

1.Kafka

Kafka topic

Kafka topic

producers.

topics

consumer.

Kafka

broker.

producers

Kafka

2.

1 :

2 :

3 Exactly once :

3.Kafka

1 ZooKeeper

Zookeeper

2 follower,

leader

4.producer

broker leader()

producer

broker leader()

producer

Kafka

:

topic

leader

producer

5 Kafa consumer

Kafa consumer

broker

"fetch"

consumer

offset

customer

offset

6 Kafka

Pull

Push

Kafka

customer

brokes

brokers

consumer

pull

push

Kafka

producer

broker

consumer

broker

Scribe

Apache

Flume

push

consumer

broker

consumer

consumer

push

broker

consumer

consumer

Kafka

pull

Pull

consumer

broker

Push

consumer

consumer

Pull

consumer

Pull broker consumer
t Kafka consumer
(

7.Kafka

CRC32

: 4 bytes (value: 1+4+n)
: 1 byte
CRC : 4 bytes
: n bytes

8.Kafka

(1).Kafka topic partition

(2). message response
(3). index memory segment file IO
(4). index

9.Kafka

(1).Kafka

(2).Kafka

(3).Kafka

10.Kafka Topic Broker
Broker
0 brokerList
0 5

Broker 5
Broker
Broker
nextReplicaShift

11.Kafka

Kafka log.dirs Kafka
log.dir Broker
log.dirs

log.dirs Kafka Topic
+ ID
log.dirs
12.partition
topic partition broker 0
Partition segment xxx.index xxx.log
segment 1g segment segment 1g
13.kafka ack
request.required.acks 0 1 -1
0: broker ack server
1 ack leader ack leader
leader
-1 1 follower leader
ack
14.Kafka
offset
15.
16.
17.kafaka
partition
key value
Key
key partition