

AN SIMPLE INTRODUCTION OF REKOO SOCIAL GAME BACK-END ARCHITECTURE

REKOO PRODUCTS INTRODUCTION:

Social Game: the serial of Sunny, the serial of Moon

Operation Platform: Tencent, RenRen Social Website, 51.com, Taobao, Baidu, Souhu Mixi, DeNA, GREE, KDDI, Yabage, Facebook, MySpace

Country: Japan, South Korea, Russia, Germany, Poland

THE CHALLENGE:

1. Development efficiency
2. Flexible deployment
3. Big Data storage
4. Scalability

TECHNOLOGY STACK:

Front-end Stack:

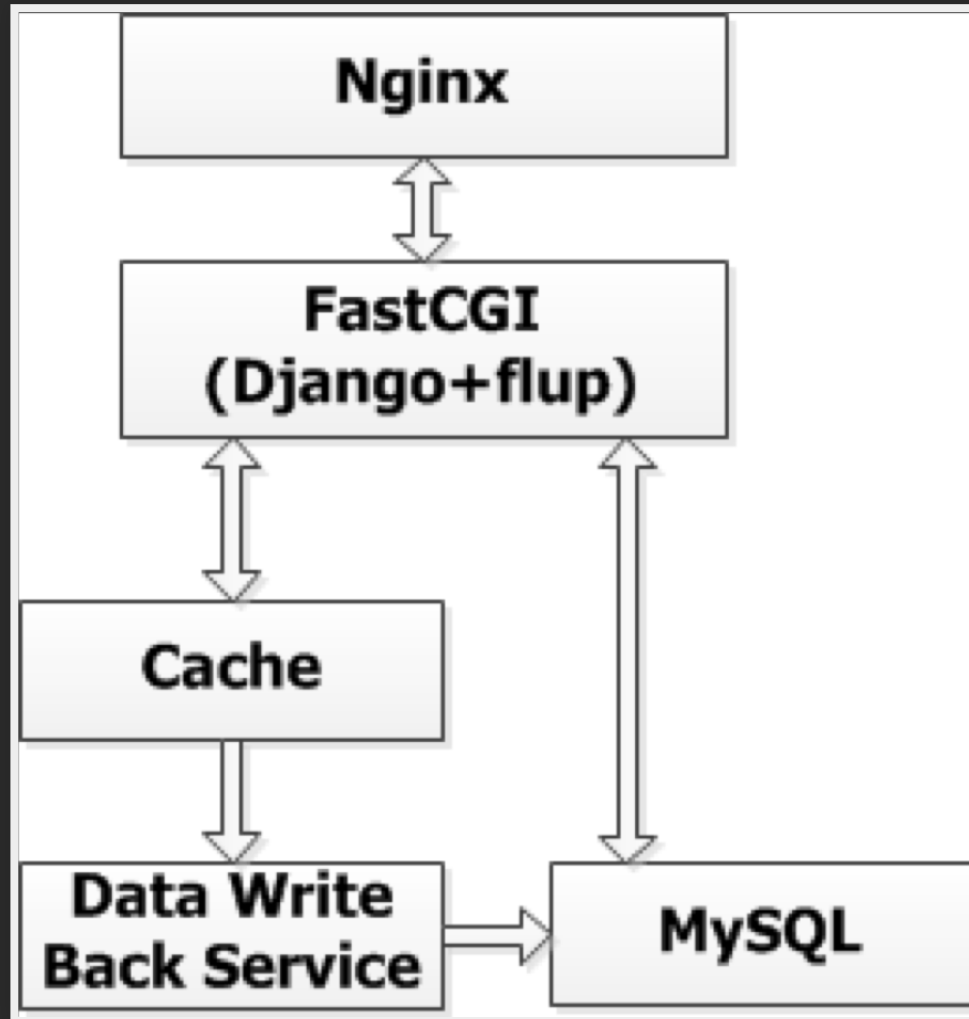
1. ActionScript/MXML(Fash/Flex)
2. HTML
3. JavaScript

Back-end Stack: 99% Python

PYTHON LIBRARIES

1. Django
2. MySQLdb
3. SQLAlchemy
4. Twisted
5. Pylibmc
6. flup
7. Tokyo Tyrant

SIMPLE ARCHITECTURE:



WEB SERVER:

1. Nginx
2. FastCGI
3. Running Django process in Prefork mode
4. Load balancing: LVS or HAProxy

CACHE SERVER:

1. Compatible with memcached protocol
2. Full memory cache or persistent cache
3. Scalability with cluster deployment

Tools: Memcached, Tokyo Tyrant, Flare, Kumofs,
Membase

CACHE CLIENT:

1. Pylibmc
2. Data compression
3. tcp_nodelay
4. Proxy

DATABASE:

1. MySQL Wrapped as Key-value Store
2. Horizontal sharding partition by uid
3. Data in the cache is written back to the database asynchronously

STATISTICAL ANALYSIS OF BUSINESS DATA:

1. Analysis Based Database

using python write statistical analysis script

2. Analysis Based Log records

- Scribe
- Hadoop + Hive

THANK YOU!