

# 挖财的互联网金融技术探索

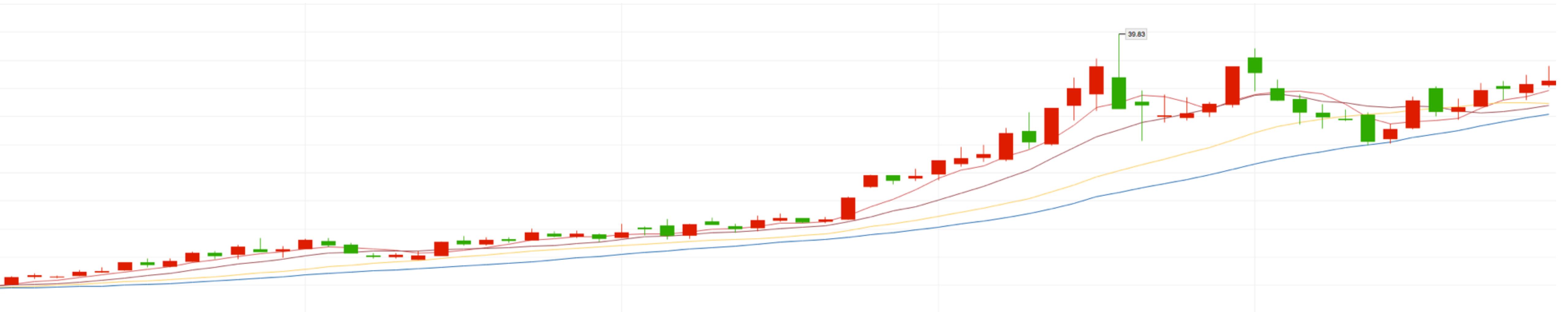
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金融

互联网

互联网金融



大连

杭州

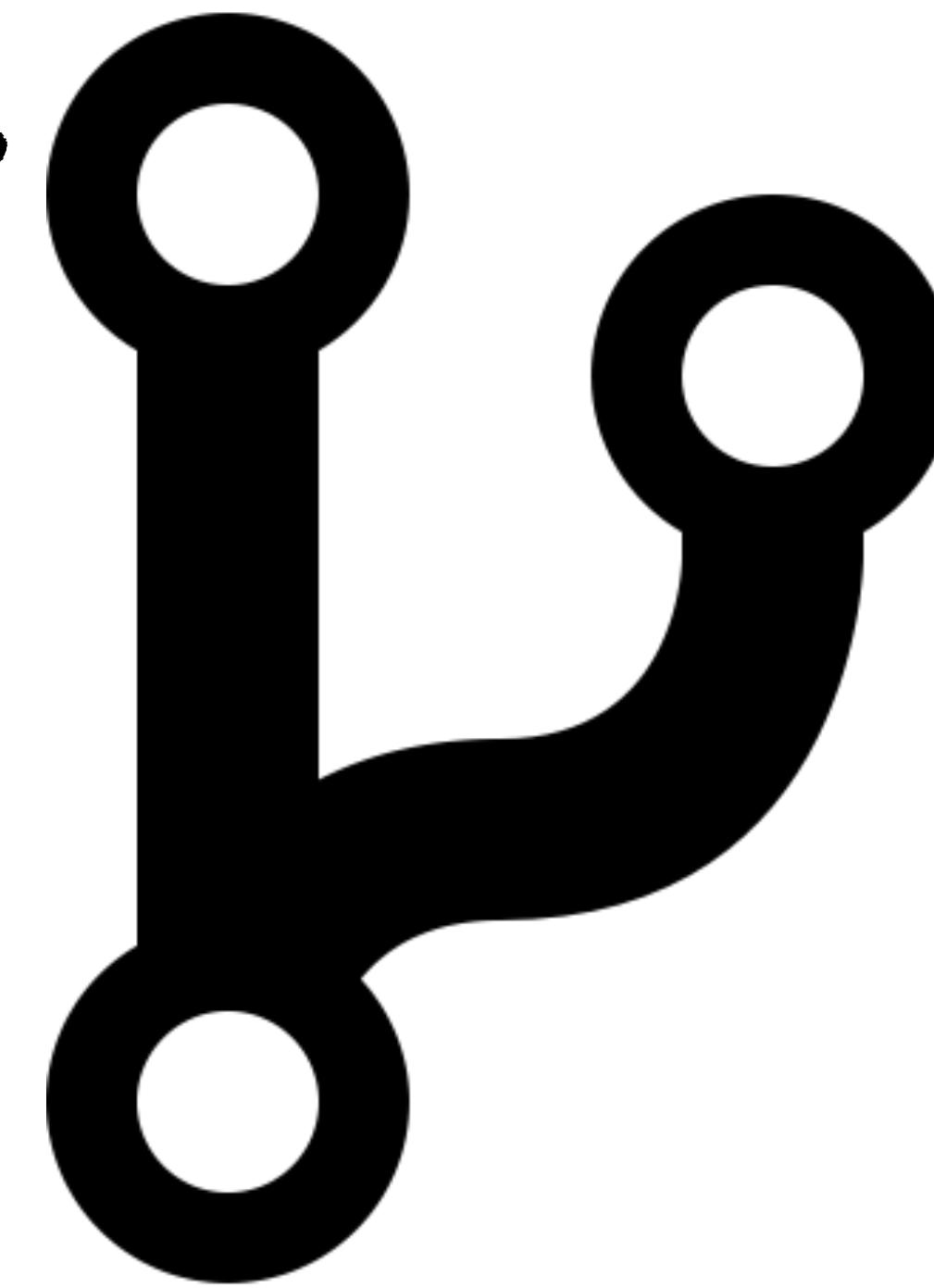
阿里

挖财

# 挖财不仅仅只是一款记账app



branch “互联网”



branch “金融”

just merge, then we get “互联网金融”?

**WE ARE STILL**



**THEN FOLLOWING ...**

# 1. Separation Everywhere

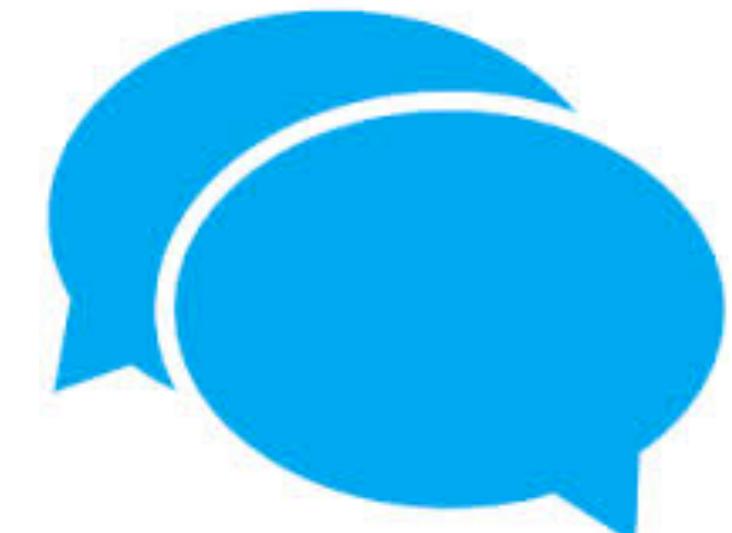
SOA micro services  
modularity responsibility

