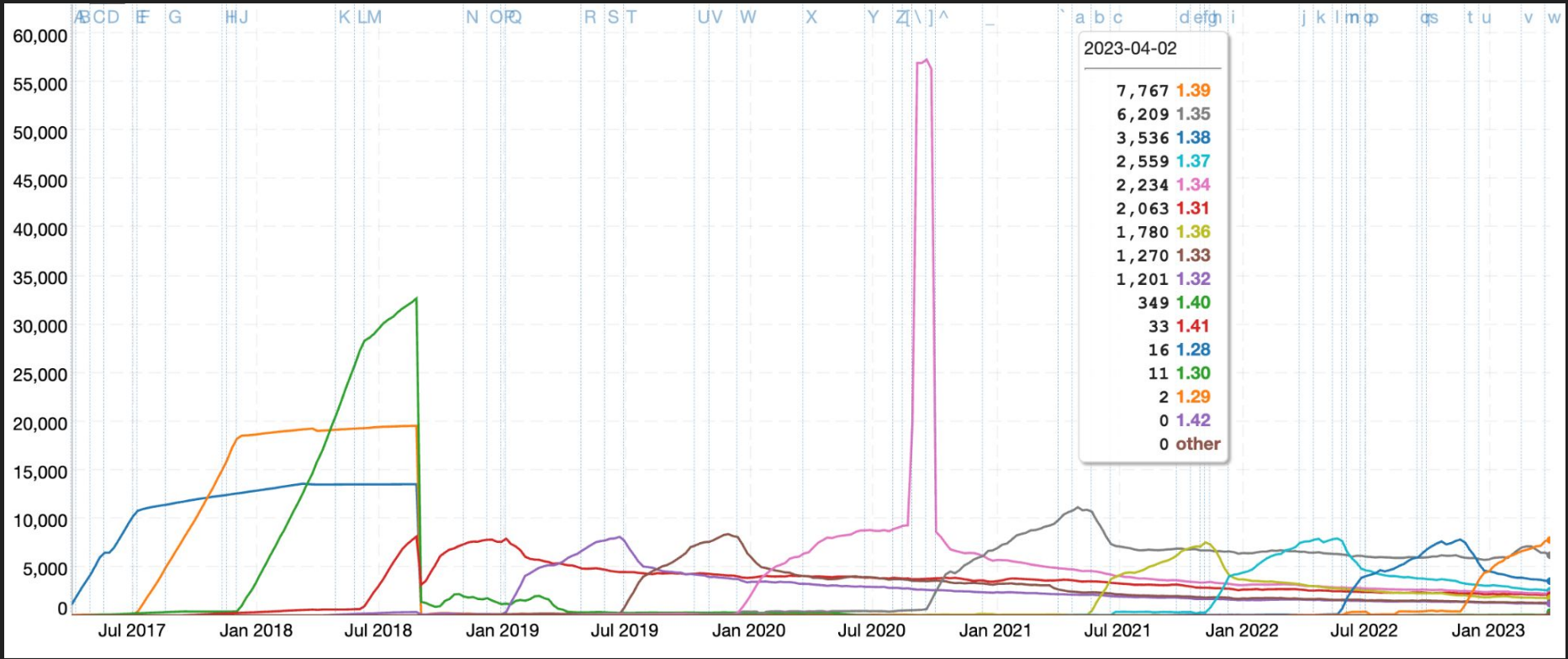Added in MediaWiki 1.28

Heartbeat ping added in MediaWiki 1.31

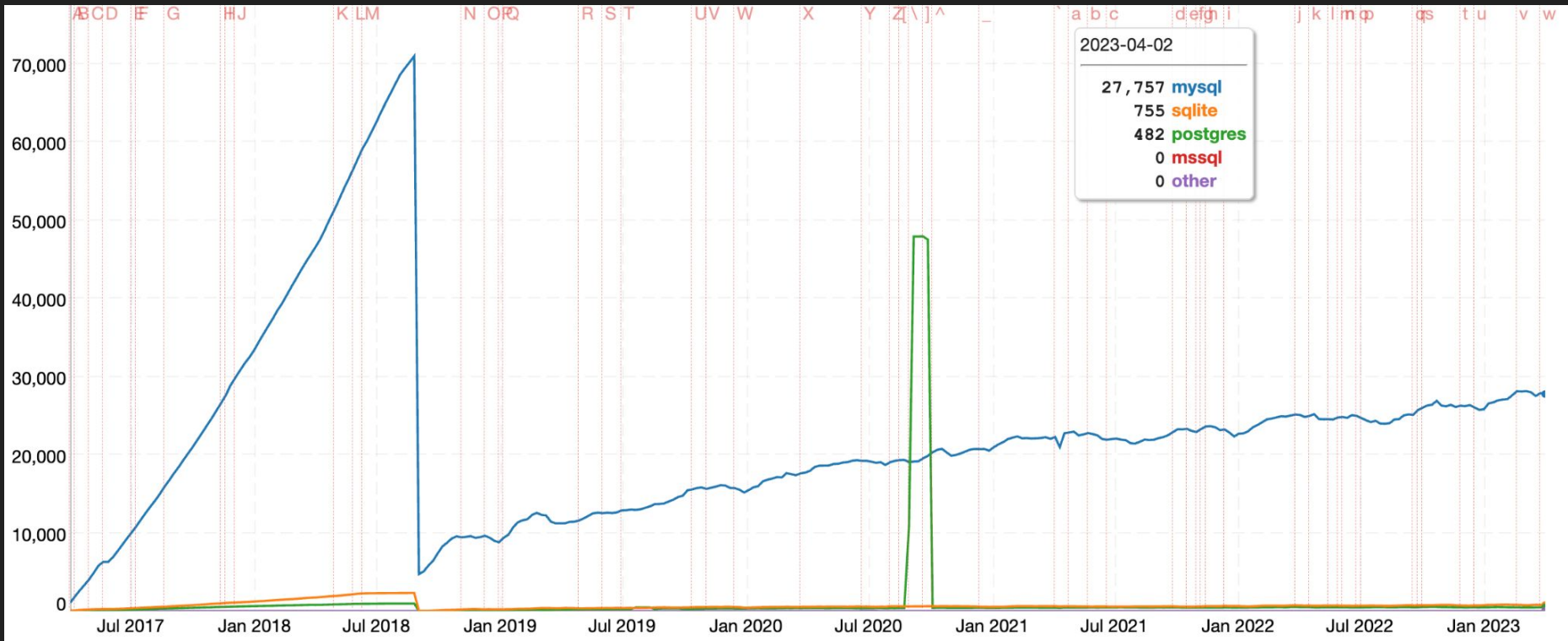Each