



The Tech That Drives Wikipedia

How Wikimedia serves a hundred thousand
Wikipedia pages per second

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- **Requests:** ~ 8 million per minute
(that's half a million per opsen, roughly ten thousand per second per head)
- **Traffic:** ~ 25Gbit per second
- **Wikis:** ~ 900
- **Users:** ~ 100 000
- **Edits:** ~ 1000 per minute
- **Servers:** ~ 1000 or so. 8 master DB servers.
- **Data Centers:** eqiad and codfw have application servers and database, esams and ulsfo have caches. eqsin to come soon.

<https://grafana.wikimedia.org/>

<https://stats.wikimedia.org/>

How Wikimedia serves a hundred thousand Wikipedia pages per second

Short answer: Caching!

Long answer... is long...

https://meta.wikimedia.org/wiki/Wikimedia_servers

The logo features a large blue circle with a white outline. Inside this circle is a green shape resembling a stylized 'Y' or a plant, with a white vertical bar in the center. At the top of the green shape is a red circle containing the text 'LAMP...'.

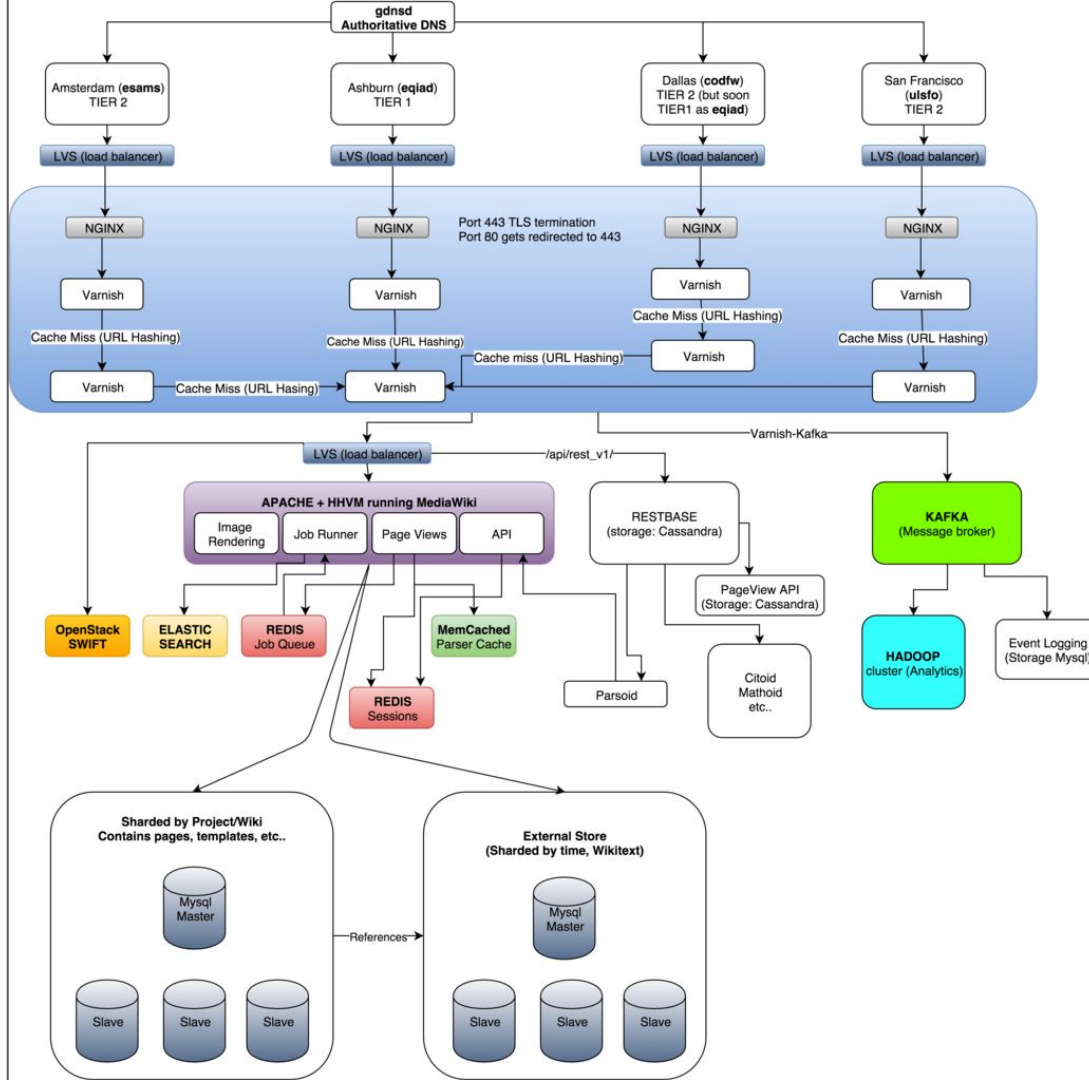
LAMP...

