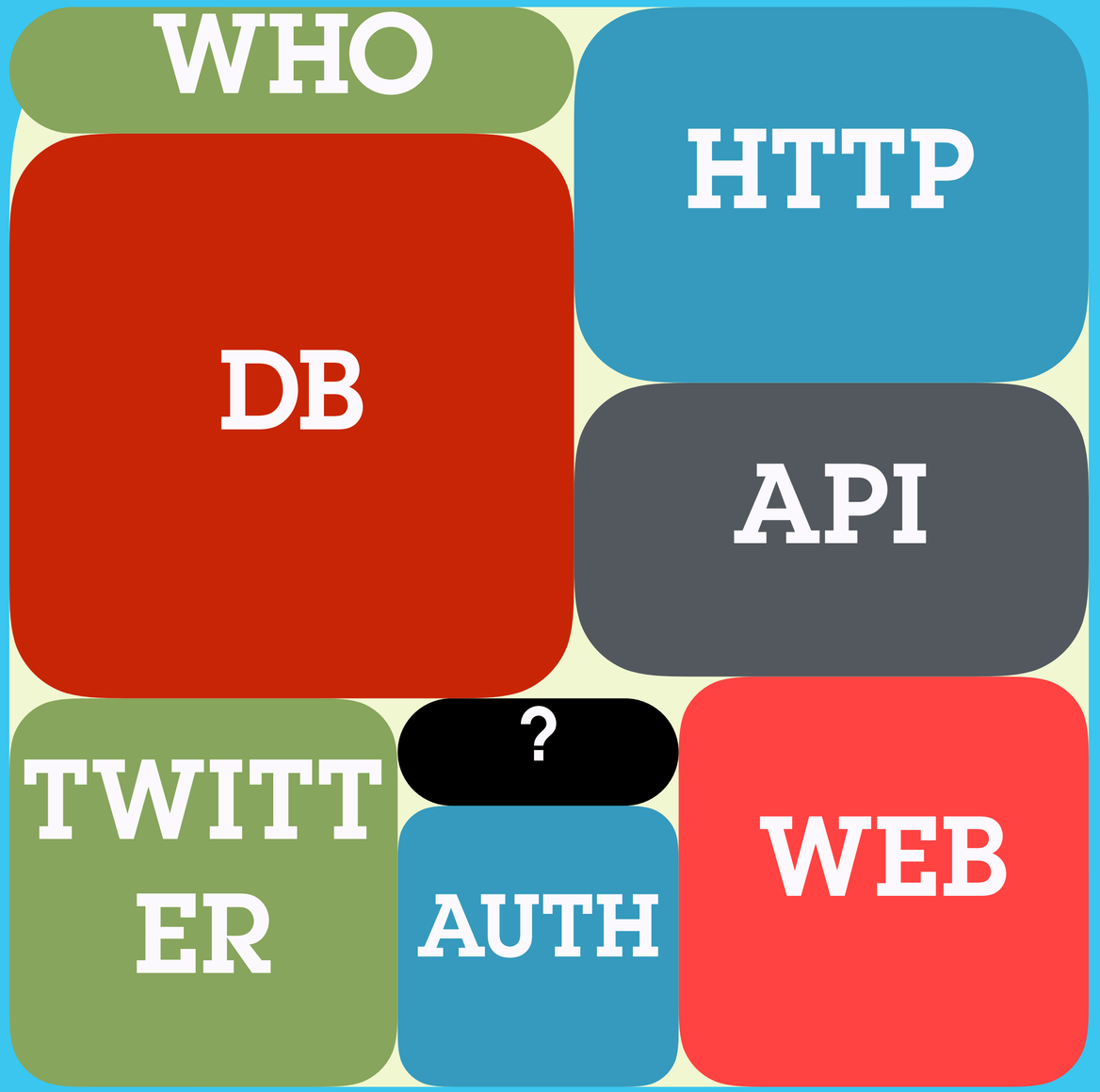