wiki generates a unique id used to detect upgrades
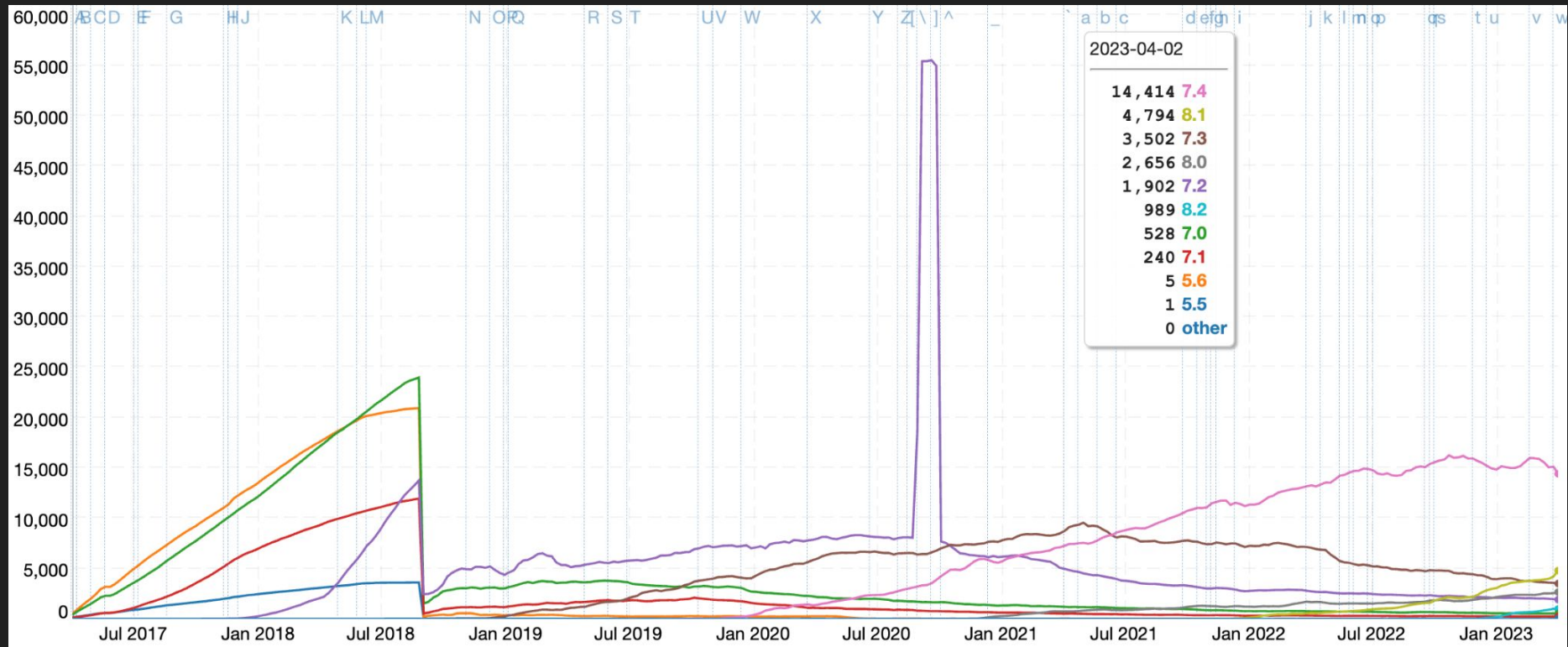
Controlled by $wgPingback