# [ Micro ] Services Everywhere

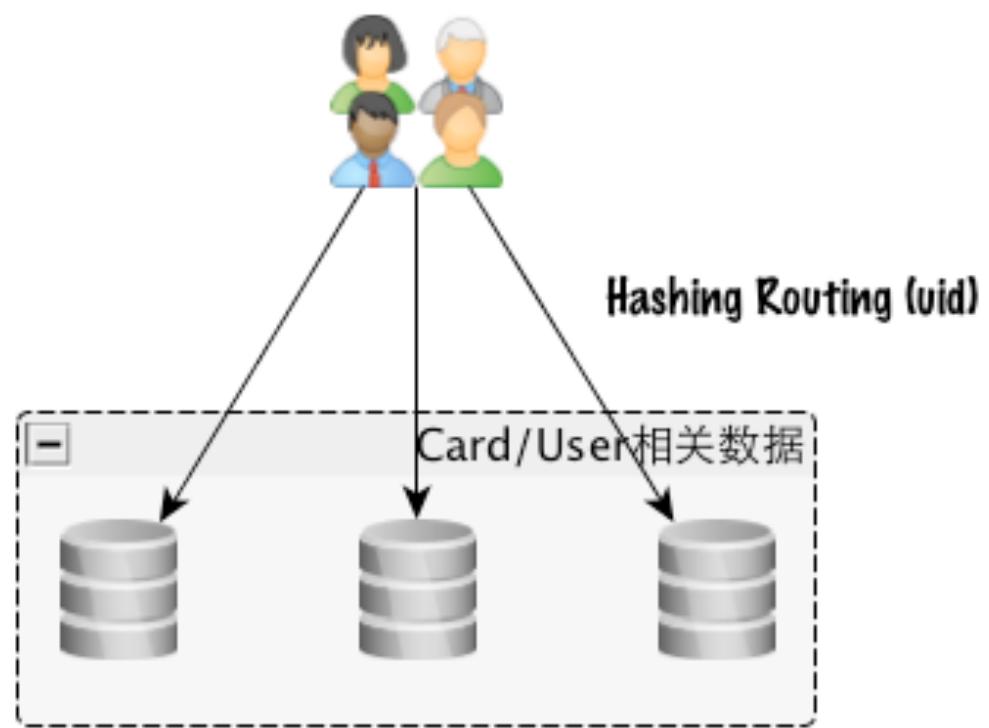


**CASHFLOW**

**SETTLEMENT**

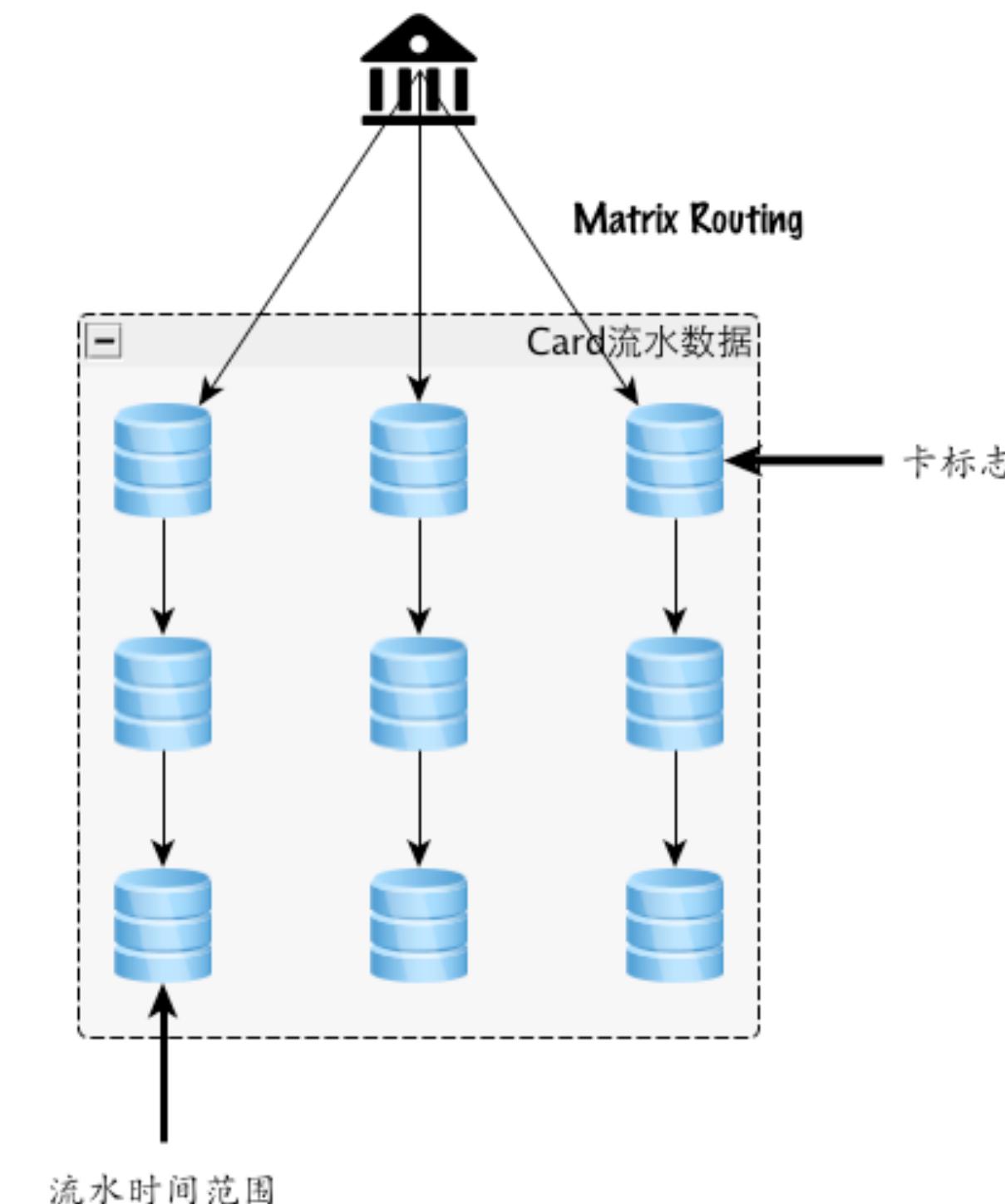


# Scale MySQL For Cashflow



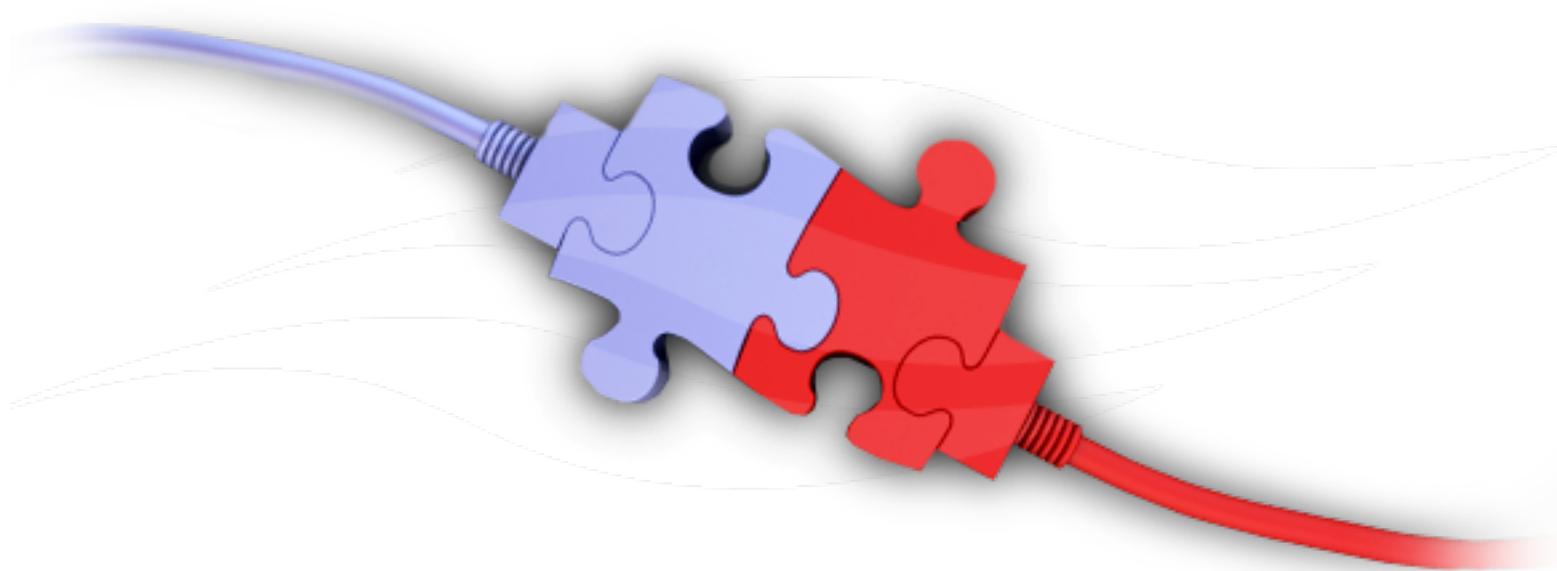
Cobar != CobarClient

Naming Consistency  
Sucks Here



# Different Is Good



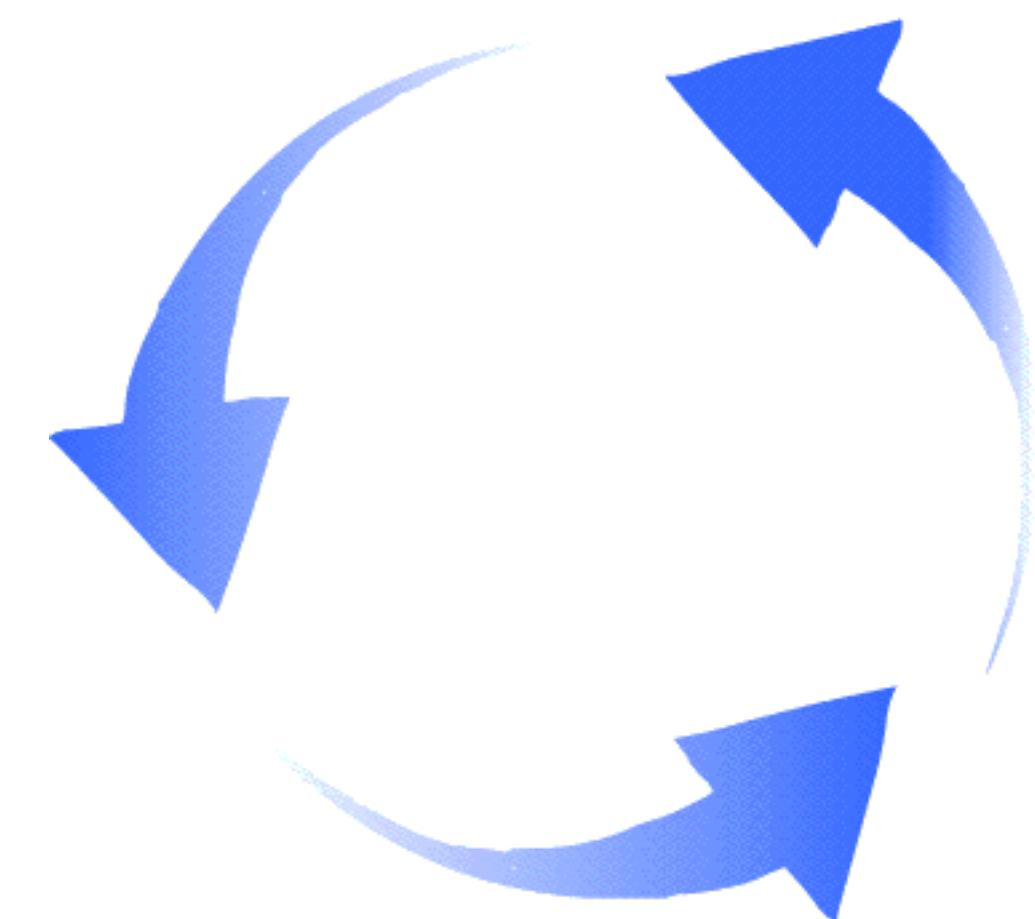


## 2. Message Passing Everywhere

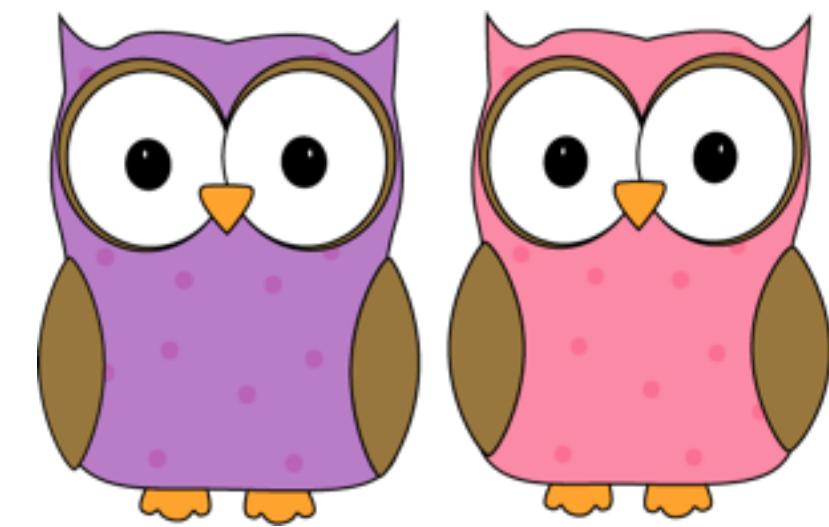
Sync

Local

Remote



Async



RPC

DUBBO

HTTP



HARPY

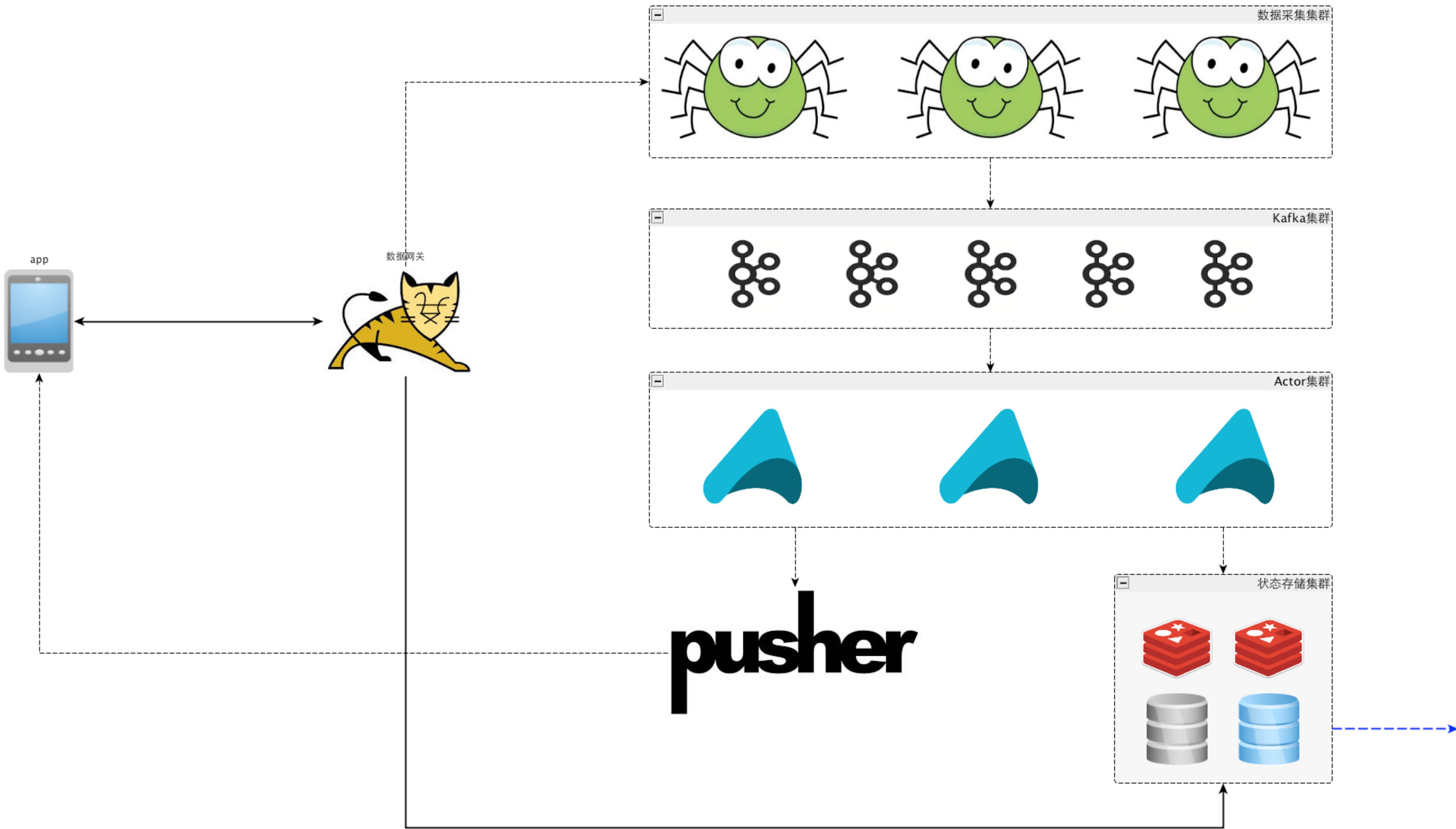
# Commands & Events





### 3. Async Everywhere

**Latency, latency, latency**



**THROTTLING**

Taming  akka