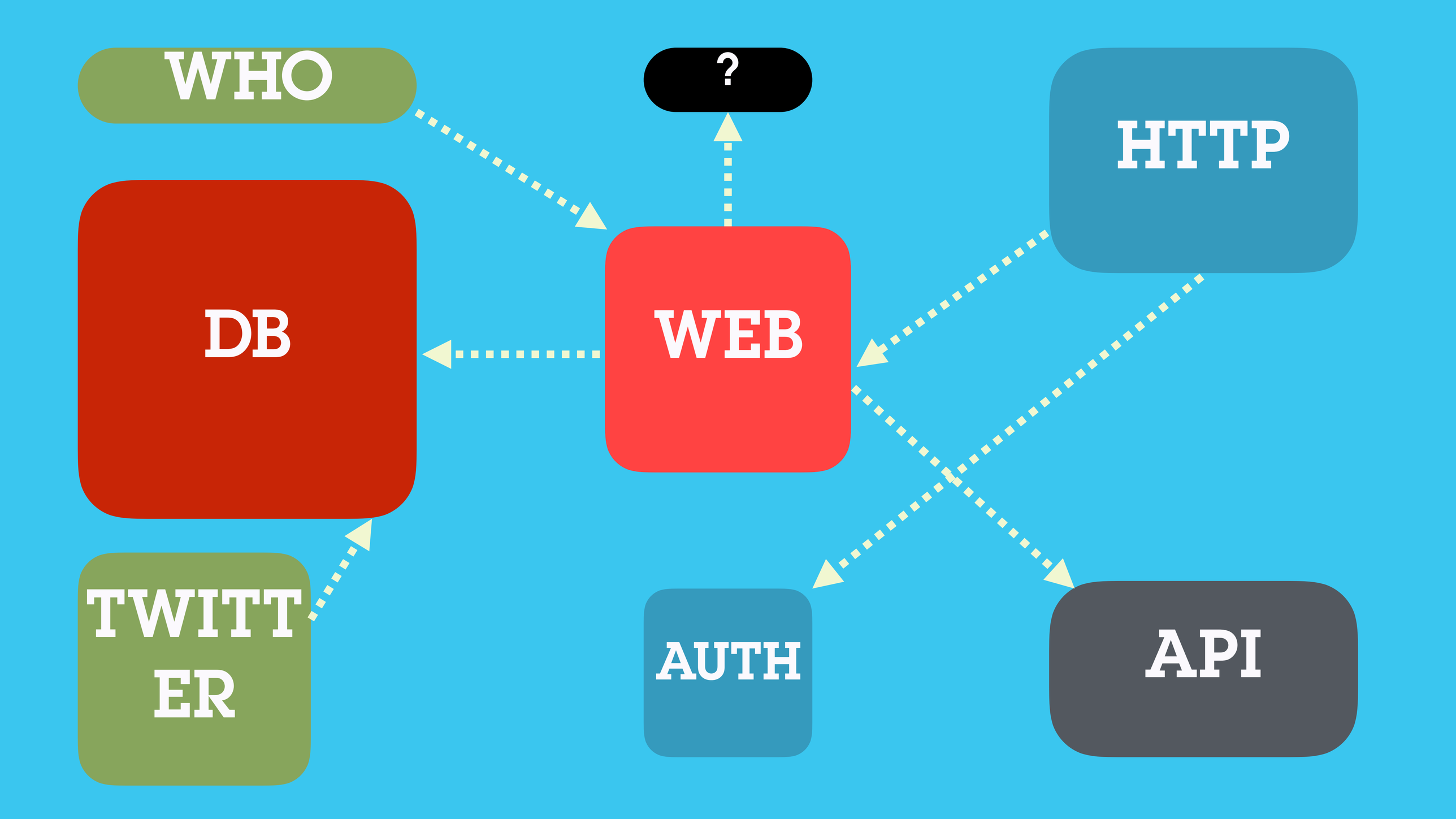
DISMANTLING THE MONOLITH