    Defaults to false, although web installer defaults to checked (true)
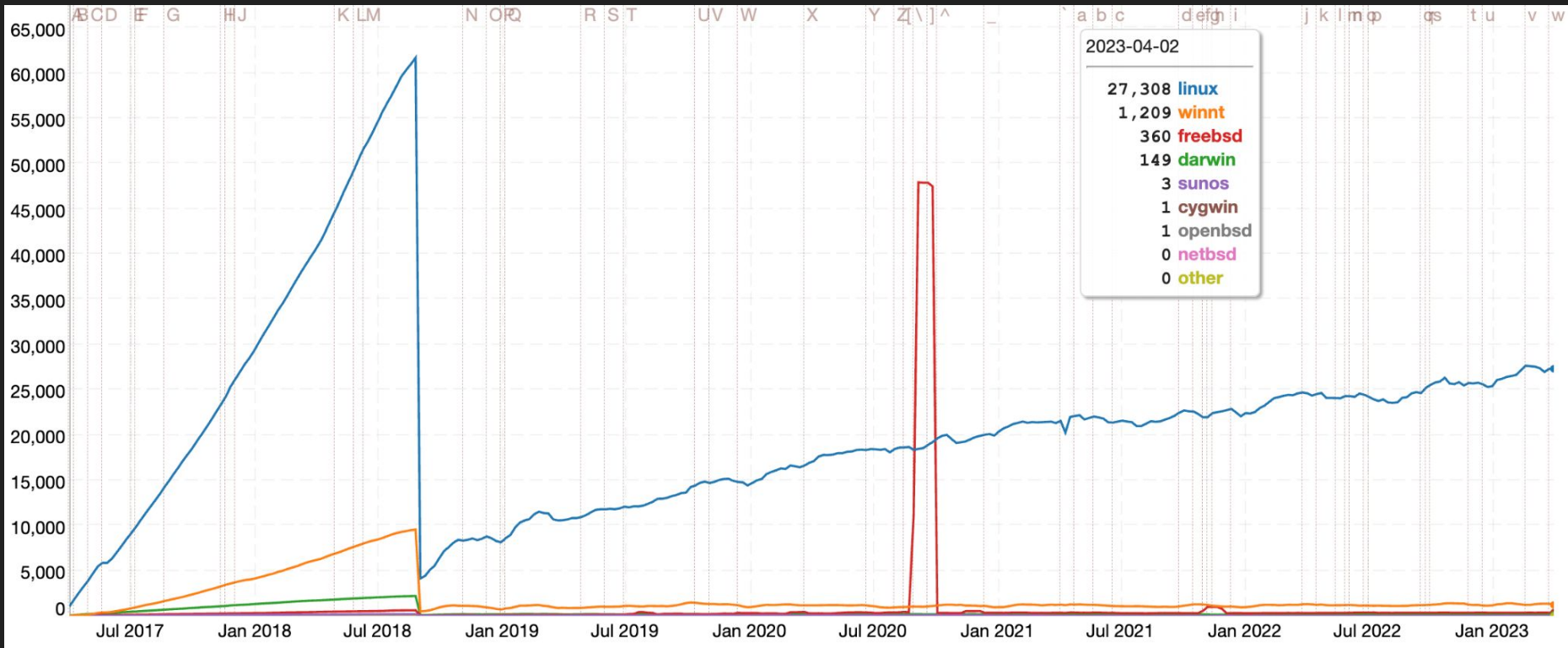
Aggregate data graphs: https://pingback.wmflabs.org/