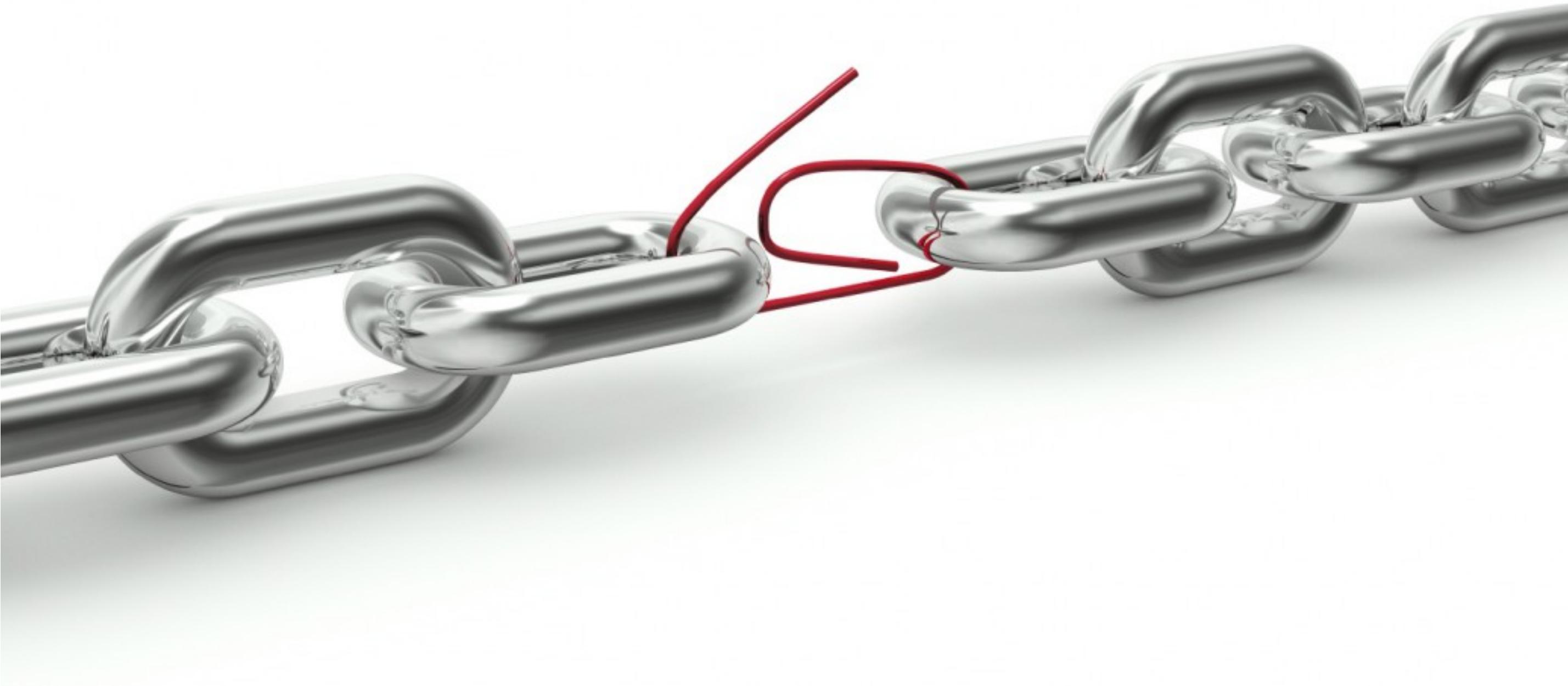
**CLUSTERING**

**HIBERNATE**

Push is NOT so reliable  
Poll lives long



# Async Is Not Enough, Non-blocking Matters



- adbcj - < <https://github.com/mheath/adbcj> >



宁多勿缺

# 4. Immutability Everywhere



# Kafka As The Big Journals

- expiration after 1 month(default is 1 week)
- topics with hierarchy
- replicas first, partitions if needed
- http senders, tcp receivers

# Traveling Back...

- Logging, Logging, Logging...
- Trace Tables
- Event Sourcing
  - Akka Persistence