Jonathan Kaufman - @kauffecup - 2-25-15

MONOLITHIC APP


WHO
HTTP
DB
API
?
TWITTER
AUTH
WEB


WHO
?
HTTP
DB
WEB
TWITTER
AUTH
API

OK SO

WHY IS THIS BETTER?

SMALL TASK

HIGHLY DECOUPLED

MODULAR

SCALABILITY

OK SO

WHY IS THIS WORSE?

LATENCY

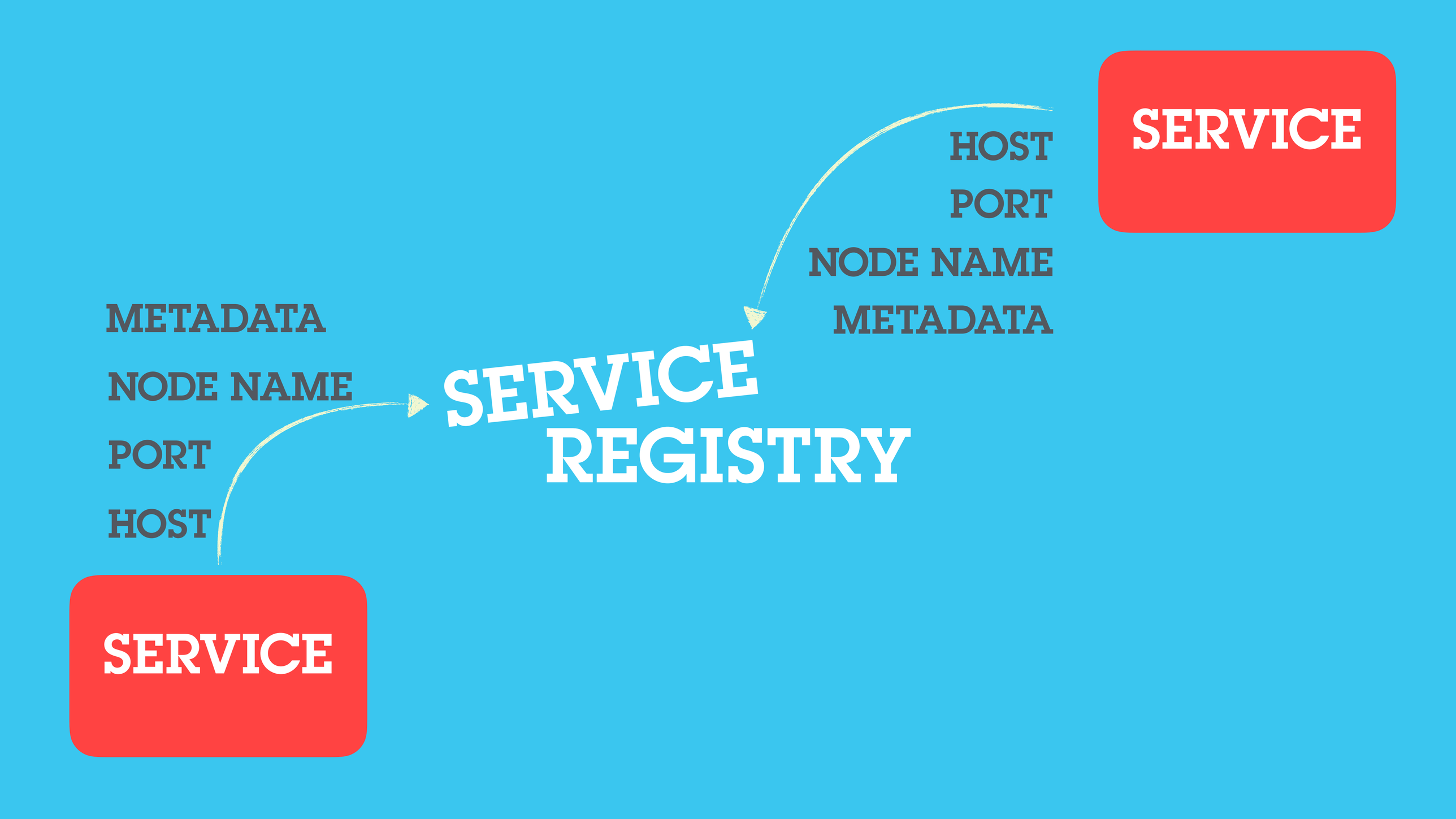
LOAD BALANCING

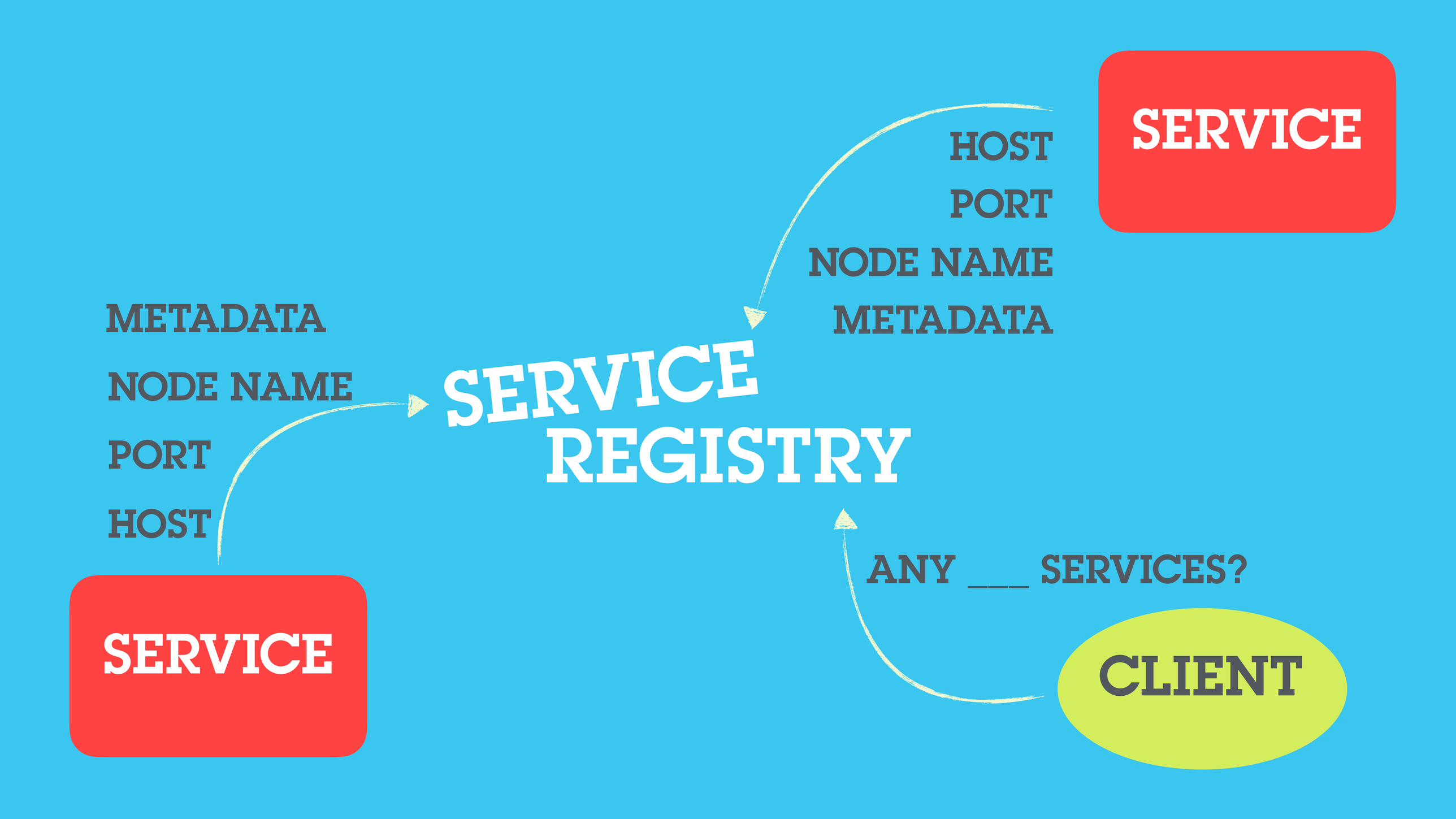
FAULT TOLERANCE

DEPLOYMENT

DEMO

SERVICE REGISTRY


SERVICE
HOST
PORT
NODE NAME
METADATA
SERVICE REGISTRY
METADATA
NODE NAME
