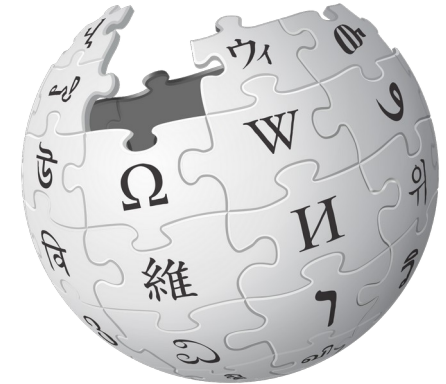


Working together with Debian



Kunal Mehta / Legoktm
WikiConference North America 2022

Wikipedia and Debian

- Collaborative project to build a free encyclopedia
 - Free culture movement
 - Est. 2001
 - Primarily volunteer contributors
 - 6.5m articles
- Collaborative project to build a universal operating system
 - Free software movement
 - Est. 1993
 - Mix of volunteers and paid contributors
 - 35,000 packages

What is a Linux distro?

- An operating system built on the Linux kernel
- Has some kind of app store (“packages”)
- Different distros target different audiences. Some are for desktops or embedded or servers.
- Hundreds of distros, many are forks or derivatives of another distro
- E.g. Fedora, Ubuntu, Mint, Red Hat, Arch

Do you use Debian?

- Yes! All Wikimedia servers run Debian
- Debian is also a very popular distro for servers, best known for its stable releases
- It's very aligned with the Wikimedia ethos



Powered by
MediaWiki



powered by
debian

Openness

- Anyone can contribute to Debian through bug reports and patches
- Only uploading packages requires permissions/vetting
- Everything but security issues handled publicly
- Enshrined in Debian Social Contract

Power structure

- Debian Project Leader elected every year, primarily a coordination and process role
- Project-wide votes (“General Resolutions”) to determine controversial issues
- Each package is maintained by a single developer or designated group

Power structure

Officers

- [Leader](#) — <leader@debian.org>
current Jonathan Carter
- [Technical Committee](#) — <debian-ctte@lists.debian.org> — [appoir](#)
current Sean Whitton (*chair*)
current Niko Tyni
current Gunnar Wolf
current Simon McVittie
current Elana Hashman
current Christoph Berg
current Helmut Grohne
current Matthew Vernon
- [Secretary](#) — <secretary@debian.org> — [appointment mail](#)
current Kurt Roeckx

Distribution

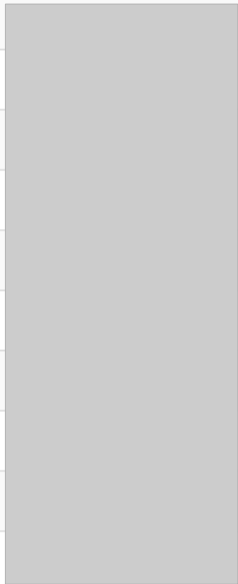
- [Development Projects](#) — <debian-devel@lists.debian.org>
- [FTP Archives](#) — <ftpmaster@debian.org> — [delegation mail](#)
 - FTP Masters —
member Thorsten Alteholz (delegate)
member Ansgar (delegate)
member Joerg Jaspert (delegate)
member Luke W. Faraone (delegate; they/them)
member Mark Hymers (delegate)
 - FTP Assistants —
member Bastian Blank
member Luca Falavigna
member Paul Tagliamonte
member Scott Kitterman
member Sean Whitton
 - FTP Wizards —
member Mike O'Connor

Ownership

- Maintainer has full control over a package
- Can be overruled by Technical Committee or via project-wide GR
- Yes, people do “own” pages on Wikipedia despite it being forbidden by policy
- Do-ocracy!