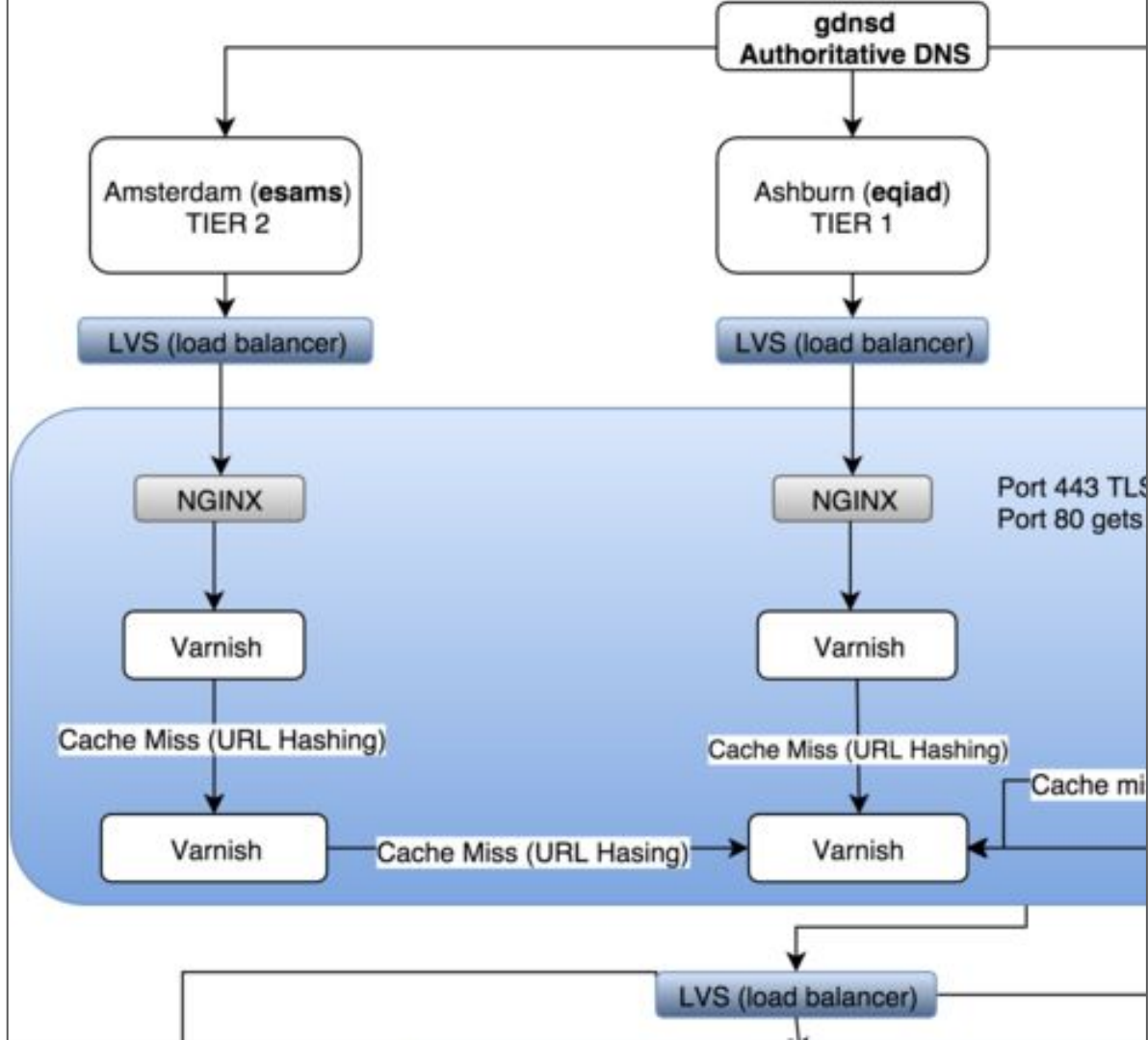
- Linux
- Apache
- MySQL