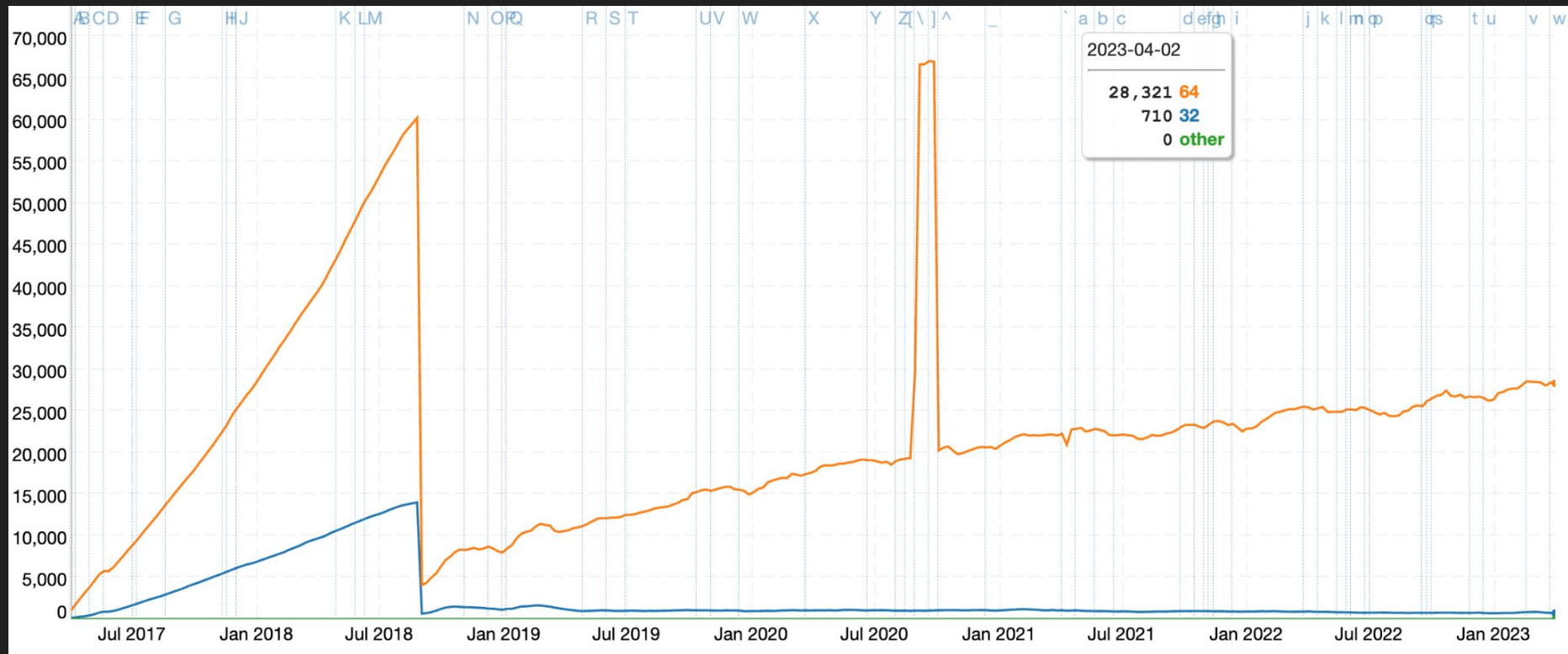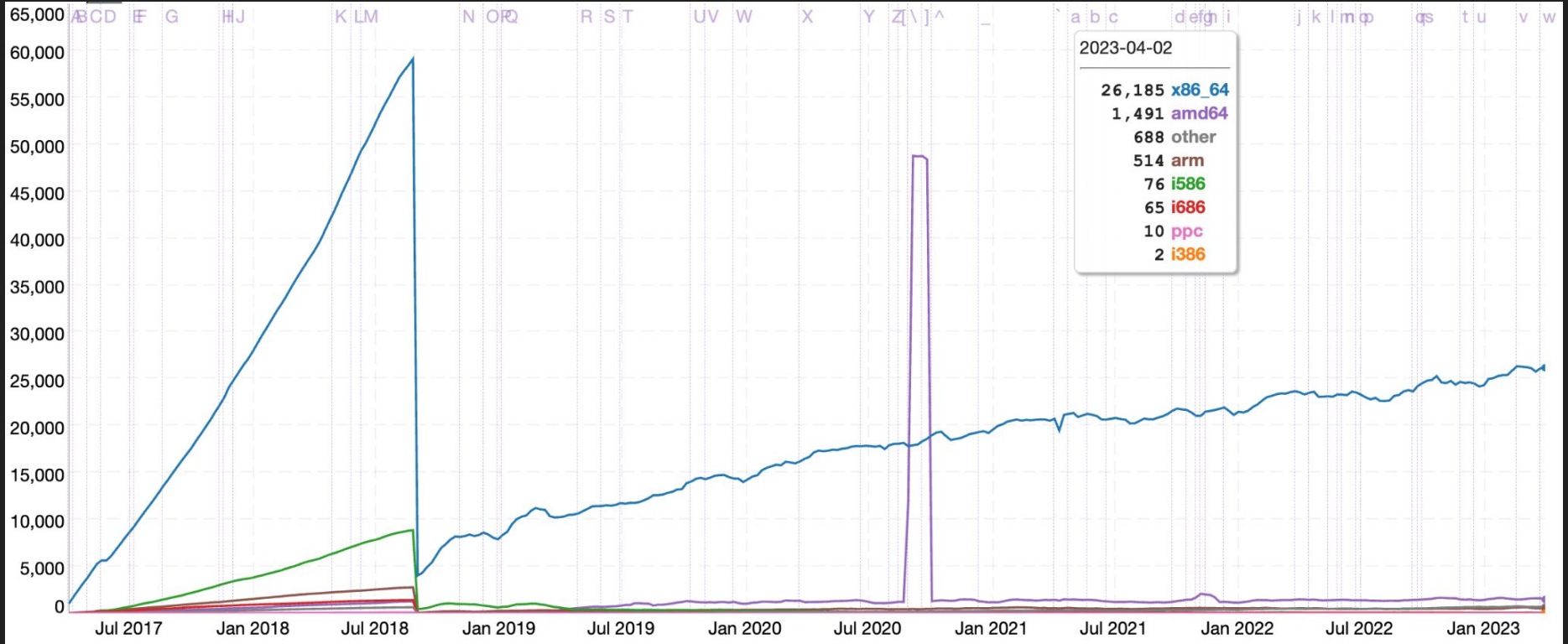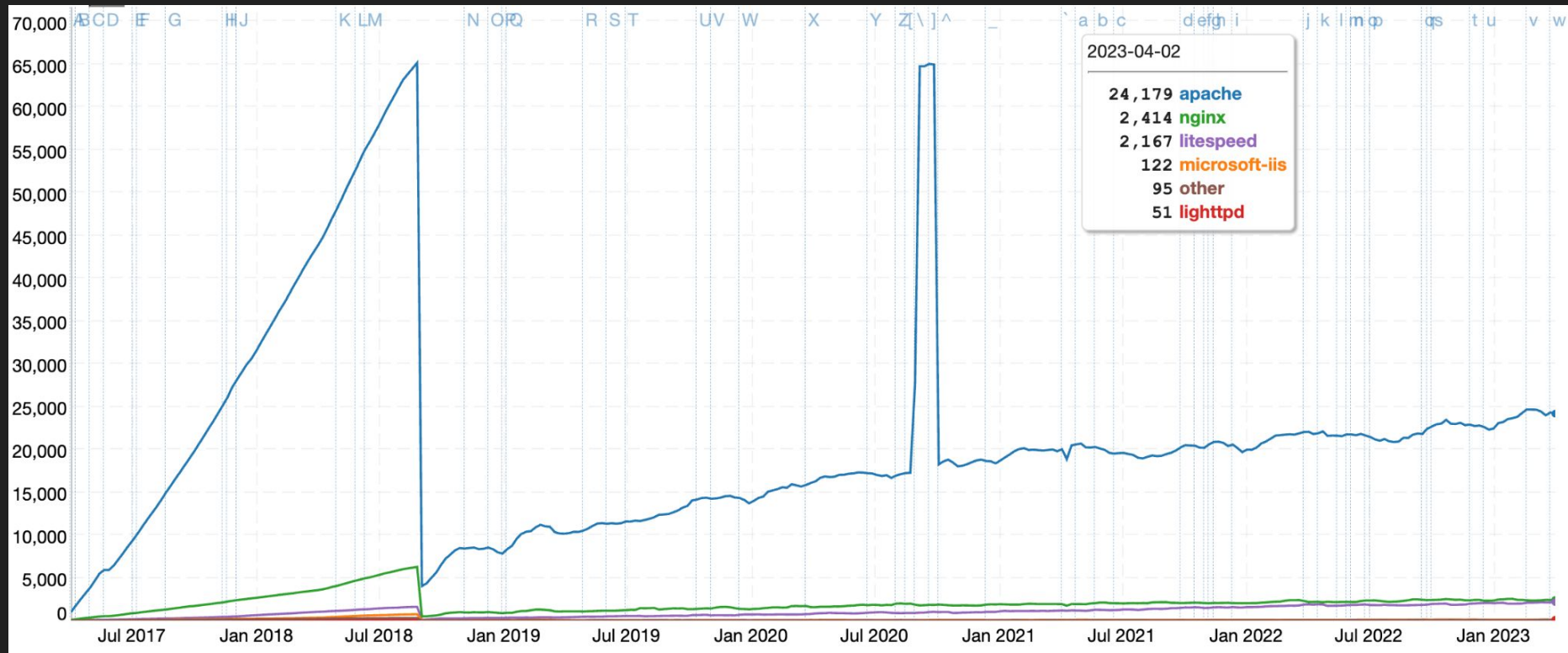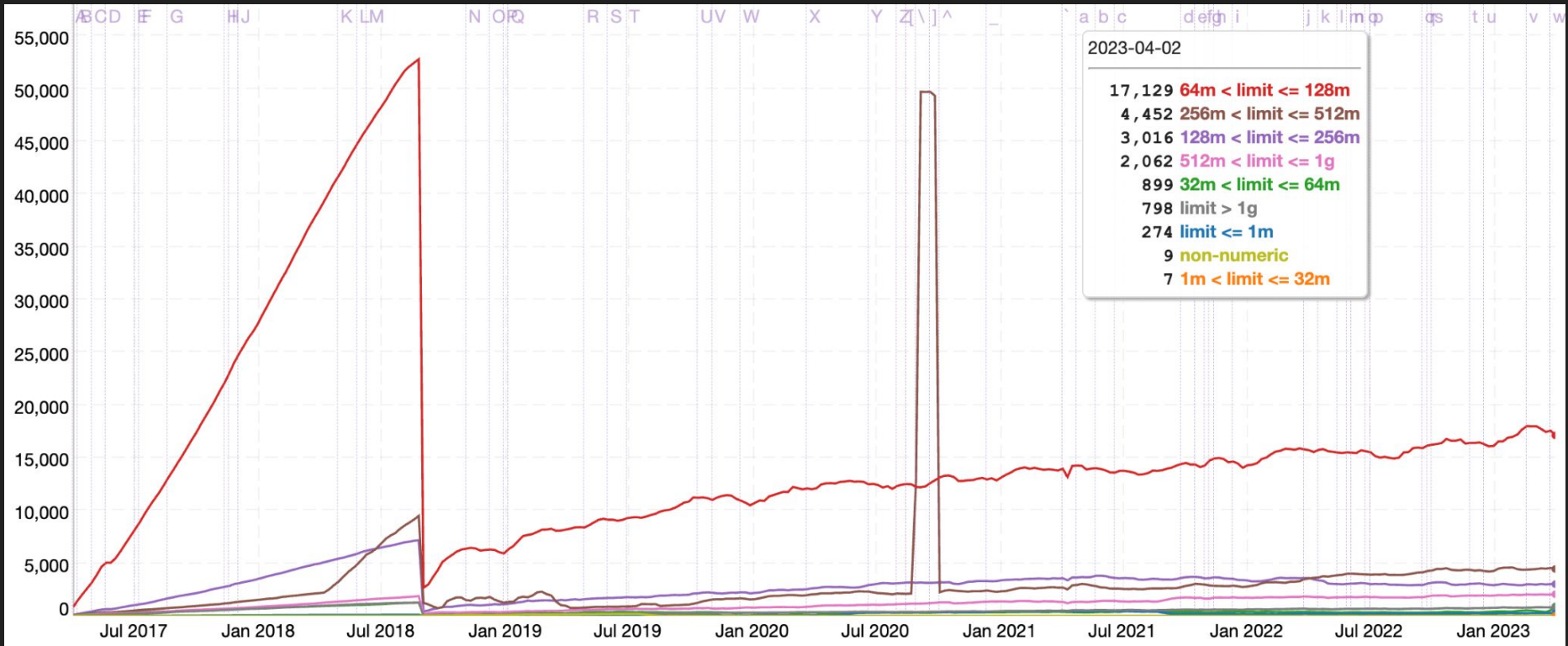
Pingback

