(sent to Mobile-I, Analytics-I and Wikitech-I on December 12, 2016)

Subject: Readership metrics for the timespan until December 4, 2016

Hi all,

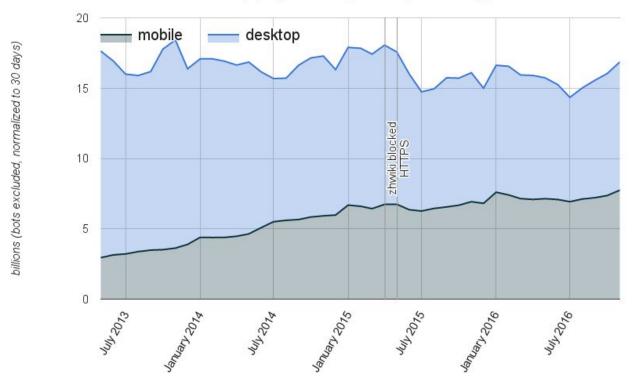
This resumes the <u>usual look</u> at our most important readership metrics. This time we can report that daily pageviews are up 4.8% (since the last report), with an interesting recent peak which meant that November's pageviews surpassed those of November 2015 (coincidentally also) by 4.8%, after October had already seen a 2.1% year-over-year increase. The iOS Wikipedia app saw increased downloads, while the Android app's install base has stopped its previous downward trend.

As <u>laid out earlier</u>, the main purpose is to raise awareness about how these metrics are developing, call out the impact of any unusual events, and facilitate thinking about core metrics in general. As always; feedback and discussion welcome. Week-over-week and month-over-month changes are now being recorded <u>on the Product page</u> at MediaWiki.org. This edition of the report covers a timespan of eighteen weeks.

Some other recent items of interest, in case they didn't already catch your attention:

- The WMF Reading team published its <u>quarterly review presentation</u> for Q1 2016-17 (July-September), which includes lots of traffic and usage data.
- At the Foundation's <u>August metrics meeting</u>, the Reading team gave an update on longer-term traffic trends since 2013. (TL;DR: Overall pageviews have been flat to slightly declining, mobile has been steadily rising but recently slowed down, desktop has declining during these three years. However, total pageviews have been slightly increasing year-over-year in the last few months.) See the chart below, updated with data until November:

Wikimedia monthly pageviews (desktop+mobile), 2013-2016



In particular, as mentioned, the number of total pageview saw year-over-year increases of +2.1% for October and +4.8% in November, in contrast to e.g. the -10.5% we had for May 2015-May 2016.

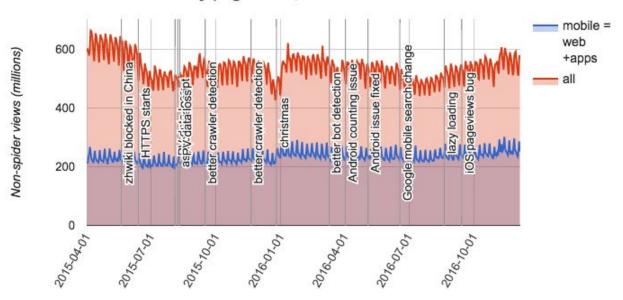
Now to the usual data. (All numbers below are averages for August 1-December 4, 2016 unless otherwise noted.)

Pageviews

Total: 529 million/day (+4.76% from the previous report timeframe, with corrected numbers for anomalously high traffic on some main pages)

Context (April 2015-December 2016):