## 5. Security Everywhere



## 5.1 Interception Everywhere

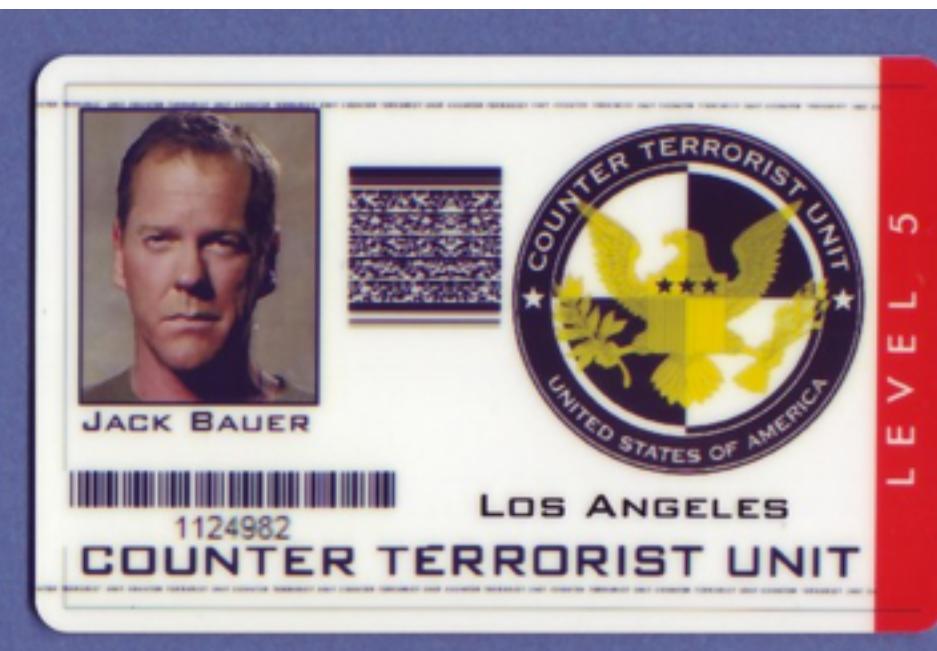


技术层面

NFw

WAF

AUTH



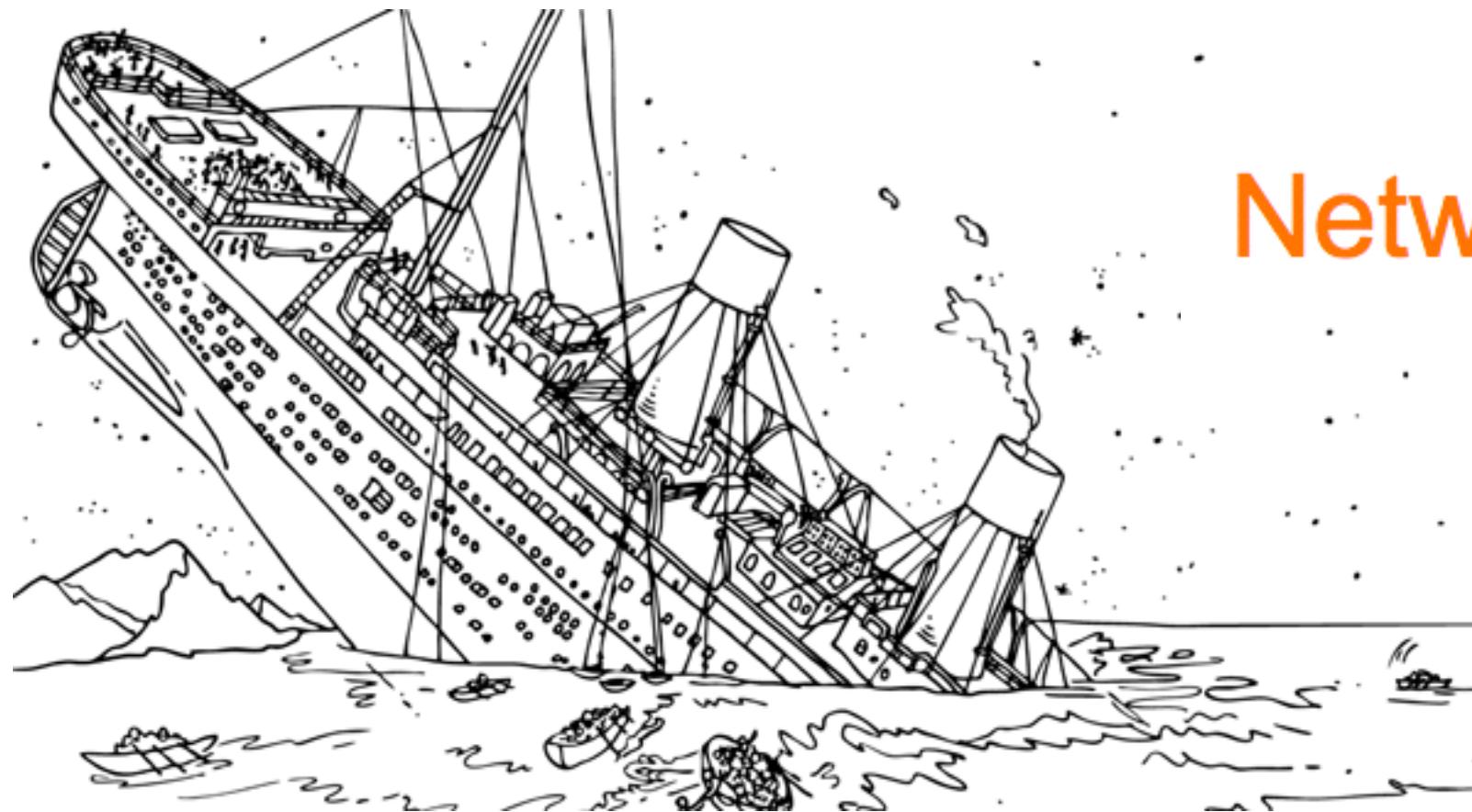
业务层面

同盾

风控

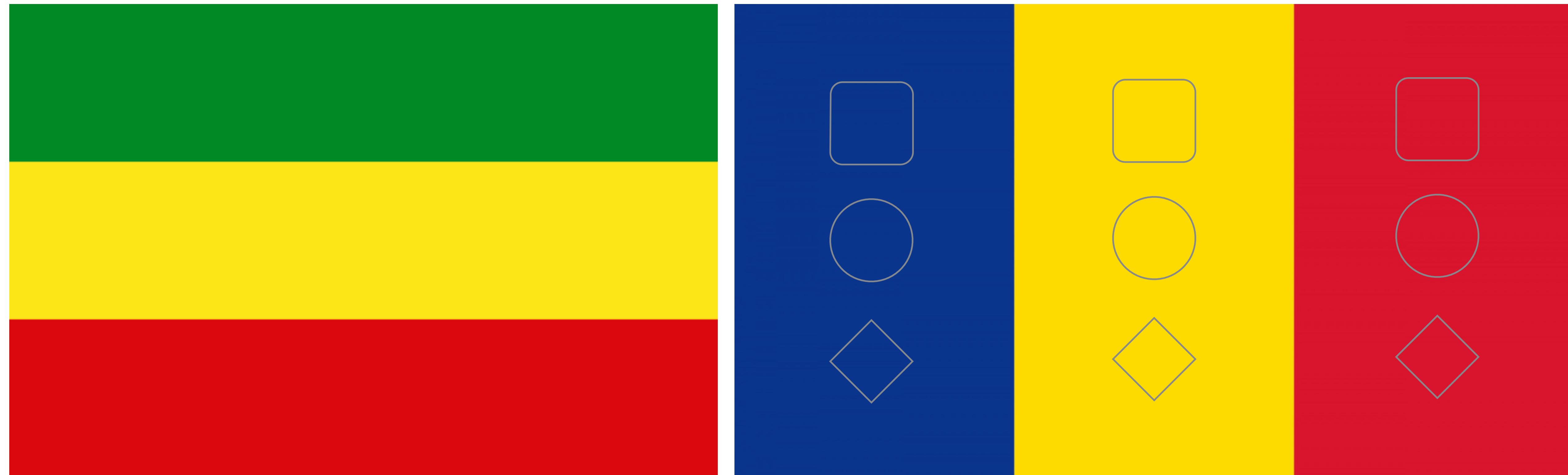
人工