Query code:
https://github.com/wikimedia/analytics-reportupdater-queries/tree/master/pingback

Graph annotations:
https://meta.wikimedia.org/wiki/Dashiki:PingbackMediaWikiReleaseAnnotations

Currently uses old EventLogging endpoint at www.mediawiki.org

> Will eventually go away, so will need to be migrated to new endpoint/schema

Pingback strengths

Gives us some very basic version and configuration information

Preserves privacy

Pingback limitations

Tells us very little about configuration settings

Tells us nothing about how MediaWiki and extensions are installed

Tells us nothing about extensions or skins

Tells us nothing about usage

What if I want to know more information about MediaWiki extensions (and skins)?

Which extensions should I choose for my wiki?

Does anybody really use my extension?

Is this extension actively maintained?

Should we bundle this extension?

Extension pages on mediawiki.org

Maintained by extension authors and other volunteers

Information mined from extension.json and ExtensionDistributor stats for infobox

Thank you Brian Wolff, Gergő Tisza, and Sam Wilson!

https://wikitech.wikimedia.org/wiki/Tool:Extjsonuploader

https://www.mediawiki.org/wiki/Module:Extension

https://www.mediawiki.org/wiki/Module:ExtensionJson

https://www.mediawiki.org/wiki/Template:Extension/popularity.json

PluggableAuth
Release status: stable

Implementation	User identity, User rights, Hook
Description	Provides framework for authentication and authorization extensions.
Author(s)	Cindy Cicalese (cindy.cicalese^{talk})
Latest version	6.3 (2023-02-08)
Compatibility policy	Snapshots releases along with MediaWiki. Master is not backward compatible.
MediaWiki	>= 1.35.0
Composer	mediawiki/pluggable-auth
License	MIT License

Download	**Download extension**

Git [?]:

- Download Git master
- browse repository (Phabricator · GitHub)
- commit history
- repository contributors (GitHub)
- code review

Parameters	[Expand]
Hooks used	[Expand]
Hooks provided	[Expand]
Quarterly downloads	2,374 (Ranked 2nd)

Translate the PluggableAuth extension if it is available at translatewiki.net

Issues	Open tasks · Report a bug

Grafana

Wealth of collected data about Wikimedia projects

Last 30 days
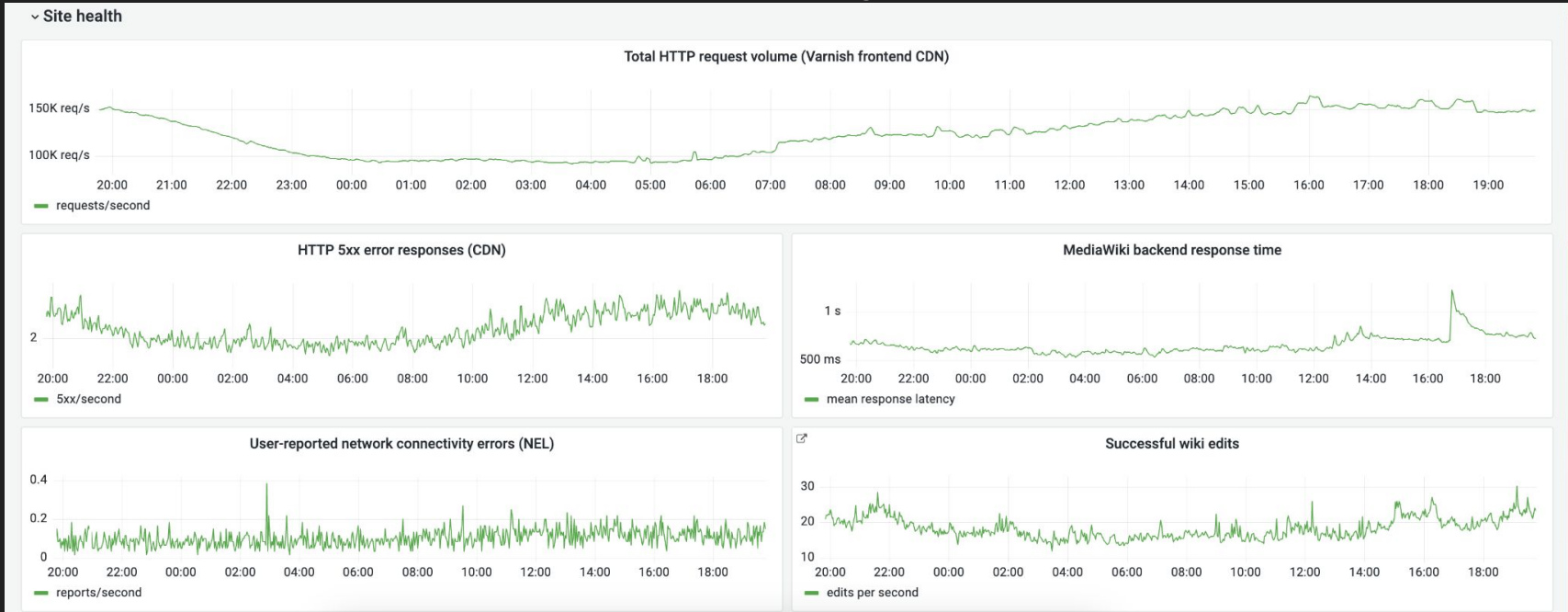
Release — REL1_39 — Group by — 1d — Special:ExtensionDistributor

Version Downloads

downloads

1.50 K
1 K
500
0

03/18 03/20 03/22 03/24 03/26 03/28 03/30 04/01 04/03 04/05 04/07 04/09 04/11 04/13 04/15

	min	max	avg	current	total
REL1_39	40	1.07 K	495	222	15.4 K

Extension Downloads

downloads

1.25 K
1 K
750
500
250
0

03/19 03/22 03/25 03/28 03/31 04/03 04/06 04/09 04/12 04/15

	min	max	avg	current	total
TemplateStyles	0	112	29.4	12	911
Scribunto	0	114	24.6	10	763
Cite	0	109	23.1	8	715
LabeledSectionTransclusion	0	107	21.6	7	671

Skin Downloads

downloads

50
40
30
20
10
0

03/19 03/22 03/25 03/28 03/31 04/03 04/06 04/09 04/12 04/15

	min	max	avg	current	total
Vector	0	17	6.26	3	194
MinervaNeue	0	10	3.97	2	123
Timeless	0	7	1.71	0	53
Cosmos	0	16	1.52	0	47