Wikimedia daily pageviews, all vs. mobile

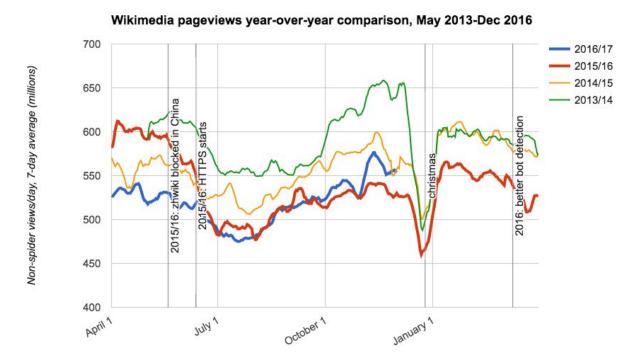


See also the Vital Signs dashboard

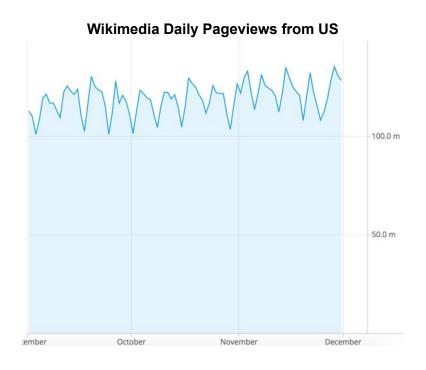
(Small caveats: iOS app's pageviews were undercounted by about 1.6 million/day from mid September to early November due to a <u>bug</u>.)

Overall pageviews increased steadily during the timespan of this report aside from the week ending October 30th (right before Halloween) and the end of November. There appears to be a peak in pageviews in November.

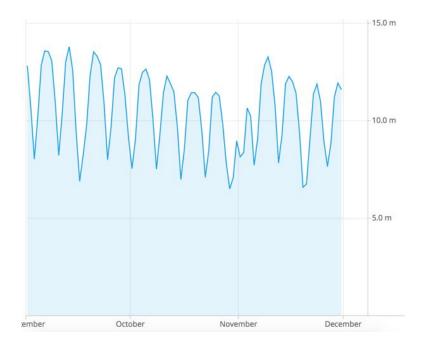
To facilitate our understanding of which traffic movements are seasonal and which may indicate lasting changes, here is a chart overlaying the total pageview numbers back to May 2013 (the earliest time for which we have data according to the current pageview definition):



The blue line indicates a non-seasonal rise peaking around November 12. We checked whether this peak came from a particular country and were able to exclude that possibility.

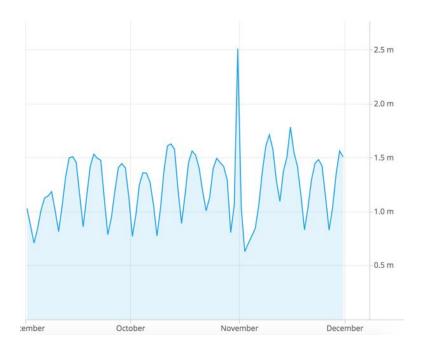


Pageviews in US do not show any drastic changes (even around the time of the US elections).



In Mexico, there seems to been a huge drop starting October 27th (perhaps some sort of local outage).

Wikimedia Daily Pageviews from Ecuador



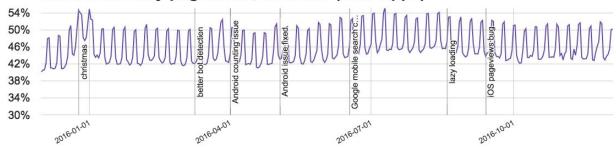
Ecuador shows a huge spike on October 30th, followed by a drop for several days.

Desktop: 54.1% (previous report: 54.1%) **Mobile web: 44.8%** (previous report: 44.6%)

Apps: 1.1% (previous report: 1.3%) (missing some iOS pageviews, cf. above)

Context (December 2015 - December 2016):

Wikimedia daily pageviews, %mobile (web+apps)

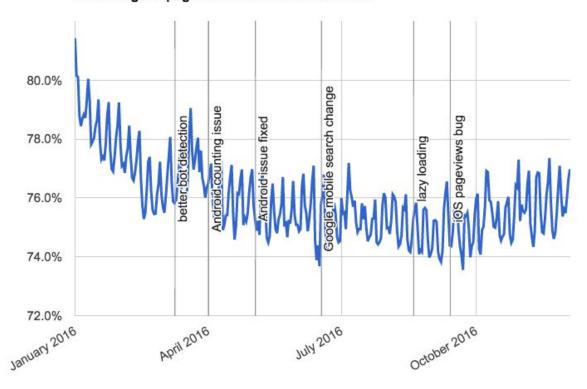


Overall mobile percentage is similar to the last report, but we did see a small increase (besides one week in August) until late September. As a reminder, mobile already has a solid majority in terms of unique devices, cf. below.