- PHP

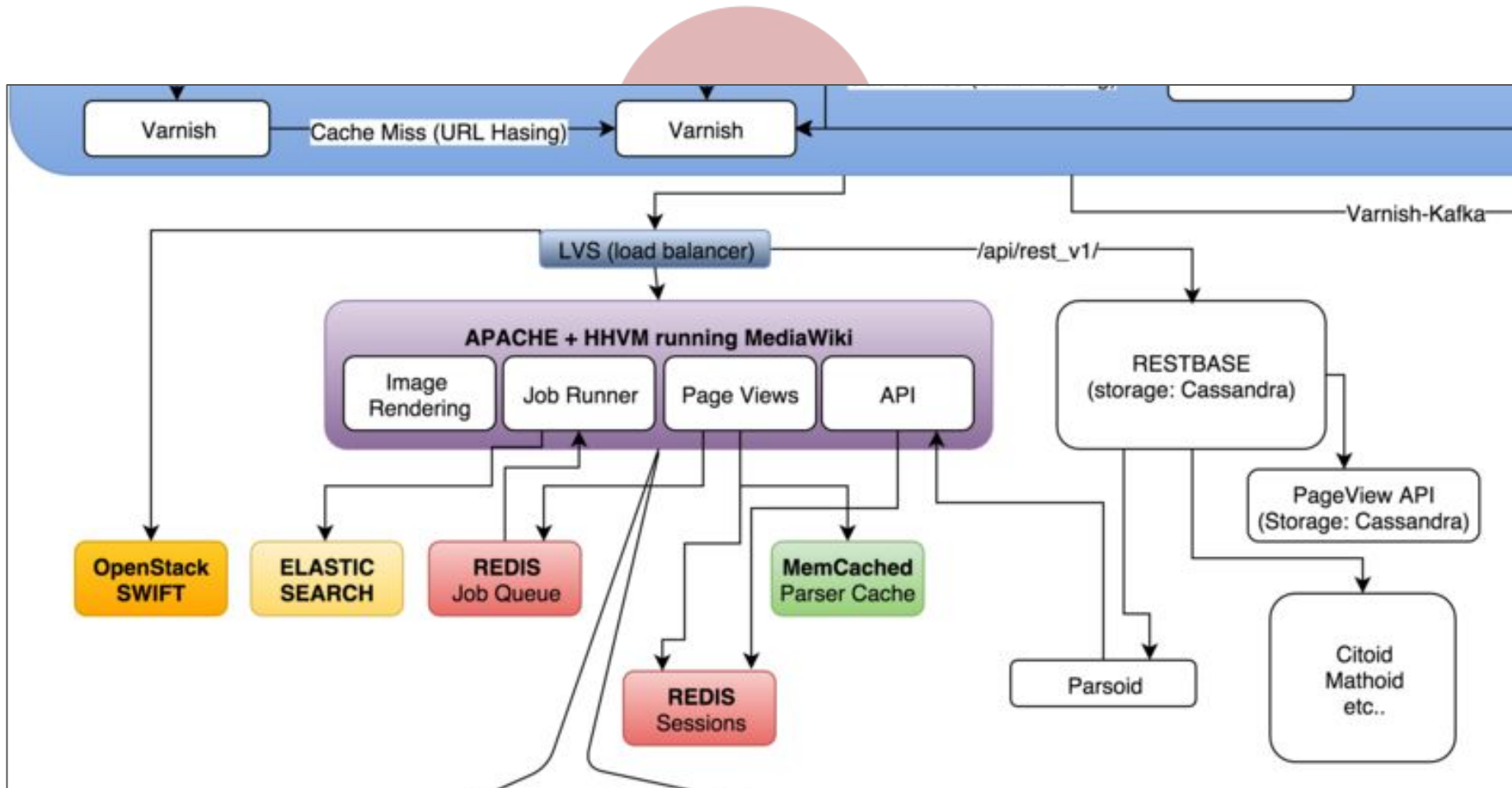
LAMP... on Steroids!

