

# NoSQL and Async not needed

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# worldoftanks.ru month numbers (Google Analytics)

- ▶ 29 766 265 visits
- ▶ 6 606 199 visitors
- ▶ 134 417 164 page views

## worldoftanks.ru day numbers (nginx logs)

- ▶ 10 492 199 non-ssl backend requests
- ▶ 3 073 424 ssl backend requests
- ▶ We unable to log frontend requests (heavy I/O) now

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- ▶ Wargaming.net don't know how to do highload web projects.

# Problems

- ▶ thousands of concurrent connections
- ▶ data caching, render caching
- ▶ effective resource usage
- ▶ low latency
- ▶ scalability
- ▶ depending on other resources

# Components

- ▶ nginx - frontend
- ▶ apache+mod\_wsgi - backend
- ▶ python - implementation
- ▶ memcached - caching
- ▶ MySQL - storage
- ▶ RabbitMQ - async tasks storage

# nginx

- ▶ use epoll
- ▶ worker\_processes 16
- ▶ gzip\_comp\_level
- ▶ keepalive\_timeout 60
- ▶ upstream backend 3+1



# apache+mod\_wsgi

- ▶ WSGIDaemonProcess ptl-wotru
- ▶ user=ptl-wotru group=ptl-wotru
- ▶ processes=8 threads=1
- ▶ maximum-requests=32768

# python

- ▶ django-1.3.1
- ▶ amqplib-1.0.3
- ▶ south-0.7.4
- ▶ PIL
- ▶ Jinja2
- ▶ python-memcached
- ▶ python-cjson

# memcached

- ▶ CACHESIZE=" 1024"
- ▶ 4 nodes cluster

# MySQL

- ▶ default-storage-engine = INNODB
- ▶ character-set-server = utf8
- ▶ transaction-isolation = READ-COMMITTED

- ▶ AMQP - Advanced Message Queuing Protocol

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- ▶ All is fine, except...
- ▶ Questions?