PORT
HOST
SERVICE


SERVICE
HOST
PORT
NODE NAME
METADATA
METADATA
NODE NAME
PORT
HOST
SERVICE REGISTRY
SERVICE
ANY ___ SERVICES?
CLIENT

PLAIN OL' DNS

SMARTSTACK

DOOZER

SENECA

ETCD

SERF

NETFLIX'S EUREKA

BITLY'S NSQ LOOKUPD

ZOOKEEPER

CONSUL

SkyDNS

COMMUNICATE VIA MESSAGES

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```
{
  cmd: "tweet",
  from: "kauffecup",
  text: "tweet town"
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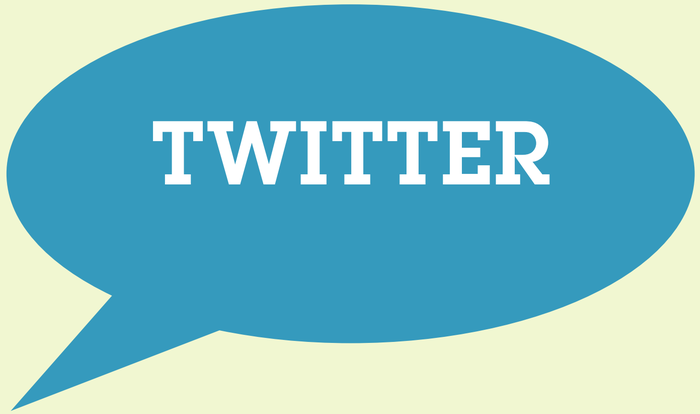