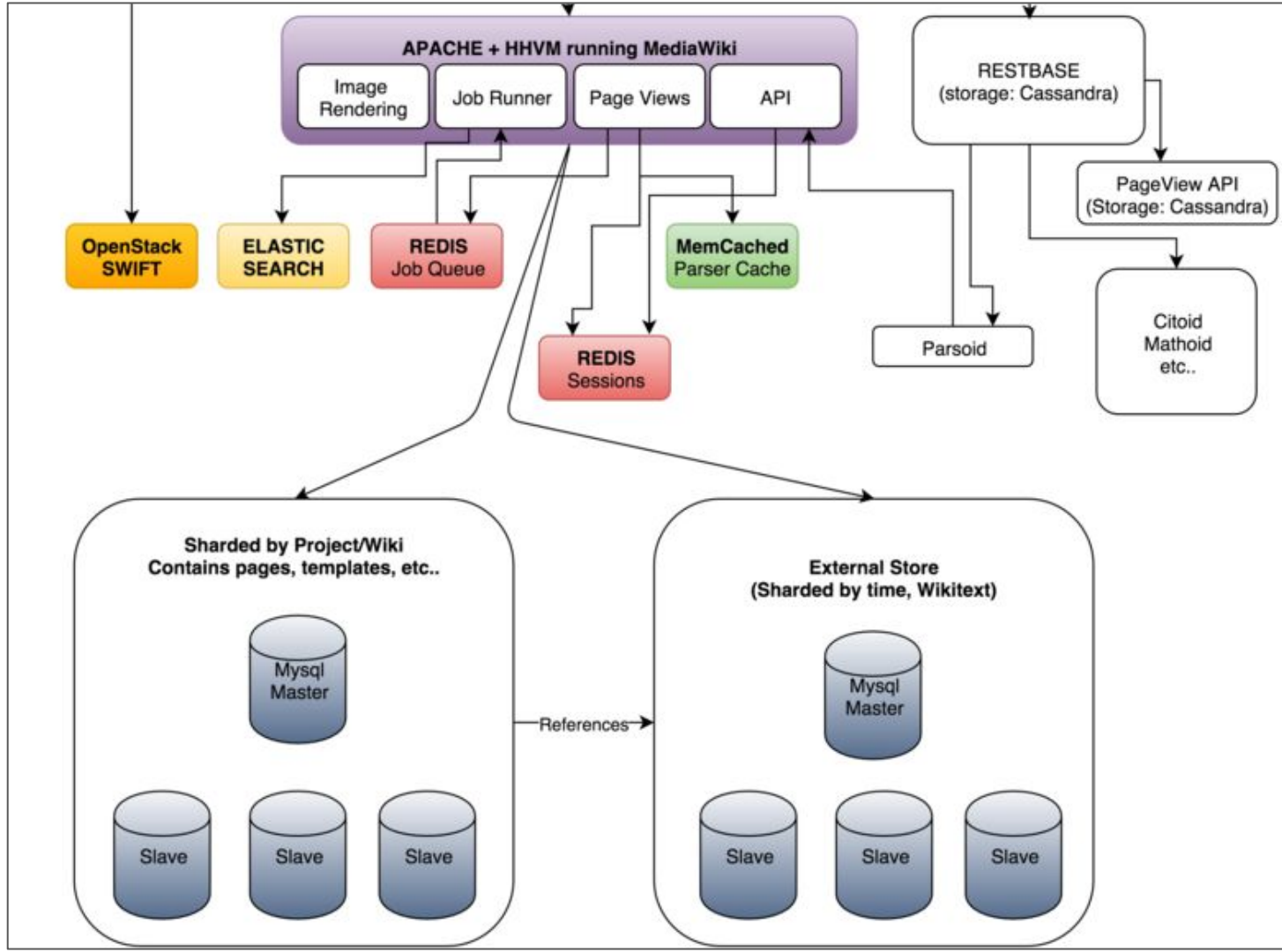
- Linux
- Apache and Nginx
- MySQL MariaDB
- PHP HHVM (but back to Zend soon)
- Varnish
- Nginx
- Swift
- Elastic
- Memcached
- Redis
- Kafka
- Logstash
- Cassandra
- ...