Global North ratio: **75.3%** of total pageviews (previous report: 75.5%)

Context (January - December 2016):

Percentage of pageviews from the Global North



There is a slight increase in Global North percentage in late October and November, but overall this number is relatively steady.

NB: We are currently rethinking this metric and might replace it with a different country selection constructed as part of the work on the New Readers project.

Unique devices

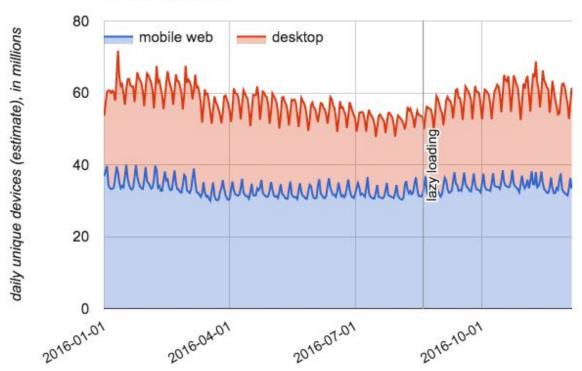
See the <u>announcement blog post</u> from March for background and details on this recently introduced metric. These estimated numbers are provided for all Wikimedia language projects (separately for the desktop and mobile web version). Because of the instrumentation method, there is no global metric for all projects and all languages, but following some recent discussions it is now <u>planned</u> to extend it to a cross-language global metric per project at least. For now, we track the daily numbers of the English Wikipedia in this report.

Daily unique devices estimate for English Wikipedia:

- Mobile web: 33.9 million (previous report: 32.2 million)
- **Desktop: 24.1 million** (previous report: 22.3 million)
- **Total: 57.9 million** (previous report: 54.5 million)
- Average mobile web ratio: 58.7% (previous report: 59.3%)

Context (January- December 2016):

Daily unique devices estimate for English Wikipedia (without apps)



This metric hasn't existed long enough yet to get a good sense of what yearly seasonalities may exist, but since the last report time frame daily unique desktop devices show an increasing upward trend until early November, where there is a peak and then an apparent drop (which parallels the peak in pageviews).

Daily views/device for English Wikipedia (without apps) 8 mobile web desktop Ratio of daily pageviews to daily 6 unique devices loading 4 2 0 2016-01-01 2016-10-01 2016-07-01 2016-04-01

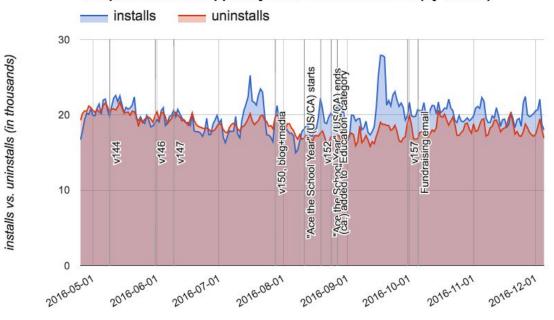
To understand the peak in daily unique devices, we plotted the ratio of daily pageviews to daily unique devices. There is a small bump in the mobile ratio in early November, but it is too small to fully explain the rise in pageviews around this time.