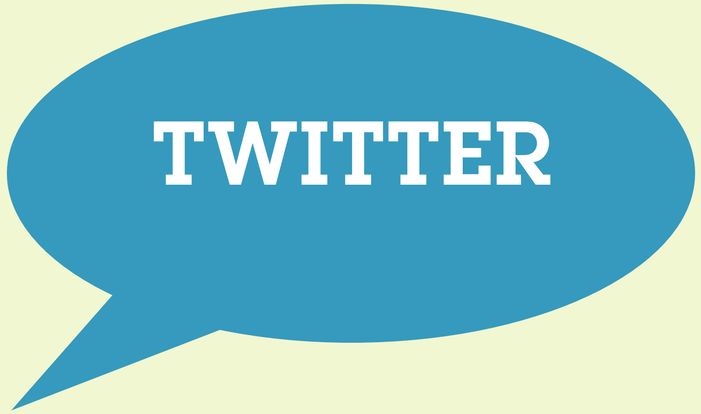


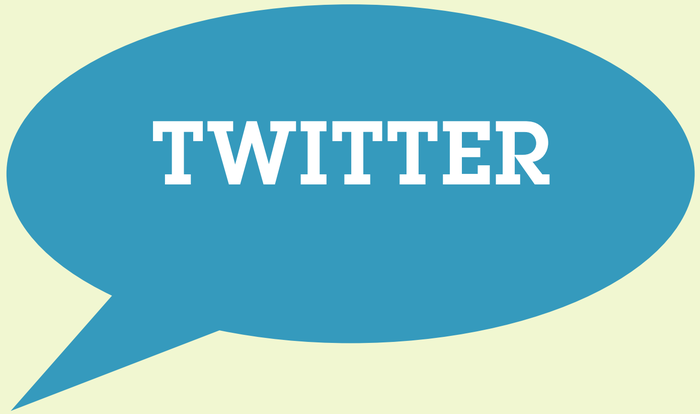



```
const Twitter = require('twitter');
const client = new Twitter({
  consumer_key, consumer_secret, access_token_key, access_token_secret
});

on('tweet', ({from, text}) => {
  client.post('statuses/update', {status: text});
});
```

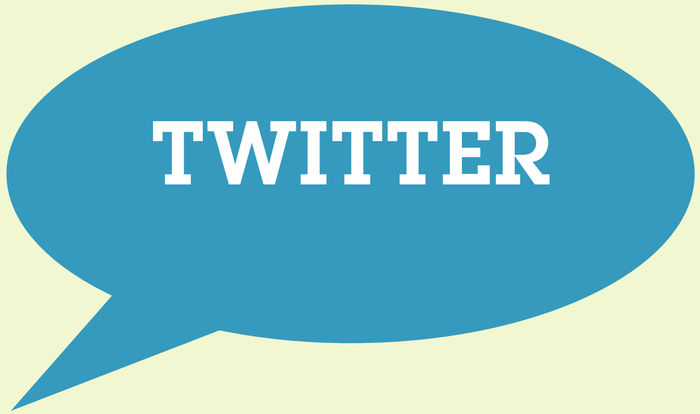
ADD A DELAY

```
{
  cmd: "tweet",
  from: "kauffecup",
  text: "tweet town"
}
```