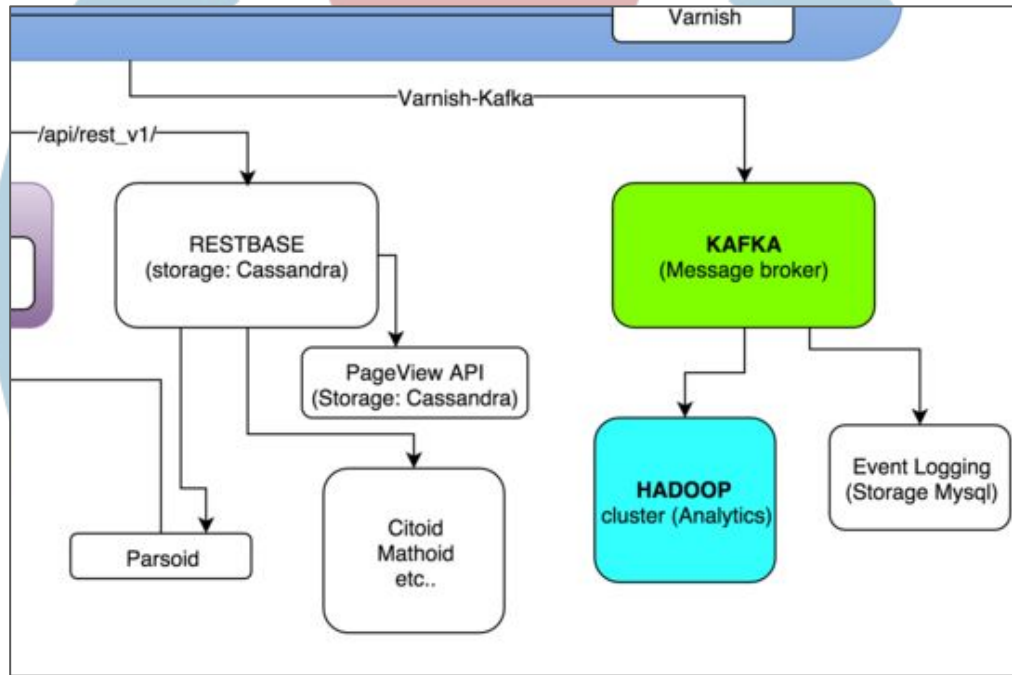
<https://wikitech.wikimedia.org>













Development Processes

- Git-based development process (gerrit, github)
- CI (pre-merge): Travis/Suul
- Ticket System (Phabricator)
- Documentation Wikis (mw.o, wikitech.wm.o)
- IRC channels, Mailing lists
- RFC process, working groups

Deployment Processes



- Browser tests on “beta”
- Weekly “trains”:
- Roll-out to “test” wikis...
- ...then small wikis...
- ...eventually, all wikis.

User Created Tools

The diagram features a central red circle at the top. Below it is a thick blue ring. Inside the ring is a green shape that is split vertically by a white gap. A bulleted list is positioned on the left side of this green shape.

- Bots
- Gadgets
- ToolForge

Wikimedia Cloud Service

The logo for Wikimedia Cloud Service features a central red circle at the top, a light green circle below it, and a light blue circle at the bottom. The green circle is split vertically by a white line. The text 'Wikimedia Cloud Service' is positioned above the red circle, and a bulleted list is centered within the green circle.

- VMS
- Web-Space
- Shell-Accounts



Thank You!

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15:30 @ Hive Stage
(near the Kid's Space)