Ownership

Authorship attribution, measured by character count, excluding spaces

Rank	Username	Links	Characters	Percentage
1		Top Edits · Edit Counter	11,530	40%
2		Top Edits · Edit Counter	7,712	26.8%
3		Top Edits · Edit Counter	3,842	13.3%
4		Top Edits · Edit Counter	1,011	3.5%
5		Top Edits · Edit Counter	793	2.8%
6		Top Edits · Edit Counter	679	2.4%
7		Top Edits · Edit Counter	488	1.7%
8		Top Edits · Edit Counter	342	1.2%
9		Top Edits · Edit Counter	275	1%
10		Top Edits · Edit Counter	273	0.9%
 58 others			1,867	6.4%

general

source: [kiwix](#) (main)
version: 2.3.0-1
maintainer: [Kunal Mehta](#) (DMD)
arch: any
std-ver: 4.6.0.1
VCS: [Git](#) ([Browse](#), [QA](#))

general

source: [mediawiki](#) (main)
version: 1:1.35.8-1.1
maintainer: [MediaWiki packaging team](#) (DMD)
uploaders: [Kunal Mehta](#) [DMD] – [Taavi Väinänen](#) [DMD] [DM]
arch: all
std-ver: 4.5.1
VCS: [Git](#) ([Browse](#), [QA](#))

How does Wikimedia use Debian?

- All servers use Debian
- All containers are based on Debian
- Mostly use packages from Debian, unmodified. For some key packages like PHP or MariaDB, we build our own on apt.wikimedia.org.

Okay, but why?

- Debian releases are supported for 3 years, plus 2 more years of “long-term support”
- Relatively stable, changes don’t suddenly happen underneath you, nor do you fall behind quickly
- Debian main is 100% free software
- Openness allows Wikimedians to ensure their input and needs are appropriately considered

Debian has a wide reach

- Lots of derivatives, like Ubuntu, Raspbian
- Packages end up there without any extra work

Repository	Packages	Total	Newest	Outdated
Debian Unstable	10	10	6 60.0%	3 30.0%
Devuan Unstable	10	10	6 60.0%	3 30.0%
Debian 12	9	9	5 55.6%	3 33.3%
Kali Linux Rolling	9	9	5 55.6%	3 33.3%
Raspbian Testing	9	9	5 55.6%	3 33.3%
Debian Experimental	4	4	3 75.0%	-
Parrot	16	8	3 37.5%	5 62.5%
Debian 11	8	8	3 37.5%	5 62.5%
Pardus 21	8	8	3 37.5%	5 62.5%
Devuan 4.0	8	8	3 37.5%	5 62.5%
PureOS landing	8	8	3 37.5%	5 62.5%
Raspbian Stable	9	9	3 33.3%	5 55.6%
Ubuntu 20.04	4	4	2 50.0%	2 50.0%
Trisquel 10.0	4	4	2 50.0%	2 50.0%
Ubuntu 22.04	4	4	1 25.0%	2 50.0%
Ubuntu 22.10	6	6	1 16.7%	4 66.7%
Debian 9 Backports	3	3	-	3 100.0%
Debian 10 Backports	3	3	-	3 100.0%
Debian 10	5	5	-	5 100.0%
Pardus 19	5	5	-	5 100.0%

How do we contribute back?

- Bug reports!

How do we contribute back?

[Message #5](#) received at submit@bugs.debian.org ([full text](#), [mbox](#), [reply](#)):

From: Moritz Muehlenhoff <mmuhlenhoff@wikimedia.org>
To: Debian Bug Tracking System <submit@bugs.debian.org>
Subject: intel-microcode: Missing MDS mitigations for some Intel CPUs
Date: Thu, 16 May 2019 14:47:24 +0200

Package: intel-microcode

Severity: important

I noticed that on some of our servers (using a E5-2470 Sandy Bridge CPU), the MDS mitigations were not picked up and after some digging I found

https://www.intel.com/content/dam/www/public/us/en/documents/corporate-information/SA00233-microcode-update-guidance_05132019.pdf

which lists all the CPU revisions for which updated microcode is not yet available, but "Planned". It's obviously not actionable on the Debian side, but I thought it's worth tracking nonetheless in the BTS for the benefit of others wondering about missing microcode updates.