## 5.2 Bulkheads Everywhere



Networking System Storage Process

# Separation != Isolation



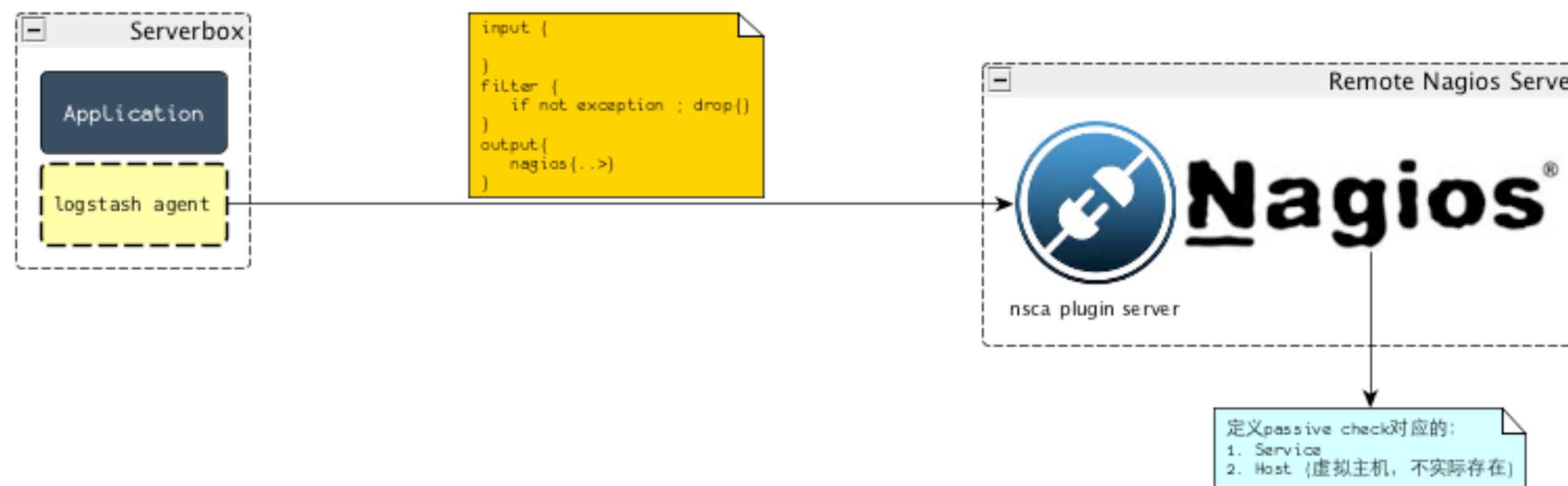
Guess, Why We Don't Use Kafka Partitions **Heavily**?



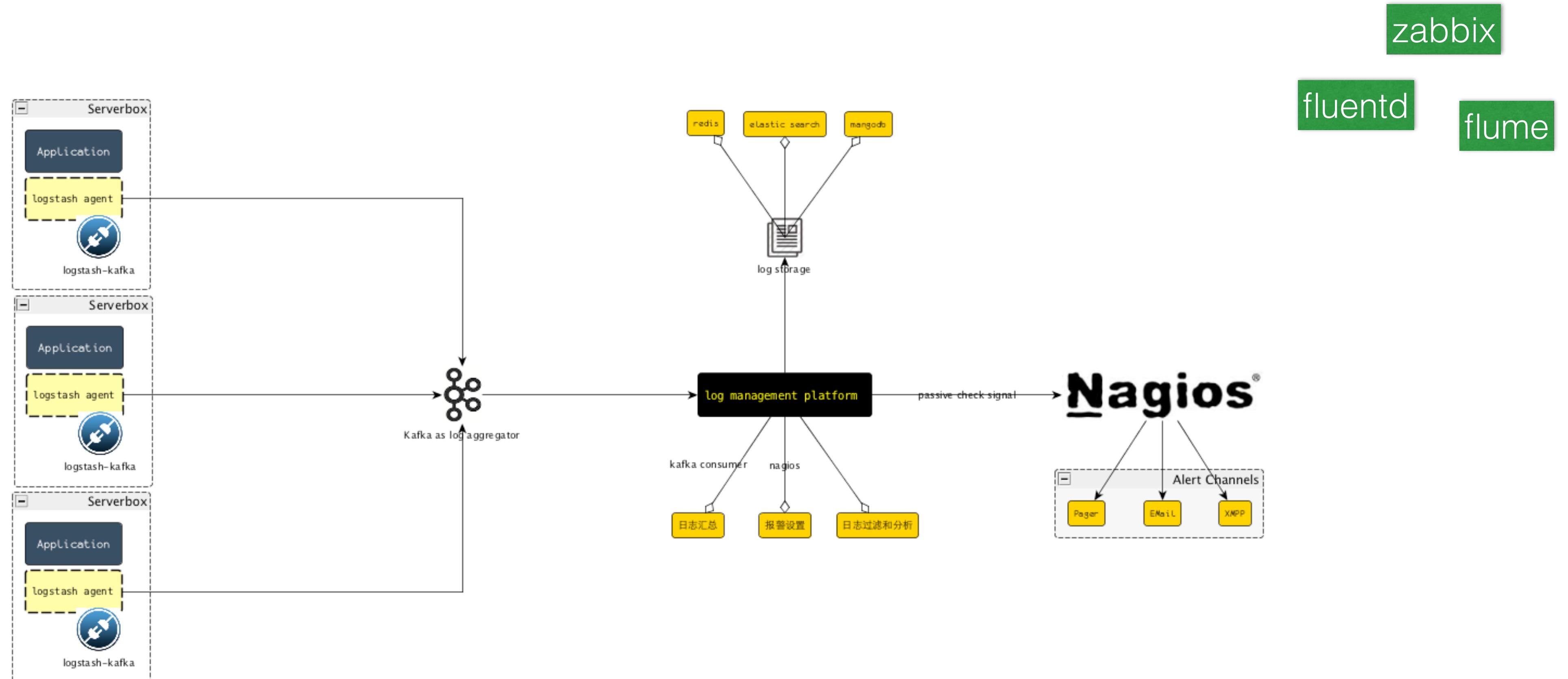
## 5.3 Monitoring Everywhere

do u mean IDS?