Github

https://github.com/wikimedia/mediawiki/graphs/contributors

Bitergia

Developer statistics

https://wikimedia.biterg.io/
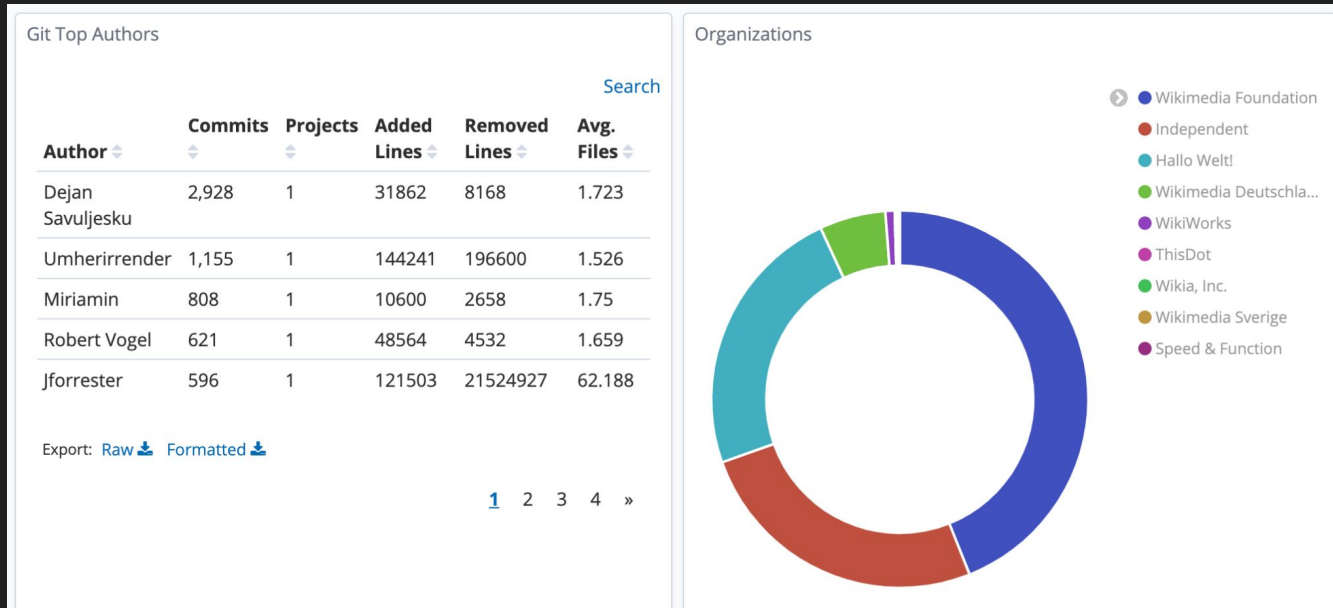
WikiApiary

Created December 21, 2012 by Jamie Thingelstad

Transitioned to MediaWiki Stakeholders' Group

Monitors wikis that have been contributed manually or by bots

Runs two bots (https://github.com/WikiApiary/wikibees)

    Bumble bee scrapes wiki data weekly

    Audit bee periodically checks for liveness

WikiApiary Stats	
Active Sites:	45,049
Semantic Sites:	1,159
Farm Sites:	35,016
Tracked generators:	1,553
Tracked extensions:	18,182
Tracked skins:	6,548
Registered farms:	518

Edit Index

Wikipedia (ce)

2,340.74

Wikisource (ru)

321.54

Wikipedia (war)

263.62

Wiktionary (fr)

257.98

EcuRed

conocimiento con todos y para todos

191.73

Pages change

Wikipedia (ce)

3.35 %

EcuRed

conocimiento con todos y para todos

2.68 %

EverybodyWiki (en)

the free wiki where everybody can write their own biography

0.98 %

Wiktionary (fr)

0.55 %

Wikipedia (uk)

Ukrainian Wikipedia

0.45 %

User Change

WikiHow (en)

21.33 %

Wiktionary (nl)

17.91 %

Wikipedia (zh-min-nan)

10.59 %

Battle for Dream Island Wiki

Welcome to the unofficial Battle for Dream Island Wiki!

8.22 %

Avatar Wiki

7.58 %

General statistics

Users	
Total registered users:	682869
Current active users:	4094
Administrators:	48
Contents	
Article pages:	1258463
Images:	112010
Total pages (AllPages):	4362424
Index:	6
Activity	
Total edits:	39142051
Jobs:	0
Total page views:	not available

Last updated: 2023-04-13 20:34:36

Extensions

Wikipedia (uk) uses the following **125** extensions (by version number, date and time, Git hash):

- **3D** (0.0.1, 3 April 2023 07:15:45, 3d9ede8d9a7cf013bbb11ce13235f0e0c0b9d4ef)
- **Abuse Filter** (*unknown*, 3 April 2023 07:15:47, 29b934eb9dc51f12782508a56259cc3e9ef55882)
- **AdvancedSearch** (*unknown*, 3 April 2023 07:15:52, 42f8fb769011fbcd906b066c1cf19cf1dac88801)
- **AntiSpoof** (*unknown*, 3 April 2023 07:15:55, 57302d7838f3d864908a1787d54decc156cab8ad)
- **ApiFeatureUsage** (1.0, 20 March 2023 07:59:36, a050b21e4034ed2166b59b5394e44f76db0e7b28)
- **Babel** (1.12.0, 31 March 2023 07:56:51, 0bf86d8b014be8e3acb7846464c20646ec2a1cdc)
- **BetaFeatures** (0.1, 3 April 2023 07:16:05, 17f7b40a0a344b9c5e933b3021a04d31d371683a)
- **BounceHandler** (1.0, 15 March 2023 02:33:35, d2a3142031e775ebdabc5891d3c438e4b3a927c0)
- **CLDR** (4.12.0, 17 March 2023 08:22:42, df1bd562ef262a1c988f286e579f06b3cc3bba0b)
- **Campaigns** (0.2.0, 3 April 2023 07:16:57, 022ec1063273a480df8d8bba2cb97d2d19f308aa)
- **CategoryTree** (*unknown*, 3 April 2023 07:17:02, 70b9f42872b0c094cb4cef4bb43c21a9b25e22ce)
- **CentralAuth** (*unknown*, 3 April 2023 07:17:03, 8ef85ab92678a1040fcc5a99bfb7c7068da77688)
- **CentralNotice** (2.6.1, 14 March 2023 01:39:55, 03c9303de7829a0eaef318a807626755c98ef05d)
- **CharInsert** (*unknown*, 15 March 2023 02:50:58, f81df428167559352798ee37d23f026d2ef1ee26)
- **CheckUser** (2.5, 3 April 2023 07:17:11, 983d07158c83362d835890752627bdef65baa092)
- **CirrusSearch** (6.5.4, 3 April 2023 07:17:11, 1f7b455f84f9ab9c683cc2ec374a507c4de06f86)
- **Cite** (*unknown*, 3 April 2023 07:17:11, faa8173d402987378c3c616efc004e70c4ac71f6)
- **CiteThisPage** (*unknown*, 3 April 2023 07:17:15, 4dee2dce16585f7b7fc63d6127f7ac1e41cc2f88)
- **Citoid** (0.3.0, 3 April 2023 07:17:18, bb7b3b95305acc864d26ad3d0015ca7e9d02142b)
- **CodeEditor** (*unknown*, 27 March 2023 14:25:51, fe024e681326962fc53a5b3f176f163faad92e20)
- **CodeMirror** (4.0.0, 27 March 2023 19:38:31, d4d29ace6090e9f239ffe95e28222c4c76f440c7)
- **Collection** (1.8.0, 3 April 2023 07:17:25, 6bda2da95ae36c7cd0274255dc2ccca071c35fe7)
- **Cologne Blue** (*unknown*, 3 April 2023 07:22:04, da1f8fd2363112164d6cdeaf4214b01730f37f39)
- **CommonsMetadata** (*unknown*, 15 March 2023 07:49:32, 7409aa149aeb5a281a76e364f4532294caad226e)
- **ConfirmEdit** (1.6.0, 3 April 2023 07:17:29, 54aac3ab9478ead89cc8142e54cf275d11b85bd2)
- **ContentTranslation** (*unknown*, 3 April 2023 09:42:43, d0edd135c342f08fd7eb33ce767cd00d502cb043)
- **Disambiguator** (1.4, 30 March 2023 22:15:18, 4ad131521dbd1b7461a6010a3a7c68dd6ce11742)
- **DiscussionTools** (0.0.0, 3 April 2023 16:36:34, 92f5cfd821727d8ca9521b37280888eebf1d5cf0)
- **DismissableSiteNotice** (1.0.1, 31 March 2023 07:57:38, 44a1649674d1eaa801dc37c79b6291dc3132ecb8)