Cheers,

Moritz

How do we contribute back?

[Message #5](#) received at submit@bugs.debian.org ([full text](#), [mbox](#), [reply](#)):

From: Giuseppe Lavagetto <glavagetto@wikimedia.org>
To: Debian Bug Tracking System <submit@bugs.debian.org>
Subject: apache2: mod_proxy_fcgi erroneously sends response body when issuing a 304
Date: Thu, 16 Jun 2016 17:03:25 +0200

Package: apache2
Version: 2.4.10-10+deb8u4
Severity: normal
Tags: upstream

Dear Maintainer,

When apache communicates with a FastCGI server (like php-fpm) via mod_proxy_fastcgi and the response contains a Last-Modified header with no Status header and this results in a 304 Not Modified response (based on the If-Modified-Since header of the HTTP request), apache sends to the client not only the headers, but the body of the response too. This violates rfc2616 section 10.3.5: "The 304 response MUST NOT contain a message-body, and thus is always terminated by the first empty line after the header fields."

Apart from causing issues with some reverse proxies, this also causes apache to log a bogus error:

"AH01070: Error parsing script headers, referer:..."

for every request that results in a 304 response.

This bug was reported upstream in

https://bz.apache.org/bugzilla/show_bug.cgi?id=57198

and is fixed in 2.4.11, see

https://svn.apache.org/viewvc/httpd/httpd/branches/2.4.x/modules/proxy/mod_proxy_fcgi.c?r1=1650677&r2=1650676&pathrev=1650677&view=patch

It would be useful to have this backported to the current apache2 package in jessie.

Thanks,

Giuseppe

How do we contribute back?

- Bug reports!
- Pre-release testing

How do we contribute back?

✓ Prepare our base system layer for Debian 11/bullseye

✓ Closed, Resolved

🌐 Public

Description

This task tracks the preparation of our base system services for Debian 11/bullseye. Nothing is released yet, schedule is here:

<https://lists.debian.org/debian-devel-announce/2020/03/msg00002.html>

Further base packages to build/import:

- ✓ debmonitor-client
- ✓ debdeploy-client
- ✓ ferm (patched compared to Debian)
- ✓ python-wmflib
- ✓ prometheus-rsyslog-exporter

How do we contribute back?

- Bug reports!
- Pre-release testing
- mirrors.wikimedia.org

How do we contribute back?

- Bug reports!
- Pre-release testing
- mirrors.wikimedia.org
- Package maintainership

How do we contribute back?

Kartik Mistry <kartik@debian.org> — Bugs: [open](#) - [RC](#) - [all](#) - [submitted](#) - [WNPP](#) -  — Reports: [\[...\]](#)

main (112)

Source Package	Bugs		Version		
	All	RC	stable	testing	unstable
apertium ^[U]	1 	-	3.7.1-1	3.8.3-1	
apertium-afr-nld ^[U]	- 	-	0.3.0-2	0.3.0-3	
apertium-all-dev ^[U]	- 	-	-	3.8.1-2	
apertium-anaphora ^[U]	- 	-	1.0.2-1	1.1.1-1	
apertium-apy ^[U]	- 	-	0.11.7-2	0.11.7-2.1	
apertium-arg-cat ^[U]	- 	-	0.2.0-2	0.2.0-3	
apertium-bel-rus ^[U]	- 	-	0.2.1-1	0.2.1-2	
apertium-br-fr ^[U]	- 	-	0.5.1-1		
apertium-cat-ita ^[U]	- 	-	0.2.1-3	0.2.2-1	

How to contribute to Debian?

- Run Debian! Especially w/ MediaWiki, you can find bugs before it hits production
- Lurk in IRC channels, provide user support
- Report bugs, write documentation, translate software, and more!
- <https://www.debian.org/intro/help>

Thanks!

- Email: legoktm@debian.org
- IRC: legoktm on irc.{libera.chat,oftc.net}
- Matrix: @legoktm:matrix.org
- Fediverse: @legoktm@wikis.world