# From Zero to One



# From One To Many





5.4 Switches Everywhere

# fallback direction

..... ➤



1



2



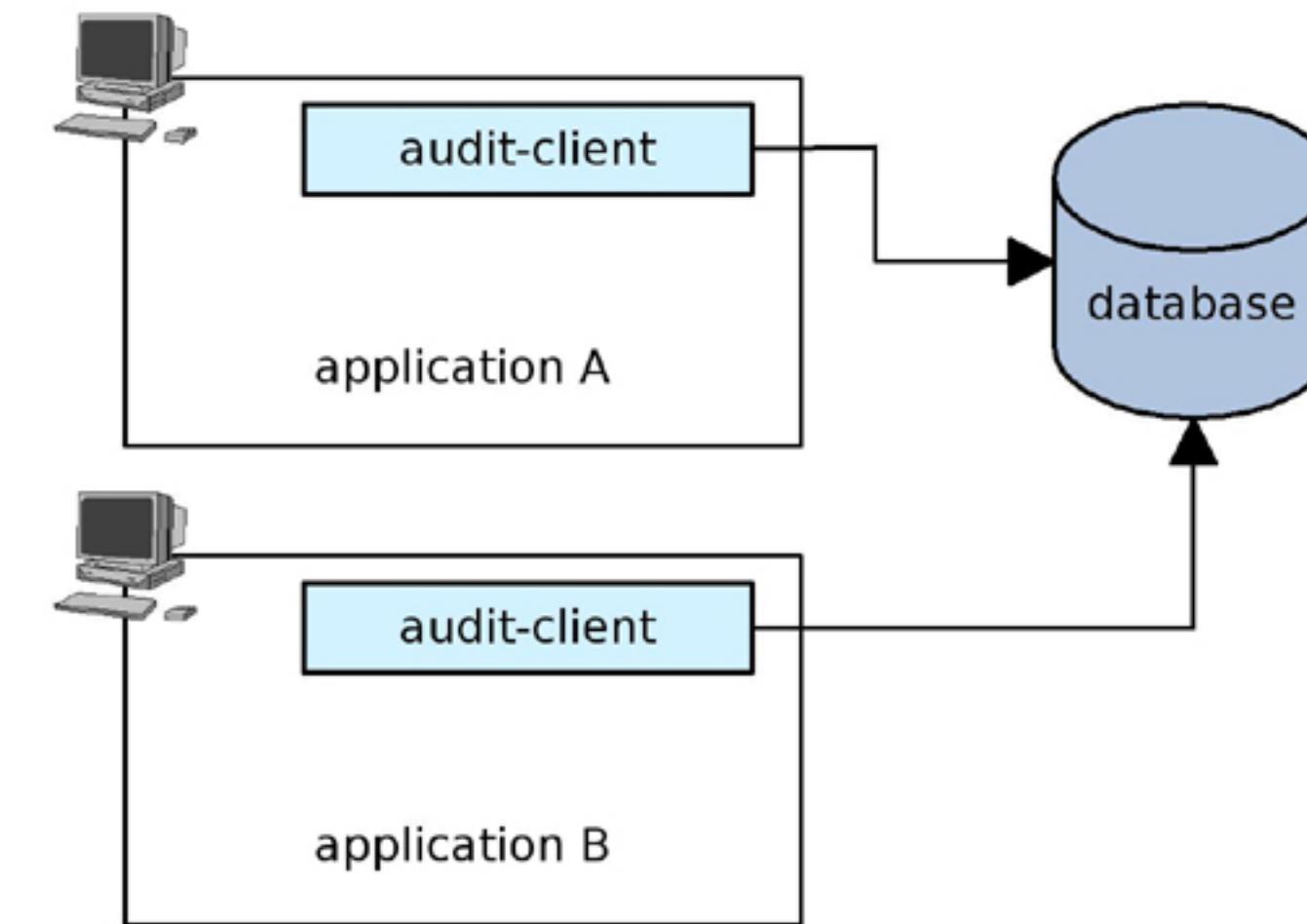
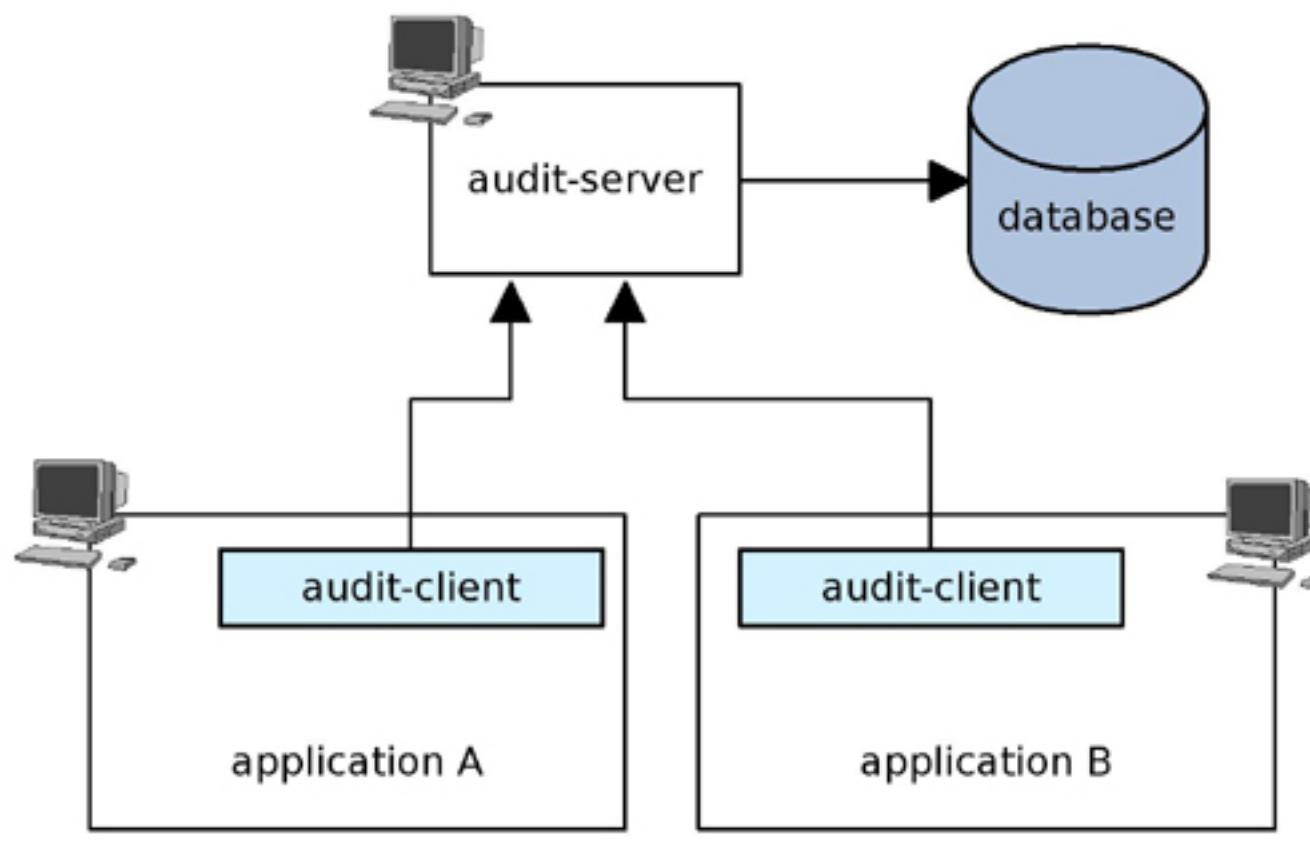
3