New app installations

Android: **19.9k/day** (+1.21% from the previous report) *Daily installs per device, from Google Play*

Context (last seven months):

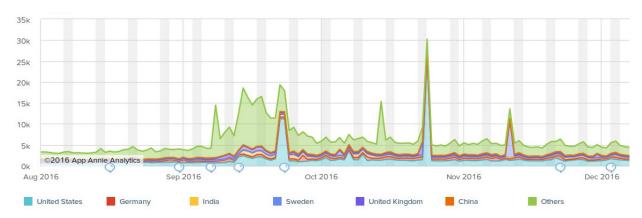
Wikipedia Android app daily installs and uninstalls (by device)



Download numbers increased in September and have sustained previous levels so far, possibly helped by the app's inclusion on the <u>Education category page</u> in Google's Play Store. There was an additional bump in mid September (reason unknown). The number of daily uninstalls decreased slightly. During the timespan of the previous report, installs had markedly decreased (except for a so far unexplained bump during two weeks in July), which combined with the high uninstall numbers had caused the app's install base to shrink from 15.5 million on March 31 to 15.1 million at the beginning of August. This trend has now been stopped, although the number was still at 15.1 million on November. (Google has since <u>discontinued</u> this "current installs" metric in favor of a new "installs on active devices" metric.)

iOS: 6.35k/day (+99.9% from the previous report) *Download numbers from App Annie*

Daily downloads (with the largest countries broken out):



The iOS Wikipedia app was promoted on iTunes in September, with huge impact (twice as many downloads than resulted from a comparable promotion in September 2015). Total daily downloads remained on a higher level afterwards (4.8k/day during the last week of this report, Nov 28-Dec 4). Around October 24, downloads from the US spiked, possibly helped by some organic media coverage such as this.. On November 11, we registered an extra 9000 downloads from Sweden, for unknown reasons (no app store promotions or media coverage that we are aware of).

App user retention

Android: 16.4% (previous report: 16.7%)

(Ratio of app installs opened again 7 days after installation, among all installed one week before a date that falls within this report. 1:100 sample)

Context (last seven months):

7-day retention of Wikipedia Android app users 30.0% 22.5% 15.0% 7.5% 7.5% 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-06-01 2016-07-07-01 2016-07-01 2016-07-01 2016-07-01 2016-07-01 2016-07-01 2016-07-01 2016-07-01 2016-07-01 2016-07-01 2016-07-01 2016-07-01 2016-07-01 2016-07-01 2016-07-07 2016-07-07 2016-0

As remarked in earlier reports, this data is a bit too noisy for drawing conclusions about whether retention changed significantly between different releases. Retention appears to have dropped

somewhat in September after having gradually grown earlier during the timespan of the last report and after.

iOS: N/A

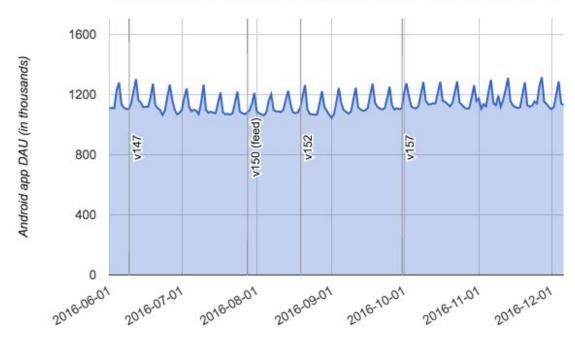
(We recently began measuring this on the iOS app - using the same method as on Android, restricted to users who opt-in to data collection - but there is not enough data yet.)

Unique app users

Android: 1.146 million / day (+0.0% from the previous report)

Context (last six months):

Wikipedia Android app daily active users



In September/October, there seems to be a very small growth in daily average users.

iOS: N/A

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Data sources

For reference, the queries and source links used are listed below (access is needed for each). Unless otherwise noted, all content of this report is © Wikimedia Foundation and released under the <u>CC BY-SA 3.0</u> license. Most of the above charts are available <u>on Commons, too</u>.