PluggableAuth versions

Version Breakdown for PluggableAuth

Versions	7.0	6.3	6.2	6.1	5.7	5.6	5.4	5.2	4.2	1.2
1.39		4	3	2	4					
1.38				2						
1.37				1	13					
1.36					84					
1.35	6			3	55		1			
1.34					7	2				
1.33					7					
1.31					6		8	1		
1.30					1		1			
1.28									1	
1.26										1
1.24										
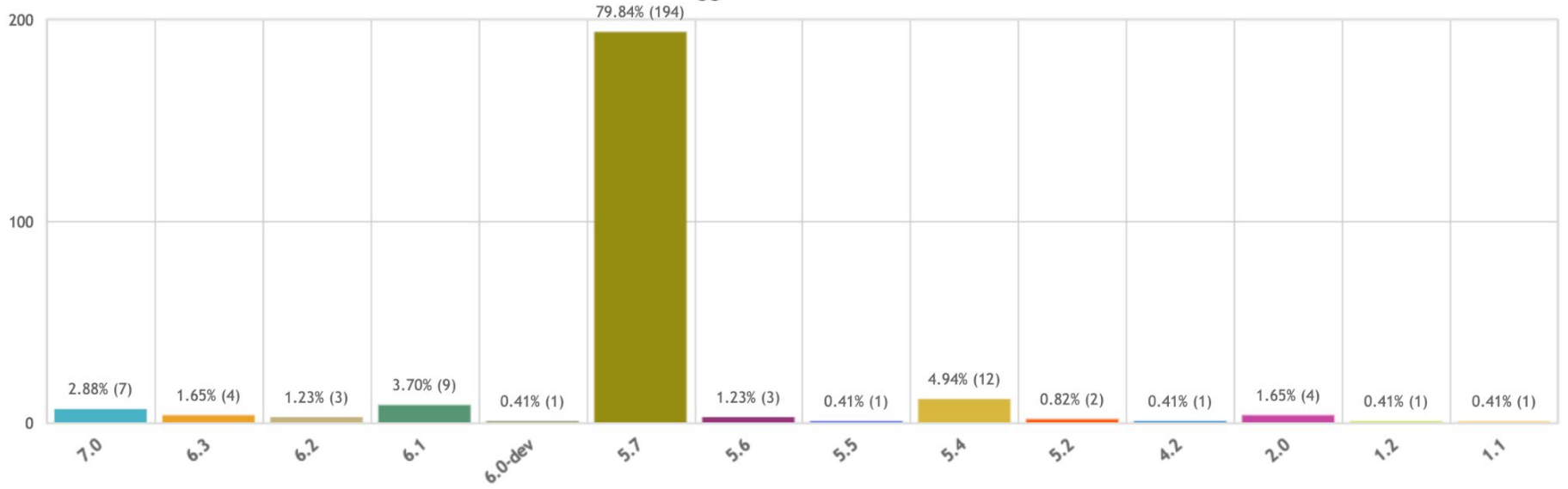
Ratings:

2 people have rated this extension:

Ease of installation:

Usability:

Documentation quality:

> **Rate this Extension**

WikiApiary strengths

Holds a wealth of current and historical data

Small but dedicated group of volunteers populating and maintaining site

WikiApiary limitations

Doesn't know about a site unless it's been contributed

Can only scrape wikis that are not behind a firewall

Some UI breakage during upgrades

Pushing Semantic MediaWiki past what it can handle

      Frequent timeouts

      Inaccurate statistics

      Rebuilding data may fix problems but takes too long

Inefficient scripts

Template storms

Popular with bots

WikiApiary future

Needs a model refresh

Join us on the mailing list and at the Wikimedia Hackathon!

Comparing wikis

VersionCompare extension

English Wikipedia vs. German Wikipedia
https://en.wikipedia.org (api) / https://de.wikipedia.org (api)

	WIKIPEDIA The Free Encyclopedia **enwiki** **en.wikipedia.org**	**WIKIPEDIA** Die freie Enzyklopädie **dewiki** **de.wikipedia.org**
MediaWiki	MediaWiki 1.41.0-wmf.4 d226755ca4e3bd65fb5e0b66142fb018264b2b27	
PHP	7.4.33 fpm-fcgi	
Database	mysql 10.6.12-MariaDB-log	mysql 10.4.25-MariaDB-log
Total count of all extensions and skins	126	120
Count of extensions and skins only on this wiki	7	1
Count of extensions and skins on both wikis	119	

https://github.com/wikimedia/operations-mediawiki-config/blob/master/wmf-config/CommonSettings.php
https://github.com/wikimedia/operations-mediawiki-config/blob/master/wmf-config/InitialiseSettings.php