5.5



攘外不忘安內

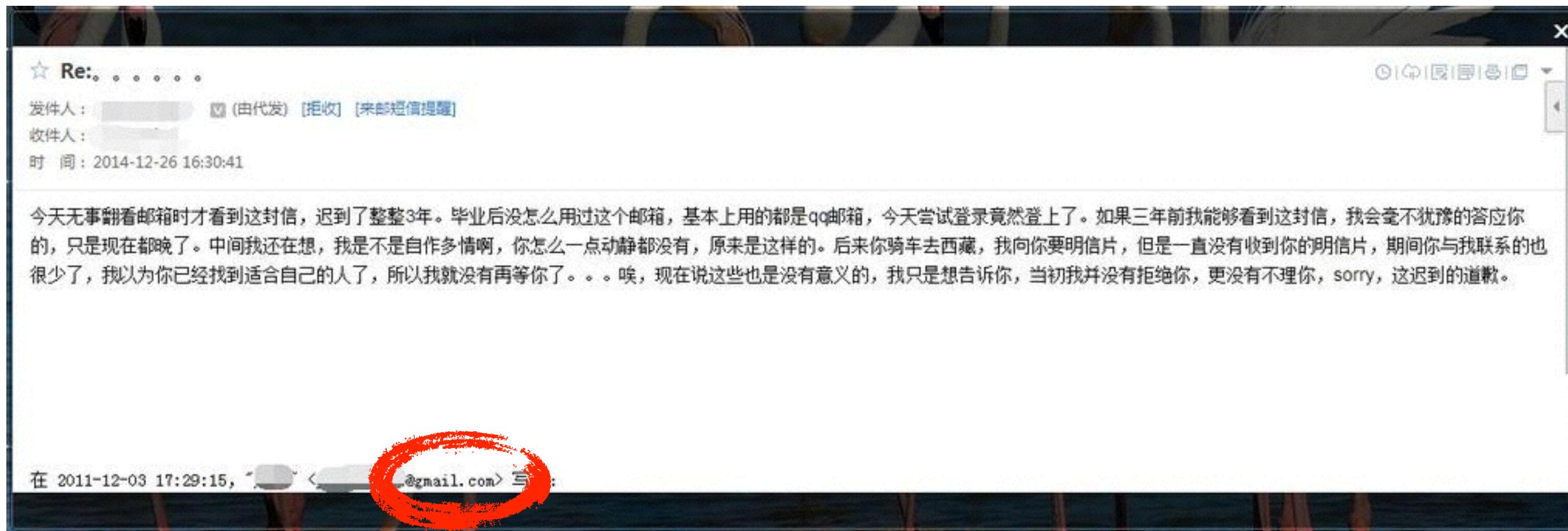
Everywhere





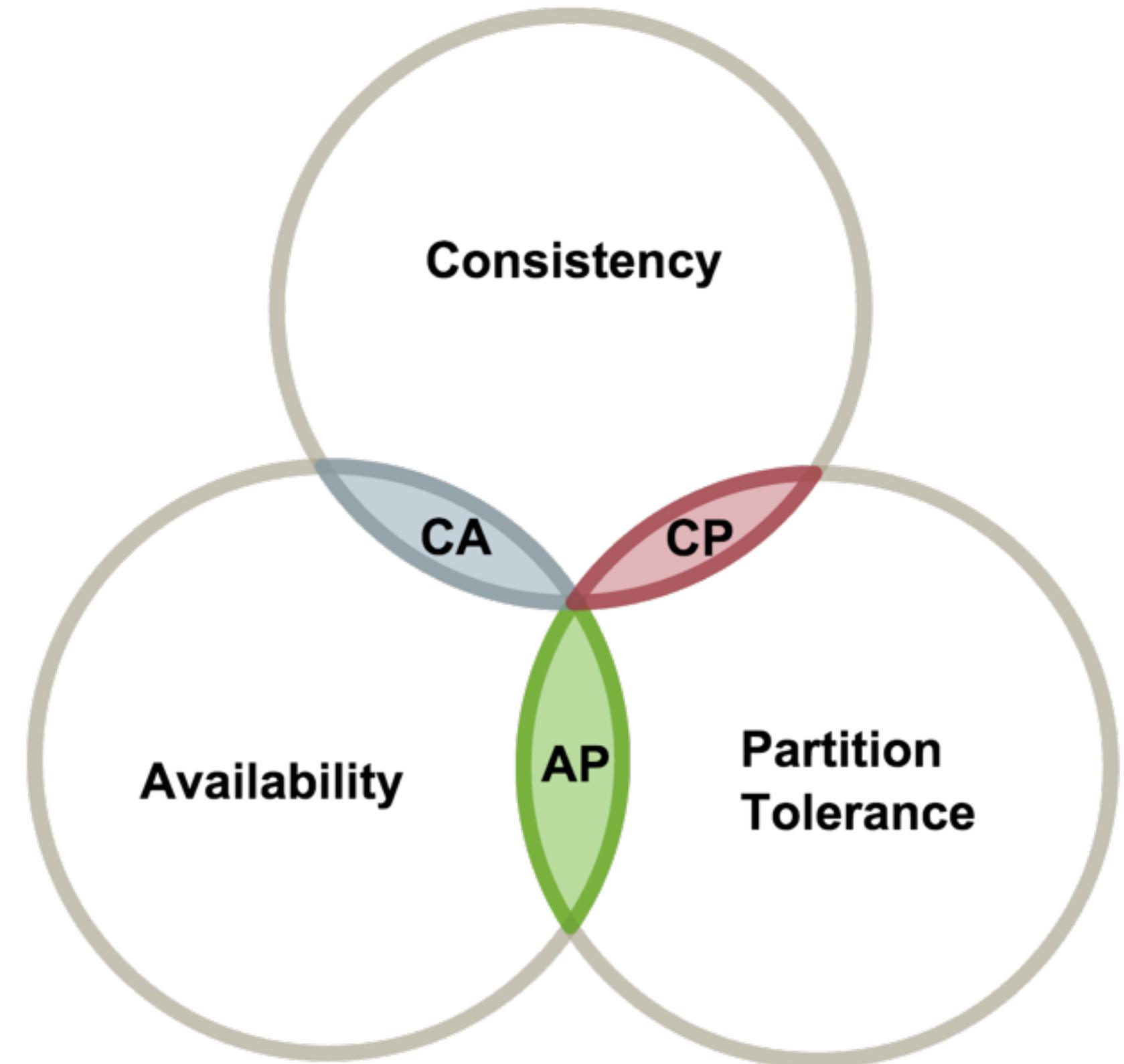
**Where U Going?**

# 6. Redundancy Everywhere



# Storage

- Taming MySQL As Per Our Needs
  - Async Replication
  - Multi-write
- Resort to proper commercial solutions
  - If you are fucking rich ;-)

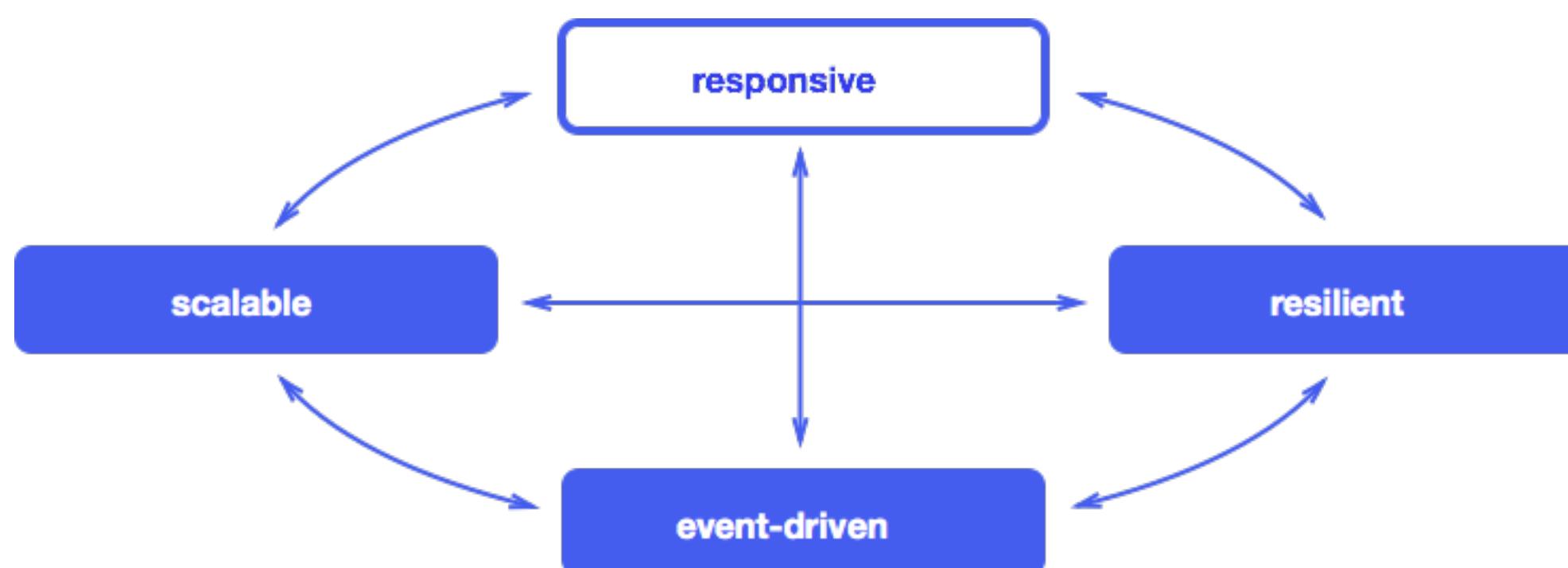


# Computation

- Binary Star
  - Zookeeper As coordination service
- Clustering
  - Zookeeper/DNS As Service Registry Service
  - Raft/Paxos if great, but we can't manage it well yet.