ADD A DELAY

```
{
  cmd: "tweet",
  from: "kauffecup",
  text: "tweet town",
  delay: 200
}
```



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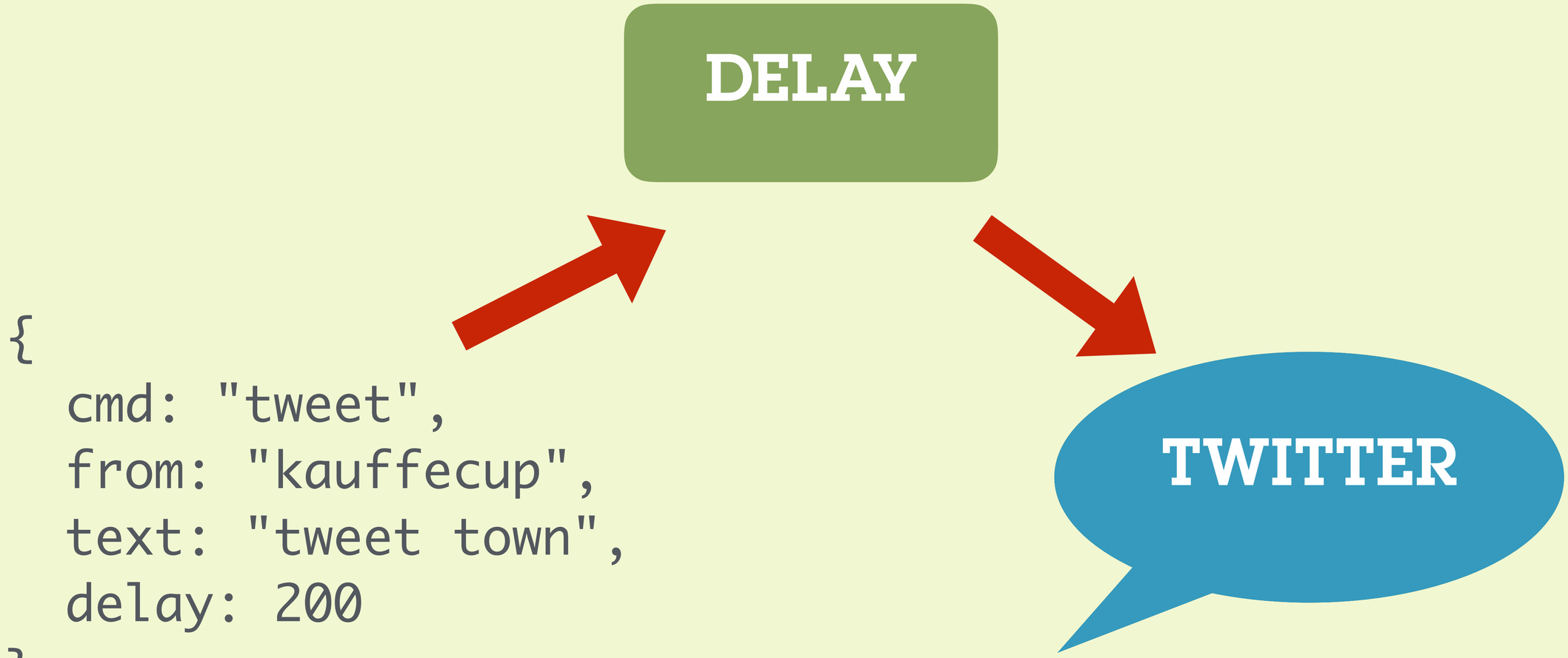


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DEMO

The microservice style of architecture is not so much about building individual services so much as it is making the interactions between services reliable and failure-tolerant.[1]

REFERENCES

[1] https://spring.io/blog/2015/01/20/microservice-registration-and-discovery-with-spring-cloud-and-netflix-s-eureka

[2] https://www.youtube.com/watch?v=fVfWuked2qE

[3] http://jkaufman.io/dismantling-the-monolith-talk/

[4] https://github.com/kauffecup/monolith-microlith