English Wikipedia vs. English Wikisource

https://en.wikipedia.org (api) / https://en.wikisource.org (api)

	enwiki en.wikipedia.org	enwikisource en.wikisource.org
MediaWiki	MediaWiki 1.41.0-wmf.4 d226755ca4e3bd65fb5e0b66142fb018264b2b27	
PHP	7.4.33 fpm-fcgi	
Database	mysql 10.4.25-MariaDB-log	mysql 10.4.26-MariaDB-log
Total count of all extensions and skins	126	115
Count of extensions and skins only on this wiki	15	4
Count of extensions and skins on both wikis	111	

English Wikipedia vs. Wikimedia Commons

https://en.wikipedia.org (api) / https://commons.wikimedia.org (api)

	enwiki en.wikipedia.org	commonswiki commons.wikimedia.org
MediaWiki	MediaWiki 1.41.0-wmf.4 d226755ca4e3bd65fb5e0b66142fb018264b2b27	
PHP	7.4.33 fpm-fcgi	
Database	mysql 10.4.26-MariaDB-log	
Total count of all extensions and skins	126	130
Count of extensions and skins only on this wiki	13	17
Count of extensions and skins on both wikis	113	

English Wikipedia vs. Miraheze Meta Wiki
https://en.wikipedia.org (api) / https://meta.miraheze.org (api)

	enwiki en.wikipedia.org	metawiki meta.miraheze.org
MediaWiki	MediaWiki 1.41.0-wmf.4 d226755ca4e3bd65fb5e0b66142fb018264b2b27	MediaWiki 1.39.3 a8ad911bfb22a85ef09ee4ae4da1e095dab43191
PHP	7.4.33 fpm-fcgi	
Database	mysql 10.4.26-MariaDB-log	mysql 10.5.17-MariaDB-1:10.5.17+maria~deb11-log
Total count of all extensions and skins	126	111
Count of extensions and skins only on this wiki	58	43
Count of extensions and skins on both wikis	68	

English Wikipedia vs. Fandom Community Wiki

https://en.wikipedia.org (api) / https://community.fandom.com (api)

	enwiki en.wikipedia.org	wikia community.fandom.com
MediaWiki	MediaWiki 1.41.0-wmf.4 d226755ca4e3bd65fb5e0b66142fb018264b2b27	MediaWiki 1.37.6
PHP	7.4.33 fpm-fcgi	8.0.28 fpm-fcgi
Database	mysql 10.4.25-MariaDB-log	mysql 8.0.25-15
Total count of all extensions and skins	126	205
Count of extensions and skins only on this wiki	99	178
Count of extensions and skins on both wikis	27	

Miraheze Meta Wiki vs. Fandom Community Wiki

https://meta.miraheze.org (api) / https://community.fandom.com (api)

	metawiki meta.miraheze.org	wikia community.fandom.com
MediaWiki	MediaWiki 1.39.3 a8ad911bfb22a85ef09ee4ae4da1e095dab43191	MediaWiki 1.37.6
PHP	7.4.33 fpm-fcgi	8.0.28 fpm-fcgi
Database	mysql 10.5.17-MariaDB-1:10.5.17+maria~deb11-log	mysql 8.0.25-15
Total count of all extensions and skins	111	205
Count of extensions and skins only on this wiki	84	178
Count of extensions and skins on both wikis	27	

Magic the Gathering Wiki vs. Fandom Community Wiki

https://mtg.fandom.com (api) / https://community.fandom.com (api)

	mtgsalvation_gamepedia mtg.fandom.com	wikia community.fandom.com
MediaWiki	MediaWiki 1.37.6	
PHP	8.0.28 fpm-fcgi	
Database	mysql 8.0.25-15	
Total count of all extensions and skins	186	205
Count of extensions and skins only on this wiki	17	36
Count of extensions and skins on both wikis	169	

Magic the Gathering Wiki vs. League of Legends Fandom Wiki

https://mtg.fandom.com (api) / https://lol.fandom.com (api)

	mtgsalvation_gamepedia mtg.fandom.com	lolesports_gamepedia_en lol.fandom.com
MediaWiki	MediaWiki 1.37.6	
PHP	8.0.28 fpm-fcgi	
Database	mysql 8.0.25-15	
Total count of all extensions and skins	186	208
Count of extensions and skins only on this wiki	2	24
Count of extensions and skins on both wikis	184	

Magic the Gathering Wiki vs. Stardew Valley Wiki

https://mtg.fandom.com (api) / https://stardewvalleywiki.com (api)

	mtgsalvation_gamepedia mtg.fandom.com	enwiki stardewvalleywiki.com
MediaWiki	MediaWiki 1.37.6	MediaWiki 1.35.1 d6db14ae6bde3c092146cf09388f9136a2f2a165
PHP	8.0.28 fpm-fcgi	7.4.3-4ubuntu2.18 fpm-fcgi
Database	mysql 8.0.25-15	mysql 10.3.38-MariaDB-0ubuntu0.20.04.1
Total count of all extensions and skins	186	25
Count of extensions and skins only on this wiki	175	14
Count of extensions and skins on both wikis	11	

Nookipedia vs. Animal Crossing Pocket Camp Wiki

https://nookipedia.com (api) / https://animalcrossingpocketcamp.wiki.gg (api)

	np_wiki-mw_ nookipedia.com	animalcrossingpocketcamp_en animalcrossingpocketcamp.wiki.gg
MediaWiki	MediaWiki 1.35.5	MediaWiki 1.39.0 f2f66ffff5d2190635892dce50a321f0b8769ee4
PHP	7.4.3-4ubuntu2.18 fpm-fcgi	7.4.3 fpm-fcgi
Database	mysql 10.3.38-MariaDB-0ubuntu0.20.04.1	mysql 8.0.27
Total count of all extensions and skins	58	73
Count of extensions and skins only on this wiki	27	42
Count of extensions and skins on both wikis	31	

Family Search Wiki (Canasta) vs. Open CSP Wiki

https://www.familysearch.org/en/wiki (api) / https://www.open-csp.org (api)

	THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS **wiki_en** **www.familysearch.org**	OPEN CSP **open_csp_org** **www.open-csp.org**
MediaWiki	MediaWiki 1.35.8	MediaWiki 1.35.10 4e5fb4f771ecabdbbd657cdc41fd536c1023d54c
PHP	7.4.33 apache2handler	
Database	mysql 8.0.30	mysql 5.7.41-0ubuntu0.18.04.1
Total count of all extensions and skins	97	49
Count of extensions and skins only on this wiki	71	23
Count of extensions and skins on both wikis	26	

Questions that are still difficult to answer

Which core features/configuration setting combinations are used?

I have extension X installed on my wiki, but am I using it? If so, am I using it a lot?

If I enable extension X on my wiki, will it coexist with the other enabled extensions?

If I drop feature Y from my extension, will it affect any of my users?

Future?

Pingback v2?

Renovating WikiApiary?

Extension store?