**Final Destination**

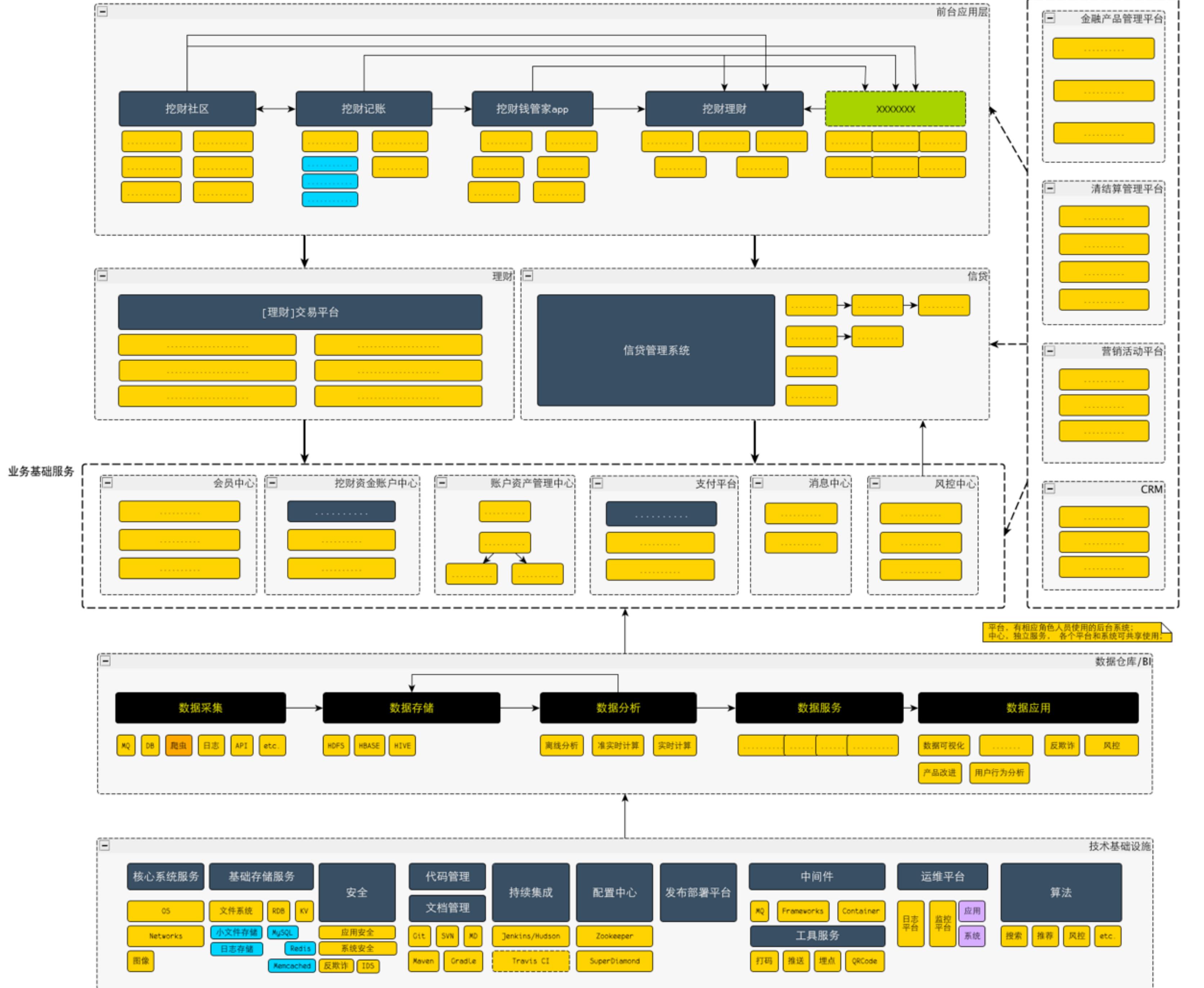
# 7. Reactive Everywhere



“No man ever steps in the same river twice”

–I don't fucking know who said it.

we  
are  
**Here,**  
**BUT**  
**STILL**  
**on**  
**THE**  
**road**

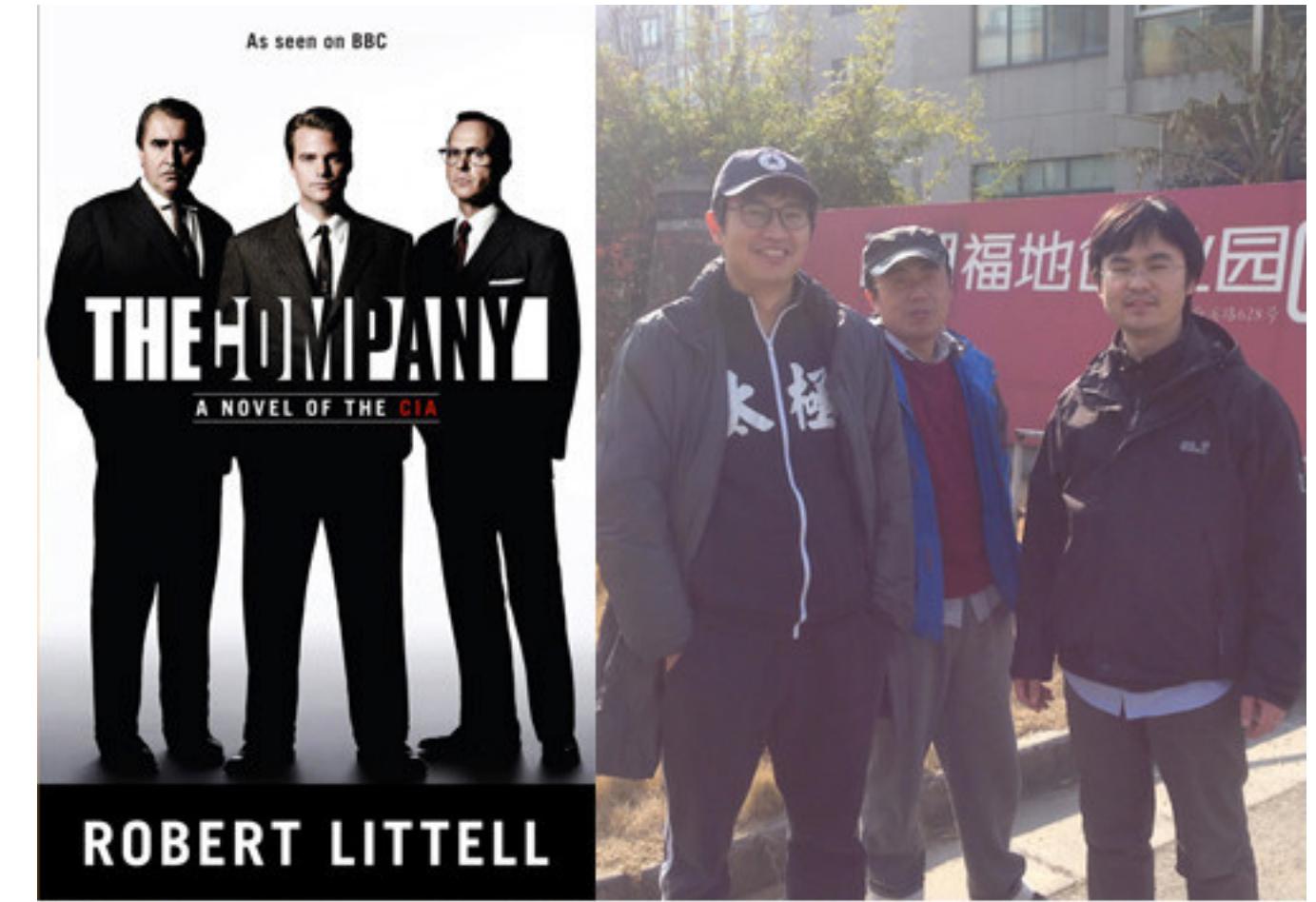


still expecting  
*funny&amazing* guys to  
**JOIN US!**

让简历砸来得更猛烈些吧~, amen~

yunshi [在] wacai [点/L] com

Thank you~



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