SELECT year, month, day, CONCAT(year,"-",LPAD(month,2,"0"),"-",LPAD(day,2,"0")) as date, sum(IF(access_method <> 'desktop', view_count, null)) AS mobileviews,
SUM(view_count) AS allviews FROM wmf.projectview_hourly WHERE year>0 AND agent_type = 'user' GROUP BY year, month, day ORDER BY year, month, day LIMIT 1000;

SELECT LEFT(timestamp, 10) AS date, sum(IF(access_method <> 'desktop', pageviews, null)) AS mobileviews, SUM(pageviews) AS allviews FROM staging.pageviews05 WHERE is spider = FALSE AND is automata = FALSE GROUP BY date;

Pivot URLs:

United States

Mexico

Ecuador

SELECT access_method, SUM(view_count)/(7*18) FROM wmf.projectview_hourly WHERE agent_type = 'user' AND CONCAT(year,"-",LPAD(month,2,"0"),"-",LPAD(day,2,"0")) BETWEEN "2016-08-01" AND "2016-12-04" GROUP BY access method;

SELECT year, month, day, CONCAT(year,"-",LPAD(month,2,"0"),"-",LPAD(day,2,"0")),
SUM(view_count) AS all, SUM(IF (FIND_IN_SET(country_code,
'AD,AL,AT,AX,BA,BE,BG,CH,CY,CZ,DE,DK,EE,ES,FI,FO,FR,FX,GB,GG,GI,GL,GR,HR,HU,IE,IL,IM,I
S,IT,JE,LI,LU,LV,MC,MD,ME,MK,MT,NL,NO,PL,PT,RO,RS,RU,SE,SI,SJ,SK,SM,TR,VA,AU,CA,HK,MO,
NZ,JP,SG,KR,TW,US') > 0, view_count, 0)) AS Global_North_views FROM
wmf.projectview_hourly WHERE year > 0 AND agent_type='user' GROUP BY year, month, day
ORDER BY year, month, day LIMIT 1000;

SELECT year, month, day, CONCAT(year,"-",LPAD(month,2,"0"),"-",LPAD(day,2,"0")) as date, SUM(IF(uri_host LIKE 'en.m.wikipedia%', uniques_estimate, 0)) AS enwiki_mobile_web

FROM wmf.last_access_uniques_daily

WHERE year=2016 GROUP BY year, month, day ORDER BY year, month, day LIMIT 1000;

SELECT year, month, day, CONCAT(year,"-",LPAD(month,2,"0"),"-",LPAD(day,2,"0")) as date, SUM(IF(uri_host LIKE 'en.wikipedia%', uniques_estimate, 0)) AS enwiki_desktop FROM wmf.last_access_uniques_daily

WHERE year=2016 GROUP BY year, month, day ORDER BY year, month, day LIMIT 1000;

SELECT year, month, day, CONCAT(year,"-",LPAD(month,2,"0"),"-",LPAD(day,2,"0")) AS date,

SUM(IF(access_method = 'mobile web', view_count, null)) AS mobilewebviews,
SUM(IF(access_method = 'desktop', view_count, null)) AS desktopviews
FROM wmf.projectview_hourly WHERE year=2016 AND agent_type = 'user' AND project = 'en.wikipedia'

GROUP BY year, month, day ORDER BY year, month, day LIMIT 1000;

SELECT LEFT(timestamp, 8) AS date, SUM(IF(event_appInstallAgeDays = 0, 1, 0)) AS day0_active, SUM(IF(event_appInstallAgeDays = 7, 1, 0)) AS day7_active FROM

log.MobileWikiAppDailyStats_12637385 WHERE timestamp LIKE '201510%' AND userAgent LIKE
'%-r-%' AND userAgent NOT LIKE '%Googlebot%' GROUP BY date ORDER BY DATE;
(with the retention rate calculated as day7_active divided by day0_active from seven days earlier, of course)

https://analytics.itunes.apple.com/#/retention?app=324715238

SELECT CONCAT(year,"-",LPAD(month,2,"0"),"-",LPAD(day,2,"0")) as date, unique_count AS Android_DAU FROM wmf.mobile_apps_uniques_daily WHERE platform = 'Android';

https://console.developers.google.com/storage/browser/pubsite_prod_rev_028125227552113
81933/stats/installs/ ("overview")

https://www.appannie.com/dashboard/252257/item/324715238/downloads/ (select "Total")