



Toolforge webservices are in the final stages of [migrating to the toolforge.org domain](#).  
Please help us clean up older documentation referring to tools.wmflabs.org!

# Incident documentation/20140503-Thumbnails

< [Incident documentation](#)

(From Antoine's email to mediawiki-l)

To long, not willing to read: our MediaWiki configuration did not trust X-Forwarded-For headers sent by the media server and ended up throttling them instead of the end users.

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## Timeline of events

**Saturday May 3rd 15:00 UTC** community member Yann Forget reopened [bugzilla:64622](#) (although unrelated) mentioning that thumbnails rendering fails with the error message:

### *Error generating thumbnail*

*As an anti-spam measure, you are limited from performing this action too many times in a short space of time, and you have exceeded this limit. Please try again in a few minutes.*

Nemo Bis confirmed a few hours after that the error is widespread and impacts commons as well. That is not surprising since the thumbnails rendering infrastructure is shared among wiki projects.

On **Sunday May 4th**, Nemo mentions some rate limiting configuration has been added for the "renderfile-nonstandard" throttle and deployed on April 21st ( <https://gerrit.wikimedia.org/r/#/c/127643/> )

- Tuesday **May 5th 3:00 UTC** Greg emits an email to the MediaWiki-core list escalating the bug report.
- Around **8:00 UTC** I read the email and do some preliminary investigation. Since Nemo mentioned the 'renderfile-nonstandard' throttle I grep our limiter.log file to find out what is hitting the limit:

```
$ fgrep renderfile limiter.log |cut -d\ : -f4|sort|uniq -c|sort -n
 378 10.64.0.168 tripped! mediawiki
 405 10.64.0.167 tripped! mediawiki
 476 10.64.32.92 tripped! mediawiki
 498 10.64.16.150 tripped! mediawiki
$
```

The IP are the media server frontends ms-fe1001 to ms-fe1004 which relay thumbnails generation requests on behalf of users. We want to throttle per end user client IP or username, NOT the proxies.

My assumption is that the media servers do not relay the end user X-Forwarded-For header which contains the end user IP.

I look at the Swift proxy rewrite.py script and find out that X-Forwarded-For seems to be handled in there. I ping Faïdon and he immediately confirmed X-Forwarded-For header is properly handled by the Swift proxies via rewrite.py and suggest that the media servers are not listed in MediaWiki configuration as trusted proxies.

On **May 5th 9:00 UTC** we add the media servers to the list of trusted proxies:

<https://gerrit.wikimedia.org/r/#/c/131670/2/wmf-config/squid.php,unified>

Additionally add a comment in Puppet configuration to remember folks to update the trusted proxy list whenever a new proxy is added:

Main page  
Recent changes  
Server admin log (Prod)  
Server admin log (RelEng)  
Deployments  
SRE/Operations Help  
Incident status

Cloud VPS & Toolforge

Cloud VPS  
documentation

Toolforge  
documentation

Request Cloud VPS  
project

Server admin log (Cloud  
VPS)

Tools

What links here

Related changes

Special pages

Permanent link

Page information

Cite this page

Print/export

Create a book

Download as PDF

Printable version

<https://gerrit.wikimedia.org/r/#/c/131671/1/manifests/site.pp,unified>

The media servers disappear from limiter.log

## how it happened

The first occurrence of a media server being tripped by renderfile-nonstandard occurs on 2014-04-29 18:04:05

Nemo detected the throttle configuration has been added to mediawiki-config on April 21st and deployed that day:

<https://gerrit.wikimedia.org/r/#/c/127643/>

The throttle has been merged in mediawiki/core master branch on April 21st as well

<https://gerrit.wikimedia.org/r/126052> sha1: 4f2324fc

MediaWiki change landed in 1.24wmf2 which

```
$ git branch --remote --contains 4f2324fc
gerrit/master
gerrit/wmf/1.24wmf2
gerrit/wmf/1.24wmf3
```

The 1.24wmf2 deployed the change on April 30st 18:03:

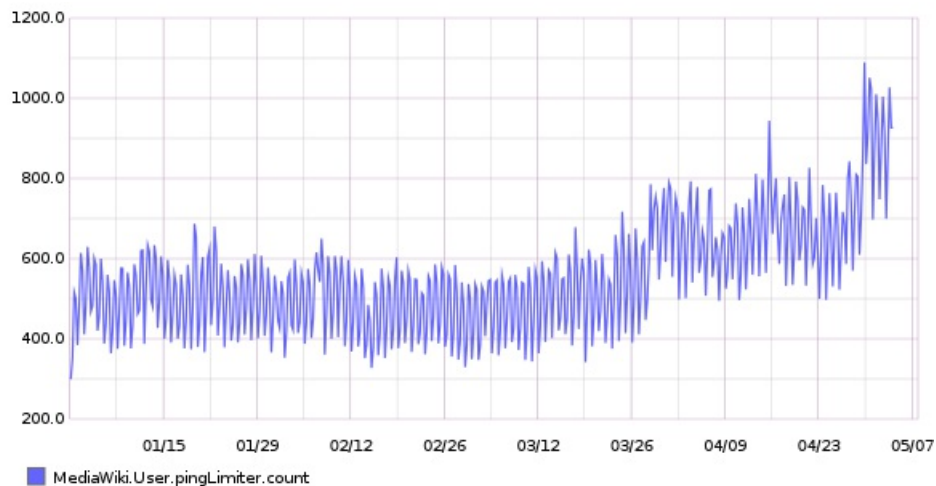
*18:03 logmsgbot: reedy rebuilt wikiversions.cdb and synchronized wikiversions files: Non wikipedias to 1.24wmf2*

"Instantly" causing the media server to be throttled.

## What can be improved

The throttling is handled by User->pingLimiter() which has a profile in entry point. Hence it generates a count metric in graphite as MediaWiki.User.pingLimiter.count

I have generated a graph from January 1st 2014 till today and uploaded it on wikitech:





It shows an increase on March 26th which is unrelated and second increase on April 30th.

## Actionables

- Status: ■ **Done** - we might want to generate finer metrics by adding the pingLimiter() action to the wfProfileIn() call.
  - [bugzilla:65477](#) User::pingLimiter should have per action profiling
- Status: ■ **Declined** - a graph in gdash and a monitoring alarm could be added whenever the rate change significantly.
  - [bugzilla:65478](#) - Graph User::pingLimiter() actions in gdash
- Status: ■ **on-going** - it took us too long (3 days) to get informed about that outage though as soon as the proper folks have been made aware of it it got promptly solved.

## References

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- [Bug 64622](#) 
- Trusting XFF from media servers: [\[1\]](#) 

Category: [Incident documentation](#)

This page was last edited on 10 July 2014, at 19:24.

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